

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

LOCATION.--Lat 39°16'21", long 106°18'21", in NW¹/₄NW¹/₄ sec.14, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on right bank 20 ft downstream from U.S. Highway 24, 0.4 mi downstream from Leadville Mine Drainage Tunnel, 1.5 mi northwest of Leadville, and 2.2 mi upstream from Tennessee Creek.

DRAINAGE AREA.--49.9 mi².

PERIOD OF RECORD.--May 1990 to current year. Daily record for water temperature, specific conductance, and pH available, May 1990 to September 1996. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07079300

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,900 ft above NGVD of 1929, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 13 | 12 | e10 | e9.2 | e8.7 | e7.0 | 9.0 | 15 | 314 | 83 | 28 | 29 |
| 2 | 14 | 12 | e10 | e9.0 | e8.6 | e6.9 | 9.0 | 13 | 315 | 81 | 27 | 26 |
| 3 | 15 | 11 | e10 | e8.8 | e9.0 | e6.8 | 8.8 | 14 | 292 | 78 | 28 | 25 |
| 4 | 15 | 11 | e10 | e8.7 | e9.0 | e6.7 | 8.7 | 15 | 248 | 73 | 34 | 25 |
| 5 | 14 | 11 | e10 | e8.7 | e9.5 | e6.6 | 8.6 | 15 | 219 | 69 | 29 | 24 |
| 6 | 14 | e11 | e10 | e8.7 | e9.3 | e6.5 | 8.7 | 15 | 168 | 66 | 27 | 29 |
| 7 | 13 | e11 | e9.9 | e8.6 | e9.1 | e6.6 | 8.9 | 15 | 155 | 60 | 27 | 37 |
| 8 | 13 | e11 | e9.8 | e8.5 | e9.0 | e6.5 | 9.4 | 15 | 145 | 57 | 26 | 37 |
| 9 | 13 | e11 | e9.8 | e8.4 | e9.0 | e6.6 | 9.4 | 15 | 150 | 55 | 26 | 38 |
| 10 | 12 | e11 | e9.7 | e8.4 | e8.9 | e6.7 | 11 | 15 | 146 | 50 | 25 | 41 |
| 11 | 12 | e11 | e9.6 | e8.3 | e8.8 | e6.9 | 12 | 14 | 162 | 48 | 25 | 39 |
| 12 | 12 | e11 | e9.5 | e8.3 | e8.6 | e7.2 | 12 | 14 | 167 | 45 | 26 | 35 |
| 13 | 11 | e11 | e9.5 | e8.4 | e8.4 | e7.4 | 13 | 18 | 170 | 44 | 24 | 33 |
| 14 | 11 | e11 | e9.5 | e8.5 | e7.9 | e7.3 | 13 | 21 | 158 | 43 | 24 | 31 |
| 15 | 11 | e11 | e9.4 | e8.5 | e7.9 | e7.3 | 12 | 30 | 156 | 42 | 23 | 29 |
| 16 | 11 | e11 | e9.3 | e8.6 | e7.7 | 7.3 | 11 | 35 | 154 | 42 | 23 | 28 |
| 17 | 11 | e11 | e9.3 | e8.7 | e7.6 | 7.7 | 12 | 53 | 140 | 42 | 25 | 26 |
| 18 | 11 | e11 | e9.3 | e8.7 | e7.4 | 7.8 | 11 | 65 | 137 | 41 | 27 | 26 |
| 19 | 11 | e11 | e9.3 | e8.6 | e7.4 | 7.5 | 11 | 66 | 130 | 41 | 26 | 25 |
| 20 | 11 | e11 | e9.3 | e8.6 | e7.4 | e7.8 | 11 | 66 | 126 | 40 | 23 | 25 |
| 21 | 11 | e11 | e9.3 | e8.5 | e7.5 | e8.0 | 11 | 75 | 118 | 39 | 22 | 23 |
| 22 | 11 | e11 | e9.3 | e8.5 | e7.4 | 7.8 | 12 | 105 | 107 | 36 | 21 | 23 |
| 23 | 12 | e11 | e9.3 | e8.4 | e7.4 | 7.9 | 12 | 144 | 106 | 34 | 23 | 23 |
| 24 | 12 | e11 | e9.3 | e8.4 | e7.4 | 7.9 | 12 | 187 | 103 | 33 | 26 | 22 |
| 25 | 12 | e11 | e9.2 | e8.5 | e7.1 | 8.2 | 14 | 249 | 101 | 32 | 27 | 21 |
| 26 | 12 | e11 | e9.2 | e8.6 | e7.3 | 8.1 | 15 | 241 | 88 | 33 | 29 | 21 |
| 27 | 12 | e11 | e9.2 | e8.7 | e7.2 | 8.3 | 15 | 325 | 89 | 34 | 26 | 21 |
| 28 | 12 | e11 | e9.2 | e8.8 | e7.1 | e8.4 | 14 | 460 | 89 | 38 | 25 | 21 |
| 29 | 11 | e10 | e9.2 | e8.8 | --- | e8.5 | 14 | 459 | 89 | 35 | 23 | 20 |
| 30 | 11 | e10 | e9.2 | e8.7 | --- | e8.6 | 15 | 209 | 84 | 32 | 27 | 20 |
| 31 | 12 | --- | e9.2 | e8.7 | --- | e8.7 | --- | 236 | --- | 29 | 33 | --- |
| TOTAL | 376 | 330 | 294.8 | 266.8 | 227.6 | 231.5 | 343.5 | 3,219 | 4,626 | 1,475 | 805 | 823 |
| MEAN | 12.1 | 11.0 | 9.51 | 8.61 | 8.13 | 7.47 | 11.4 | 104 | 154 | 47.6 | 26.0 | 27.4 |
| MAX | 15 | 12 | 10 | 9.2 | 9.5 | 8.7 | 15 | 460 | 315 | 83 | 34 | 41 |
| MIN | 11 | 10 | 9.2 | 8.3 | 7.1 | 6.5 | 8.6 | 13 | 84 | 29 | 21 | 20 |
| AC-FT | 746 | 655 | 585 | 529 | 451 | 459 | 681 | 6,380 | 9,180 | 2,930 | 1,600 | 1,630 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2003, BY WATER YEAR (WY)

| | 18.5 | 14.4 | 12.0 | 10.3 | 9.91 | 10.1 | 13.8 | 95.1 | 206 | 88.0 | 38.5 | 24.4 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 18.5 | 14.4 | 12.0 | 10.3 | 9.91 | 10.1 | 13.8 | 95.1 | 206 | 88.0 | 38.5 | 24.4 |
| MAX | 23.4 | 18.1 | 15.4 | 13.0 | 13.3 | 13.0 | 19.8 | 205 | 404 | 266 | 75.1 | 32.2 |
| (WY) | (2000) | (1996) | (1996) | (1996) | (1997) | (1997) | (1996) | (1996) | (1996) | (1995) | (1995) | (1995) |
| MIN | 12.1 | 10.8 | 9.51 | 8.61 | 7.10 | 7.47 | 10.5 | 38.4 | 39.0 | 14.7 | 10.8 | 10.9 |
| (WY) | (2003) | (1992) | (2003) | (2003) | (1993) | (2003) | (1993) | (1995) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1990 - 2003

| | | | |
|--------------------------|---------|----------|------------------|
| ANNUAL TOTAL | 5,828.9 | 13,018.2 | |
| ANNUAL MEAN | 16.0 | 35.7 | 45.7 |
| HIGHEST ANNUAL MEAN | | | 73.0 1996 |
| LOWEST ANNUAL MEAN | | | 16.8 2002 |
| HIGHEST DAILY MEAN | 69 | May 21 | 811 Jun 8, 1997 |
| LOWEST DAILY MEAN | e7.3 | Mar 6 | 6.0 Dec 9, 1994 |
| ANNUAL SEVEN-DAY MINIMUM | e7.5 | Mar 1 | e6.6 Mar 4, 2003 |
| MAXIMUM PEAK FLOW | | 760 | May 29 |
| MAXIMUM PEAK STAGE | | 4.07 | May 29 |
| ANNUAL RUNOFF (AC-FT) | 11,560 | 25,820 | 33,090 |
| 10 PERCENT EXCEEDS | 36 | 89 | 124 |
| 50 PERCENT EXCEEDS | 11 | 12 | 16 |
| 90 PERCENT EXCEEDS | 8.8 | 7.9 | 9.3 |

e Estimated.

a From rating curve extended above 517 ft³/s.

b Maximum gage height, 4.41 ft, Jun 26, 1999.

07081200 ARKANSAS RIVER NEAR LEADVILLE, CO

LOCATION.--Lat 39°15'26", long 106°20'35", in NW¼NW¼ sec.21, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on right bank 500 ft downstream from confluence of East Fork Arkansas River and Tennessee Creek, 0.5 mi downstream from highway bridge, and 2.8 mi northwest of Leadville.

DRAINAGE AREA.--98.8 mi².

PERIOD OF RECORD.--October 1967 to September 1983, April 1990 to current year. Daily record of water temperature, specific conductance, and pH available, May 1990 to September 1996. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07081200

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,730 ft above NGVD of 1929, 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) and diversions for irrigation and municipal use. 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|------|------|------|------|-------|--------|--------|-------|-------|-------|
| 1 | 22 | 18 | e16 | e13 | e12 | e13 | 15 | 57 | 723 | 136 | 40 | 35 |
| 2 | 24 | 18 | e16 | e14 | e12 | e12 | 16 | 53 | 579 | 126 | 37 | 30 |
| 3 | 28 | 17 | e15 | e14 | e12 | e12 | 15 | 51 | 464 | 122 | 36 | 29 |
| 4 | 28 | 16 | e16 | e14 | e12 | e12 | 14 | 55 | 404 | 116 | 41 | 30 |
| 5 | 25 | 16 | e16 | e14 | e13 | e12 | 13 | 48 | 370 | 109 | 37 | 29 |
| 6 | 24 | 15 | e16 | e14 | e13 | e12 | 13 | 41 | 309 | 102 | 36 | 37 |
| 7 | 24 | 15 | e15 | e14 | e12 | 13 | 13 | 39 | 283 | 96 | 36 | 45 |
| 8 | 22 | 16 | e15 | e13 | e12 | 12 | 24 | 40 | 250 | 91 | 37 | 46 |
| 9 | 21 | 16 | e15 | e13 | e12 | 12 | 15 | 40 | 250 | 87 | 36 | 47 |
| 10 | 20 | 17 | e14 | e13 | e12 | 12 | 19 | 39 | 277 | 81 | 35 | 52 |
| 11 | 20 | 17 | e14 | e13 | e12 | 12 | 22 | 35 | 283 | 76 | 33 | 51 |
| 12 | 19 | e17 | e14 | e13 | e12 | 13 | 24 | 38 | 268 | 73 | 33 | 46 |
| 13 | 19 | e17 | e15 | e13 | e12 | 13 | 26 | 55 | 300 | 70 | 31 | 41 |
| 14 | 18 | e17 | e15 | e13 | e12 | 13 | 29 | 64 | 252 | 68 | 31 | 39 |
| 15 | 20 | e16 | e15 | e13 | e12 | 13 | 27 | 86 | 248 | 65 | 28 | 36 |
| 16 | 19 | e16 | e15 | e13 | e12 | 13 | 27 | 96 | 251 | 64 | 28 | 34 |
| 17 | 18 | e17 | e15 | e12 | e12 | 13 | 31 | 136 | 224 | 64 | 37 | 32 |
| 18 | 18 | e17 | e14 | e12 | e12 | 13 | 31 | 163 | 223 | 61 | 41 | 31 |
| 19 | 18 | e16 | e14 | e12 | e12 | 13 | 29 | 180 | 225 | 61 | 37 | 30 |
| 20 | 17 | e16 | e14 | e12 | e12 | e13 | 28 | 164 | 229 | 59 | 31 | 30 |
| 21 | 17 | e16 | e14 | e12 | e12 | 13 | 29 | 164 | 205 | 60 | 28 | 28 |
| 22 | 17 | e17 | e14 | e11 | e13 | 13 | 33 | 206 | 192 | 54 | 28 | 28 |
| 23 | 19 | e16 | e14 | e12 | e13 | 14 | 33 | 265 | 183 | 51 | 33 | 27 |
| 24 | 18 | e17 | e13 | e12 | e12 | 14 | 29 | 312 | 173 | 48 | 38 | 25 |
| 25 | 17 | e17 | e13 | e12 | e12 | 14 | 32 | 354 | 163 | 47 | 42 | 25 |
| 26 | 17 | e17 | e13 | e12 | e12 | 13 | 42 | 337 | 150 | 51 | 43 | 24 |
| 27 | 19 | e17 | e13 | e12 | e12 | e14 | 55 | 376 | 149 | 59 | 35 | 24 |
| 28 | 19 | e17 | e13 | e12 | e13 | e14 | 63 | 536 | 146 | 56 | 33 | 24 |
| 29 | 18 | e17 | e13 | e12 | --- | e14 | 70 | 634 | 145 | 50 | 31 | 23 |
| 30 | 17 | e17 | e13 | e12 | --- | e15 | 70 | 751 | 143 | 48 | 33 | 23 |
| 31 | 18 | --- | e13 | e12 | --- | e15 | --- | 622 | --- | 43 | 40 | --- |
| TOTAL | 620 | 498 | 445 | 393 | 341 | 404 | 887 | 6,037 | 8,061 | 2,294 | 1,085 | 1,001 |
| MEAN | 20.0 | 16.6 | 14.4 | 12.7 | 12.2 | 13.0 | 29.6 | 195 | 269 | 74.0 | 35.0 | 33.4 |
| MAX | 28 | 18 | 16 | 14 | 13 | 15 | 70 | 751 | 723 | 136 | 43 | 52 |
| MIN | 17 | 15 | 13 | 11 | 12 | 12 | 13 | 35 | 143 | 43 | 28 | 23 |
| AC-FT | 1,230 | 988 | 883 | 780 | 676 | 801 | 1,760 | 11,970 | 15,990 | 4,550 | 2,150 | 1,990 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 26.6 | 21.2 | 16.6 | 14.7 | 14.4 | 15.2 | 30.8 | 169 | 336 | 132 | 59.2 | 34.3 |
| MAX | 38.3 | 28.9 | 21.7 | 19.0 | 20.5 | 20.8 | 52.9 | 412 | 707 | 382 | 138 | 55.8 |
| (WY) | (1971) | (1971) | (1983) | (1996) | (1973) | (1971) | (1989) | (1996) | (1997) | (1995) | (1997) | (1982) |
| MIN | 16.5 | 11.6 | 11.6 | 9.15 | 7.93 | 8.82 | 12.7 | 55.3 | 72.7 | 23.8 | 12.4 | 14.8 |
| (WY) | (1978) | (1977) | (1978) | (1977) | (1978) | (1974) | (1970) | (1981) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1968 - 2003

| | | | |
|--------------------------|----------|--------|--------|
| ANNUAL TOTAL | 10,432.7 | 22,066 | |
| ANNUAL MEAN | 28.6 | 60.5 | 73.3 |
| HIGHEST ANNUAL MEAN | | | 120 |
| LOWEST ANNUAL MEAN | | | 29.5 |
| HIGHEST DAILY MEAN | 128 | 751 | 1,120 |
| LOWEST DAILY MEAN | 8.8 | 11 | a7.0 |
| ANNUAL SEVEN-DAY MINIMUM | 9.1 | 12 | 7.0 |
| MAXIMUM PEAK FLOW | | 955 | b1,360 |
| MAXIMUM PEAK STAGE | | 4.04 | c4.38 |
| ANNUAL RUNOFF (AC-FT) | 20,690 | 43,770 | 53,110 |
| 10 PERCENT EXCEEDS | 71 | 164 | 203 |
| 50 PERCENT EXCEEDS | 17 | 21 | 25 |
| 90 PERCENT EXCEEDS | 13 | 12 | 13 |

e Estimated.

a Also occurred Feb 4-20, 1978.

b From rating curve extended above 964 ft³/s.

c Maximum gage height, 4.47 ft, Jun 15, 1978.

391504106225200 DINERO MINE DRAINAGE TUNNEL BELOW TURQUOISE LAKE NEAR LEADVILLE, CO

LOCATION.--Lat 39°15'04", long 106°22'52", in NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on left bank 8 ft downstream from mine drainage tunnel, 0.5 mi southwest of Sugarloaf Dam, and 4.5 mi west of Leadville.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--March to September 2003 (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=391504106225200

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,800 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Flow consists entirely of discharge from the Dinero Mine Drainage Tunnel.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 0.24 ft³/s, Aug. 2, 3, gage height, 10.39 ft; minimum daily, 0.11 ft³/s, on many days in April.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-------|------|-------|-------|------|------|------|
| 1 | --- | --- | --- | --- | --- | e0.12 | 0.13 | 0.12 | 0.16 | 0.17 | 0.21 | 0.18 |
| 2 | --- | --- | --- | --- | --- | e0.12 | 0.13 | 0.12 | 0.16 | 0.17 | 0.22 | 0.18 |
| 3 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.13 | 0.15 | 0.16 | 0.22 | 0.17 |
| 4 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.13 | 0.14 | 0.16 | 0.21 | 0.17 |
| 5 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.12 | 0.14 | 0.16 | 0.21 | 0.17 |
| 6 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.12 | 0.15 | 0.16 | 0.21 | 0.16 |
| 7 | --- | --- | --- | --- | --- | e0.12 | 0.11 | 0.13 | 0.15 | 0.16 | 0.21 | 0.16 |
| 8 | --- | --- | --- | --- | --- | e0.12 | 0.11 | 0.13 | 0.15 | 0.15 | 0.21 | 0.17 |
| 9 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.13 | 0.15 | 0.15 | 0.21 | 0.17 |
| 10 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.13 | 0.16 | 0.16 | 0.21 | 0.17 |
| 11 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.12 | 0.16 | 0.16 | 0.21 | 0.16 |
| 12 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.13 | 0.16 | 0.17 | 0.20 | 0.17 |
| 13 | --- | --- | --- | --- | --- | e0.12 | 0.12 | 0.13 | 0.16 | 0.17 | 0.19 | 0.17 |
| 14 | --- | --- | --- | --- | --- | 0.13 | 0.12 | 0.13 | 0.15 | 0.17 | 0.19 | 0.17 |
| 15 | --- | --- | --- | --- | --- | 0.13 | 0.12 | e0.13 | 0.14 | 0.17 | 0.19 | 0.16 |
| 16 | --- | --- | --- | --- | --- | 0.13 | 0.11 | e0.12 | 0.14 | 0.18 | 0.18 | 0.17 |
| 17 | --- | --- | --- | --- | --- | 0.13 | 0.12 | 0.12 | 0.14 | 0.17 | 0.17 | 0.16 |
| 18 | --- | --- | --- | --- | --- | 0.13 | 0.12 | 0.12 | 0.14 | 0.18 | 0.17 | 0.16 |
| 19 | --- | --- | --- | --- | --- | 0.12 | 0.11 | 0.12 | e0.16 | 0.20 | 0.17 | 0.16 |
| 20 | --- | --- | --- | --- | --- | 0.12 | 0.11 | 0.12 | 0.17 | 0.19 | 0.17 | 0.16 |
| 21 | --- | --- | --- | --- | --- | 0.12 | 0.12 | 0.12 | 0.17 | 0.19 | 0.18 | 0.17 |
| 22 | --- | --- | --- | --- | --- | 0.12 | 0.12 | 0.12 | 0.17 | 0.19 | 0.18 | 0.17 |
| 23 | --- | --- | --- | --- | --- | 0.13 | 0.12 | 0.13 | 0.17 | 0.19 | 0.18 | 0.17 |
| 24 | --- | --- | --- | --- | --- | 0.13 | 0.12 | 0.13 | 0.17 | 0.19 | 0.18 | 0.17 |
| 25 | --- | --- | --- | --- | --- | 0.12 | 0.12 | 0.13 | 0.17 | 0.19 | 0.18 | 0.17 |
| 26 | --- | --- | --- | --- | --- | 0.13 | 0.12 | 0.13 | 0.17 | 0.19 | 0.18 | 0.17 |
| 27 | --- | --- | --- | --- | --- | 0.13 | 0.11 | 0.13 | 0.17 | 0.19 | 0.19 | 0.17 |
| 28 | --- | --- | --- | --- | --- | 0.12 | 0.12 | 0.13 | 0.17 | 0.18 | 0.17 | 0.17 |
| 29 | --- | --- | --- | --- | --- | 0.12 | 0.12 | 0.14 | 0.17 | 0.19 | 0.17 | 0.17 |
| 30 | --- | --- | --- | --- | --- | 0.12 | 0.12 | 0.14 | 0.18 | 0.20 | 0.17 | 0.17 |
| 31 | --- | --- | --- | --- | --- | 0.13 | --- | 0.15 | --- | 0.21 | 0.17 | --- |
| TOTAL | --- | --- | --- | --- | --- | 3.82 | 3.56 | 3.95 | 4.74 | 5.47 | 5.91 | 5.04 |
| MEAN | --- | --- | --- | --- | --- | 0.12 | 0.12 | 0.13 | 0.16 | 0.18 | 0.19 | 0.17 |
| MAX | --- | --- | --- | --- | --- | 0.13 | 0.13 | 0.15 | 0.18 | 0.21 | 0.22 | 0.18 |
| MIN | --- | --- | --- | --- | --- | 0.12 | 0.11 | 0.12 | 0.14 | 0.15 | 0.17 | 0.16 |
| AC-FT | --- | --- | --- | --- | --- | 7.6 | 7.1 | 7.8 | 9.4 | 11 | 12 | 10 |

e Estimated.

07083000 HALFMOON CREEK NEAR MALTA, CO
(Hydrologic Benchmark station)

LOCATION.--Lat 39°10'20", long 106°23'19", in SE¹/₄SE¹/₄ sec.13, T.10 S., R.81 W., Lake County, Hydrologic Unit 11020001, on San Isabel National Forest, on right bank 1.4 mi upstream from culvert on Halfmoon Campground road, 3.3 mi upstream from mouth, and 4.3 mi southwest of Malta.

DRAINAGE AREA.--23.6 mi².

PERIOD OF RECORD.--August 1946 to current year. Meteorological data available, May 1994 to September 1995. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07083000

REVISED RECORDS.--WSP 2121: Drainage area at site 1.4 mi downstream. WRD Colo. 1968: 1967 (M). WDR CO-79-1: 1976 (M). WDR CO-80-1: 1954 (M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Concrete control since 1966. Elevation of gage is 9,830 ft above NGVD of 1929, from topographic map. Prior to Oct. 19, 1966, at sites 1.4 mi downstream at different datums.

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 "Supplementary Water-Quality Data for Gaging Stations section of this report.

DISCHARGE, CUBIC FEET PER SECOND
 WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
 DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|------|-------|---------|-------|-------|-------|-------|
| 1 | 9.6 | 6.7 | e3.5 | e3.2 | e3.3 | e2.6 | e2.4 | 10 | 188 | 85 | 35 | 19 |
| 2 | 10 | 7.0 | e3.5 | e3.2 | e3.2 | e2.6 | e2.4 | 9.4 | 142 | 85 | 29 | 17 |
| 3 | 12 | e7.2 | e3.5 | e3.4 | e3.1 | e2.6 | 2.5 | 9.1 | 153 | 83 | 29 | 18 |
| 4 | 10 | e7.3 | e3.5 | e3.4 | e3.1 | e2.6 | 2.3 | 9.4 | 129 | 83 | 27 | 18 |
| 5 | 10 | e7.5 | e3.5 | e3.4 | e3.0 | e2.5 | 2.3 | 8.6 | 103 | 76 | 25 | 18 |
| 6 | 9.7 | e7.5 | e3.5 | e3.4 | e3.0 | e2.5 | 2.3 | 7.9 | 81 | 72 | 24 | 26 |
| 7 | 9.7 | e7.5 | e3.5 | e3.4 | e3.0 | e2.5 | 2.3 | 7.6 | 73 | 69 | 23 | 34 |
| 8 | 9.7 | e7.5 | e3.5 | e3.4 | e3.0 | e2.5 | 2.4 | 7.4 | 69 | 67 | 22 | 33 |
| 9 | 9.3 | e7.5 | e3.5 | e3.4 | e3.0 | e2.5 | 2.7 | 7.4 | 84 | 66 | 20 | 41 |
| 10 | 9.0 | e7.0 | e3.4 | e3.4 | e3.0 | e2.5 | 3.6 | 7.1 | 113 | 62 | 20 | 43 |
| 11 | 8.7 | e6.5 | e3.4 | e3.4 | e3.0 | e2.4 | 4.5 | 6.8 | 139 | 59 | 19 | 37 |
| 12 | 8.3 | e6.5 | e3.4 | e3.4 | e3.0 | e2.4 | 5.0 | 8.3 | 150 | 57 | 19 | 37 |
| 13 | 8.1 | e6.0 | e3.5 | e3.4 | e2.9 | e2.4 | 5.7 | 13 | 151 | 53 | 18 | 37 |
| 14 | 7.8 | e6.0 | e3.5 | e3.4 | e2.9 | e2.4 | 7.1 | 17 | 130 | 49 | 17 | 33 |
| 15 | 7.4 | e5.5 | e3.5 | e3.3 | e2.9 | e2.4 | 6.9 | 27 | 139 | 44 | 16 | 30 |
| 16 | 7.4 | e6.0 | e3.4 | e3.2 | e2.9 | e2.4 | 6.6 | 29 | 136 | 42 | 17 | 29 |
| 17 | 7.3 | e5.5 | e3.3 | e3.3 | e2.9 | e2.3 | 6.3 | 48 | 120 | 40 | 20 | 27 |
| 18 | 7.1 | e5.0 | e3.2 | e3.3 | e2.8 | e2.3 | 6.1 | 54 | 130 | 39 | 23 | 25 |
| 19 | 7.0 | e5.0 | e3.0 | e3.4 | e2.8 | e2.3 | 5.7 | 46 | 126 | 38 | 24 | 24 |
| 20 | 7.2 | e4.5 | e3.2 | e3.4 | e2.8 | e2.3 | 5.9 | 49 | 120 | 38 | 20 | 22 |
| 21 | 7.4 | e4.0 | e3.4 | e3.4 | e2.8 | e2.4 | 6.0 | 59 | 111 | 37 | 18 | 21 |
| 22 | 7.1 | e4.5 | e3.2 | e3.4 | e2.8 | e2.4 | 6.1 | 79 | 115 | 36 | 18 | 19 |
| 23 | 7.6 | e4.5 | e3.2 | e3.4 | e2.7 | e2.4 | 5.6 | 105 | 110 | 35 | 18 | 18 |
| 24 | 6.9 | e4.0 | e3.2 | e3.4 | e2.7 | e2.3 | 5.6 | 125 | 105 | 31 | 19 | 17 |
| 25 | 7.1 | e3.5 | e3.2 | e3.4 | e2.7 | e2.3 | 6.7 | 147 | 92 | 30 | 22 | 16 |
| 26 | 7.0 | e3.5 | e3.0 | e3.4 | e2.7 | e2.3 | 7.6 | 144 | 93 | 31 | 21 | 16 |
| 27 | 7.1 | e4.0 | e3.2 | e3.4 | e2.7 | e2.3 | 8.4 | 168 | 94 | 31 | 20 | 15 |
| 28 | 6.8 | e4.0 | e3.2 | e3.4 | e2.6 | e2.3 | 8.9 | 191 | 92 | 33 | 24 | 14 |
| 29 | 6.2 | e3.5 | e3.2 | e3.4 | --- | e2.3 | 10 | 210 | 94 | 30 | 20 | 14 |
| 30 | 7.0 | e3.5 | e3.2 | e3.4 | --- | e2.4 | 11 | 206 | 89 | 27 | 22 | 13 |
| 31 | 6.9 | --- | e3.2 | e3.4 | --- | e2.4 | --- | 185 | --- | 28 | 21 | --- |
| TOTAL | 252.4 | 168.2 | 103.5 | 104.5 | 81.3 | 74.8 | 160.9 | 2,001.0 | 3,471 | 1,556 | 670 | 731 |
| MEAN | 8.14 | 5.61 | 3.34 | 3.37 | 2.90 | 2.41 | 5.36 | 64.5 | 116 | 50.2 | 21.6 | 24.4 |
| MAX | 12 | 7.5 | 3.5 | 3.4 | 3.3 | 2.6 | 11 | 210 | 188 | 85 | 35 | 43 |
| MIN | 6.2 | 3.5 | 3.0 | 3.2 | 2.6 | 2.3 | 2.3 | 6.8 | 69 | 27 | 16 | 13 |
| AC-FT | 501 | 334 | 205 | 207 | 161 | 148 | 319 | 3,970 | 6,880 | 3,090 | 1,330 | 1,450 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 11.2 | 7.60 | 5.12 | 4.11 | 3.76 | 3.75 | 6.81 | 45.8 | 129 | 82.7 | 34.9 | 18.0 |
| MAX | 24.5 | 16.6 | 9.65 | 9.03 | 7.90 | 10.8 | 13.8 | 79.1 | 208 | 247 | 128 | 44.3 |
| (WY) | (1962) | (1962) | (1996) | (1996) | (1986) | (1947) | (1989) | (1996) | (1980) | (1995) | (1995) | (1961) |
| MIN | 6.23 | 4.40 | 3.19 | 1.65 | 1.70 | 1.20 | 2.70 | 17.7 | 41.4 | 12.7 | 7.11 | 8.03 |
| (WY) | (1956) | (1992) | (1993) | (1977) | (1948) | (1948) | (1973) | (1995) | (2002) | (2002) | (2002) | (1974) |

SUMMARY STATISTICS

| | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | WATER YEARS 1946 - 2003 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 4,300.3 | | 9,374.6 | | | |
| ANNUAL MEAN | 11.8 | | 25.7 | | 29.5 | |
| HIGHEST ANNUAL MEAN | | | | | 55.3 1995 | |
| LOWEST ANNUAL MEAN | | | | | 12.2 2002 | |
| HIGHEST DAILY MEAN | 85 | May 31 | 210 | May 29 | 410 | Jul 12, 1995 |
| LOWEST DAILY MEAN | e3.0 | Dec 19 | e2.3 | Mar 17 | a1.1 | Apr 1, 1948 |
| ANNUAL SEVEN-DAY MINIMUM | e3.2 | Dec 22 | e2.3 | Mar 23 | 1.2 | Mar 27, 1948 |
| MAXIMUM PEAK FLOW | | | 286 | May 29 | b615 | Jun 30, 1984 |
| MAXIMUM PEAK STAGE | | | 3.18 | May 29 | c3.77 | Jun 30, 1984 |
| ANNUAL RUNOFF (AC-FT) | 8,530 | | 18,590 | | 21,340 | |
| 10 PERCENT EXCEEDS | 29 | | 85 | | 88 | |
| 50 PERCENT EXCEEDS | 7.0 | | 7.2 | | 9.0 | |
| 90 PERCENT EXCEEDS | 4.0 | | 2.6 | | 3.2 | |

e Estimated.

a Also occurred Apr 2, 1948.

b From rating curve extended above 254 ft³/s.

c Maximum gage height for period of record, 4.32 ft, Apr 24, 1965, backwater from ice.

07086000 ARKANSAS RIVER AT GRANITE, CO

LOCATION.--Lat 39°02'34", long 106°15'55", in SE¹/₄SW¹/₄ sec.31, T.11 S., R.79 W., Chaffee County, Hydrologic Unit 11020001, on right bank at Granite, 100 ft east of U.S. Highway 24, 100 ft downstream from county bridge, and 200 ft upstream from Cache Creek.

DRAINAGE AREA.--427 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to October 1895, May to December 1897, August to September 1898, March to October 1899, April to May 1901 (gage heights and discharge measurements only in 1895, 1899, and 1901), April 1910 to current year. Monthly discharge only for some periods, published in WSP 1311. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07086000

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1711: 1952, 1956(M).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,914.86 ft above NGVD of 1929, supplementary adjustment of 1960. Prior to Apr. 6, 1910, nonrecording gages near present site at different datums. Apr. 6, 1910 to Oct. 25, 1917, water-stage recorder or nonrecording gage at site 832 ft upstream at different datum. Oct. 26, 1917 to Oct. 26, 1960, water-stage recorder at site 168 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions from Colorado River Basin (see elsewhere in this report), diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Turquoise Lake and Twin Lakes Reservoir, on tributaries upstream from station, combined capacity, about 269,700 acre-ft.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|-------|
| 1 | 84 | 116 | e67 | e69 | e57 | e48 | 106 | 201 | 2,150 | 544 | 431 | 152 |
| 2 | 90 | 114 | e68 | e70 | e58 | e45 | 157 | 210 | 2,080 | 511 | 415 | 141 |
| 3 | 108 | 107 | e66 | e80 | e52 | e42 | 180 | 207 | 1,770 | 478 | 408 | 139 |
| 4 | 109 | 107 | e64 | e90 | e48 | e43 | 167 | 210 | 1,350 | 461 | 299 | 137 |
| 5 | 100 | 110 | e60 | e90 | e45 | e46 | 160 | 214 | 1,160 | 454 | 169 | 130 |
| 6 | 91 | 106 | e60 | e80 | e45 | e47 | 157 | 217 | 1,100 | 445 | 171 | 151 |
| 7 | 90 | 103 | e58 | e50 | e42 | e48 | 161 | 213 | 943 | 478 | 169 | 175 |
| 8 | 90 | 107 | e60 | e53 | e40 | e47 | 165 | 214 | 797 | 496 | 260 | 177 |
| 9 | 88 | 114 | e59 | e56 | e41 | e47 | 165 | 215 | 787 | 490 | 519 | 182 |
| 10 | 89 | 104 | e58 | e53 | e42 | e47 | 183 | 216 | 902 | 486 | 518 | 205 |
| 11 | 102 | 111 | e57 | e53 | e48 | e60 | 206 | 209 | 1,060 | 476 | 445 | 234 |
| 12 | 102 | e109 | e58 | e50 | e50 | e80 | 211 | 203 | 1,200 | 464 | 340 | 240 |
| 13 | 95 | e105 | e59 | e51 | e60 | e82 | 206 | 220 | 1,380 | 457 | 232 | 231 |
| 14 | 97 | e99 | e60 | e52 | e68 | e78 | 220 | 249 | 1,350 | 455 | 191 | 227 |
| 15 | 99 | e90 | e62 | e55 | e58 | e69 | 205 | 300 | 1,320 | 454 | 146 | 183 |
| 16 | 102 | e85 | e60 | e53 | e45 | 67 | 169 | 290 | 1,280 | 453 | 138 | 105 |
| 17 | 103 | e92 | e61 | e53 | e50 | 66 | 179 | 289 | 1,110 | 465 | 149 | 121 |
| 18 | 103 | e82 | e59 | e52 | e51 | e66 | 178 | 423 | 983 | 484 | 162 | 208 |
| 19 | 102 | e80 | e60 | e55 | e50 | e60 | 171 | 633 | 924 | 483 | 171 | 209 |
| 20 | 97 | e82 | e66 | e58 | e49 | e60 | 167 | 615 | 1,080 | 482 | 155 | 206 |
| 21 | 96 | e79 | e70 | e59 | e51 | 77 | 180 | 512 | 1,040 | 487 | 142 | 204 |
| 22 | 99 | e76 | e70 | e60 | e53 | e69 | 223 | 536 | 1,080 | 476 | 137 | 191 |
| 23 | 109 | e72 | e69 | e62 | e50 | 79 | 213 | 632 | 997 | 471 | 146 | 154 |
| 24 | 114 | e73 | e70 | e60 | e49 | 86 | 205 | 769 | 715 | 488 | 158 | 120 |
| 25 | 108 | e71 | e69 | e58 | e50 | 88 | 219 | 782 | 580 | 493 | 170 | 98 |
| 26 | 105 | e67 | e70 | e56 | e49 | e82 | 226 | 885 | 533 | 510 | 166 | 89 |
| 27 | 107 | e67 | e70 | e58 | e49 | e80 | 233 | 1,100 | 476 | 528 | 158 | 87 |
| 28 | 105 | e68 | e73 | e58 | e49 | e75 | 241 | 1,270 | 451 | 491 | 157 | 83 |
| 29 | 107 | e68 | e78 | e53 | --- | e77 | 225 | 1,530 | 447 | 407 | 148 | 84 |
| 30 | 102 | e69 | e74 | e58 | --- | e76 | 205 | 1,930 | 508 | 420 | 152 | 85 |
| 31 | 115 | --- | e67 | e60 | --- | e82 | --- | 2,070 | --- | 432 | 164 | --- |
| TOTAL | 3,108 | 2,733 | 2,002 | 1,865 | 1,399 | 2,019 | 5,683 | 17,564 | 31,553 | 14,719 | 7,186 | 4,748 |
| MEAN | 100 | 91.1 | 64.6 | 60.2 | 50.0 | 65.1 | 189 | 567 | 1,052 | 475 | 232 | 158 |
| MAX | 115 | 116 | 78 | 90 | 68 | 88 | 241 | 2,070 | 2,150 | 544 | 519 | 240 |
| MIN | 84 | 67 | 57 | 50 | 40 | 42 | 106 | 201 | 447 | 407 | 137 | 83 |
| AC-FT | 6,160 | 5,420 | 3,970 | 3,700 | 2,770 | 4,000 | 11,270 | 34,840 | 62,590 | 29,200 | 14,250 | 9,420 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2003, BY WATER YEAR (WY)

| | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 155 | 129 | 110 | 108 | 113 | 129 | 237 | 693 | 1,268 | 887 | 528 | 241 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MAX | 356 | 337 | 448 | 419 | 526 | 500 | 667 | 1,711 | 2,146 | 2,367 | 1,239 | 546 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | (1977) | (1983) | (1983) | (1983) | (1985) | (1985) | (1962) | (1984) | (1984) | (1983) | (1984) | (1961) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MIN | 82.4 | 64.3 | 48.5 | 39.8 | 45.0 | 55.0 | 97.1 | 191 | 262 | 150 | 151 | 93.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| (WY) | (1932) | (1945) | (1977) | (1918) | (1919) | (1919) | (1933) | (1935) | (2002) | (2002) | (1934) | (2002) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1910 - 2003

| | | | |
|--------------------------|---------|---------|---------|
| ANNUAL TOTAL | 52,644 | 94,579 | |
| ANNUAL MEAN | 144 | 259 | 385 |
| HIGHEST ANNUAL MEAN | | | 687 |
| LOWEST ANNUAL MEAN | | | 157 |
| HIGHEST DAILY MEAN | 393 | May 23 | 2,150 |
| LOWEST DAILY MEAN | e57 | Dec 11 | e40 |
| ANNUAL SEVEN-DAY MINIMUM | e58 | Dec 7 | e43 |
| MAXIMUM PEAK FLOW | | | 2,220 |
| MAXIMUM PEAK STAGE | | | 5.26 |
| ANNUAL RUNOFF (AC-FT) | 104,400 | 187,600 | 278,700 |
| 10 PERCENT EXCEEDS | 222 | 558 | 1,040 |
| 50 PERCENT EXCEEDS | 141 | 109 | 170 |
| 90 PERCENT EXCEEDS | 72 | 52 | 74 |

e Estimated.

07086000 ARKANSAS RIVER AT GRANITE, CO—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
|-------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 167 | 159 | 164 | 167 | 155 | 160 | 128 | 122 | 125 | 137 | 126 | 132 |
| 2 | 168 | 158 | 165 | 173 | 157 | 165 | 122 | 113 | 116 | 129 | 123 | 125 |
| 3 | 168 | 163 | 166 | 174 | 151 | 164 | 116 | 105 | 111 | 128 | 125 | 127 |
| 4 | 171 | 161 | 166 | 170 | 150 | 163 | 115 | 108 | 111 | 130 | 126 | 128 |
| 5 | 172 | 160 | 166 | 176 | 154 | 166 | 113 | 106 | 110 | 132 | 120 | 126 |
| 6 | 168 | 157 | 161 | 173 | 155 | 167 | 113 | 111 | 112 | 122 | 118 | 120 |
| 7 | 172 | 148 | 164 | 170 | 158 | 167 | 112 | 108 | 110 | 120 | 117 | 119 |
| 8 | 173 | 149 | 164 | 170 | 165 | 168 | 117 | 98 | 107 | 122 | 119 | 120 |
| 9 | 174 | 164 | 171 | 174 | 165 | 170 | 118 | 104 | 111 | 121 | 119 | 120 |
| 10 | 173 | 151 | 166 | 177 | 165 | 171 | 119 | 108 | 111 | 122 | 118 | 120 |
| 11 | 170 | 152 | 164 | 179 | 170 | 174 | 115 | 107 | 110 | 119 | 116 | 118 |
| 12 | 171 | 163 | 168 | 181 | 170 | 174 | 115 | 109 | 112 | 121 | 116 | 118 |
| 13 | 170 | 163 | 166 | 183 | 169 | 175 | 122 | 113 | 117 | 125 | 116 | 119 |
| 14 | 168 | 159 | 162 | 177 | 168 | 173 | 125 | 119 | 121 | 126 | 112 | 119 |
| 15 | 166 | 158 | 162 | 180 | 170 | 175 | 133 | 121 | 125 | 122 | 112 | 117 |
| 16 | 171 | 154 | 165 | 180 | 173 | 176 | 133 | 126 | 129 | 131 | 115 | 121 |
| 17 | 171 | 157 | 165 | 178 | 173 | 176 | 130 | 124 | 127 | 143 | 130 | 138 |
| 18 | 166 | 158 | 162 | 173 | 170 | 172 | 130 | 124 | 127 | 142 | 100 | 127 |
| 19 | 179 | 156 | 167 | 172 | 168 | 170 | 129 | 121 | 125 | 101 | 96 | 99 |
| 20 | 173 | 146 | 164 | 168 | 162 | 165 | 129 | 122 | 126 | 108 | 96 | 101 |
| 21 | 165 | 154 | 162 | 167 | 156 | 162 | 131 | 115 | 125 | 130 | 106 | 119 |
| 22 | 163 | 156 | 159 | 165 | 157 | 161 | 123 | 108 | 114 | 130 | 117 | 123 |
| 23 | 167 | 155 | 162 | 162 | 151 | 156 | 133 | 118 | 127 | 152 | 115 | 129 |
| 24 | 163 | 155 | 159 | 157 | 151 | 155 | 141 | 126 | 135 | 262 | 150 | 178 |
| 25 | 161 | 153 | 157 | 154 | 146 | 150 | 140 | 132 | 136 | 288 | 127 | 191 |
| 26 | 162 | 153 | 156 | 147 | 139 | 142 | 132 | 118 | 122 | 144 | 98 | 116 |
| 27 | 161 | 148 | 156 | 139 | 129 | 134 | 123 | 119 | 121 | 98 | 92 | 94 |
| 28 | 166 | 151 | 157 | 129 | 123 | 126 | 126 | 118 | 121 | 97 | 88 | 93 |
| 29 | --- | --- | --- | 125 | 122 | 124 | 144 | 116 | 124 | 88 | 79 | 84 |
| 30 | --- | --- | --- | 126 | 121 | 123 | 144 | 131 | 136 | 87 | 77 | 81 |
| 31 | --- | --- | --- | 130 | 121 | 125 | --- | --- | --- | 81 | 74 | 77 |
| MONTH | 179 | 146 | 163 | 183 | 121 | 160 | 144 | 98 | 120 | 288 | 74 | 119 |
| DAY | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 79 | 74 | 76 | 102 | 94 | 99 | 98 | 90 | 95 | 160 | 154 | 157 |
| 2 | 76 | 75 | 75 | 105 | 99 | 101 | 93 | 90 | 92 | 156 | 151 | 153 |
| 3 | 80 | 75 | 77 | 105 | 97 | 102 | 93 | 90 | 92 | 152 | 150 | 151 |
| 4 | 84 | 79 | 82 | 99 | 95 | 97 | 143 | 91 | 112 | 154 | 150 | 152 |
| 5 | 85 | 83 | 84 | 98 | 95 | 96 | 148 | 143 | 145 | 153 | 150 | 151 |
| 6 | 85 | 84 | 84 | 98 | 95 | 96 | 151 | 144 | 148 | 173 | 151 | 165 |
| 7 | 92 | 84 | 89 | 97 | 90 | 93 | 150 | 140 | 144 | 186 | 168 | 178 |
| 8 | 92 | 91 | 92 | 96 | 90 | 93 | 143 | 109 | 133 | 178 | 168 | 173 |
| 9 | 93 | 90 | 92 | 97 | 93 | 95 | 109 | 106 | 107 | 179 | 166 | 172 |
| 10 | 93 | 85 | 89 | 98 | 94 | 96 | 116 | 109 | 113 | 181 | 170 | 175 |
| 11 | 88 | 80 | 84 | 95 | 91 | 94 | 121 | 114 | 117 | 180 | 150 | 164 |
| 12 | 83 | 78 | 81 | 92 | 91 | 91 | 124 | 116 | 119 | 150 | 141 | 146 |
| 13 | 88 | 78 | 82 | 92 | 91 | 92 | 142 | 120 | 131 | 141 | 138 | 139 |
| 14 | 79 | 76 | 78 | 92 | 91 | 91 | 162 | 140 | 150 | 139 | 137 | 138 |
| 15 | 77 | 76 | 77 | 96 | 91 | 94 | 163 | 154 | 160 | 186 | 135 | 150 |
| 16 | 77 | 74 | 76 | 103 | 96 | 98 | 154 | 147 | 150 | 196 | 186 | 191 |
| 17 | 81 | 77 | 79 | 103 | 93 | 98 | 161 | 148 | 156 | 211 | 144 | 190 |
| 18 | 88 | 80 | 84 | 94 | 91 | 93 | 169 | 159 | 163 | 144 | 131 | 136 |
| 19 | 92 | 81 | 87 | 95 | 92 | 94 | 170 | 163 | 166 | 131 | 129 | 130 |
| 20 | 84 | 80 | 82 | 95 | 92 | 93 | 172 | 161 | 165 | 130 | 129 | 129 |
| 21 | 82 | 80 | 81 | 97 | 92 | 95 | 166 | 160 | 162 | 130 | 127 | 128 |
| 22 | 82 | 78 | 80 | 97 | 93 | 95 | 161 | 156 | 158 | 142 | 127 | 131 |
| 23 | 83 | 78 | 80 | 97 | 95 | 96 | 158 | 152 | 155 | 168 | 141 | 149 |
| 24 | 98 | 81 | 91 | 96 | 94 | 95 | 157 | 152 | 154 | 192 | 168 | 174 |
| 25 | 100 | 95 | 99 | 95 | 90 | 93 | 157 | 153 | 154 | 192 | 184 | 189 |
| 26 | 107 | 98 | 103 | 92 | 89 | 91 | 161 | 151 | 155 | 192 | 189 | 190 |
| 27 | 108 | 103 | 105 | 96 | 90 | 93 | 161 | 155 | 157 | 191 | 186 | 189 |
| 28 | 107 | 103 | 105 | 102 | 94 | 97 | 161 | 155 | 157 | 189 | 185 | 187 |
| 29 | 106 | 102 | 104 | 107 | 102 | 104 | 159 | 151 | 156 | 190 | 186 | 188 |
| 30 | 106 | 93 | 99 | 104 | 99 | 103 | 158 | 152 | 154 | 203 | 187 | 193 |
| 31 | --- | --- | --- | 100 | 94 | 98 | 162 | 157 | 159 | --- | --- | --- |
| MONTH | 108 | 74 | 87 | 107 | 89 | 96 | 172 | 90 | 141 | 211 | 127 | 162 |

07086000 ARKANSAS RIVER AT GRANITE, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|-----|------|------|-----|------|
| | | | | | | | | | | | | |
| 1 | 10.6 | 5.0 | 8.2 | 4.0 | 0.4 | 2.5 | 0.3 | 0.0 | 0.0 | --- | --- | --- |
| 2 | 10.5 | 5.7 | 7.8 | 4.8 | 1.3 | 2.8 | 0.7 | 0.0 | 0.1 | --- | --- | --- |
| 3 | 7.8 | 4.4 | 6.0 | 3.6 | 0.0 | 1.3 | 0.1 | 0.0 | 0.0 | --- | --- | --- |
| 4 | 9.0 | 2.6 | 5.8 | 3.8 | 0.0 | 1.3 | 0.1 | 0.0 | 0.0 | --- | --- | --- |
| 5 | 11.1 | 4.6 | 7.3 | 2.6 | 0.0 | 0.7 | 0.4 | 0.0 | 0.1 | --- | --- | --- |
| 6 | 11.2 | 3.5 | 7.2 | 4.4 | 0.0 | 1.5 | 0.0 | 0.0 | 0.0 | --- | --- | --- |
| 7 | 11.5 | 3.6 | 7.6 | 4.8 | 0.0 | 1.8 | 0.1 | 0.0 | 0.0 | --- | --- | --- |
| 8 | 11.8 | 4.1 | 8.0 | 4.5 | 1.4 | 2.9 | 0.1 | 0.0 | 0.0 | --- | --- | --- |
| 9 | 11.3 | 4.1 | 7.8 | 2.9 | 0.1 | 1.4 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| 10 | 10.9 | 3.3 | 7.3 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.1 |
| 11 | 11.1 | 4.5 | 7.7 | --- | --- | --- | 0.1 | 0.0 | 0.0 | 0.9 | 0.0 | 0.2 |
| 12 | 9.9 | 3.9 | 6.9 | --- | --- | --- | 0.1 | 0.0 | 0.0 | 1.0 | 0.0 | 0.2 |
| 13 | 9.8 | 1.6 | 5.6 | 1.8 | 0.0 | 0.5 | 0.1 | 0.0 | 0.0 | 0.5 | 0.0 | 0.1 |
| 14 | 10.0 | 2.4 | 6.0 | 2.4 | 0.0 | 0.7 | 0.1 | 0.0 | 0.0 | 0.6 | 0.0 | 0.1 |
| 15 | 9.5 | 2.0 | 5.8 | 2.5 | 0.0 | 0.6 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 16 | 9.4 | 2.9 | 6.0 | 0.6 | 0.0 | 0.1 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 17 | 9.6 | 1.7 | 5.6 | 1.6 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 |
| 18 | 9.5 | 2.0 | 5.8 | 1.4 | 0.0 | 0.3 | --- | --- | --- | 0.1 | 0.0 | 0.0 |
| 19 | 9.1 | 2.1 | 5.6 | 0.4 | 0.0 | 0.1 | --- | --- | --- | 0.1 | 0.0 | 0.0 |
| 20 | 8.1 | 1.6 | 4.9 | 1.9 | 0.0 | 0.3 | --- | --- | --- | 0.1 | 0.0 | 0.0 |
| 21 | 7.1 | 1.4 | 4.5 | 2.4 | 0.0 | 0.5 | --- | --- | --- | 0.4 | 0.0 | 0.1 |
| 22 | 7.1 | 1.7 | 4.6 | 2.0 | 0.0 | 0.5 | --- | --- | --- | 0.8 | 0.0 | 0.1 |
| 23 | 7.3 | 2.8 | 5.0 | 1.5 | 0.0 | 0.3 | --- | --- | --- | 1.5 | 0.0 | 0.4 |
| 24 | 6.5 | 2.9 | 4.8 | 2.5 | 0.0 | 0.9 | --- | --- | --- | 1.7 | 0.0 | 0.6 |
| 25 | 6.9 | 1.8 | 4.4 | 1.7 | 0.0 | 0.3 | --- | --- | --- | 1.9 | 0.0 | 0.5 |
| 26 | 6.2 | 1.6 | 4.1 | 0.1 | 0.0 | 0.0 | --- | --- | --- | 1.7 | 0.0 | 0.3 |
| 27 | 5.9 | 3.9 | 4.8 | 0.1 | 0.0 | 0.0 | --- | --- | --- | 2.9 | 0.0 | 0.8 |
| 28 | 6.9 | 2.4 | 4.6 | 0.1 | 0.0 | 0.0 | --- | --- | --- | 1.5 | 0.0 | 0.4 |
| 29 | 5.7 | 1.2 | 3.2 | 0.4 | 0.0 | 0.1 | --- | --- | --- | 2.1 | 0.0 | 0.4 |
| 30 | 3.3 | 0.2 | 1.8 | 0.5 | 0.0 | 0.1 | --- | --- | --- | 2.4 | 0.0 | 0.6 |
| 31 | 5.5 | 0.9 | 3.2 | --- | --- | --- | --- | --- | --- | 3.4 | 0.0 | 0.9 |
| MONTH | 11.8 | 0.2 | 5.7 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 3.4 | 0.0 | 1.0 | 0.7 | 0.0 | 0.1 | 8.3 | 0.8 | 4.4 | 10.8 | 2.2 | 6.5 |
| 2 | 2.1 | 0.0 | 0.6 | 0.7 | 0.0 | 0.1 | 7.0 | 1.0 | 3.8 | 10.1 | 3.5 | 7.0 |
| 3 | 1.6 | 0.0 | 0.3 | 1.3 | 0.0 | 0.2 | 5.9 | 0.6 | 3.1 | 9.6 | 4.5 | 7.4 |
| 4 | 0.1 | 0.0 | 0.0 | 2.5 | 0.0 | 0.4 | 5.7 | 0.3 | 2.7 | 10.9 | 4.3 | 7.1 |
| 5 | 0.1 | 0.0 | 0.0 | 2.5 | 0.0 | 0.5 | 5.0 | 0.7 | 2.6 | 11.2 | 4.0 | 6.9 |
| 6 | 0.0 | 0.0 | 0.0 | 1.5 | 0.0 | 0.2 | 5.7 | 0.7 | 2.8 | 11.4 | 3.7 | 7.4 |
| 7 | 0.1 | 0.0 | 0.0 | 4.1 | 0.0 | 0.9 | 5.1 | 0.0 | 2.2 | 9.5 | 4.4 | 6.8 |
| 8 | 0.1 | 0.0 | 0.0 | 4.7 | 0.0 | 1.2 | 7.4 | 0.0 | 2.9 | 10.6 | 4.6 | 7.4 |
| 9 | 0.1 | 0.0 | 0.0 | 4.8 | 0.0 | 1.1 | 9.0 | 0.2 | 4.3 | 11.2 | 5.1 | 7.8 |
| 10 | 0.1 | 0.0 | 0.0 | 5.1 | 0.0 | 1.4 | 9.2 | 1.4 | 5.0 | 8.0 | 3.8 | 6.1 |
| 11 | 0.1 | 0.0 | 0.0 | 4.7 | 0.0 | 1.5 | 9.2 | 1.9 | 5.2 | 11.6 | 2.8 | 7.1 |
| 12 | 0.1 | 0.0 | 0.0 | 5.3 | 0.0 | 1.6 | 7.4 | 2.0 | 4.7 | 13.2 | 4.5 | 8.7 |
| 13 | 0.2 | 0.0 | 0.1 | 5.5 | 0.0 | 1.5 | 9.9 | 1.8 | 5.5 | 11.8 | 5.8 | 8.9 |
| 14 | 0.3 | 0.0 | 0.1 | 3.4 | 0.0 | 1.4 | 9.5 | 2.1 | 5.7 | 12.9 | 5.5 | 9.4 |
| 15 | 1.1 | 0.0 | 0.3 | 6.4 | 0.1 | 3.1 | 5.8 | 2.7 | 4.3 | 10.0 | 7.4 | 8.9 |
| 16 | 1.5 | 0.0 | 0.3 | 4.3 | 1.4 | 2.9 | 9.7 | 0.8 | 4.8 | 14.6 | 6.6 | 10.3 |
| 17 | 2.4 | 0.0 | 0.6 | 4.2 | 0.2 | 2.1 | 7.2 | 2.2 | 4.9 | 14.2 | 7.0 | 10.4 |
| 18 | 2.1 | 0.0 | 0.5 | 2.2 | 0.0 | 0.9 | 9.1 | 2.4 | 5.3 | 12.8 | 7.0 | 9.6 |
| 19 | 1.6 | 0.0 | 0.2 | 4.1 | 0.0 | 1.7 | 6.7 | 2.2 | 4.3 | 12.5 | 7.0 | 9.8 |
| 20 | 0.7 | 0.0 | 0.1 | 5.3 | 0.0 | 2.4 | 10.4 | 1.8 | 5.6 | 11.4 | 6.8 | 8.8 |
| 21 | 0.8 | 0.0 | 0.1 | 7.2 | 1.1 | 3.6 | 7.7 | 3.2 | 5.4 | 13.0 | 5.8 | 9.3 |
| 22 | 1.2 | 0.0 | 0.2 | 8.0 | 0.0 | 3.7 | 8.1 | 3.7 | 5.6 | 13.6 | 6.8 | 10.3 |
| 23 | 0.4 | 0.0 | 0.1 | 9.0 | 0.9 | 4.6 | 5.2 | 2.1 | 3.6 | 13.5 | 7.5 | 10.7 |
| 24 | 2.6 | 0.0 | 0.5 | 6.9 | 1.1 | 3.8 | 8.4 | 1.2 | 4.6 | 12.4 | 7.6 | 10.4 |
| 25 | 1.8 | 0.0 | 0.4 | 7.6 | 0.1 | 3.5 | 11.0 | 2.1 | 6.3 | 10.5 | 7.3 | 9.1 |
| 26 | 1.0 | 0.0 | 0.2 | 5.8 | 1.1 | 3.2 | 11.4 | 3.2 | 7.1 | 11.2 | 6.0 | 8.9 |
| 27 | 1.6 | 0.0 | 0.4 | 3.4 | 0.0 | 1.3 | 10.7 | 3.4 | 7.0 | 13.9 | 8.0 | 10.9 |
| 28 | 0.5 | 0.0 | 0.1 | 4.5 | 0.0 | 1.4 | 11.3 | 3.1 | 7.0 | 13.9 | 8.3 | 11.3 |
| 29 | --- | --- | --- | 2.8 | 0.0 | 0.7 | 12.7 | 3.2 | 7.5 | 13.4 | 8.0 | 10.9 |
| 30 | --- | --- | --- | 5.6 | 0.0 | 2.1 | 10.8 | 3.8 | 7.4 | 12.2 | 9.1 | 10.8 |
| 31 | --- | --- | --- | 9.4 | 0.1 | 3.5 | --- | --- | --- | 13.0 | 8.5 | 10.6 |
| MONTH | 3.4 | 0.0 | 0.2 | 9.4 | 0.0 | 1.8 | 12.7 | 0.0 | 4.9 | 14.6 | 2.2 | 8.9 |

ARKANSAS RIVER BASIN

07086000 ARKANSAS RIVER AT GRANITE, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 11.5 | 9.3 | 10.2 | 16.0 | 11.4 | 13.6 | 19.0 | 14.3 | 16.4 | 18.9 | 11.3 | 15.0 |
| 2 | 12.5 | 8.1 | 10.3 | 17.6 | 11.3 | 14.3 | 19.4 | 14.7 | 16.7 | 17.6 | 11.0 | 14.4 |
| 3 | 13.2 | 8.8 | 11.0 | 17.2 | 11.4 | 14.3 | 18.7 | 15.5 | 17.0 | 15.8 | 11.6 | 13.5 |
| 4 | 12.9 | 8.7 | 10.9 | 17.3 | 11.6 | 14.4 | 19.3 | 15.1 | 16.9 | 16.9 | 10.6 | 13.6 |
| 5 | 11.2 | 9.0 | 10.2 | 15.6 | 11.5 | 14.0 | 19.3 | 12.2 | 15.8 | 16.3 | 10.4 | 13.3 |
| 6 | 11.7 | 7.7 | 9.8 | 15.4 | 11.7 | 13.8 | 17.3 | 12.4 | 15.2 | 15.6 | 11.5 | 13.2 |
| 7 | 12.7 | 8.5 | 10.4 | 16.3 | 11.6 | 14.2 | 17.7 | 11.9 | 14.8 | 13.2 | 11.1 | 12.1 |
| 8 | 13.4 | 7.6 | 10.6 | 17.4 | 12.5 | 14.9 | 19.8 | 12.9 | 15.6 | 16.5 | 8.6 | 12.3 |
| 9 | 12.1 | 8.8 | 10.7 | 17.6 | 12.7 | 15.3 | 18.3 | 15.1 | 16.6 | 12.6 | 10.2 | 11.4 |
| 10 | 13.8 | 8.8 | 11.1 | 17.6 | 12.5 | 15.1 | 18.5 | 14.9 | 16.5 | 12.7 | 8.7 | 10.3 |
| 11 | 14.0 | 9.3 | 11.7 | 17.2 | 12.4 | 15.0 | 18.3 | 15.1 | 16.3 | 11.9 | 7.7 | 9.8 |
| 12 | 13.0 | 10.0 | 11.5 | 17.1 | 13.2 | 15.2 | 17.8 | 14.2 | 15.8 | 15.1 | 8.0 | 11.2 |
| 13 | 12.1 | 8.8 | 10.5 | 16.9 | 13.3 | 15.3 | 18.1 | 13.4 | 15.4 | 12.9 | 9.7 | 11.0 |
| 14 | 13.5 | 9.5 | 11.6 | 16.7 | 13.3 | 14.9 | 19.5 | 11.5 | 15.2 | 14.3 | 7.4 | 10.6 |
| 15 | 14.1 | 10.3 | 12.2 | 16.5 | 12.9 | 14.5 | 19.8 | 11.1 | 15.2 | 14.4 | 7.4 | 10.8 |
| 16 | 12.1 | 10.3 | 11.2 | 17.2 | 13.0 | 14.6 | 16.9 | 11.9 | 14.3 | 13.9 | 6.0 | 9.9 |
| 17 | 12.6 | 9.0 | 10.9 | 17.9 | 12.8 | 15.0 | 16.5 | 11.7 | 13.8 | 14.3 | 8.0 | 11.0 |
| 18 | 12.9 | 9.9 | 11.2 | 18.4 | 13.5 | 15.7 | 16.0 | 11.6 | 13.6 | 13.4 | 7.2 | 10.1 |
| 19 | 12.1 | 9.8 | 10.9 | 17.9 | 13.9 | 15.7 | 18.1 | 10.1 | 13.8 | 13.8 | 7.4 | 10.5 |
| 20 | 12.3 | 9.7 | 11.1 | 17.0 | 13.6 | 15.4 | 19.9 | 11.0 | 15.2 | 14.0 | 8.2 | 10.8 |
| 21 | 14.1 | 9.5 | 11.8 | 18.3 | 13.6 | 15.8 | 17.0 | 12.2 | 14.8 | 14.0 | 7.8 | 10.7 |
| 22 | 14.6 | 10.3 | 12.5 | 18.7 | 13.9 | 16.2 | 16.3 | 12.4 | 14.5 | 14.5 | 7.8 | 10.8 |
| 23 | 14.0 | 10.8 | 12.5 | 18.2 | 14.2 | 15.8 | 16.1 | 12.6 | 14.4 | 14.6 | 7.2 | 10.7 |
| 24 | 14.3 | 9.7 | 11.9 | 18.0 | 14.0 | 16.0 | 17.6 | 10.9 | 14.2 | 14.5 | 6.5 | 10.2 |
| 25 | 14.5 | 9.5 | 11.9 | 18.0 | 14.6 | 16.2 | 17.0 | 12.4 | 14.6 | 13.3 | 5.6 | 9.4 |
| 26 | 16.0 | 9.6 | 12.6 | 18.6 | 14.7 | 16.4 | 18.5 | 11.4 | 14.6 | 13.5 | 5.4 | 9.4 |
| 27 | 16.4 | 9.7 | 13.1 | 18.1 | 15.0 | 16.3 | 17.4 | 12.2 | 14.8 | 13.7 | 5.7 | 9.7 |
| 28 | 15.3 | 10.1 | 12.9 | 18.9 | 14.4 | 16.2 | 16.3 | 12.7 | 14.2 | 14.0 | 6.0 | 9.9 |
| 29 | 15.7 | 10.5 | 13.1 | 18.3 | 13.8 | 15.7 | 18.4 | 10.8 | 14.3 | 13.5 | 5.7 | 9.6 |
| 30 | 15.2 | 10.9 | 13.2 | 18.5 | 14.0 | 16.3 | 15.7 | 11.7 | 13.5 | 13.5 | 6.4 | 9.7 |
| 31 | --- | --- | --- | 17.4 | 14.4 | 15.9 | 18.7 | 11.5 | 14.5 | --- | --- | --- |
| MONTH | 16.4 | 7.6 | 11.4 | 18.9 | 11.3 | 15.2 | 19.9 | 10.1 | 15.1 | 18.9 | 5.4 | 11.2 |

07087050 ARKANSAS RIVER BELOW GRANITE, CO

LOCATION.--Lat 38°59'42", long 106°13'11", in SW¹/₄NW¹/₄ sec.22, T.12 S., R.79 W., Chaffee County, Hydrologic Unit 11020001, on right bank 500 ft east of U.S. Highway 24, 1.0 mi downstream from Pine Creek, and 4.8 mi southeast of Granite.

DRAINAGE AREA.--546 mi².

PERIOD OF RECORD.--March 1999 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07087050

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,620 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions (see elsewhere in this report), diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 3,280 ft³/s, May 31, 2000, gage height, 8.06 ft; minimum daily, 101 ft³/s, Sept. 15, 22-23, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 3,230 ft³/s, June 1-2, gage height, 8.01 ft; minimum daily, 125 ft³/s (estimated), Apr. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-----|--------|--------|--------|--------|--------|--------|
| 1 | --- | --- | --- | --- | --- | --- | e125 | 224 | 3,150 | 819 | 631 | 240 |
| 2 | --- | --- | --- | --- | --- | --- | 168 | 240 | 3,020 | 776 | 616 | 254 |
| 3 | --- | --- | --- | --- | --- | --- | 191 | 235 | 2,640 | 733 | 606 | 220 |
| 4 | --- | --- | --- | --- | --- | --- | 176 | 234 | 2,140 | 707 | 581 | 209 |
| 5 | --- | --- | --- | --- | --- | --- | 168 | 238 | 1,830 | 692 | 513 | 203 |
| 6 | --- | --- | --- | --- | --- | --- | 168 | 240 | 1,550 | 646 | 560 | 226 |
| 7 | --- | --- | --- | --- | --- | --- | 173 | 236 | 1,210 | 671 | 581 | 263 |
| 8 | --- | --- | --- | --- | --- | --- | 176 | 236 | 1,040 | 697 | 435 | 267 |
| 9 | --- | --- | --- | --- | --- | --- | 177 | 236 | 1,100 | 682 | 661 | 286 |
| 10 | --- | --- | --- | --- | --- | --- | 195 | 236 | 1,360 | 675 | 656 | 361 |
| 11 | --- | --- | --- | --- | --- | --- | 218 | 231 | 1,510 | 668 | 581 | 379 |
| 12 | --- | --- | --- | --- | --- | --- | 221 | 228 | 1,670 | 643 | 453 | 374 |
| 13 | --- | --- | --- | --- | --- | --- | 219 | 244 | 1,890 | 675 | 313 | 357 |
| 14 | --- | --- | --- | --- | --- | --- | 237 | 279 | 1,760 | 686 | 257 | 348 |
| 15 | --- | --- | --- | --- | --- | --- | 226 | 351 | 1,680 | 691 | 201 | 304 |
| 16 | --- | --- | --- | --- | --- | --- | 189 | 384 | 1,870 | 688 | 187 | 217 |
| 17 | --- | --- | --- | --- | --- | --- | 198 | 404 | 1,620 | 698 | 202 | 223 |
| 18 | --- | --- | --- | --- | --- | --- | 195 | 578 | 1,410 | 713 | 218 | 304 |
| 19 | --- | --- | --- | --- | --- | --- | 190 | 840 | 1,340 | 706 | 229 | 291 |
| 20 | --- | --- | --- | --- | --- | --- | 185 | 718 | 1,530 | 700 | 207 | 287 |
| 21 | --- | --- | --- | --- | --- | --- | 196 | 597 | 1,480 | 708 | 197 | 285 |
| 22 | --- | --- | --- | --- | --- | --- | 245 | 663 | 1,500 | 693 | 195 | 271 |
| 23 | --- | --- | --- | --- | --- | --- | 236 | 889 | 1,410 | 687 | 207 | 224 |
| 24 | --- | --- | --- | --- | --- | --- | 228 | 1,160 | 1,090 | 697 | 222 | 187 |
| 25 | --- | --- | --- | --- | --- | --- | 244 | 1,220 | 898 | 699 | 258 | 165 |
| 26 | --- | --- | --- | --- | --- | --- | 254 | 1,320 | 784 | 718 | 299 | 145 |
| 27 | --- | --- | --- | --- | --- | --- | 260 | 1,610 | 740 | 745 | 277 | 139 |
| 28 | --- | --- | --- | --- | --- | --- | 269 | 1,960 | 724 | 709 | 266 | 135 |
| 29 | --- | --- | --- | --- | --- | --- | 255 | 2,310 | 726 | 614 | 230 | 133 |
| 30 | --- | --- | --- | --- | --- | --- | 229 | 2,800 | 784 | 624 | 235 | 133 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 2,990 | --- | 629 | 250 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | 6,211 | 24,131 | 45,456 | 21,489 | 11,324 | 7,430 |
| MEAN | --- | --- | --- | --- | --- | --- | 207 | 778 | 1,515 | 693 | 365 | 248 |
| MAX | --- | --- | --- | --- | --- | --- | 269 | 2,990 | 3,150 | 819 | 661 | 379 |
| MIN | --- | --- | --- | --- | --- | --- | 125 | 224 | 724 | 614 | 187 | 133 |
| AC-FT | --- | --- | --- | --- | --- | --- | 12,320 | 47,860 | 90,160 | 42,620 | 22,460 | 14,740 |

e Estimated.

07091200 ARKANSAS RIVER NEAR NATHROP, CO

LOCATION.--Lat 38°39'08", long 106°03'02", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.23, T.51 N., R.8 E., Chaffee County, Hydrologic Unit 11020001, on right bank 300 ft upstream from end of Chaffee County Road 194 in Browns Canyon, 3.7 mi downstream from Browns Creek, 6.7 mi south of Nathrop, and 9 mi north of Salida.

DRAINAGE AREA.--1,060 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1982. April 1989 to September 1993. October 1993 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07091200

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,350 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (occurred during period of seasonal record), 5,540 ft³/s, July 14, 1995, gage height, 8.63 ft, from rating curve extended above 5,500 ft³/s; maximum gage height, 8.94 ft, Aug. 31, 1972 (backwater from unnamed tributary); minimum daily, 95 ft³/s, Feb. 25-27, 1977.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 3,310 ft³/s, June 2, gage height, 7.35 ft; minimum daily, 179 ft³/s, Apr. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-----|--------|--------|--------|--------|--------|--------|
| 1 | --- | --- | --- | --- | --- | --- | 179 | 286 | 3,140 | 923 | 674 | 327 |
| 2 | --- | --- | --- | --- | --- | --- | 203 | 298 | 3,070 | 899 | 657 | 330 |
| 3 | --- | --- | --- | --- | --- | --- | 253 | 301 | 2,800 | 846 | 642 | 317 |
| 4 | --- | --- | --- | --- | --- | --- | 245 | 293 | 2,350 | 820 | 642 | 326 |
| 5 | --- | --- | --- | --- | --- | --- | 230 | 295 | 2,060 | 796 | 543 | 311 |
| 6 | --- | --- | --- | --- | --- | --- | 229 | 300 | 1,800 | 760 | 576 | 323 |
| 7 | --- | --- | --- | --- | --- | --- | 225 | 286 | 1,430 | 746 | 614 | 361 |
| 8 | --- | --- | --- | --- | --- | --- | 233 | 287 | 1,200 | 775 | 530 | 411 |
| 9 | --- | --- | --- | --- | --- | --- | 236 | 291 | 1,180 | 762 | 619 | 380 |
| 10 | --- | --- | --- | --- | --- | --- | 242 | 288 | 1,490 | 743 | 665 | 471 |
| 11 | --- | --- | --- | --- | --- | --- | 270 | 287 | 1,630 | 741 | 644 | 496 |
| 12 | --- | --- | --- | --- | --- | --- | 278 | 282 | 1,770 | 706 | 551 | 474 |
| 13 | --- | --- | --- | --- | --- | --- | 275 | 287 | 1,900 | 719 | 438 | 468 |
| 14 | --- | --- | --- | --- | --- | --- | 287 | 308 | 1,860 | 737 | e375 | 451 |
| 15 | --- | --- | --- | --- | --- | --- | 297 | 361 | 1,790 | 710 | e300 | 438 |
| 16 | --- | --- | --- | --- | --- | --- | 256 | 421 | 1,890 | 710 | e275 | 348 |
| 17 | --- | --- | --- | --- | --- | --- | 256 | 431 | 1,720 | 715 | e300 | 327 |
| 18 | --- | --- | --- | --- | --- | --- | 257 | 549 | 1,560 | 727 | 306 | 370 |
| 19 | --- | --- | --- | --- | --- | --- | 254 | 836 | 1,400 | 718 | 335 | 380 |
| 20 | --- | --- | --- | --- | --- | --- | 252 | 821 | 1,640 | 715 | 318 | 374 |
| 21 | --- | --- | --- | --- | --- | --- | 249 | 675 | 1,590 | 724 | 302 | 370 |
| 22 | --- | --- | --- | --- | --- | --- | 293 | 731 | 1,550 | 711 | 300 | 375 |
| 23 | --- | --- | --- | --- | --- | --- | 307 | 953 | 1,550 | 691 | 306 | e337 |
| 24 | --- | --- | --- | --- | --- | --- | 289 | 1,230 | 1,260 | 709 | 334 | e307 |
| 25 | --- | --- | --- | --- | --- | --- | 301 | 1,490 | 1,020 | 709 | 353 | e286 |
| 26 | --- | --- | --- | --- | --- | --- | 309 | 1,430 | 951 | 739 | 380 | e271 |
| 27 | --- | --- | --- | --- | --- | --- | 312 | 1,810 | 884 | 779 | 374 | e259 |
| 28 | --- | --- | --- | --- | --- | --- | 314 | 2,210 | 866 | 819 | 367 | e253 |
| 29 | --- | --- | --- | --- | --- | --- | 320 | 2,510 | 862 | 668 | 354 | e249 |
| 30 | --- | --- | --- | --- | --- | --- | 288 | 2,940 | 866 | 663 | 370 | e247 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 3,070 | --- | 666 | 352 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | 7,939 | 26,557 | 49,079 | 23,146 | 13,796 | 10,637 |
| MEAN | --- | --- | --- | --- | --- | --- | 265 | 857 | 1,636 | 747 | 445 | 355 |
| MAX | --- | --- | --- | --- | --- | --- | 320 | 3,070 | 3,140 | 923 | 674 | 496 |
| MIN | --- | --- | --- | --- | --- | --- | 179 | 282 | 862 | 663 | 275 | 247 |
| AC-FT | --- | --- | --- | --- | --- | --- | 15,750 | 52,680 | 97,350 | 45,910 | 27,360 | 21,100 |

e Estimated.

ARKANSAS RIVER BASIN

07091200 ARKANSAS RIVER NEAR NATHROP, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | --- | --- | --- | --- | --- | --- | 11.3 | 5.9 | 8.9 | 12.1 | 7.4 | 9.4 |
| 2 | --- | --- | --- | --- | --- | --- | 10.6 | 6.7 | 8.8 | 11.8 | 7.7 | 9.8 |
| 3 | --- | --- | --- | --- | --- | --- | 9.6 | 5.4 | 7.6 | 12.4 | 8.6 | 10.5 |
| 4 | --- | --- | --- | --- | --- | --- | 8.5 | 3.8 | 6.2 | 12.2 | 8.1 | 9.8 |
| 5 | --- | --- | --- | --- | --- | --- | 6.9 | 3.7 | 5.5 | 12.0 | 7.7 | 10.0 |
| 6 | --- | --- | --- | --- | --- | --- | 7.2 | 3.5 | 5.5 | 13.6 | 7.9 | 10.7 |
| 7 | --- | --- | --- | --- | --- | --- | 7.1 | 3.1 | 5.3 | 12.3 | 7.6 | 9.9 |
| 8 | --- | --- | --- | --- | --- | --- | 9.2 | 2.5 | 5.7 | 11.7 | 7.2 | 9.6 |
| 9 | --- | --- | --- | --- | --- | --- | 11.1 | 3.9 | 7.5 | 12.7 | 7.9 | 10.2 |
| 10 | --- | --- | --- | --- | --- | --- | 12.1 | 5.8 | 9.1 | 12.7 | 7.3 | 10.0 |
| 11 | --- | --- | --- | --- | --- | --- | 12.4 | 6.5 | 9.6 | 13.4 | 6.4 | 10.1 |
| 12 | --- | --- | --- | --- | --- | --- | 11.5 | 6.9 | 9.2 | 15.2 | 8.0 | 11.6 |
| 13 | --- | --- | --- | --- | --- | --- | 12.7 | 6.3 | 9.6 | 15.4 | 9.5 | 12.5 |
| 14 | --- | --- | --- | --- | --- | --- | 12.0 | 7.1 | 9.9 | 15.3 | 9.6 | 12.6 |
| 15 | --- | --- | --- | --- | --- | --- | 11.3 | 7.5 | 8.9 | 14.8 | 11.2 | 12.3 |
| 16 | --- | --- | --- | --- | --- | --- | 11.0 | 4.7 | 7.7 | 16.0 | 9.2 | 12.5 |
| 17 | --- | --- | --- | --- | --- | --- | 10.5 | 6.4 | 8.6 | 15.8 | 11.3 | 13.6 |
| 18 | --- | --- | --- | --- | --- | --- | 11.5 | 6.3 | 8.7 | 13.9 | 11.2 | 12.3 |
| 19 | --- | --- | --- | --- | --- | --- | 10.7 | 6.5 | 7.6 | 14.5 | 10.6 | 12.3 |
| 20 | --- | --- | --- | --- | --- | --- | 11.3 | 5.7 | 8.2 | 12.1 | 9.8 | 10.6 |
| 21 | --- | --- | --- | --- | --- | --- | 12.1 | 7.2 | 9.6 | 14.5 | 8.9 | 11.4 |
| 22 | --- | --- | --- | --- | --- | --- | 11.6 | 8.1 | 10.0 | 15.2 | 10.2 | 12.7 |
| 23 | --- | --- | --- | --- | --- | --- | 10.2 | 5.8 | 7.4 | 14.9 | 10.8 | 12.9 |
| 24 | --- | --- | --- | --- | --- | --- | 10.1 | 3.9 | 6.7 | 14.9 | 11.1 | 13.1 |
| 25 | --- | --- | --- | --- | --- | --- | 13.1 | 6.0 | 9.5 | 13.0 | 10.6 | 11.7 |
| 26 | --- | --- | --- | --- | --- | --- | 14.0 | 7.9 | 11.1 | 12.4 | 9.3 | 11.0 |
| 27 | --- | --- | --- | --- | --- | --- | 12.9 | 8.2 | 10.8 | 14.3 | 10.2 | 12.2 |
| 28 | --- | --- | --- | --- | --- | --- | 13.0 | 7.5 | 10.4 | 14.4 | 11.0 | 12.8 |
| 29 | --- | --- | --- | --- | --- | --- | 14.0 | 7.9 | 11.1 | 13.7 | 11.0 | 12.4 |
| 30 | --- | --- | --- | --- | --- | --- | 14.0 | 8.4 | 11.0 | 12.8 | 11.2 | 12.0 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 12.2 | 10.4 | 11.4 |
| MONTH | --- | --- | --- | --- | --- | --- | 14.0 | 2.5 | 8.5 | 16.0 | 6.4 | 11.4 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 12.2 | 11.0 | 11.6 | 17.2 | 13.4 | 15.3 | 18.0 | 14.6 | 16.3 | 18.5 | 13.6 | 16.1 |
| 2 | 13.2 | 10.0 | 11.6 | 17.9 | 13.5 | 15.7 | 19.6 | 15.2 | 17.2 | 18.0 | 13.6 | 16.0 |
| 3 | 13.5 | 10.4 | 12.1 | 18.1 | 14.2 | 16.2 | 19.4 | 16.2 | 17.7 | 16.8 | 13.7 | 14.6 |
| 4 | 13.5 | 10.6 | 12.1 | 18.3 | 14.0 | 16.2 | 19.5 | 15.8 | 17.6 | 18.0 | 12.2 | 14.9 |
| 5 | 12.6 | 10.5 | 11.4 | 16.8 | 13.7 | 15.5 | 19.7 | 15.2 | 17.4 | 17.2 | 13.6 | 15.5 |
| 6 | 12.3 | 9.7 | 10.9 | 16.1 | 13.4 | 14.9 | 17.9 | 15.2 | 16.8 | 16.8 | 13.3 | 14.9 |
| 7 | 13.4 | 10.4 | 11.8 | 17.8 | 13.1 | 15.5 | 17.9 | 14.7 | 16.4 | 15.0 | 12.9 | 13.9 |
| 8 | 14.3 | 10.0 | 12.1 | 18.7 | 13.9 | 16.3 | 19.1 | 15.3 | 17.1 | 15.8 | 11.1 | 13.5 |
| 9 | 13.7 | 10.9 | 12.3 | 18.8 | 14.3 | 16.5 | 18.7 | 15.6 | 17.3 | 14.7 | 12.4 | 13.1 |
| 10 | 13.3 | 10.4 | 12.0 | 18.8 | 13.9 | 16.4 | 18.3 | 15.5 | 17.0 | 12.8 | 10.6 | 11.6 |
| 11 | 14.8 | 10.8 | 12.8 | 18.1 | 14.3 | 16.3 | 19.0 | 15.6 | 17.3 | 13.4 | 9.2 | 11.2 |
| 12 | 13.9 | 11.5 | 12.9 | 18.1 | 14.5 | 16.3 | 18.3 | 15.1 | 16.8 | 14.7 | 9.3 | 11.9 |
| 13 | 13.0 | 11.0 | 11.9 | 18.6 | 14.6 | 16.5 | 19.6 | 14.8 | 17.1 | 13.5 | 10.1 | 11.6 |
| 14 | 14.7 | 10.9 | 12.8 | 17.6 | 14.2 | 15.9 | 19.2 | 14.4 | 16.9 | 13.5 | 8.7 | 11.0 |
| 15 | 15.3 | 12.0 | 13.8 | 16.6 | 13.9 | 15.5 | 19.1 | 14.5 | 16.9 | 14.3 | 9.0 | 11.7 |
| 16 | 14.3 | 12.3 | 13.2 | 17.3 | 14.0 | 15.7 | 18.3 | 14.8 | 16.7 | 15.0 | 9.7 | 12.3 |
| 17 | 13.1 | 10.8 | 12.0 | 18.9 | 14.2 | 16.5 | 17.2 | 13.7 | 15.7 | 15.4 | 11.0 | 13.1 |
| 18 | 14.0 | 11.3 | 12.6 | 19.6 | 15.3 | 17.4 | 16.5 | 13.5 | 15.1 | 14.2 | 9.3 | 11.9 |
| 19 | 14.7 | 11.0 | 12.8 | 17.7 | 15.8 | 16.9 | 17.6 | 12.8 | 15.2 | 14.1 | 8.7 | 11.4 |
| 20 | 13.2 | 11.2 | 12.4 | 17.4 | 15.0 | 16.3 | 18.5 | 13.8 | 16.3 | 14.1 | 9.9 | 12.0 |
| 21 | 15.0 | 10.7 | 12.9 | 18.1 | 14.9 | 16.5 | 17.9 | 14.9 | 16.4 | 14.1 | 9.3 | 11.7 |
| 22 | 15.3 | 11.6 | 13.6 | 18.5 | 14.9 | 16.5 | 18.2 | 14.5 | 16.4 | 14.3 | 8.9 | 11.7 |
| 23 | 15.5 | 12.0 | 13.9 | 18.1 | 15.5 | 16.8 | 17.2 | 14.4 | 15.8 | 14.5 | 9.3 | 12.0 |
| 24 | 15.4 | 11.7 | 13.6 | 19.6 | 14.9 | 17.0 | 17.1 | 14.2 | 15.7 | 14.6 | 9.3 | 12.0 |
| 25 | 15.8 | 11.8 | 13.8 | 18.1 | 15.6 | 16.9 | 16.3 | 14.3 | 15.3 | 14.4 | 9.6 | 12.2 |
| 26 | 16.3 | 11.9 | 14.1 | 18.9 | 15.2 | 17.0 | 16.9 | 13.5 | 15.1 | 14.7 | 9.2 | 12.0 |
| 27 | 17.0 | 12.5 | 14.8 | 17.8 | 15.9 | 16.9 | 17.9 | 13.9 | 15.7 | 14.2 | 9.8 | 12.2 |
| 28 | 17.2 | 12.7 | 14.9 | 18.3 | 14.8 | 16.7 | 16.3 | 14.5 | 15.2 | 14.0 | 9.4 | 11.8 |
| 29 | 16.1 | 13.0 | 14.9 | 18.8 | 15.5 | 16.9 | 17.6 | 12.9 | 15.0 | 14.1 | 9.1 | 11.7 |
| 30 | 17.3 | 13.0 | 15.0 | 18.7 | 15.0 | 16.8 | 16.6 | 13.9 | 15.1 | 13.7 | 9.6 | 11.8 |
| 31 | --- | --- | --- | 18.1 | 15.2 | 16.5 | 18.1 | 13.5 | 15.6 | --- | --- | --- |
| MONTH | 17.3 | 9.7 | 12.9 | 19.6 | 13.1 | 16.3 | 19.7 | 12.8 | 16.3 | 18.5 | 8.7 | 12.7 |

07093700 ARKANSAS RIVER NEAR WELLSVILLE, CO

LOCATION.--Lat 38°30'10", long 105°56'21", in SW¹/₄NE¹/₄ sec.14, T.49 N., R.9 E., Chaffee County, Hydrologic Unit 11020001, on right bank 50 ft upstream from Chaffee-Fremont County line, 2.0 mi northwest of Wellsville, 2.8 mi downstream from South Arkansas River, and 3.5 mi southeast of Salida.

DRAINAGE AREA.--1,485 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1961 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07093700

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,883.4 ft above NGVD of 1929 (river-profile survey).

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin and transmountain diversions, storage reservoirs, power developments, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 228 | 245 | 223 | 214 | 221 | 207 | 190 | 237 | 3,320 | 903 | 679 | 341 |
| 2 | 240 | 240 | 222 | 206 | 221 | 209 | 205 | 239 | 3,240 | 884 | 668 | 330 |
| 3 | 265 | 237 | 224 | 217 | 221 | 198 | 243 | 247 | 2,960 | 822 | 649 | 332 |
| 4 | 267 | 227 | 216 | 237 | 205 | 205 | 250 | 242 | 2,440 | 802 | 644 | 344 |
| 5 | 255 | 224 | 217 | 239 | 200 | 210 | 230 | 239 | 2,120 | 779 | 579 | 328 |
| 6 | 246 | 217 | 216 | 239 | 213 | 202 | 221 | 244 | 1,860 | 755 | 578 | 336 |
| 7 | 229 | 211 | 212 | e220 | e202 | 203 | 221 | 236 | 1,490 | 720 | 616 | 377 |
| 8 | 230 | 209 | 212 | e210 | e198 | 202 | 227 | 232 | 1,210 | 755 | 585 | 441 |
| 9 | 232 | 237 | 205 | 215 | 195 | 197 | 225 | 235 | 1,150 | 744 | 554 | 402 |
| 10 | 228 | 238 | 205 | e213 | 196 | 189 | 224 | 233 | 1,430 | 721 | 665 | 475 |
| 11 | 205 | 224 | 203 | e218 | 217 | 188 | 245 | 234 | 1,580 | 723 | 662 | 528 |
| 12 | 196 | 221 | 197 | e218 | 212 | 194 | 256 | 228 | 1,710 | 695 | 589 | 499 |
| 13 | 184 | 225 | 207 | e214 | 226 | 193 | 257 | 228 | 1,840 | 696 | 479 | 489 |
| 14 | 181 | 238 | 214 | 213 | 233 | 188 | 263 | 246 | 1,830 | 721 | 390 | 482 |
| 15 | 182 | 238 | 210 | 215 | 225 | 194 | 274 | 300 | 1,750 | 700 | 345 | 459 |
| 16 | 186 | 222 | 209 | 201 | 217 | 196 | 252 | 374 | 1,810 | 700 | 313 | 393 |
| 17 | 184 | 221 | 212 | 200 | 212 | 192 | 234 | 402 | 1,700 | 706 | 314 | 347 |
| 18 | 197 | 228 | 209 | 198 | 214 | 206 | 238 | 495 | 1,560 | 716 | 326 | 368 |
| 19 | 207 | 220 | 189 | 213 | 212 | 190 | 237 | 733 | e1,380 | 717 | 389 | 394 |
| 20 | 207 | 219 | 188 | 213 | 205 | 178 | 235 | 805 | e1,610 | 740 | 390 | 390 |
| 21 | 206 | 228 | e212 | 217 | 207 | 185 | 216 | 651 | 1,580 | 742 | 366 | 382 |
| 22 | 218 | 230 | e210 | 213 | 217 | 191 | 233 | 665 | 1,510 | 731 | 367 | 385 |
| 23 | 226 | 228 | e210 | 215 | 207 | 192 | 255 | 878 | 1,520 | 711 | 382 | 363 |
| 24 | 238 | 228 | e207 | 218 | 197 | 201 | 245 | 1,170 | 1,250 | 723 | 413 | 327 |
| 25 | 239 | 231 | e202 | 217 | 217 | 199 | 246 | 1,580 | 990 | 719 | 439 | 299 |
| 26 | 234 | 216 | e200 | 212 | 219 | 192 | 254 | 1,600 | 944 | 737 | 466 | 283 |
| 27 | 230 | 206 | e202 | 212 | 210 | 196 | 262 | 2,010 | 865 | 778 | 461 | 262 |
| 28 | 231 | 213 | 230 | 218 | 214 | 193 | 269 | 2,550 | 844 | 819 | 430 | 256 |
| 29 | 228 | 221 | 229 | 213 | --- | 188 | 308 | 2,920 | 844 | 706 | 416 | 251 |
| 30 | 234 | 228 | 229 | 208 | --- | 185 | 273 | 3,180 | 830 | 670 | 392 | 249 |
| 31 | 236 | --- | 218 | 216 | --- | 185 | --- | 3,310 | --- | 677 | 366 | --- |
| TOTAL | 6,869 | 6,770 | 6,539 | 6,672 | 5,933 | 6,048 | 7,288 | 26,943 | 49,167 | 23,012 | 14,912 | 11,112 |
| MEAN | 222 | 226 | 211 | 215 | 212 | 195 | 243 | 869 | 1,639 | 742 | 481 | 370 |
| MAX | 267 | 245 | 230 | 239 | 233 | 210 | 308 | 3,310 | 3,320 | 903 | 679 | 528 |
| MIN | 181 | 206 | 188 | 198 | 195 | 178 | 190 | 228 | 830 | 670 | 313 | 249 |
| AC-FT | 13,620 | 13,430 | 12,970 | 13,230 | 11,770 | 12,000 | 14,460 | 53,440 | 97,520 | 45,640 | 29,580 | 22,040 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 405 | 417 | 380 | 354 | 348 | 336 | 387 | 1,034 | 2,064 | 1,428 | 868 | 500 |
| MAX | 750 | 581 | 636 | 576 | 729 | 647 | 896 | 2,344 | 3,930 | 3,521 | 1,889 | 1,031 |
| (WY) | (1985) | (1983) | (1983) | (1983) | (1985) | (1993) | (1962) | (1984) | (1980) | (1995) | (1984) | (1970) |
| MIN | 222 | 226 | 211 | 207 | 208 | 195 | 215 | 380 | 417 | 278 | 260 | 218 |
| (WY) | (2003) | (2003) | (2003) | (1977) | (1977) | (2003) | (1977) | (2002) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1961 - 2003

| | | | |
|--------------------------|------------|--------------|--------------------|
| ANNUAL TOTAL | 104,744 | 171,265 | |
| ANNUAL MEAN | 287 | 469 | 716 |
| HIGHEST ANNUAL MEAN | | | a1,135 1984 |
| LOWEST ANNUAL MEAN | | | 318 2002 |
| HIGHEST DAILY MEAN | 564 May 23 | 3,320 Jun 1 | 5,980 Jun 12, 1980 |
| LOWEST DAILY MEAN | 179 Sep 16 | 178 Mar 20 | 110 Jan 12, 1963 |
| ANNUAL SEVEN-DAY MINIMUM | 187 Oct 12 | 187 Oct 12 | 147 Jan 11, 1963 |
| MAXIMUM PEAK FLOW | | 3,540 May 31 | 6,240 Jun 12, 1980 |
| MAXIMUM PEAK STAGE | | 6.95 May 31 | b8.02 Jun 12, 1980 |
| ANNUAL RUNOFF (AC-FT) | 207,800 | 339,700 | 518,700 |
| 10 PERCENT EXCEEDS | 383 | 880 | 1,600 |
| 50 PERCENT EXCEEDS | 265 | 236 | 439 |
| 90 PERCENT EXCEEDS | 210 | 198 | 258 |

e Estimated.

a Highest annual mean, also occurred 1995 water year.

b Maximum gage height, 8.40 ft, Jun 23, 1995.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1961 to January 1962, February to October 1964, December 1968, April 1969 to September 1975, March 1978 to February 1980, April to October 1987, April 1990 to March 1993, January 2002 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07093700

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instan- taneous dis- charge, cfs (00061) | Specif. conduc- tance, wat unf uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) |
|--------------|------|---|--|---|
| NOV 14... | 1345 | 250 | 214 | 4.5 |
| DEC 06... | 1200 | 234 | 222 | 0.5 |
| FEB 07... | 1345 | 220 | 235 | 0.0 |
| MAR 26... | 1245 | 193 | 219 | 7.5 |
| MAY 09... | 1530 | 236 | 135 | 15.5 |
| JUN 03... | 1630 | 2,900 | 90 | 13.5 |
| JUL 02... | 1330 | 886 | 131 | 17.5 |
| AUG 21... | 1530 | 364 | 206 | 17.5 |
| SEP 05... | 1000 | 328 | 213 | 15.5 |

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO

LOCATION.--Lat 38°39'32", long 105°48'48", in SE¹/₄SE¹/₄ sec.13, T.51 N., R.10 E., Fremont County, Hydrologic Unit 11020001, on left bank 0.1 mi downstream from County Road 2, 1.0 mi upstream from Steer Creek, 14.3 mi north of Howard, and 14.6 mi upstream from mouth.

DRAINAGE AREA.--106 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1980 to September 1986, October 1986 to current year (seasonal records only). Records prior to October 1988 not equivalent because of seepage between sites. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07093740

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,790 ft above NGVD of 1929, from topographic map. Prior to Oct. 28, 1988, at site 0.2 mi downstream at different datum. Mar. 24, 1989 to June 30, 1994, at site 0.1 mi downstream at different datum. July 1, 1994 to Aug. 1, 1996, at site 60 ft upstream at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream may be affected by erosion- control or livestock-watering reservoirs.

AVERAGE DISCHARGE.--5 years (water years 1981-86), 5.89 ft³/s; 4,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft³/s, Aug. 14, 1983, from slope-area measurement of peak flow, gage height, 8.22 ft, site and datum then in use; no flow, July 17-23, 1989.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 11 ft³/s, Aug. 22, gage height, 2.56 ft, from rating curve extended above 6.9 ft³/s on basis of slope-area measurement of peak flow at gage height 3.76 ft; minimum daily, 0.04 ft³/s, on several days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-----|-----|-----|-----|-----|-------|------|------|-------|------|------|
| 1 | 0.12 | --- | --- | --- | --- | --- | e4.0 | 0.21 | 0.26 | 0.07 | 0.05 | 0.20 |
| 2 | 0.28 | --- | --- | --- | --- | --- | e3.0 | 0.22 | 0.24 | 0.06 | 0.04 | 0.19 |
| 3 | 0.43 | --- | --- | --- | --- | --- | 2.5 | 0.22 | 0.17 | 0.06 | 0.04 | 0.20 |
| 4 | 0.42 | --- | --- | --- | --- | --- | 0.88 | 0.20 | 0.15 | 0.05 | 0.04 | 0.23 |
| 5 | 0.27 | --- | --- | --- | --- | --- | 0.53 | 0.19 | 0.17 | 0.05 | 0.04 | 0.23 |
| 6 | 0.25 | --- | --- | --- | --- | --- | 0.46 | 0.17 | 0.21 | 0.05 | 0.04 | 0.64 |
| 7 | 0.22 | --- | --- | --- | --- | --- | 0.46 | 0.15 | 0.16 | 0.05 | 0.05 | 0.49 |
| 8 | 0.22 | --- | --- | --- | --- | --- | 0.53 | 0.17 | 0.14 | 0.04 | 0.05 | 0.31 |
| 9 | 0.23 | --- | --- | --- | --- | --- | 0.79 | 0.15 | 0.11 | 0.04 | 0.06 | 0.25 |
| 10 | 0.23 | --- | --- | --- | --- | --- | 1.0 | 0.15 | 0.10 | 0.04 | 0.05 | 0.25 |
| 11 | 0.24 | --- | --- | --- | --- | --- | 1.1 | 0.31 | 0.10 | 0.04 | 0.06 | 0.23 |
| 12 | 0.24 | --- | --- | --- | --- | --- | 1.2 | 0.12 | 0.09 | 0.04 | 0.06 | 0.21 |
| 13 | 0.26 | --- | --- | --- | --- | --- | 0.96 | 0.21 | 0.10 | 0.04 | 0.06 | 0.20 |
| 14 | 0.29 | --- | --- | --- | --- | --- | 1.1 | 0.20 | 0.12 | 0.04 | 0.06 | 0.21 |
| 15 | 0.29 | --- | --- | --- | --- | --- | 0.96 | 0.36 | 0.12 | 0.04 | 0.05 | 0.21 |
| 16 | 0.30 | --- | --- | --- | --- | --- | 0.69 | 0.80 | 0.13 | 0.05 | 0.06 | 0.20 |
| 17 | 0.30 | --- | --- | --- | --- | --- | 0.67 | 0.38 | 0.20 | 0.05 | 0.07 | 0.19 |
| 18 | 0.31 | --- | --- | --- | --- | --- | 0.66 | 0.32 | 0.20 | 0.04 | 0.07 | 0.19 |
| 19 | 0.31 | --- | --- | --- | --- | --- | 0.56 | 0.33 | 0.40 | 0.04 | 0.07 | 0.19 |
| 20 | e0.30 | --- | --- | --- | --- | --- | 0.58 | 0.27 | 0.41 | 0.05 | 0.06 | 0.19 |
| 21 | e0.30 | --- | --- | --- | --- | --- | 0.61 | 0.22 | 0.30 | 0.04 | 0.07 | 0.20 |
| 22 | e0.30 | --- | --- | --- | --- | --- | 0.65 | 0.15 | 0.19 | 0.04 | 0.44 | 0.21 |
| 23 | e0.28 | --- | --- | --- | --- | --- | 0.62 | 0.16 | 0.14 | 0.05 | 0.23 | 0.21 |
| 24 | e0.28 | --- | --- | --- | --- | --- | 0.54 | 0.16 | 0.11 | 0.05 | 0.12 | 0.22 |
| 25 | e0.25 | --- | --- | --- | --- | --- | 0.44 | 0.18 | 0.10 | 0.05 | 0.17 | 0.22 |
| 26 | e0.25 | --- | --- | --- | --- | --- | 0.40 | 0.34 | 0.09 | 0.05 | 0.18 | 0.23 |
| 27 | e0.25 | --- | --- | --- | --- | --- | 0.32 | 0.20 | 0.08 | 0.06 | 0.15 | 0.22 |
| 28 | e0.25 | --- | --- | --- | --- | --- | 0.31 | 0.18 | 0.08 | 0.06 | 0.15 | 0.24 |
| 29 | e0.25 | --- | --- | --- | --- | --- | 0.29 | 0.23 | 0.08 | 0.06 | 0.15 | 0.25 |
| 30 | e0.25 | --- | --- | --- | --- | --- | 0.25 | 0.23 | 0.07 | 0.05 | 0.17 | 0.25 |
| 31 | e0.25 | --- | --- | --- | --- | --- | --- | 0.24 | --- | 0.05 | 0.23 | --- |
| TOTAL | 8.42 | --- | --- | --- | --- | --- | 27.06 | 7.42 | 4.82 | 1.50 | 3.14 | 7.26 |
| MEAN | 0.27 | --- | --- | --- | --- | --- | 0.90 | 0.24 | 0.16 | 0.048 | 0.10 | 0.24 |
| MAX | 0.43 | --- | --- | --- | --- | --- | 4.0 | 0.80 | 0.41 | 0.07 | 0.44 | 0.64 |
| MIN | 0.12 | --- | --- | --- | --- | --- | 0.25 | 0.12 | 0.07 | 0.04 | 0.04 | 0.19 |
| AC-FT | 17 | --- | --- | --- | --- | --- | 54 | 15 | 9.6 | 3.0 | 6.2 | 14 |

e Estimated.

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1981 to September 1986, October 1986 to current year (seasonal records only). Prior to March 1989, at site 1,000 ft downstream, not equivalent because of seepage inflow between sites. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07093740

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March 1995 to current year (seasonal records only).

SUSPENDED-SEDIMENT DISCHARGE: June 1981 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler and water-temperature probe with satellite telemetry.

REMARKS.--Daily water temperature records are good. Daily water-temperature data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE (seasonal only): Maximum, 30.7°C, July 28, 1995, July 18, 1998; minimum, 0.0°C, on many days.

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 25,800 mg/L, Aug. 20, 1982; minimum daily mean, 4 mg/L, Aug. 31, Sept. 1, 4, 1988, Aug. 31, 1990.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 15,600 tons, Aug. 14, 1983; minimum daily, 0.0 ton, on many days during 1989-90, 2002, 2003.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE (seasonal only): Maximum, 28.9°C, July 17; minimum, 0.0°C, on many days.

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 1,680 mg/L, Aug. 23; minimum daily mean, 6 mg/L, May 12, 14.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 9.8 tons (estimated) Apr. 1; minimum daily, 0.0 ton, on many days.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instan- taneous dis- charge, cfs (00061) | Specif. conduc- tance, wat unf uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) | Sus- pended sedi- ment concen- tration mg/L (80154) | Sus- pended sedi- ment load, tons/d (80155) |
|-------|------|---|--|---|--|---|
| OCT | | | | | | |
| 16... | 1145 | 0.28 | 397 | 3.5 | 11 | 0.01 |
| NOV | | | | | | |
| 04... | 1500 | 0.23 | 389 | 4.3 | 12 | 0.01 |
| APR | | | | | | |
| 01... | 1800 | 2.6 | 344 | 6.2 | 637 | 4.5 |
| 09... | 1200 | 0.36 | 388 | 7.0 | 49 | 0.05 |
| 19... | 1230 | 0.38 | 388 | -- | -- | -- |
| 21... | 1330 | 0.65 | 399 | 9.9 | 24 | 0.04 |
| MAY | | | | | | |
| 06... | 1430 | 0.17 | 373 | -- | -- | -- |
| 06... | 1500 | 0.17 | 373 | 15.0 | 8 | 0.00 |
| 19... | 1300 | 0.41 | 407 | -- | -- | -- |
| 22... | 1200 | 0.15 | -- | -- | 18 | 0.01 |
| JUN | | | | | | |
| 13... | 1200 | 0.10 | 402 | -- | -- | -- |
| 13... | 1245 | 0.11 | 402 | 14.0 | 28 | 0.01 |
| 24... | 1630 | 0.08 | 378 | 20.7 | 52 | 0.01 |
| JUL | | | | | | |
| 10... | 1315 | 0.04 | 390 | -- | -- | -- |
| 10... | 1400 | 0.04 | 396 | 26.0 | 244 | 0.03 |
| 28... | 1130 | 0.06 | 416 | -- | -- | -- |
| 28... | 1200 | 0.06 | 416 | 18.5 | 117 | 0.02 |
| AUG | | | | | | |
| 05... | 1445 | 0.04 | 371 | -- | -- | -- |
| 21... | 1130 | 0.06 | 403 | -- | -- | -- |
| 21... | 1145 | 0.07 | 403 | 14.5 | 85 | 0.02 |
| SEP | | | | | | |
| 11... | 1130 | 0.25 | 430 | -- | -- | -- |
| 11... | 1200 | 0.24 | 430 | 8.5 | 101 | 0.07 |

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
| 1 | 16.2 | 3.1 | 8.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | 11.2 | 5.7 | 8.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | 9.4 | 2.4 | 5.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | 13.2 | 1.5 | 6.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 14.5 | 3.3 | 8.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | 15.3 | 2.2 | 7.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | 15.4 | 2.0 | 8.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 15.1 | 2.2 | 8.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | 15.2 | 2.5 | 8.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | 13.6 | 1.1 | 6.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | 14.1 | 2.2 | 7.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | 12.2 | 2.1 | 6.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | 12.7 | 0.1 | 5.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | 12.8 | 0.1 | 5.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | 11.8 | 0.1 | 4.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | 11.5 | 0.1 | 4.5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | 11.4 | 0.0 | 4.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | 11.1 | 0.1 | 4.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | 10.3 | 0.0 | 4.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | 10.2 | 0.0 | 4.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | 11.4 | 0.0 | 4.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | 9.5 | 0.1 | 4.1 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | 10.5 | 1.0 | 5.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | 9.1 | 0.8 | 4.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | 8.7 | 0.1 | 3.8 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | 7.0 | 0.1 | 3.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | 7.2 | 0.1 | 3.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | 6.7 | 0.8 | 3.6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | 4.9 | 0.1 | 2.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 3.3 | 0.0 | 1.0 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 4.2 | 0.0 | 1.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | 16.2 | 0.0 | 5.3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | --- | --- | --- | --- | --- | --- | 6.7 | 0.0 | 2.6 | 13.6 | 0.0 | 6.2 |
| 2 | --- | --- | --- | --- | --- | --- | 6.4 | 0.0 | 2.3 | 13.7 | 2.3 | 7.7 |
| 3 | --- | --- | --- | --- | --- | --- | 6.6 | 0.0 | 2.6 | 14.7 | 1.6 | 7.4 |
| 4 | --- | --- | --- | --- | --- | --- | 6.4 | 0.0 | 2.6 | 15.4 | 0.9 | 6.9 |
| 5 | --- | --- | --- | --- | --- | --- | 7.3 | 0.0 | 2.9 | 15.8 | 0.5 | 6.9 |
| 6 | --- | --- | --- | --- | --- | --- | 7.8 | 0.1 | 3.0 | 17.5 | 0.2 | 7.7 |
| 7 | --- | --- | --- | --- | --- | --- | 6.5 | 0.1 | 2.7 | 14.5 | 0.0 | 6.7 |
| 8 | --- | --- | --- | --- | --- | --- | 10.5 | 0.1 | 4.0 | 17.6 | 0.1 | 7.7 |
| 9 | --- | --- | --- | --- | --- | --- | 12.9 | 0.1 | 5.9 | 15.4 | 0.7 | 7.0 |
| 10 | --- | --- | --- | --- | --- | --- | 14.5 | 0.4 | 7.0 | 13.5 | 0.0 | 4.9 |
| 11 | --- | --- | --- | --- | --- | --- | 14.8 | 1.4 | 7.5 | 17.4 | 0.0 | 6.9 |
| 12 | --- | --- | --- | --- | --- | --- | 12.2 | 1.7 | 6.5 | 20.3 | 0.0 | 8.9 |
| 13 | --- | --- | --- | --- | --- | --- | 16.5 | 1.0 | 7.7 | 17.7 | 0.5 | 8.4 |
| 14 | --- | --- | --- | --- | --- | --- | 15.2 | 2.4 | 7.7 | 20.0 | 1.2 | 10.0 |
| 15 | --- | --- | --- | --- | --- | --- | 8.8 | 2.0 | 5.3 | 11.6 | 4.4 | 7.4 |
| 16 | --- | --- | --- | --- | --- | --- | 16.9 | 0.0 | 6.7 | 22.2 | 4.1 | 11.9 |
| 17 | --- | --- | --- | --- | --- | --- | 13.7 | 1.2 | 6.5 | 20.8 | 4.8 | 11.9 |
| 18 | --- | --- | --- | --- | --- | --- | 15.6 | 0.9 | 7.0 | 18.9 | 5.6 | 11.2 |
| 19 | --- | --- | --- | --- | --- | --- | 6.6 | 1.4 | 3.6 | 16.2 | 3.8 | 9.5 |
| 20 | --- | --- | --- | --- | --- | --- | 17.8 | 0.8 | 6.7 | 10.7 | 3.4 | 6.5 |
| 21 | --- | --- | --- | --- | --- | --- | 13.9 | 2.6 | 6.8 | 20.8 | 1.6 | 10.3 |
| 22 | --- | --- | --- | --- | --- | --- | 14.0 | 3.3 | 7.6 | 23.3 | 3.2 | 12.2 |
| 23 | --- | --- | --- | --- | --- | --- | 6.9 | 0.0 | 3.5 | 23.5 | 4.1 | 12.8 |
| 24 | --- | --- | --- | --- | --- | --- | 14.0 | 0.0 | 5.6 | 19.8 | 5.3 | 11.5 |
| 25 | --- | --- | --- | --- | --- | --- | 19.5 | 0.0 | 8.0 | 17.3 | 5.5 | 10.1 |
| 26 | --- | --- | --- | --- | --- | --- | 19.2 | 0.8 | 8.8 | 19.8 | 4.9 | 11.7 |
| 27 | --- | --- | --- | --- | --- | --- | 16.8 | 0.2 | 7.2 | 23.1 | 6.8 | 13.8 |
| 28 | --- | --- | --- | --- | --- | --- | 16.3 | 0.1 | 7.3 | 24.5 | 6.8 | 14.7 |
| 29 | --- | --- | --- | --- | --- | --- | 16.8 | 1.6 | 8.3 | 26.1 | 6.8 | 14.7 |
| 30 | --- | --- | --- | --- | --- | --- | 17.5 | 0.7 | 7.9 | 23.5 | 8.3 | 14.1 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.1 | 7.8 | 12.4 |
| MONTH | --- | --- | --- | --- | --- | --- | 19.5 | 0.0 | 5.7 | 26.1 | 0.0 | 9.7 |

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 18.5 | 7.6 | 11.9 | 22.5 | 8.3 | 15.6 | 22.3 | 9.6 | 15.6 | 22.6 | 10.1 | 15.5 |
| 2 | 24.1 | 5.2 | 13.2 | 27.5 | 7.7 | 16.7 | 26.6 | 9.3 | 16.2 | 20.0 | 8.9 | 14.3 |
| 3 | 24.4 | 5.3 | 13.7 | 28.1 | 9.3 | 17.4 | 24.4 | 13.0 | 17.5 | 14.7 | 10.0 | 12.2 |
| 4 | 25.0 | 7.6 | 13.6 | 28.0 | 8.1 | 16.8 | 22.4 | 11.1 | 16.5 | 21.0 | 9.7 | 14.3 |
| 5 | 15.8 | 6.8 | 10.0 | 25.0 | 8.2 | 15.7 | 25.5 | 9.9 | 16.7 | 17.4 | 8.5 | 13.2 |
| 6 | 19.4 | 6.0 | 11.8 | 22.6 | 8.1 | 15.1 | 20.8 | 10.1 | 15.3 | 16.1 | 10.4 | 12.7 |
| 7 | 19.9 | 6.6 | 11.7 | 26.4 | 7.3 | 15.4 | 22.0 | 9.6 | 15.2 | 15.3 | 10.3 | 12.2 |
| 8 | 23.5 | 6.2 | 13.2 | 28.0 | 7.9 | 16.8 | 22.6 | 12.8 | 16.5 | 20.0 | 7.0 | 12.8 |
| 9 | 23.1 | 5.6 | 12.7 | 28.0 | 7.3 | 16.6 | 21.6 | 10.9 | 16.1 | 12.8 | 9.1 | 11.0 |
| 10 | 22.1 | 5.3 | 12.8 | 28.6 | 7.4 | 16.7 | 21.0 | 9.5 | 15.3 | 14.7 | 6.7 | 10.2 |
| 11 | 24.9 | 5.1 | 14.1 | 27.0 | 8.0 | 16.3 | 22.7 | 9.8 | 15.3 | 14.5 | 4.2 | 8.9 |
| 12 | 20.1 | 6.6 | 13.1 | 23.4 | 9.0 | 16.2 | 22.2 | 9.5 | 15.2 | 18.2 | 4.1 | 10.4 |
| 13 | 16.4 | 7.1 | 11.8 | 25.6 | 9.4 | 16.7 | 23.5 | 9.4 | 15.5 | 10.9 | 6.1 | 7.8 |
| 14 | 22.9 | 5.6 | 13.4 | 22.1 | 8.3 | 14.7 | 24.4 | 7.3 | 14.8 | 16.2 | 3.6 | 9.1 |
| 15 | 27.6 | 6.3 | 14.5 | 25.2 | 8.2 | 15.2 | 25.0 | 7.8 | 15.2 | 16.4 | 2.9 | 9.2 |
| 16 | 20.1 | 7.9 | 12.0 | 26.7 | 9.8 | 15.9 | 19.0 | 9.1 | 13.3 | 16.4 | 3.6 | 9.7 |
| 17 | 21.8 | 5.0 | 11.3 | 28.9 | 10.2 | 18.1 | 20.5 | 8.9 | 13.9 | 17.2 | 6.8 | 11.2 |
| 18 | 17.9 | 6.5 | 11.1 | 27.9 | 9.9 | 17.8 | 19.0 | 9.3 | 13.5 | 15.8 | 5.3 | 9.7 |
| 19 | 18.5 | 7.6 | 11.4 | 25.7 | 11.6 | 17.3 | 23.1 | 8.0 | 14.6 | 15.5 | 2.4 | 8.7 |
| 20 | 19.6 | 8.1 | 13.1 | 21.9 | 11.1 | 16.3 | 24.7 | 8.4 | 15.2 | 14.8 | 3.7 | 8.9 |
| 21 | 23.3 | 6.8 | 14.1 | 26.3 | 9.7 | 16.9 | 19.9 | 9.7 | 14.7 | 15.5 | 2.8 | 8.7 |
| 22 | 23.9 | 6.6 | 14.2 | 24.9 | 9.6 | 15.6 | 22.9 | 9.3 | 14.0 | 15.8 | 2.1 | 8.7 |
| 23 | 23.1 | 6.2 | 13.7 | 26.6 | 9.4 | 15.9 | 22.2 | 10.6 | 15.3 | 16.1 | 2.9 | 9.1 |
| 24 | 22.9 | 6.9 | 13.6 | 26.7 | 9.2 | 16.8 | 20.5 | 10.1 | 15.0 | 15.9 | 2.9 | 8.9 |
| 25 | 24.3 | 7.0 | 14.4 | 26.7 | 10.6 | 16.9 | 16.0 | 11.7 | 14.2 | 15.5 | 3.3 | 9.1 |
| 26 | 26.7 | 9.4 | 16.0 | 23.6 | 10.8 | 16.0 | 17.3 | 10.6 | 13.7 | 16.5 | 3.2 | 9.3 |
| 27 | 26.2 | 7.0 | 15.4 | 24.3 | 13.2 | 16.9 | 20.0 | 9.4 | 14.2 | 16.1 | 4.7 | 9.9 |
| 28 | 27.3 | 7.7 | 15.8 | 23.0 | 11.0 | 16.5 | 16.5 | 12.2 | 14.1 | 14.6 | 3.2 | 8.6 |
| 29 | 21.6 | 8.7 | 13.9 | 25.3 | 10.4 | 16.3 | 17.0 | 9.1 | 13.1 | 15.1 | 2.8 | 8.5 |
| 30 | 26.3 | 8.3 | 15.5 | 24.4 | 9.2 | 16.1 | 16.6 | 11.2 | 13.5 | 13.2 | 3.4 | 8.1 |
| 31 | --- | --- | --- | 22.6 | 9.4 | 15.4 | 19.0 | 10.5 | 14.1 | --- | --- | --- |
| MONTH | 27.6 | 5.0 | 13.2 | 28.9 | 7.3 | 16.3 | 26.6 | 7.3 | 14.9 | 22.6 | 2.1 | 10.4 |

ARKANSAS RIVER BASIN

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) |
|-------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|
| | | | | | | | | | |
| 1 | e4.0 | --- | e9.8 | 0.21 | 9 | 0.00 | 0.26 | 76 | 0.05 |
| 2 | e3.0 | --- | e6.8 | 0.22 | 11 | 0.00 | 0.24 | --- | e0.04 |
| 3 | 2.5 | 259 | 1.9 | 0.22 | --- | e0.00 | 0.17 | 53 | 0.02 |
| 4 | 0.88 | --- | e0.28 | 0.20 | 10 | 0.00 | 0.15 | 42 | 0.02 |
| 5 | 0.53 | --- | e0.13 | 0.19 | 11 | 0.00 | 0.17 | 39 | 0.02 |
| 6 | 0.46 | 59 | 0.07 | 0.17 | 9 | 0.00 | 0.21 | 51 | 0.03 |
| 7 | 0.46 | --- | e0.07 | 0.15 | 13 | 0.00 | 0.16 | --- | e0.02 |
| 8 | 0.53 | --- | e0.07 | 0.17 | --- | e0.00 | 0.14 | 46 | 0.02 |
| 9 | 0.79 | 64 | 0.16 | 0.15 | 18 | 0.00 | 0.11 | 42 | 0.01 |
| 10 | 1.0 | 113 | 0.35 | 0.15 | 22 | 0.00 | 0.10 | 53 | 0.01 |
| 11 | 1.1 | 114 | 0.36 | 0.31 | 32 | 0.37 | 0.10 | 59 | 0.02 |
| 12 | 1.2 | 104 | 0.35 | 0.12 | 6 | 0.00 | 0.09 | --- | e0.01 |
| 13 | 0.96 | --- | e0.27 | 0.21 | --- | e0.00 | 0.10 | 36 | 0.00 |
| 14 | 1.1 | 91 | 0.26 | 0.20 | 6 | 0.00 | 0.12 | 37 | 0.01 |
| 15 | 0.96 | 69 | 0.18 | 0.36 | 21 | 0.03 | 0.12 | 51 | 0.02 |
| 16 | 0.69 | 75 | 0.14 | 0.80 | 88 | 0.21 | 0.13 | 60 | 0.02 |
| 17 | 0.67 | 69 | 0.13 | 0.38 | 46 | 0.05 | 0.20 | --- | e0.03 |
| 18 | 0.66 | --- | e0.10 | 0.32 | --- | e0.03 | 0.20 | 57 | 0.03 |
| 19 | 0.56 | 37 | 0.06 | 0.33 | 23 | 0.02 | 0.40 | 92 | 0.12 |
| 20 | 0.58 | 28 | 0.04 | 0.27 | 19 | 0.01 | 0.41 | 153 | 0.17 |
| 21 | 0.61 | 29 | 0.05 | 0.22 | 22 | 0.01 | 0.30 | 92 | 0.08 |
| 22 | 0.65 | 37 | 0.06 | 0.15 | 22 | 0.00 | 0.19 | --- | e0.03 |
| 23 | 0.62 | --- | e0.06 | 0.16 | --- | e0.01 | 0.14 | 46 | 0.02 |
| 24 | 0.54 | 37 | 0.05 | 0.16 | 37 | 0.02 | 0.11 | 43 | 0.01 |
| 25 | 0.44 | 44 | 0.05 | 0.18 | 35 | 0.02 | 0.10 | 56 | 0.02 |
| 26 | 0.40 | 29 | 0.03 | 0.34 | 82 | 0.07 | 0.09 | 59 | 0.01 |
| 27 | 0.32 | 23 | 0.02 | 0.20 | 85 | 0.04 | 0.08 | --- | e0.01 |
| 28 | 0.31 | --- | e0.01 | 0.18 | --- | e0.04 | 0.08 | 55 | 0.01 |
| 29 | 0.29 | 12 | 0.00 | 0.23 | 63 | 0.04 | 0.08 | 65 | 0.01 |
| 30 | 0.25 | 8 | 0.00 | 0.23 | 58 | 0.04 | 0.07 | 80 | 0.02 |
| 31 | --- | --- | --- | 0.24 | 74 | 0.05 | --- | --- | --- |
| TOTAL | 27.06 | --- | 21.85 | 7.42 | --- | 1.06 | 4.82 | --- | 0.89 |
| | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 0.07 | 94 | 0.02 | 0.05 | --- | e0.02 | 0.20 | 130 | 0.07 |
| 2 | 0.06 | --- | e0.02 | 0.04 | 122 | 0.01 | 0.19 | 134 | 0.07 |
| 3 | 0.06 | 82 | 0.01 | 0.04 | 128 | 0.01 | 0.20 | 125 | 0.07 |
| 4 | 0.05 | 68 | 0.00 | 0.04 | 144 | 0.02 | 0.23 | 120 | 0.07 |
| 5 | 0.05 | 101 | 0.01 | 0.04 | 155 | 0.02 | 0.23 | --- | e0.06 |
| 6 | 0.05 | 122 | 0.02 | 0.04 | --- | e0.02 | 0.64 | 329 | 1.9 |
| 7 | 0.05 | --- | e0.01 | 0.05 | 108 | 0.01 | 0.49 | 260 | 0.79 |
| 8 | 0.04 | 95 | 0.01 | 0.05 | 110 | 0.02 | 0.31 | 145 | 0.12 |
| 9 | 0.04 | 120 | 0.01 | 0.06 | 117 | 0.02 | 0.25 | 115 | 0.08 |
| 10 | 0.04 | 235 | 0.02 | 0.05 | 121 | 0.02 | 0.25 | --- | e0.06 |
| 11 | 0.04 | 257 | 0.03 | 0.06 | --- | e0.02 | 0.23 | 94 | 0.06 |
| 12 | 0.04 | --- | e0.02 | 0.06 | 102 | 0.02 | 0.21 | 96 | 0.05 |
| 13 | 0.04 | 186 | 0.02 | 0.06 | 82 | 0.01 | 0.20 | 90 | 0.05 |
| 14 | 0.04 | 161 | 0.02 | 0.06 | 103 | 0.02 | 0.21 | 108 | 0.06 |
| 15 | 0.04 | 202 | 0.02 | 0.05 | 115 | 0.02 | 0.21 | --- | e0.06 |
| 16 | 0.05 | 211 | 0.03 | 0.06 | --- | e0.02 | 0.20 | 89 | 0.05 |
| 17 | 0.05 | --- | e0.03 | 0.07 | 72 | 0.01 | 0.19 | 95 | 0.05 |
| 18 | 0.04 | 180 | 0.02 | 0.07 | 64 | 0.01 | 0.19 | 146 | 0.07 |
| 19 | 0.04 | 169 | 0.02 | 0.07 | 92 | 0.02 | 0.19 | 144 | 0.07 |
| 20 | 0.05 | 196 | 0.02 | 0.06 | 117 | 0.02 | 0.19 | --- | e0.06 |
| 21 | 0.04 | 221 | 0.03 | 0.07 | 91 | 0.02 | 0.20 | 90 | 0.05 |
| 22 | 0.04 | --- | e0.02 | 0.44 | 1,030 | 6.4 | 0.21 | --- | e0.05 |
| 23 | 0.05 | 120 | 0.02 | 0.23 | 1,680 | 1.1 | 0.21 | 105 | 0.06 |
| 24 | 0.05 | 110 | 0.01 | 0.12 | 848 | 0.28 | 0.22 | 117 | 0.07 |
| 25 | 0.05 | 175 | 0.02 | 0.17 | 777 | 0.40 | 0.22 | --- | e0.06 |
| 26 | 0.05 | 218 | 0.03 | 0.18 | --- | e0.35 | 0.23 | 78 | 0.05 |
| 27 | 0.06 | --- | e0.03 | 0.15 | 394 | 0.16 | 0.22 | 91 | 0.05 |
| 28 | 0.06 | 118 | 0.02 | 0.15 | 184 | 0.08 | 0.24 | 185 | 0.12 |
| 29 | 0.06 | 133 | 0.02 | 0.15 | 143 | 0.06 | 0.25 | 140 | 0.10 |
| 30 | 0.05 | 160 | 0.02 | 0.17 | 119 | 0.06 | 0.25 | --- | e0.07 |
| 31 | 0.05 | 172 | 0.02 | 0.23 | --- | e0.07 | --- | --- | --- |
| TOTAL | 1.50 | --- | 0.60 | 3.14 | --- | 9.32 | 7.26 | --- | 4.55 |

e Estimated.

07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO

LOCATION.--Lat 38°28'02", long 105°51'34", in SW¹/₄SW¹/₄ sec.27, T.49 N., R.10 E., Fremont County, Hydrologic Unit 11020001, on left bank 660 ft upstream from Denver and Rio Grande Railroad bridge, 960 ft upstream from mouth, and 1.9 mi northwest of Howard.

DRAINAGE AREA.--211 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1980 to September 1996, October 1996 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07093775

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,780 ft above NGVD of 1929, from topographic map. Prior to May 19, 1983, at site 360 ft downstream at datum 5.07 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream may be affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,900 ft³/s, July 8, 1996, from slope-area measurement of peak flow, gage height, 10.73 ft, from floodmarks; minimum daily, 0.56 ft³/s, Feb. 4-5, 1982.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 86 ft³/s, July 22, gage height, 4.80 ft, from floodmarks; minimum daily, 3.0 ft³/s, Aug. 4.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|
| 1 | 4.4 | --- | --- | --- | --- | --- | 6.6 | 6.4 | 6.2 | 3.7 | 3.1 | 3.6 |
| 2 | 5.3 | --- | --- | --- | --- | --- | 7.9 | 6.5 | 5.9 | 3.6 | 3.1 | 3.5 |
| 3 | 6.0 | --- | --- | --- | --- | --- | 8.2 | 6.3 | 5.7 | 3.5 | 3.2 | 3.9 |
| 4 | 5.5 | --- | --- | --- | --- | --- | 7.8 | 6.3 | 5.7 | 3.5 | 3.0 | 4.0 |
| 5 | 5.0 | --- | --- | --- | --- | --- | 7.5 | 6.4 | 5.9 | 3.5 | 3.2 | 3.8 |
| 6 | 4.8 | --- | --- | --- | --- | --- | 7.3 | 6.3 | 5.7 | 3.5 | 3.2 | 4.0 |
| 7 | 4.6 | --- | --- | --- | --- | --- | 7.2 | 6.2 | 5.6 | 3.6 | 3.2 | 4.5 |
| 8 | 4.4 | --- | --- | --- | --- | --- | 7.0 | 6.2 | 5.4 | 3.5 | 3.2 | 4.1 |
| 9 | 4.4 | --- | --- | --- | --- | --- | 7.0 | 6.1 | 5.2 | 3.3 | 3.3 | 4.2 |
| 10 | 4.4 | --- | --- | --- | --- | --- | 7.4 | 6.1 | 5.3 | 3.3 | 3.9 | 4.3 |
| 11 | 4.3 | --- | --- | --- | --- | --- | 8.0 | 6.1 | 5.2 | 3.3 | 3.5 | 4.1 |
| 12 | 4.3 | --- | --- | --- | --- | --- | 8.2 | 5.9 | 5.1 | 3.4 | 3.4 | 3.9 |
| 13 | 4.4 | --- | --- | --- | --- | --- | 8.1 | 5.7 | 5.0 | 3.3 | 3.3 | 4.0 |
| 14 | 4.3 | --- | --- | --- | --- | --- | 8.3 | 5.6 | 5.2 | 3.3 | 3.2 | 4.0 |
| 15 | 4.3 | --- | --- | --- | --- | --- | 8.6 | 6.4 | 5.1 | 3.5 | 3.1 | 3.7 |
| 16 | 4.3 | --- | --- | --- | --- | --- | 8.0 | 6.7 | 5.3 | 3.9 | 3.3 | 3.6 |
| 17 | 4.4 | --- | --- | --- | --- | --- | 7.7 | 6.3 | 5.4 | 3.9 | 3.5 | 3.5 |
| 18 | 4.3 | --- | --- | --- | --- | --- | 7.5 | 6.1 | 7.9 | 3.4 | 3.5 | 3.6 |
| 19 | 4.2 | --- | --- | --- | --- | --- | 7.7 | 6.2 | 5.8 | 3.5 | 3.5 | 3.7 |
| 20 | 4.2 | --- | --- | --- | --- | --- | 7.6 | 6.6 | 5.6 | 4.1 | 3.2 | 3.6 |
| 21 | 4.2 | --- | --- | --- | --- | --- | 7.6 | 6.4 | 5.2 | 3.5 | 3.1 | 3.6 |
| 22 | 4.4 | --- | --- | --- | --- | --- | 7.8 | 6.0 | 5.0 | 6.3 | 3.3 | 3.6 |
| 23 | 4.8 | --- | --- | --- | --- | --- | 7.8 | 5.7 | 4.8 | e3.2 | 3.8 | 3.5 |
| 24 | 4.9 | --- | --- | --- | --- | --- | 7.4 | 5.6 | 4.5 | e3.1 | 3.6 | 3.5 |
| 25 | 4.8 | --- | --- | --- | --- | --- | 7.3 | 6.2 | 4.4 | 3.1 | 3.7 | 3.5 |
| 26 | 4.8 | --- | --- | --- | --- | --- | 7.2 | 6.3 | 4.4 | 3.2 | 3.7 | 3.4 |
| 27 | 5.0 | --- | --- | --- | --- | --- | 7.1 | 6.1 | 4.5 | 5.1 | 3.6 | 3.5 |
| 28 | 4.9 | --- | --- | --- | --- | --- | 6.9 | 5.8 | 4.4 | 6.2 | 3.8 | 3.5 |
| 29 | 4.8 | --- | --- | --- | --- | --- | 6.7 | 5.6 | 4.2 | 4.0 | 3.8 | 3.6 |
| 30 | 4.9 | --- | --- | --- | --- | --- | 6.6 | 6.2 | 3.9 | 3.2 | 3.8 | 3.6 |
| 31 | 4.8 | --- | --- | --- | --- | --- | --- | 6.2 | --- | 3.1 | 3.7 | --- |
| TOTAL | 144.1 | --- | --- | --- | --- | --- | 226.0 | 190.5 | 157.5 | 114.6 | 105.8 | 112.9 |
| MEAN | 4.65 | --- | --- | --- | --- | --- | 7.53 | 6.15 | 5.25 | 3.70 | 3.41 | 3.76 |
| MAX | 6.0 | --- | --- | --- | --- | --- | 8.6 | 6.7 | 7.9 | 6.3 | 3.9 | 4.5 |
| MIN | 4.2 | --- | --- | --- | --- | --- | 6.6 | 5.6 | 3.9 | 3.1 | 3.0 | 3.4 |
| AC-FT | 286 | --- | --- | --- | --- | --- | 448 | 378 | 312 | 227 | 210 | 224 |

e Estimated.

07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | --- | --- | --- | --- | --- | --- | 17.6 | 2.9 | 8.4 | 16.7 | 3.4 | 8.8 |
| 2 | --- | --- | --- | --- | --- | --- | 12.3 | 3.3 | 7.0 | 16.6 | 5.8 | 10.0 |
| 3 | --- | --- | --- | --- | --- | --- | 14.2 | 2.5 | 6.7 | 18.7 | 6.3 | 10.5 |
| 4 | --- | --- | --- | --- | --- | --- | 13.3 | 1.5 | 5.9 | 17.9 | 5.4 | 9.5 |
| 5 | --- | --- | --- | --- | --- | --- | 10.7 | 2.8 | 5.8 | 16.4 | 5.0 | 8.9 |
| 6 | --- | --- | --- | --- | --- | --- | 14.3 | 2.3 | 6.5 | 15.5 | 5.0 | 9.2 |
| 7 | --- | --- | --- | --- | --- | --- | 8.2 | 1.6 | 4.6 | 16.7 | 5.2 | 9.4 |
| 8 | --- | --- | --- | --- | --- | --- | 16.1 | 0.8 | 6.8 | 15.3 | 4.8 | 9.0 |
| 9 | --- | --- | --- | --- | --- | --- | 17.8 | 1.7 | 8.0 | 17.2 | 4.6 | 9.7 |
| 10 | --- | --- | --- | --- | --- | --- | 17.7 | 2.9 | 8.8 | 18.3 | 3.7 | 9.3 |
| 11 | --- | --- | --- | --- | --- | --- | 17.8 | 3.7 | 8.9 | 18.6 | 3.2 | 9.8 |
| 12 | --- | --- | --- | --- | --- | --- | 15.3 | 3.8 | 8.5 | 20.9 | 4.5 | 11.3 |
| 13 | --- | --- | --- | --- | --- | --- | 18.3 | 3.8 | 9.5 | 19.6 | 5.7 | 11.1 |
| 14 | --- | --- | --- | --- | --- | --- | 17.0 | 3.9 | 9.2 | 20.9 | 6.2 | 12.2 |
| 15 | --- | --- | --- | --- | --- | --- | 10.2 | 4.4 | 7.4 | 15.8 | 8.3 | 10.6 |
| 16 | --- | --- | --- | --- | --- | --- | 17.6 | 3.2 | 8.7 | 22.8 | 6.7 | 13.3 |
| 17 | --- | --- | --- | --- | --- | --- | 15.9 | 4.0 | 8.6 | 20.6 | 8.3 | 13.4 |
| 18 | --- | --- | --- | --- | --- | --- | 15.8 | 3.9 | 8.2 | 16.2 | 8.3 | 11.8 |
| 19 | --- | --- | --- | --- | --- | --- | 9.3 | 4.7 | 6.5 | 20.0 | 7.1 | 11.9 |
| 20 | --- | --- | --- | --- | --- | --- | 16.5 | 4.6 | 9.1 | 11.3 | 6.9 | 8.6 |
| 21 | --- | --- | --- | --- | --- | --- | 14.7 | 5.7 | 8.9 | 22.0 | 5.2 | 12.0 |
| 22 | --- | --- | --- | --- | --- | --- | 14.8 | 6.8 | 9.2 | 23.2 | 7.2 | 13.7 |
| 23 | --- | --- | --- | --- | --- | --- | 10.3 | 3.6 | 6.7 | 21.6 | 8.0 | 13.7 |
| 24 | --- | --- | --- | --- | --- | --- | 16.5 | 3.3 | 8.1 | 24.2 | 8.7 | 14.7 |
| 25 | --- | --- | --- | --- | --- | --- | 18.7 | 3.9 | 9.9 | 20.4 | 9.1 | 13.1 |
| 26 | --- | --- | --- | --- | --- | --- | 19.2 | 5.0 | 10.7 | 22.8 | 8.2 | 13.7 |
| 27 | --- | --- | --- | --- | --- | --- | 17.0 | 4.9 | 9.5 | 19.4 | 9.4 | 13.6 |
| 28 | --- | --- | --- | --- | --- | --- | 19.2 | 5.2 | 10.3 | 25.8 | 9.6 | 16.0 |
| 29 | --- | --- | --- | --- | --- | --- | 18.6 | 5.2 | 10.2 | 25.6 | 10.1 | 15.6 |
| 30 | --- | --- | --- | --- | --- | --- | 16.2 | 4.9 | 8.9 | 23.9 | 10.9 | 14.7 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 20.1 | 10.4 | 13.6 |
| MONTH | --- | --- | --- | --- | --- | --- | 19.2 | 0.8 | 8.2 | 25.8 | 3.2 | 11.7 |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 19.8 | 10.5 | 13.3 | 26.7 | 11.1 | 17.4 | 23.4 | 14.7 | 18.8 | 26.8 | 12.6 | 17.6 |
| 2 | 23.9 | 8.2 | 14.4 | 26.9 | 10.8 | 17.5 | 25.4 | 15.0 | 19.4 | 25.9 | 11.2 | 16.7 |
| 3 | 24.0 | 8.8 | 15.0 | 27.0 | 11.2 | 17.6 | 23.3 | 16.4 | 19.5 | 19.0 | 12.6 | 14.6 |
| 4 | 23.6 | 10.4 | 14.9 | 28.2 | 10.8 | 17.7 | 24.9 | 16.0 | 19.6 | 26.0 | 10.8 | 16.1 |
| 5 | 15.3 | 9.3 | 11.8 | 25.5 | 10.9 | 17.1 | 29.0 | 15.2 | 19.5 | 23.9 | 11.5 | 15.4 |
| 6 | 19.7 | 8.5 | 13.2 | 24.4 | 11.1 | 16.7 | 28.0 | 12.5 | 17.9 | 23.8 | 12.2 | 15.9 |
| 7 | 19.3 | 9.6 | 12.5 | 25.6 | 11.0 | 16.8 | 27.2 | 12.3 | 17.5 | 20.4 | 11.9 | 14.5 |
| 8 | 23.8 | 7.2 | 14.1 | 28.2 | 11.2 | 17.9 | 27.2 | 14.5 | 18.6 | 24.2 | 9.3 | 14.8 |
| 9 | 21.7 | 9.1 | 14.0 | 28.4 | 10.8 | 17.8 | 26.5 | 13.5 | 17.9 | 14.3 | 11.4 | 12.7 |
| 10 | 21.4 | 8.9 | 14.0 | 28.5 | 11.2 | 18.2 | 27.1 | 12.5 | 17.7 | 18.9 | 9.3 | 12.1 |
| 11 | 23.6 | 8.8 | 14.3 | 28.1 | 11.0 | 17.5 | 26.4 | 12.4 | 17.5 | 18.3 | 6.4 | 11.2 |
| 12 | 23.2 | 9.2 | 14.5 | 26.5 | 11.9 | 17.9 | 25.5 | 12.7 | 18.0 | 22.7 | 6.7 | 12.8 |
| 13 | 18.3 | 9.4 | 13.4 | 27.1 | 12.1 | 18.3 | 27.7 | 12.8 | 18.3 | 13.4 | 8.1 | 10.1 |
| 14 | 21.2 | 8.7 | 14.0 | 27.3 | 11.3 | 17.6 | 26.3 | 11.3 | 17.2 | 20.7 | 5.5 | 11.4 |
| 15 | 26.2 | 9.2 | 15.3 | 26.8 | 11.9 | 17.0 | 26.9 | 11.9 | 17.6 | 21.2 | 5.6 | 11.8 |
| 16 | 20.1 | 10.8 | 13.8 | 27.9 | 12.0 | 17.3 | 26.7 | 12.5 | 17.2 | 22.3 | 6.7 | 12.4 |
| 17 | 23.8 | 9.0 | 13.6 | 28.5 | 12.6 | 19.0 | 23.5 | 11.6 | 16.2 | 22.4 | 9.1 | 13.6 |
| 18 | 24.1 | 3.8 | 12.9 | 28.6 | 12.6 | 19.0 | 19.8 | 11.9 | 15.0 | 19.7 | 8.2 | 11.7 |
| 19 | 22.3 | 9.5 | 13.6 | 28.4 | 13.6 | 18.4 | 25.4 | 10.9 | 16.9 | 21.2 | 5.4 | 11.3 |
| 20 | 18.7 | 10.2 | 13.8 | 24.0 | 13.2 | 17.1 | 27.5 | 11.7 | 17.9 | 20.2 | 6.5 | 11.4 |
| 21 | 23.1 | 8.8 | 14.5 | 28.3 | 12.5 | 18.2 | 23.1 | 12.5 | 16.7 | 21.1 | 6.1 | 11.7 |
| 22 | 23.8 | 8.9 | 14.8 | 29.2 | 9.2 | 16.6 | 25.8 | 11.9 | 16.9 | 22.0 | 5.7 | 11.8 |
| 23 | 23.5 | 8.9 | 15.0 | 26.2 | 12.5 | 17.3 | 27.1 | 12.7 | 17.3 | 21.4 | 6.3 | 12.1 |
| 24 | 24.3 | 9.3 | 15.3 | 28.5 | 12.1 | 18.8 | 28.1 | 12.2 | 17.7 | 22.0 | 6.3 | 12.0 |
| 25 | 24.6 | 10.0 | 15.8 | 27.4 | 13.3 | 19.0 | 23.6 | 13.6 | 16.4 | 22.1 | 6.8 | 12.5 |
| 26 | 25.5 | 11.5 | 16.8 | 28.6 | 13.5 | 18.6 | 25.7 | 13.2 | 16.6 | 22.4 | 6.4 | 12.5 |
| 27 | 26.5 | 10.2 | 16.9 | 25.2 | 14.8 | 17.5 | 27.5 | 12.2 | 17.5 | 21.0 | 7.4 | 12.2 |
| 28 | 25.4 | 10.6 | 16.1 | 21.0 | 13.8 | 16.8 | 20.4 | 13.7 | 16.1 | 20.3 | 6.6 | 11.5 |
| 29 | 23.5 | 10.7 | 15.8 | 24.5 | 14.9 | 18.8 | 25.6 | 11.1 | 16.5 | 21.6 | 6.1 | 11.8 |
| 30 | 25.6 | 11.8 | 16.9 | 24.9 | 14.9 | 19.3 | 19.9 | 13.6 | 15.4 | 18.9 | 6.8 | 11.1 |
| 31 | --- | --- | --- | 22.7 | 15.1 | 18.2 | 24.7 | 12.9 | 16.5 | --- | --- | --- |
| MONTH | 26.5 | 3.8 | 14.5 | 29.2 | 9.2 | 17.8 | 29.0 | 10.9 | 17.5 | 26.8 | 5.4 | 12.9 |

07094500 ARKANSAS RIVER AT PARKDALE, CO

LOCATION.--Lat 38°29'14", long 105°22'23", in NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.18, T.18 S., R.71 W., Fremont County, Hydrologic Unit 11020001, on left bank at Parkdale, 100 ft upstream from Bumback Gulch, 300 ft upstream from bridge on U.S. Highway 50, and 0.9 mi upstream from Copper Gulch.

DRAINAGE AREA.--2,548 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1955, October 1964 to September 1994, April 1995 to current year (seasonal records only). Monthly discharge only for October 1945 to May 1946, published in WSP 1311. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07094500

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,720 ft above NGVD of 1929, from topographic map. Prior to Oct. 1, 1964, at site 600 ft downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transbasin and transmountain diversions, storage reservoirs, power development, ground-water withdrawals, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (occurred during period of seasonal record), 6,830 ft³/s, June 18, 1995, gage height, 8.82 ft, from rating curve extended above 6,050 ft³/s; maximum gage height, 9.13 ft, June 9, 1985; minimum daily (occurred during period of seasonal record), 187 ft³/s, Sept. 17, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 3,910 ft³/s, May 31, gage height, 6.59 ft; minimum daily, 235 ft³/s, Apr. 1.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-----|--------|--------|---------|--------|--------|--------|
| 1 | --- | --- | --- | --- | --- | --- | 235 | 269 | 3,680 | 981 | 771 | 395 |
| 2 | --- | --- | --- | --- | --- | --- | 243 | 251 | 3,730 | 986 | 756 | 353 |
| 3 | --- | --- | --- | --- | --- | --- | 259 | 261 | 3,430 | 929 | 733 | 370 |
| 4 | --- | --- | --- | --- | --- | --- | 302 | 261 | 2,820 | 894 | 719 | 371 |
| 5 | --- | --- | --- | --- | --- | --- | 288 | 256 | 2,380 | 866 | 692 | 367 |
| 6 | --- | --- | --- | --- | --- | --- | 268 | 258 | 2,120 | 847 | 625 | 357 |
| 7 | --- | --- | --- | --- | --- | --- | 261 | 257 | 1,730 | 807 | 658 | 394 |
| 8 | --- | --- | --- | --- | --- | --- | 260 | 247 | 1,410 | 818 | 675 | 481 |
| 9 | --- | --- | --- | --- | --- | --- | 266 | 245 | 1,280 | 815 | 571 | 468 |
| 10 | --- | --- | --- | --- | --- | --- | 261 | 247 | 1,420 | 804 | 750 | 489 |
| 11 | --- | --- | --- | --- | --- | --- | 264 | 247 | 1,660 | 793 | 756 | 600 |
| 12 | --- | --- | --- | --- | --- | --- | 289 | 246 | 1,790 | 784 | 696 | 584 |
| 13 | --- | --- | --- | --- | --- | --- | 293 | 238 | 1,920 | 760 | 601 | 551 |
| 14 | --- | --- | --- | --- | --- | --- | 286 | 244 | 2,040 | 787 | 482 | 560 |
| 15 | --- | --- | --- | --- | --- | --- | 300 | 278 | 1,900 | 786 | 412 | 528 |
| 16 | --- | --- | --- | --- | --- | --- | 308 | 372 | 1,890 | 779 | 363 | 484 |
| 17 | --- | --- | --- | --- | --- | --- | 264 | 415 | 1,970 | 793 | 345 | 383 |
| 18 | --- | --- | --- | --- | --- | --- | 261 | 486 | 1,750 | 784 | 352 | 354 |
| 19 | --- | --- | --- | --- | --- | --- | 262 | 684 | 1,610 | 786 | 385 | 417 |
| 20 | --- | --- | --- | --- | --- | --- | 272 | 895 | 1,760 | 813 | 437 | 418 |
| 21 | --- | --- | --- | --- | --- | --- | 259 | 800 | 1,770 | 827 | 411 | 406 |
| 22 | --- | --- | --- | --- | --- | --- | 240 | 709 | 1,650 | 823 | 398 | 394 |
| 23 | --- | --- | --- | --- | --- | --- | 268 | 863 | 1,670 | 809 | 426 | 395 |
| 24 | --- | --- | --- | --- | --- | --- | 279 | 1,160 | 1,480 | 801 | 449 | 347 |
| 25 | --- | --- | --- | --- | --- | --- | 259 | 1,550 | 1,200 | 787 | 476 | 317 |
| 26 | --- | --- | --- | --- | --- | --- | 269 | 1,500 | 1,110 | 814 | 511 | 296 |
| 27 | --- | --- | --- | --- | --- | --- | 275 | 1,820 | 1,020 | 851 | 527 | 281 |
| 28 | --- | --- | --- | --- | --- | --- | 282 | 2,340 | 975 | 924 | 486 | 267 |
| 29 | --- | --- | --- | --- | --- | --- | 300 | 2,770 | 955 | 873 | 491 | 258 |
| 30 | --- | --- | --- | --- | --- | --- | 327 | 3,370 | 958 | 765 | 448 | 250 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 3,720 | --- | 744 | 424 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | 8,200 | 27,259 | 55,078 | 25,630 | 16,826 | 12,135 |
| MEAN | --- | --- | --- | --- | --- | --- | 273 | 879 | 1,836 | 827 | 543 | 404 |
| MAX | --- | --- | --- | --- | --- | --- | 327 | 3,720 | 3,730 | 986 | 771 | 600 |
| MIN | --- | --- | --- | --- | --- | --- | 235 | 238 | 955 | 744 | 345 | 250 |
| AC-FT | --- | --- | --- | --- | --- | --- | 16,260 | 54,070 | 109,200 | 50,840 | 33,370 | 24,070 |

ARKANSAS RIVER BASIN

07094500 ARKANSAS RIVER AT PARKDALE, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | --- | --- | --- | --- | --- | --- | 13.8 | 7.9 | 10.8 | 15.8 | 11.3 | 13.2 |
| 2 | --- | --- | --- | --- | --- | --- | 13.7 | 8.5 | 10.9 | 16.2 | 11.2 | 13.4 |
| 3 | --- | --- | --- | --- | --- | --- | 12.2 | 8.3 | 9.8 | 17.5 | 12.2 | 14.4 |
| 4 | --- | --- | --- | --- | --- | --- | 10.8 | 6.8 | 8.7 | 15.3 | 11.6 | 13.1 |
| 5 | --- | --- | --- | --- | --- | --- | 8.3 | 6.2 | 7.5 | 15.6 | 10.4 | 12.9 |
| 6 | --- | --- | --- | --- | --- | --- | 10.2 | 7.0 | 8.4 | 15.6 | 10.7 | 12.9 |
| 7 | --- | --- | --- | --- | --- | --- | 9.0 | 6.4 | 7.5 | 15.6 | 12.0 | 13.6 |
| 8 | --- | --- | --- | --- | --- | --- | 11.0 | 4.6 | 7.8 | 15.5 | 11.1 | 13.1 |
| 9 | --- | --- | --- | --- | --- | --- | 12.8 | 6.2 | 9.6 | 15.5 | 10.9 | 13.2 |
| 10 | --- | --- | --- | --- | --- | --- | 14.7 | 8.5 | 11.5 | 13.1 | 10.3 | 11.8 |
| 11 | --- | --- | --- | --- | --- | --- | 14.3 | 10.0 | 12.2 | 15.7 | 10.0 | 12.8 |
| 12 | --- | --- | --- | --- | --- | --- | 13.6 | 10.1 | 11.8 | 17.2 | 11.3 | 14.3 |
| 13 | --- | --- | --- | --- | --- | --- | 14.9 | 9.1 | 12.2 | 17.1 | 12.8 | 14.9 |
| 14 | --- | --- | --- | --- | --- | --- | 13.5 | 11.1 | 12.5 | 16.5 | 12.6 | 15.1 |
| 15 | --- | --- | --- | --- | --- | --- | 13.1 | 10.2 | 11.9 | 17.9 | 14.4 | 15.5 |
| 16 | --- | --- | --- | --- | --- | --- | 13.7 | 8.0 | 10.9 | 18.3 | 12.7 | 15.7 |
| 17 | --- | --- | --- | --- | --- | --- | 13.4 | 9.2 | 11.6 | 18.8 | 15.3 | 17.1 |
| 18 | --- | --- | --- | --- | --- | --- | 14.6 | 9.5 | 12.1 | 18.2 | 15.1 | 16.7 |
| 19 | --- | --- | --- | --- | --- | --- | 11.8 | 9.7 | 10.5 | 15.5 | 13.5 | 14.4 |
| 20 | --- | --- | --- | --- | --- | --- | 12.9 | 8.6 | 10.7 | 13.5 | 10.5 | 11.7 |
| 21 | --- | --- | --- | --- | --- | --- | 13.8 | 10.5 | 11.6 | 15.4 | 9.5 | 12.5 |
| 22 | --- | --- | --- | --- | --- | --- | 14.8 | 10.5 | 12.4 | 18.0 | 13.0 | 15.5 |
| 23 | --- | --- | --- | --- | --- | --- | 12.4 | 8.0 | 10.8 | 18.0 | 14.9 | 16.7 |
| 24 | --- | --- | --- | --- | --- | --- | 12.6 | 6.8 | 9.2 | 17.5 | 14.6 | 16.3 |
| 25 | --- | --- | --- | --- | --- | --- | 14.8 | 8.3 | 11.6 | 16.6 | 14.5 | 15.7 |
| 26 | --- | --- | --- | --- | --- | --- | 16.6 | 11.1 | 13.8 | 15.3 | 12.8 | 14.1 |
| 27 | --- | --- | --- | --- | --- | --- | 16.0 | 11.9 | 13.7 | 15.7 | 13.4 | 14.5 |
| 28 | --- | --- | --- | --- | --- | --- | 16.1 | 11.6 | 13.8 | 16.5 | 13.9 | 15.3 |
| 29 | --- | --- | --- | --- | --- | --- | 16.9 | 12.5 | 14.5 | 16.0 | 14.4 | 15.2 |
| 30 | --- | --- | --- | --- | --- | --- | 16.1 | 12.1 | 14.0 | 15.4 | 13.7 | 14.5 |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- | 14.4 | 13.0 | 13.6 |
| MONTH | --- | --- | --- | --- | --- | --- | 16.9 | 4.6 | 11.1 | 18.8 | 9.5 | 14.3 |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 14.0 | 12.1 | 13.1 | 20.3 | 17.0 | 18.7 | 19.4 | 17.3 | 18.6 | 21.3 | 17.4 | 19.2 |
| 2 | 15.0 | 11.8 | 13.4 | 20.8 | 17.3 | 19.1 | 21.4 | 17.6 | 19.4 | 21.6 | 17.5 | 19.3 |
| 3 | 15.5 | 12.9 | 14.1 | 21.4 | 17.6 | 19.5 | 23.1 | 19.0 | 20.7 | 19.2 | 16.8 | 18.0 |
| 4 | 15.6 | 13.6 | 14.6 | 20.9 | 17.5 | 19.4 | 22.3 | 18.9 | 20.6 | 19.9 | 15.1 | 17.5 |
| 5 | 14.4 | 12.6 | 13.1 | 20.3 | 17.9 | 19.3 | 22.6 | 18.9 | 20.7 | 19.7 | 16.7 | 18.2 |
| 6 | 14.6 | 11.5 | 13.0 | 20.0 | 17.7 | 18.8 | 22.1 | 18.7 | 20.4 | 19.6 | 17.3 | 18.3 |
| 7 | 13.8 | 11.7 | 12.7 | 20.0 | 16.1 | 18.1 | 21.0 | 18.6 | 19.9 | 18.4 | 16.8 | 17.3 |
| 8 | 16.2 | 12.3 | 14.2 | 21.8 | 16.8 | 19.1 | 21.7 | 18.8 | 20.1 | 18.4 | 15.1 | 16.9 |
| 9 | 16.5 | 14.4 | 15.5 | 21.4 | 18.0 | 19.7 | 22.0 | 19.2 | 20.6 | 17.5 | 15.3 | 16.3 |
| 10 | 15.8 | 14.0 | 15.0 | 22.5 | 18.1 | 20.1 | 20.9 | 18.4 | 19.9 | 16.0 | 13.5 | 14.7 |
| 11 | 16.8 | 13.5 | 15.2 | 20.6 | 18.1 | 19.6 | 21.6 | 18.1 | 19.6 | 14.3 | 11.5 | 13.1 |
| 12 | 17.0 | 14.3 | 15.7 | 20.5 | 18.3 | 19.3 | 22.5 | 18.3 | 20.3 | 15.9 | 11.6 | 13.9 |
| 13 | 16.2 | 14.1 | 14.7 | 20.5 | 17.9 | 19.2 | 22.8 | 18.6 | 20.5 | 15.2 | 11.0 | 12.9 |
| 14 | 15.6 | 12.7 | 14.3 | 20.9 | 18.1 | 19.5 | 21.9 | 18.1 | 19.9 | 14.4 | 9.7 | 12.1 |
| 15 | 17.5 | 14.4 | 15.9 | 21.0 | 17.7 | 19.2 | 21.9 | 17.9 | 19.8 | 15.2 | 11.7 | 13.6 |
| 16 | 16.9 | 15.0 | 15.8 | 21.0 | 17.4 | 19.0 | 22.1 | 17.9 | 19.3 | 15.8 | 12.3 | 14.3 |
| 17 | 16.0 | 13.4 | 14.8 | 22.0 | 17.5 | 19.7 | 22.0 | 17.7 | 19.4 | 16.9 | 13.6 | 15.2 |
| 18 | 15.5 | 13.0 | 14.4 | 22.9 | 18.5 | 20.6 | 19.7 | 17.4 | 18.4 | 14.9 | 12.4 | 13.7 |
| 19 | 16.5 | 13.6 | 15.1 | 22.9 | 19.5 | 21.1 | 20.6 | 16.2 | 18.4 | 14.8 | 11.3 | 13.2 |
| 20 | 16.1 | 13.7 | 15.0 | 21.3 | 19.0 | 19.9 | 22.1 | 17.8 | 20.0 | 14.6 | 11.5 | 13.3 |
| 21 | 16.8 | 13.4 | 15.1 | 21.2 | 17.9 | 19.6 | 22.3 | 18.5 | 20.1 | 15.4 | 11.9 | 13.8 |
| 22 | 17.9 | 14.0 | 16.0 | 21.9 | 18.3 | 20.0 | 20.7 | 17.2 | 18.9 | 15.3 | 12.0 | 13.8 |
| 23 | 17.8 | 14.3 | 16.3 | 20.0 | 18.1 | 19.2 | 20.9 | 17.5 | 19.1 | 16.0 | 12.4 | 14.3 |
| 24 | 18.1 | 14.7 | 16.4 | 22.6 | 17.9 | 20.1 | 22.7 | 17.4 | 19.8 | 15.5 | 12.1 | 14.1 |
| 25 | 18.0 | 14.6 | 16.4 | 22.6 | 19.3 | 21.2 | 20.6 | 18.6 | 19.1 | 16.1 | 12.3 | 14.3 |
| 26 | 18.6 | 15.5 | 17.0 | 22.2 | 19.0 | 20.6 | 20.0 | 17.7 | 18.9 | 16.2 | 12.4 | 14.5 |
| 27 | 19.0 | 16.2 | 17.7 | 20.8 | 18.6 | 19.5 | 20.3 | 17.1 | 18.7 | 16.3 | 12.7 | 14.5 |
| 28 | 19.9 | 16.8 | 18.3 | 19.7 | 17.8 | 18.9 | 19.5 | 17.8 | 18.8 | 15.7 | 12.1 | 13.8 |
| 29 | 18.8 | 16.2 | 17.8 | 20.8 | 17.6 | 19.0 | 20.0 | 16.1 | 17.9 | 15.4 | 11.2 | 13.3 |
| 30 | 20.1 | 17.0 | 18.5 | 21.5 | 18.2 | 19.8 | 18.0 | 17.0 | 17.4 | 15.1 | 11.7 | 13.3 |
| 31 | --- | --- | --- | 20.2 | 18.3 | 19.3 | 18.5 | 16.0 | 17.3 | --- | --- | --- |
| MONTH | 20.1 | 11.5 | 15.3 | 22.9 | 16.1 | 19.6 | 23.1 | 16.0 | 19.4 | 21.6 | 9.7 | 15.0 |

07096000 ARKANSAS RIVER AT CANON CITY, CO

LOCATION.--Lat 38°26'02". long 105°15'24", in SE¹/₄SE¹/₄ sec.31, T.18 S., R.70 W., Fremont County, Hydrologic Unit 11020002, on right bank 800 ft upstream from Sand Creek, 0.7 mi downstream from Grape Creek, and 0.7 mi upstream from First Street Bridge at Canon City.

DRAINAGE AREA.--3,117 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1888 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near Canyon" 1900-1906. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07096000

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 NGVD of 1929. 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. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| 1 | 137 | 221 | 222 | e220 | 223 | 236 | 231 | 196 | 3,460 | 755 | 569 | 299 |
| 2 | 156 | 226 | 224 | e220 | 228 | 231 | 273 | 173 | 3,540 | 751 | 559 | 255 |
| 3 | 163 | 221 | 224 | e215 | 231 | 223 | 359 | 166 | 3,180 | 709 | 542 | 264 |
| 4 | 177 | 214 | 226 | e215 | 223 | 217 | 348 | 165 | 2,720 | 668 | 525 | 271 |
| 5 | 175 | 205 | 219 | e220 | 209 | 224 | 324 | 164 | 2,330 | 644 | 519 | 276 |
| 6 | 166 | 199 | 223 | e220 | 216 | 225 | 272 | 166 | 2,050 | 640 | 464 | 264 |
| 7 | 161 | 210 | 222 | e215 | e215 | 216 | 264 | 165 | 1,650 | 608 | 492 | 292 |
| 8 | 157 | 226 | 223 | 223 | e210 | 218 | 264 | 159 | 1,280 | 604 | 522 | 367 |
| 9 | 157 | 210 | 234 | e225 | e220 | 223 | 268 | 153 | 1,100 | 632 | 439 | 373 |
| 10 | 154 | 221 | 232 | e225 | e240 | 218 | 250 | 151 | 1,240 | 639 | 577 | 367 |
| 11 | 138 | 199 | 211 | e230 | 260 | 213 | 205 | 132 | 1,520 | 633 | 580 | 470 |
| 12 | 117 | 190 | e214 | e220 | 263 | 208 | 205 | 123 | 1,660 | 646 | 557 | 460 |
| 13 | 111 | 190 | e218 | e220 | 274 | 215 | 198 | 119 | 1,790 | 620 | 484 | 436 |
| 14 | 98 | 215 | e220 | e215 | 287 | 200 | 194 | 126 | 1,900 | 632 | 396 | 442 |
| 15 | 102 | 204 | e220 | e220 | 266 | 192 | 212 | 131 | 1,790 | 609 | 331 | 415 |
| 16 | 128 | 191 | e225 | e220 | 243 | 209 | 245 | 220 | 1,780 | 595 | 288 | 393 |
| 17 | 132 | 176 | 232 | e210 | 231 | 228 | 198 | 279 | 1,860 | 611 | 262 | 295 |
| 18 | 136 | 169 | e230 | e210 | 233 | 248 | 159 | 328 | 1,630 | 602 | 268 | 271 |
| 19 | 143 | 175 | e215 | e210 | 236 | 248 | 160 | 489 | 1,510 | 587 | 285 | 316 |
| 20 | 154 | 170 | e210 | e210 | 221 | 220 | 166 | 706 | 1,640 | 612 | 329 | 326 |
| 21 | 157 | 162 | e215 | e220 | 219 | 236 | 160 | 636 | 1,680 | 614 | 312 | 307 |
| 22 | 156 | 174 | e220 | e225 | 223 | 233 | 139 | 510 | 1,540 | 616 | 283 | 292 |
| 23 | 162 | 184 | e230 | e220 | 234 | 237 | 131 | 595 | 1,550 | 602 | 337 | 294 |
| 24 | 165 | 186 | e230 | 224 | 219 | 245 | 149 | 906 | 1,350 | 592 | 361 | 263 |
| 25 | 176 | 190 | e225 | 225 | e230 | 254 | 151 | 1,320 | 1,020 | 584 | 375 | 236 |
| 26 | 172 | 190 | e225 | 221 | e230 | 250 | 143 | 1,430 | 894 | 603 | 404 | 214 |
| 27 | 180 | 205 | e230 | 215 | e240 | 256 | 144 | 1,680 | 800 | 620 | 424 | 209 |
| 28 | 169 | 220 | e230 | 219 | 235 | 242 | 172 | 2,190 | 768 | 704 | 396 | 205 |
| 29 | 165 | 217 | e235 | 223 | --- | 227 | 232 | 2,610 | 750 | 709 | 390 | 206 |
| 30 | 189 | 220 | e230 | 218 | --- | 218 | 257 | 3,080 | 748 | 623 | 351 | 204 |
| 31 | 216 | --- | e225 | 219 | --- | 215 | --- | 3,450 | --- | 546 | 334 | --- |
| TOTAL | 4,769 | 5,980 | 6,939 | 6,792 | 6,559 | 7,025 | 6,473 | 22,718 | 50,730 | 19,610 | 12,955 | 9,282 |
| MEAN | 154 | 199 | 224 | 219 | 234 | 227 | 216 | 733 | 1,691 | 633 | 418 | 309 |
| MAX | 216 | 226 | 235 | 230 | 287 | 256 | 359 | 3,450 | 3,540 | 755 | 580 | 470 |
| MIN | 98 | 162 | 210 | 210 | 209 | 192 | 131 | 119 | 748 | 546 | 262 | 204 |
| AC-FT | 9,460 | 11,860 | 13,760 | 13,470 | 13,010 | 13,930 | 12,840 | 45,060 | 100,600 | 38,900 | 25,700 | 18,410 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 2003, BY WATER YEAR (WY)

| | 370 | 377 | 370 | 348 | 344 | 353 | 421 | 1,102 | 2,263 | 1,456 | 845 | 445 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 370 | 377 | 370 | 348 | 344 | 353 | 421 | 1,102 | 2,263 | 1,456 | 845 | 445 |
| MAX | 1,195 | 620 | 623 | 609 | 781 | 711 | 1,120 | 2,667 | 4,286 | 5,541 | 2,134 | 1,411 |
| (WY) | (1912) | (1924) | (1983) | (1983) | (1985) | (1989) | (1942) | (1984) | (1980) | (1957) | (1957) | (1909) |
| MIN | 154 | 180 | 204 | 195 | 217 | 176 | 108 | 243 | 300 | 200 | 168 | 142 |
| (WY) | (2003) | (1940) | (1940) | (1979) | (1978) | (1904) | (1940) | (1977) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1889 - 2003

| | | | |
|--------------------------|---------|---------|----------|
| ANNUAL TOTAL | 89,669 | 159,832 | |
| ANNUAL MEAN | 246 | 438 | 727 |
| HIGHEST ANNUAL MEAN | | | 1,299 |
| LOWEST ANNUAL MEAN | | | 280 |
| HIGHEST DAILY MEAN | 472 | May 17 | 9,480 |
| LOWEST DAILY MEAN | 98 | Oct 14 | 69 |
| ANNUAL SEVEN-DAY MINIMUM | 118 | Oct 12 | 87 |
| MAXIMUM PEAK FLOW | | | a19,000 |
| MAXIMUM PEAK STAGE | | 8.99 | b,c10.70 |
| ANNUAL RUNOFF (AC-FT) | 177,900 | 317,000 | 526,300 |
| 10 PERCENT EXCEEDS | 380 | 760 | 1,690 |
| 50 PERCENT EXCEEDS | 222 | 230 | 412 |
| 90 PERCENT EXCEEDS | 153 | 162 | 237 |

e Estimated.

a Site and datum then in use, from rating curve extended above 5,000 ft³/s.

b From floodmark.

c Maximum gage height, 10.90 ft, Jun 18, 1995.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1963 to September 1968, October 1970 to January 1977, April 1990 to March 1993, October 1993 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07096000

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1993 to current year.

WATER TEMPERATURE: October 1993 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 739 microsiemens/cm, Aug. 16, 2000; minimum, 94 microsiemens/cm, June 9, 1996.

WATER TEMPERATURE: Maximum, 25.7°C, July 12, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 570 microsiemens/cm, May 25; minimum, 112 microsiemens/cm, June 3-4.

WATER TEMPERATURE: Maximum, 23.6°C, July 19; minimum, 0.0 °C, on many days.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 299 | 292 | 295 | 283 | 277 | 280 | 294 | 282 | 288 | 284 | 272 | 278 |
| 2 | 295 | 284 | 288 | 286 | 277 | 280 | 293 | 281 | 287 | 288 | 280 | 284 |
| 3 | 286 | 281 | 283 | 284 | 279 | 280 | 295 | 283 | 289 | 289 | 277 | 283 |
| 4 | 290 | 284 | 286 | 285 | 279 | 282 | 298 | 286 | 293 | 290 | 277 | 282 |
| 5 | 290 | 286 | 287 | 287 | 279 | 284 | 299 | 291 | 294 | 279 | 265 | 269 |
| 6 | 287 | 282 | 284 | 291 | 282 | 287 | 302 | 289 | 294 | 265 | 253 | 259 |
| 7 | 288 | 282 | 285 | 298 | 285 | 292 | 301 | 286 | 292 | 260 | 251 | 256 |
| 8 | 295 | 284 | 288 | 304 | 291 | 297 | 303 | 286 | 294 | 270 | 260 | 264 |
| 9 | 302 | 291 | 296 | 303 | 296 | 299 | 308 | 288 | 297 | 277 | 270 | 273 |
| 10 | 302 | 295 | 299 | 299 | 284 | 290 | 309 | 295 | 301 | 295 | 275 | 285 |
| 11 | 299 | 292 | 296 | 284 | 277 | 282 | 306 | 293 | 301 | 294 | 280 | 288 |
| 12 | 304 | 295 | 298 | 288 | 276 | 283 | 305 | 294 | 299 | 293 | 282 | 288 |
| 13 | 309 | 300 | 304 | 288 | 277 | 282 | 306 | 292 | 299 | 288 | 278 | 285 |
| 14 | 311 | 302 | 307 | 300 | 279 | 290 | 303 | 286 | 295 | 286 | 281 | 284 |
| 15 | 311 | 301 | 306 | 292 | 279 | 288 | 295 | 282 | 288 | 289 | 273 | 283 |
| 16 | 308 | 301 | 305 | 285 | 276 | 280 | 289 | 285 | 287 | 286 | 276 | 281 |
| 17 | 307 | 299 | 303 | 286 | 275 | 279 | 292 | 286 | 288 | 291 | 283 | 286 |
| 18 | 308 | 299 | 304 | 292 | 276 | 285 | 297 | 287 | 292 | 303 | 284 | 298 |
| 19 | 310 | 303 | 307 | 292 | 282 | 288 | 300 | 291 | 295 | 308 | 287 | 298 |
| 20 | 308 | 296 | 301 | 291 | 280 | 285 | 313 | 300 | 308 | 299 | 278 | 290 |
| 21 | 302 | 296 | 299 | 298 | 279 | 290 | 323 | 311 | 316 | 288 | 276 | 283 |
| 22 | 301 | 293 | 297 | 302 | 284 | 293 | 327 | 310 | 318 | 288 | 275 | 283 |
| 23 | 298 | 287 | 291 | 292 | 281 | 286 | 318 | 301 | 310 | 287 | 275 | 281 |
| 24 | 294 | 289 | 291 | 291 | 278 | 285 | 316 | 306 | 311 | 287 | 278 | 283 |
| 25 | 291 | 284 | 287 | 289 | 279 | 284 | 316 | 304 | 310 | 288 | 282 | 284 |
| 26 | 286 | 281 | 283 | 289 | 279 | 283 | 324 | 309 | 317 | 286 | 281 | 283 |
| 27 | 285 | 278 | 282 | 290 | 278 | 285 | 333 | 307 | 321 | 288 | 283 | 285 |
| 28 | 286 | 278 | 283 | 294 | 279 | 287 | 323 | 302 | 313 | 290 | 284 | 288 |
| 29 | 285 | 275 | 281 | 293 | 281 | 288 | 309 | 289 | 300 | 290 | 286 | 287 |
| 30 | 284 | 274 | 280 | 289 | 280 | 285 | 294 | 274 | 286 | 287 | 282 | 284 |
| 31 | 284 | 279 | 281 | --- | --- | --- | 284 | 277 | 281 | 291 | 283 | 287 |
| MONTH | 311 | 274 | 293 | 304 | 275 | 286 | 333 | 274 | 299 | 308 | 251 | 282 |

ARKANSAS RIVER BASIN

07096000 ARKANSAS RIVER AT CANON CITY, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|-----|------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 14.8 | 11.8 | 13.5 | 3.1 | 1.6 | 2.3 | 2.1 | 0.3 | 1.1 | 0.5 | 0.0 | 0.1 |
| 2 | 13.5 | 10.8 | 12.0 | 4.2 | 1.8 | 3.0 | 2.3 | 0.6 | 1.4 | 0.4 | 0.0 | 0.1 |
| 3 | 12.7 | 10.0 | 11.0 | 5.8 | 3.3 | 4.2 | 2.0 | 1.4 | 1.7 | 0.4 | 0.0 | 0.1 |
| 4 | 12.3 | 9.2 | 10.7 | 5.4 | 3.5 | 4.3 | 2.4 | 1.3 | 1.9 | 0.6 | 0.0 | 0.2 |
| 5 | 13.1 | 9.7 | 11.2 | 5.3 | 3.4 | 4.2 | 2.3 | 0.9 | 1.5 | 0.6 | 0.0 | 0.2 |
| 6 | 12.9 | 10.2 | 11.5 | 5.5 | 3.0 | 4.1 | 1.5 | 0.1 | 0.6 | 1.0 | 0.1 | 0.3 |
| 7 | 14.0 | 10.3 | 12.1 | 5.5 | 3.2 | 4.4 | 1.0 | 0.0 | 0.3 | 1.2 | 0.0 | 0.3 |
| 8 | 14.4 | 10.7 | 12.5 | 6.4 | 3.8 | 5.1 | 1.1 | 0.0 | 0.3 | 1.7 | 0.0 | 0.4 |
| 9 | 15.0 | 11.5 | 13.2 | 8.0 | 5.5 | 6.5 | 0.5 | 0.0 | 0.1 | 0.8 | 0.0 | 0.1 |
| 10 | 14.7 | 11.0 | 12.9 | 6.3 | 4.4 | 5.4 | 0.5 | 0.0 | 0.1 | 0.3 | 0.0 | 0.0 |
| 11 | 14.1 | 10.5 | 12.3 | 4.8 | 2.6 | 3.7 | 0.2 | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 |
| 12 | 13.4 | 10.5 | 11.5 | 3.5 | 1.2 | 2.3 | 0.1 | 0.0 | 0.1 | 0.6 | 0.0 | 0.1 |
| 13 | 12.3 | 8.3 | 10.2 | 4.2 | 2.0 | 3.2 | 0.2 | 0.0 | 0.1 | 0.9 | 0.0 | 0.2 |
| 14 | 12.6 | 8.5 | 10.1 | 4.9 | 3.4 | 4.1 | 0.5 | 0.0 | 0.1 | 0.9 | 0.0 | 0.2 |
| 15 | 11.4 | 7.6 | 9.4 | 4.7 | 2.8 | 3.9 | 0.8 | 0.0 | 0.2 | 1.5 | 0.0 | 0.3 |
| 16 | 10.8 | 7.4 | 8.9 | 3.3 | 1.6 | 2.4 | 1.0 | 0.0 | 0.2 | 0.7 | 0.0 | 0.1 |
| 17 | 10.7 | 6.7 | 8.6 | 3.8 | 1.9 | 2.7 | 1.4 | 0.0 | 0.5 | 0.5 | 0.0 | 0.1 |
| 18 | 11.2 | 7.3 | 9.0 | 3.9 | 2.0 | 2.8 | 0.8 | 0.0 | 0.3 | 0.1 | 0.0 | 0.0 |
| 19 | 10.6 | 7.3 | 8.9 | 3.6 | 1.8 | 2.6 | 0.5 | 0.0 | 0.1 | 0.2 | 0.0 | 0.0 |
| 20 | 10.7 | 7.3 | 8.8 | 4.0 | 2.0 | 2.9 | 0.2 | 0.0 | 0.1 | 0.7 | 0.0 | 0.2 |
| 21 | 10.6 | 7.4 | 8.8 | 4.4 | 2.3 | 3.3 | 0.2 | 0.0 | 0.0 | 1.0 | 0.0 | 0.2 |
| 22 | 9.9 | 7.4 | 8.5 | 4.6 | 2.7 | 3.5 | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| 23 | 7.8 | 6.1 | 6.8 | 4.5 | 2.9 | 3.6 | 0.1 | 0.0 | 0.1 | 0.9 | 0.0 | 0.2 |
| 24 | 6.9 | 5.6 | 6.2 | 3.5 | 1.5 | 2.6 | 0.1 | 0.0 | 0.0 | 2.3 | 0.1 | 1.3 |
| 25 | 8.4 | 5.7 | 7.0 | 2.5 | 1.2 | 1.7 | 0.1 | 0.0 | 0.1 | 3.3 | 1.2 | 2.1 |
| 26 | 8.5 | 6.5 | 7.6 | 1.7 | 0.0 | 1.0 | 0.1 | 0.0 | 0.1 | 2.8 | 0.7 | 1.8 |
| 27 | 9.0 | 7.0 | 8.1 | 0.6 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 | 4.5 | 2.2 | 3.3 |
| 28 | 10.2 | 7.5 | 8.6 | 0.7 | 0.0 | 0.2 | 0.1 | 0.0 | 0.1 | 4.4 | 2.4 | 3.4 |
| 29 | 8.5 | 5.1 | 7.1 | 1.3 | 0.1 | 0.5 | 0.1 | 0.0 | 0.1 | 4.3 | 2.7 | 3.3 |
| 30 | 5.1 | 3.1 | 4.2 | 1.5 | 0.0 | 0.5 | 0.4 | 0.0 | 0.1 | 4.0 | 2.0 | 3.1 |
| 31 | 3.1 | 2.0 | 2.6 | --- | --- | --- | 0.3 | 0.0 | 0.1 | 4.8 | 2.5 | 3.8 |
| MONTH | 15.0 | 2.0 | 9.5 | 8.0 | 0.0 | 3.0 | 2.4 | 0.0 | 0.4 | 4.8 | 0.0 | 0.8 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | | | | | | | | | | | | |
| 1 | 5.4 | 3.3 | 4.3 | 4.3 | 1.6 | 2.8 | 13.9 | 8.1 | 10.9 | 15.6 | 12.2 | 13.8 |
| 2 | 6.2 | 4.0 | 4.9 | 5.4 | 1.8 | 3.4 | 13.1 | 8.9 | 10.9 | 15.7 | 11.8 | 13.8 |
| 3 | 4.9 | 2.7 | 3.8 | 5.9 | 2.4 | 4.1 | 11.2 | 7.2 | 9.2 | 17.3 | 12.4 | 14.7 |
| 4 | 3.0 | 1.2 | 2.0 | 4.6 | 1.6 | 3.1 | 10.8 | 6.8 | 8.5 | 15.5 | 12.3 | 13.6 |
| 5 | 1.8 | 0.1 | 1.1 | 4.1 | 0.8 | 2.1 | 7.9 | 6.1 | 7.1 | 15.8 | 11.1 | 13.3 |
| 6 | 0.3 | 0.0 | 0.1 | 5.7 | 1.6 | 3.6 | 10.3 | 6.5 | 8.0 | 15.4 | 11.5 | 13.5 |
| 7 | 0.2 | 0.0 | 0.1 | 7.3 | 3.3 | 5.3 | 9.0 | 6.0 | 7.5 | 15.8 | 12.0 | 13.7 |
| 8 | 0.2 | 0.0 | 0.1 | 8.4 | 4.9 | 6.5 | 10.9 | 4.6 | 7.6 | 15.6 | 11.7 | 13.6 |
| 9 | 0.1 | 0.0 | 0.1 | 9.1 | 5.4 | 7.2 | 12.9 | 6.2 | 9.4 | 16.0 | 11.2 | 13.4 |
| 10 | 0.3 | 0.0 | 0.1 | 9.4 | 5.7 | 7.5 | 14.3 | 8.1 | 11.0 | 12.8 | 11.0 | 11.9 |
| 11 | 0.2 | 0.0 | 0.1 | 10.2 | 6.2 | 8.1 | 15.2 | 9.9 | 12.3 | 15.6 | 9.8 | 12.5 |
| 12 | 0.5 | 0.0 | 0.2 | 10.6 | 7.1 | 8.7 | 13.9 | 10.1 | 12.0 | 17.3 | 11.4 | 14.2 |
| 13 | 0.8 | 0.1 | 0.3 | 11.3 | 7.0 | 9.0 | 15.6 | 9.8 | 12.5 | 17.3 | 12.7 | 15.1 |
| 14 | 2.0 | 0.1 | 1.1 | 11.9 | 7.8 | 10.0 | 14.0 | 11.5 | 12.8 | 17.1 | 13.5 | 15.3 |
| 15 | 2.7 | 1.0 | 1.6 | 11.7 | 8.5 | 10.2 | 13.4 | 10.4 | 11.9 | 17.3 | 14.5 | 15.4 |
| 16 | 4.0 | 2.3 | 3.2 | 10.2 | 8.5 | 9.3 | 14.3 | 9.0 | 11.2 | 18.9 | 13.4 | 15.9 |
| 17 | 5.6 | 2.7 | 4.0 | 9.3 | 6.5 | 7.9 | 13.5 | 10.0 | 11.9 | 19.1 | 15.5 | 17.3 |
| 18 | 5.0 | 3.4 | 4.5 | 6.5 | 4.5 | 5.7 | 14.9 | 10.1 | 12.3 | 19.0 | 15.5 | 17.0 |
| 19 | 4.7 | 2.0 | 3.3 | 6.0 | 3.9 | 4.6 | 12.7 | 10.3 | 11.2 | 16.5 | 13.7 | 14.5 |
| 20 | 4.8 | 2.3 | 3.4 | 7.4 | 2.9 | 5.4 | 12.9 | 9.1 | 10.9 | 14.2 | 10.9 | 12.1 |
| 21 | 4.9 | 2.0 | 3.2 | 7.5 | 5.9 | 6.6 | 13.6 | 10.6 | 11.8 | 15.1 | 9.8 | 12.5 |
| 22 | 4.6 | 1.8 | 3.1 | 10.5 | 4.8 | 7.6 | 14.4 | 10.8 | 12.6 | 17.7 | 13.6 | 15.7 |
| 23 | 3.0 | 1.2 | 2.1 | 11.9 | 7.1 | 9.4 | 13.4 | 8.9 | 11.5 | 18.5 | 15.8 | 17.3 |
| 24 | 1.2 | 0.0 | 0.2 | 11.9 | 7.7 | 9.8 | 13.3 | 8.0 | 10.2 | 18.0 | 15.5 | 17.0 |
| 25 | 0.1 | 0.0 | 0.1 | 12.8 | 8.8 | 10.6 | 15.1 | 8.7 | 11.7 | 17.0 | 15.5 | 16.2 |
| 26 | 0.5 | 0.0 | 0.1 | 11.7 | 8.4 | 10.1 | 17.1 | 11.7 | 14.2 | 15.8 | 13.3 | 14.8 |
| 27 | 2.5 | 0.0 | 0.9 | 10.6 | 6.7 | 8.6 | 16.4 | 12.4 | 14.2 | 16.4 | 14.0 | 15.3 |
| 28 | 3.3 | 1.9 | 2.7 | 7.6 | 4.6 | 6.2 | 16.0 | 12.6 | 14.4 | 17.3 | 14.3 | 15.9 |
| 29 | --- | --- | --- | 8.1 | 3.6 | 5.7 | 17.7 | 13.0 | 15.1 | 16.6 | 14.9 | 15.8 |
| 30 | --- | --- | --- | 9.5 | 3.6 | 6.6 | 17.2 | 12.9 | 14.6 | 16.0 | 13.9 | 15.1 |
| 31 | --- | --- | --- | 11.9 | 6.3 | 8.0 | --- | --- | --- | 14.8 | 13.5 | 14.2 |
| MONTH | 6.2 | 0.0 | 1.8 | 12.8 | 0.8 | 6.9 | 17.7 | 4.6 | 11.3 | 19.1 | 9.8 | 14.7 |

07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO

LOCATION (REVISED).--Lat 38°39'50", long 105°13'39", in SW¹/₄SE¹/₄ sec.9, T.16 S., R.70 W., Teller County, Hydrologic Unit 11020002, on left bank 500 ft from Teller County Route 88, 0.2 mi downstream from Cripple Creek, and 5.5 mi southwest of Victor.

DRAINAGE AREA.--272 mi².

PERIOD OF RECORD.--October 1992 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07096250

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,870 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by small diversions for irrigation, flows from Cripple Creek sewage treatment plant, and releases from Wrights Reservoir.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 0.23 | 0.85 | 0.56 | 0.91 | 0.20 | 0.55 | 17 | 12 | 18 | 26 | 11 | 5.6 |
| 2 | 0.40 | 0.92 | 0.55 | 0.86 | 0.20 | 0.61 | 24 | 13 | 19 | 24 | 14 | 5.5 |
| 3 | 0.33 | 1.2 | 0.56 | 0.67 | 0.18 | 0.61 | 26 | 14 | 26 | 23 | 15 | 5.9 |
| 4 | 0.28 | 0.98 | 0.52 | 0.42 | 0.17 | 0.55 | 20 | 15 | 31 | 21 | 13 | 6.2 |
| 5 | 0.27 | 0.81 | 0.42 | 0.35 | 0.20 | 0.58 | 13 | 14 | 41 | 21 | 11 | 5.4 |
| 6 | 0.28 | 0.78 | 0.42 | 0.21 | 0.31 | 0.56 | 8.9 | 13 | 37 | 22 | 10 | 6.5 |
| 7 | 0.29 | 0.81 | 0.42 | 0.15 | 0.30 | 0.60 | 6.4 | 12 | 35 | 23 | 10 | 8.7 |
| 8 | 0.25 | 0.93 | 0.44 | 0.15 | 0.48 | 0.64 | 4.9 | 11 | 32 | 23 | 9.8 | 9.0 |
| 9 | 0.25 | 1.1 | 0.38 | 0.15 | 0.52 | 0.72 | 7.7 | 11 | 30 | 21 | 11 | 7.1 |
| 10 | 0.26 | 1.2 | 0.36 | 0.16 | 0.51 | 0.81 | 10 | 11 | 30 | 20 | 15 | 6.6 |
| 11 | 0.25 | 0.82 | 0.33 | 0.19 | 0.38 | 1.0 | 12 | 11 | 29 | 18 | 13 | 6.3 |
| 12 | 0.27 | 0.65 | 0.28 | 0.20 | 0.38 | 1.2 | 9.5 | 10 | 27 | 19 | 13 | 6.1 |
| 13 | 0.33 | 0.82 | 0.26 | 0.19 | 0.46 | 1.4 | 8.3 | 10 | 30 | 23 | 11 | 6.2 |
| 14 | 0.33 | 0.88 | 0.27 | 0.14 | 0.54 | 1.6 | 9.6 | 11 | 30 | 22 | 11 | 6.6 |
| 15 | 0.32 | 0.83 | 0.31 | 0.15 | 0.61 | 1.7 | 7.9 | 10 | 28 | 22 | 9.8 | 5.9 |
| 16 | 0.31 | 0.61 | 0.33 | 0.15 | 0.56 | 1.4 | 6.9 | 15 | 28 | 24 | 9.4 | 5.3 |
| 17 | 0.31 | 0.69 | 0.30 | 0.18 | 0.60 | 1.2 | 8.7 | 9.4 | 35 | 23 | 7.3 | 5.0 |
| 18 | 0.31 | 0.65 | 0.24 | 0.21 | 0.63 | 1.2 | 10 | 8.2 | 41 | 22 | 6.0 | 5.0 |
| 19 | 0.32 | 0.58 | 0.21 | 0.25 | 0.63 | 1.0 | 11 | 9.8 | 47 | 16 | 5.6 | 5.0 |
| 20 | 0.35 | 0.62 | 0.22 | 0.28 | 0.54 | 1.2 | 11 | 15 | 51 | 13 | 4.9 | 4.9 |
| 21 | 0.34 | 0.61 | 0.22 | 0.28 | 0.55 | 2.2 | 12 | 14 | 46 | 12 | 4.5 | 4.7 |
| 22 | 0.34 | 0.62 | 0.19 | 0.23 | 0.58 | 2.0 | 13 | 12 | 40 | 10 | 4.3 | 4.5 |
| 23 | 0.44 | 0.63 | 0.17 | 0.23 | 0.51 | 3.4 | 14 | 11 | 36 | 10 | 7.8 | 4.3 |
| 24 | 0.44 | 0.54 | 0.17 | 0.20 | 0.44 | 5.5 | 16 | 10 | 33 | 10 | 8.0 | 4.2 |
| 25 | 0.38 | 0.58 | 0.25 | 0.21 | 0.56 | 8.3 | 15 | 12 | 29 | 10 | 6.4 | 4.2 |
| 26 | 0.37 | 0.35 | 0.57 | 0.23 | 0.52 | e8.4 | 13 | 14 | 35 | 11 | 6.7 | 4.1 |
| 27 | 0.55 | 0.39 | 0.62 | 0.27 | 0.51 | e8.0 | 11 | 12 | 33 | 13 | 5.5 | 4.2 |
| 28 | 1.0 | 0.48 | 0.59 | 0.25 | 0.54 | 6.9 | 9.5 | 9.7 | 30 | 16 | 6.7 | 4.3 |
| 29 | 1.2 | 0.56 | 0.82 | 0.21 | --- | 5.2 | 11 | 11 | 29 | 16 | 7.8 | 4.1 |
| 30 | 0.99 | 0.54 | 1.1 | 0.23 | --- | 4.7 | 12 | 12 | 27 | 13 | 6.7 | 4.1 |
| 31 | 0.88 | --- | 1.2 | 0.20 | --- | 5.2 | --- | 17 | --- | 12 | 6.1 | --- |
| TOTAL | 12.87 | 22.03 | 13.28 | 8.51 | 12.61 | 78.93 | 359.3 | 370.1 | 983 | 559 | 281.3 | 165.5 |
| MEAN | 0.42 | 0.73 | 0.43 | 0.27 | 0.45 | 2.55 | 12.0 | 11.9 | 32.8 | 18.0 | 9.07 | 5.52 |
| MAX | 1.2 | 1.2 | 1.2 | 0.91 | 0.63 | 8.4 | 26 | 17 | 51 | 26 | 15 | 9.0 |
| MIN | 0.23 | 0.35 | 0.17 | 0.14 | 0.17 | 0.55 | 4.9 | 8.2 | 18 | 10 | 4.3 | 4.1 |
| AC-FT | 26 | 44 | 26 | 17 | 25 | 157 | 713 | 734 | 1,950 | 1,110 | 558 | 328 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2003, BY WATER YEAR (WY)

| | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 12.9 | 9.83 | 7.17 | 6.64 | 6.11 | 7.94 | 19.1 | 52.9 | 42.2 | 25.3 | 26.8 | 17.1 |
| MAX | 21.5 | 21.8 | 16.6 | 15.4 | 12.1 | 17.1 | 40.2 | 149 | 128 | 75.8 | 101 | 44.9 |
| (WY) | (2000) | (1995) | (1996) | (1996) | (2000) | (2000) | (1994) | (1994) | (1995) | (1995) | (1999) | (1998) |
| MIN | 0.42 | 0.73 | 0.43 | 0.27 | 0.45 | 2.55 | 9.11 | 1.45 | 11.8 | 11.2 | 0.19 | 0.25 |
| (WY) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2002) | (2002) | (1996) | (1993) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1993 - 2003

| | | | |
|--------------------------|----------|----------|--------|
| ANNUAL TOTAL | 1,762.14 | 2,866.43 | |
| ANNUAL MEAN | 4.83 | 7.85 | 19.6 |
| HIGHEST ANNUAL MEAN | | | 38.2 |
| LOWEST ANNUAL MEAN | | | 6.54 |
| HIGHEST DAILY MEAN | 34 | 51 | 373 |
| LOWEST DAILY MEAN | 0.00 | 0.14 | a0.00 |
| ANNUAL SEVEN-DAY MINIMUM | 0.05 | 0.17 | 0.05 |
| MAXIMUM PEAK FLOW | | 183 | b647 |
| MAXIMUM PEAK STAGE | | 3.82 | 4.62 |
| ANNUAL RUNOFF (AC-FT) | 3,500 | 5,690 | 14,180 |
| 10 PERCENT EXCEEDS | 11 | 23 | 45 |
| 50 PERCENT EXCEEDS | 2.0 | 4.3 | 11 |
| 90 PERCENT EXCEEDS | 0.22 | 0.25 | 3.9 |

e Estimated.

a Also occurred Sept. 7-8, 2002.

b From rating curve extended above 187 ft³/s.

07097000 ARKANSAS RIVER AT PORTLAND, CO

LOCATION.--Lat 38°23'18", long 105°00'56", in NE¹/₄NE¹/₄ sec.20, T.19 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on right bank at upstream side of bridge on State Highway 120 at Portland, and 1 mi downstream from Hardscrabble Creek.

DRAINAGE AREA.--4,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1952, October 1974 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07097000

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,021.59 ft above NGVD of 1929. 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 storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 21, 1965, reached a discharge of 23,900 ft³/s, from rating curve extended above 7,400 ft³/s on basis of slope-area measurement of peak flow, gage height, 11.85 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|
| 1 | 135 | 221 | 237 | 242 | 184 | 217 | 205 | 198 | 3,660 | 850 | 590 | 296 |
| 2 | 169 | 240 | 232 | 227 | 188 | 211 | 244 | 170 | 3,740 | 862 | 596 | 255 |
| 3 | 205 | 232 | 232 | 224 | 193 | 208 | 366 | 156 | 3,460 | 806 | 569 | 256 |
| 4 | 221 | 226 | 234 | 237 | 200 | 191 | 356 | 165 | 2,980 | 747 | 548 | 273 |
| 5 | 222 | 218 | 226 | 250 | 186 | 200 | 373 | 159 | 2,560 | 720 | 536 | 269 |
| 6 | 198 | 217 | 228 | 258 | 186 | 198 | 323 | 155 | 2,280 | 719 | 464 | 285 |
| 7 | 187 | 213 | 229 | 252 | e165 | 197 | 311 | 157 | 1,850 | 695 | 478 | 279 |
| 8 | 171 | 228 | 215 | 228 | e161 | 197 | 314 | 157 | 1,450 | 656 | 523 | 339 |
| 9 | 173 | 227 | 232 | 212 | e150 | 206 | 310 | 142 | 1,220 | 667 | 467 | 372 |
| 10 | 171 | 227 | 231 | 200 | e173 | 193 | 304 | 150 | 1,360 | 680 | 540 | 354 |
| 11 | 154 | 228 | 204 | 203 | e177 | 194 | 254 | 154 | 1,650 | 661 | 581 | 466 |
| 12 | 135 | 212 | 205 | 209 | 197 | 188 | 251 | 151 | 1,770 | 695 | 594 | 470 |
| 13 | 139 | 207 | 198 | 208 | 209 | 186 | 264 | 144 | 1,900 | 669 | 496 | 442 |
| 14 | 130 | 221 | 214 | 206 | 230 | 189 | 237 | 150 | 2,060 | 670 | 372 | 456 |
| 15 | 119 | 239 | 220 | 203 | 222 | 182 | 221 | 162 | 1,930 | 681 | 281 | 421 |
| 16 | 118 | 227 | 220 | 196 | 206 | 183 | 266 | 245 | 1,900 | 655 | 258 | 403 |
| 17 | 123 | 209 | 214 | 174 | 196 | 211 | 215 | 317 | 2,060 | 658 | 236 | 323 |
| 18 | 134 | 201 | 215 | 169 | 195 | 264 | 179 | 359 | 1,870 | 629 | 250 | 277 |
| 19 | 128 | 208 | 205 | 176 | 213 | 252 | 186 | 526 | 1,770 | 610 | 249 | 298 |
| 20 | 140 | 209 | e168 | 183 | 200 | 207 | 189 | 855 | 1,790 | 638 | 283 | 325 |
| 21 | 149 | 204 | e177 | 192 | 198 | 213 | 171 | 818 | 1,880 | 641 | 276 | 302 |
| 22 | 149 | 209 | e198 | 200 | 198 | 212 | 168 | 648 | 1,710 | 656 | 250 | 296 |
| 23 | 168 | 216 | e225 | 192 | 207 | 209 | 164 | 751 | 1,680 | 635 | 248 | 298 |
| 24 | 184 | 224 | e230 | 191 | e188 | 223 | 190 | 1,420 | 1,510 | 601 | 351 | 268 |
| 25 | 199 | 227 | e220 | 177 | e170 | 237 | 180 | 1,540 | 1,180 | 600 | 320 | 238 |
| 26 | 191 | 230 | e225 | 173 | e198 | 221 | 171 | 1,630 | 1,000 | 624 | 392 | 223 |
| 27 | 202 | 216 | e215 | 165 | e203 | 230 | 171 | 1,740 | 918 | 675 | 390 | 210 |
| 28 | 191 | 206 | 256 | 169 | 210 | 222 | 187 | 2,230 | 882 | 810 | 378 | 211 |
| 29 | 192 | 226 | 279 | 178 | --- | 209 | 195 | 2,690 | 857 | 772 | 367 | 213 |
| 30 | 206 | 227 | 268 | 184 | --- | 199 | 254 | 3,190 | 855 | 724 | 345 | 200 |
| 31 | 217 | --- | 234 | 186 | --- | 195 | --- | 3,600 | --- | 582 | 331 | --- |
| TOTAL | 5,220 | 6,595 | 6,886 | 6,264 | 5,403 | 6,444 | 7,219 | 24,929 | 55,732 | 21,288 | 12,559 | 9,318 |
| MEAN | 168 | 220 | 222 | 202 | 193 | 208 | 241 | 804 | 1,858 | 687 | 405 | 311 |
| MAX | 222 | 240 | 279 | 258 | 230 | 264 | 373 | 3,600 | 3,740 | 862 | 596 | 470 |
| MIN | 118 | 201 | 168 | 165 | 150 | 182 | 164 | 142 | 855 | 582 | 236 | 200 |
| AC-FT | 10,350 | 13,080 | 13,660 | 12,420 | 10,720 | 12,780 | 14,320 | 49,450 | 110,500 | 42,220 | 24,910 | 18,480 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 384 | 414 | 377 | 358 | 349 | 363 | 487 | 1,175 | 2,433 | 1,531 | 914 | 440 |
| MAX | 1,083 | 748 | 693 | 626 | 774 | 683 | 1,869 | 2,680 | 4,429 | 4,472 | 2,380 | 1,008 |
| (WY) | (1985) | (1985) | (1983) | (1983) | (1985) | (1989) | (1942) | (1984) | (1980) | (1995) | (1984) | (1982) |
| MIN | 136 | 191 | 212 | 199 | 162 | 147 | 135 | 245 | 292 | 201 | 144 | 134 |
| (WY) | (1978) | (1978) | (1978) | (1979) | (1978) | (1978) | (1981) | (1977) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1939 - 2003

| | | | |
|--------------------------|---------|---------|---------|
| ANNUAL TOTAL | 85,141 | 167,857 | |
| ANNUAL MEAN | 233 | 460 | 775 |
| HIGHEST ANNUAL MEAN | | | 1,387 |
| LOWEST ANNUAL MEAN | | | 264 |
| HIGHEST DAILY MEAN | 673 | Jul 6 | 3,740 |
| LOWEST DAILY MEAN | 91 | Sep 18 | 118 |
| ANNUAL SEVEN-DAY MINIMUM | 119 | Sep 16 | 127 |
| MAXIMUM PEAK FLOW | | | 3,820 |
| MAXIMUM PEAK STAGE | | | 5.93 |
| ANNUAL RUNOFF (AC-FT) | 168,900 | 332,900 | 561,300 |
| 10 PERCENT EXCEEDS | 344 | 870 | 1,840 |
| 50 PERCENT EXCEEDS | 224 | 227 | 447 |
| 90 PERCENT EXCEEDS | 134 | 169 | 219 |

e Estimated.

a From rating curve extended above 5,300 ft³/s.

07097000 ARKANSAS RIVER AT PORTLAND, CO—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 485 | 442 | 467 | 514 | 454 | 472 | 552 | 484 | 519 | 572 | 479 | 508 |
| 2 | 482 | 441 | 461 | 533 | 460 | 481 | 512 | 474 | 493 | 613 | 526 | 562 |
| 3 | 468 | 444 | 455 | 532 | 428 | 493 | 514 | 439 | 463 | 668 | 543 | 600 |
| 4 | 468 | 432 | 453 | 521 | 443 | 496 | 468 | 431 | 457 | 632 | 526 | 594 |
| 5 | 472 | 451 | 461 | 504 | 457 | 482 | 445 | 422 | 434 | 634 | 581 | 606 |
| 6 | 482 | 445 | 459 | 518 | 464 | 485 | 456 | 426 | 440 | 659 | 569 | 612 |
| 7 | 548 | 451 | 481 | 519 | 468 | 488 | 467 | 425 | 450 | 650 | 574 | 601 |
| 8 | 556 | 474 | 521 | 499 | 466 | 484 | 456 | 444 | 450 | 629 | 594 | 611 |
| 9 | --- | --- | --- | 504 | 465 | 480 | 463 | 427 | 451 | 698 | 603 | 650 |
| 10 | --- | --- | --- | 498 | 471 | 484 | 479 | 440 | 455 | 663 | 544 | 624 |
| 11 | 546 | 468 | 494 | 502 | 469 | 485 | 499 | 460 | 475 | 652 | 590 | 621 |
| 12 | 516 | 448 | 478 | 502 | 482 | 490 | 488 | 461 | 474 | 651 | 604 | 624 |
| 13 | 498 | 431 | 464 | 508 | 481 | 494 | 532 | 454 | 477 | 674 | 615 | 639 |
| 14 | 473 | 410 | 437 | 515 | 485 | 499 | 475 | 437 | 457 | 673 | 585 | 625 |
| 15 | 449 | 421 | 436 | 547 | 468 | 510 | 492 | 465 | 476 | 653 | 548 | 613 |
| 16 | 477 | 436 | 451 | 527 | 492 | 505 | 465 | 418 | 443 | 600 | 496 | 535 |
| 17 | 500 | 452 | 465 | 527 | 453 | 495 | 511 | 434 | 459 | 520 | 466 | 479 |
| 18 | 502 | 461 | 475 | 668 | 492 | 585 | 579 | 488 | 523 | 474 | 418 | 452 |
| 19 | 491 | 437 | 465 | 659 | 514 | 558 | 581 | 493 | 531 | 418 | 339 | 389 |
| 20 | 499 | 464 | 482 | 631 | 554 | 585 | 587 | 506 | 544 | 341 | 283 | 311 |
| 21 | 509 | 474 | 491 | 601 | 532 | 555 | 615 | 533 | 563 | 307 | 280 | 291 |
| 22 | 521 | 455 | 493 | 591 | 497 | 556 | 589 | 556 | 570 | 330 | 297 | 308 |
| 23 | 513 | 458 | 481 | 560 | 522 | 540 | 613 | 538 | 566 | 317 | 285 | 299 |
| 24 | 486 | 463 | 475 | 615 | 503 | 532 | 557 | 513 | 524 | 647 | 253 | 327 |
| 25 | 523 | 466 | 490 | 574 | 492 | 530 | 565 | 523 | 541 | 335 | 225 | 255 |
| 26 | 521 | 454 | 470 | 566 | 502 | 521 | 587 | 532 | 563 | 229 | 215 | 223 |
| 27 | 513 | 446 | 470 | 551 | 480 | 522 | 569 | 539 | 549 | 230 | 199 | 217 |
| 28 | 517 | 457 | 476 | 530 | 508 | 520 | 586 | 514 | 551 | 200 | 171 | 185 |
| 29 | --- | --- | --- | 528 | 510 | 520 | 575 | 488 | 520 | 178 | 163 | 170 |
| 30 | --- | --- | --- | 536 | 509 | 521 | 521 | 468 | 490 | 256 | 152 | 166 |
| 31 | --- | --- | --- | 529 | 475 | 511 | --- | --- | --- | 160 | 145 | 152 |
| MONTH | --- | --- | --- | 668 | 428 | 512 | 615 | 418 | 497 | 698 | 145 | 447 |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 148 | 130 | 143 | 295 | 269 | 283 | 339 | 319 | 331 | 522 | 477 | 503 |
| 2 | 146 | 137 | 142 | 271 | 261 | 267 | 337 | 318 | 329 | 533 | 482 | 505 |
| 3 | 148 | 137 | 142 | 277 | 262 | 270 | 343 | 324 | 332 | 787 | 462 | 511 |
| 4 | --- | --- | --- | 277 | 265 | 273 | 340 | 327 | 331 | 511 | 457 | 479 |
| 5 | 175 | 150 | 161 | 278 | 264 | 273 | 339 | 327 | 333 | 477 | 460 | 468 |
| 6 | 179 | 167 | 175 | 292 | 271 | 282 | 364 | 337 | 352 | 485 | 343 | 459 |
| 7 | 198 | 178 | 187 | 309 | 288 | 298 | 368 | 342 | 354 | 493 | 371 | 464 |
| 8 | 224 | 198 | 211 | 311 | 287 | 297 | 356 | 335 | 342 | 466 | 425 | 444 |
| 9 | 242 | 217 | 226 | 299 | 278 | 291 | 1,650 | 335 | 422 | 439 | 411 | 424 |
| 10 | 431 | 209 | 236 | 307 | 290 | 298 | 451 | 322 | 354 | 440 | 417 | 428 |
| 11 | 224 | 191 | 201 | 308 | 295 | 303 | 332 | 300 | 313 | 417 | 381 | 397 |
| 12 | 193 | 159 | 181 | 316 | 303 | 312 | 333 | 294 | 314 | 395 | 368 | 380 |
| 13 | 178 | 153 | 170 | 321 | 306 | 317 | 355 | 310 | 326 | 391 | 371 | 380 |
| 14 | 176 | 170 | 173 | 320 | 303 | 315 | 378 | 355 | 360 | 389 | 373 | 380 |
| 15 | --- | --- | --- | 543 | 295 | 340 | 404 | 376 | 393 | 400 | 369 | 384 |
| 16 | --- | --- | --- | 393 | 328 | 351 | 411 | 384 | 400 | 410 | 377 | 389 |
| 17 | 357 | 169 | 188 | 344 | 313 | 328 | --- | --- | --- | 453 | 399 | 417 |
| 18 | 264 | 177 | 198 | 341 | 327 | 332 | 480 | 446 | 464 | 469 | 422 | 437 |
| 19 | 893 | 222 | 280 | 332 | 320 | 326 | 483 | 436 | 456 | 468 | 422 | 440 |
| 20 | 304 | 225 | 252 | 336 | 310 | 321 | 462 | 402 | 428 | 447 | 405 | 425 |
| 21 | 242 | 209 | 218 | 326 | 310 | 317 | 441 | 403 | 422 | 443 | 396 | 418 |
| 22 | 212 | 205 | 209 | 324 | 305 | 314 | 445 | 409 | 425 | 434 | 389 | 418 |
| 23 | 219 | 197 | 208 | 326 | 302 | 315 | 472 | 415 | 440 | 442 | 388 | 414 |
| 24 | 210 | 188 | 202 | 322 | 315 | 318 | 438 | 391 | 418 | 436 | 392 | 420 |
| 25 | 246 | 209 | 223 | 316 | 306 | 312 | 442 | 393 | 428 | 481 | 421 | 443 |
| 26 | 263 | 244 | 253 | 429 | 299 | 317 | 519 | 392 | 429 | 497 | 442 | 466 |
| 27 | 287 | 261 | 270 | 344 | 305 | 319 | 445 | 396 | 417 | 506 | 429 | 480 |
| 28 | 290 | 272 | 282 | 617 | 287 | 334 | 412 | 390 | 399 | 528 | 455 | 494 |
| 29 | 287 | 280 | 283 | 316 | 296 | 306 | 470 | 410 | 440 | 530 | 464 | 501 |
| 30 | 298 | 281 | 288 | 342 | 276 | 319 | 497 | 439 | 463 | 531 | 469 | 508 |
| 31 | --- | --- | --- | 345 | 325 | 335 | 493 | 454 | 475 | --- | --- | --- |
| MONTH | --- | --- | --- | 617 | 261 | 309 | --- | --- | --- | 787 | 343 | 443 |

ARKANSAS RIVER BASIN

07097000 ARKANSAS RIVER AT PORTLAND, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 18.2 | 11.8 | 15.2 | 5.8 | 3.0 | 4.2 | 5.8 | 0.4 | 3.3 | --- | --- | --- |
| 2 | 15.4 | 12.3 | 13.7 | 7.0 | 3.5 | 5.2 | 6.4 | 2.4 | 4.4 | --- | --- | --- |
| 3 | 16.7 | 11.3 | 13.3 | 8.2 | 4.3 | 6.1 | 4.2 | 2.8 | 3.4 | 5.4 | 1.4 | 3.4 |
| 4 | 15.9 | 9.8 | 13.0 | 7.2 | 4.1 | 5.7 | 4.6 | 2.9 | 3.7 | 5.2 | 2.3 | 3.5 |
| 5 | 15.9 | 10.4 | 13.2 | 8.5 | 3.9 | 6.2 | 5.3 | 2.3 | 3.8 | 4.0 | 1.5 | 2.9 |
| 6 | 16.5 | 10.6 | 13.6 | 9.1 | 3.7 | 6.5 | 5.1 | 1.3 | 2.7 | 5.4 | 2.7 | 3.9 |
| 7 | 17.0 | 10.3 | 13.7 | 8.3 | 4.1 | 6.3 | --- | --- | --- | 5.0 | 0.9 | 3.0 |
| 8 | 17.6 | 11.3 | 14.5 | 9.1 | 5.3 | 7.3 | --- | --- | --- | 5.6 | 1.4 | 3.6 |
| 9 | 18.0 | 12.2 | 15.2 | 11.2 | 6.6 | 8.8 | 4.6 | 1.5 | 3.2 | 3.5 | 0.6 | 2.3 |
| 10 | 18.0 | 12.3 | 15.2 | 9.2 | 5.4 | 7.2 | 3.9 | 0.0 | 2.0 | 2.6 | 0.0 | 1.2 |
| 11 | 17.7 | 11.7 | 14.8 | 7.5 | 4.2 | 5.7 | 3.9 | 0.0 | 2.2 | 2.2 | 0.0 | 1.1 |
| 12 | 15.9 | 11.4 | 13.5 | 7.1 | 2.6 | 4.9 | 3.4 | 0.3 | 1.9 | 4.7 | 1.1 | 3.0 |
| 13 | 15.1 | 9.1 | 12.2 | 8.1 | 3.8 | 6.2 | 4.4 | 0.0 | 2.3 | 4.9 | 0.9 | 3.1 |
| 14 | 15.0 | 9.6 | 12.4 | 8.1 | 4.9 | 6.8 | 4.8 | 0.7 | 2.9 | 3.7 | 0.7 | 2.5 |
| 15 | 14.2 | 8.4 | 11.5 | 7.5 | 4.9 | 6.1 | 4.4 | 1.8 | 3.1 | 4.2 | 0.3 | 2.4 |
| 16 | 13.6 | 8.2 | 11.0 | 6.9 | 2.9 | 5.2 | 4.4 | 1.1 | 3.0 | 3.3 | 0.0 | 1.6 |
| 17 | 13.5 | 7.5 | 10.6 | 8.0 | 3.8 | 6.0 | 4.8 | 1.8 | 3.4 | 3.6 | 0.0 | 1.6 |
| 18 | 14.5 | 8.5 | 11.5 | 7.6 | 3.7 | 5.8 | 3.4 | 0.7 | 2.2 | 2.7 | 0.0 | 1.1 |
| 19 | 13.5 | 8.0 | 11.0 | 7.4 | 2.9 | 5.3 | 2.9 | 0.0 | 1.4 | 5.1 | 0.0 | 2.4 |
| 20 | 14.0 | 8.2 | 11.2 | 8.2 | 3.7 | 5.9 | 1.7 | 0.0 | 0.5 | 5.4 | 0.7 | 3.3 |
| 21 | 13.5 | 8.5 | 10.5 | 8.4 | 3.6 | 5.3 | 2.4 | 0.0 | 0.9 | 4.2 | 1.0 | 2.9 |
| 22 | 12.7 | 8.0 | 10.4 | --- | --- | --- | 1.5 | 0.0 | 0.3 | 2.0 | 0.4 | 1.2 |
| 23 | 9.7 | 7.6 | 8.4 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 3.4 | 0.2 | 1.8 |
| 24 | --- | --- | --- | --- | --- | --- | 0.0 | 0.0 | 0.0 | 4.5 | 0.3 | 2.6 |
| 25 | 11.5 | 6.9 | 9.2 | --- | --- | --- | 0.0 | 0.0 | 0.0 | 5.9 | 1.3 | 3.6 |
| 26 | 10.8 | 6.8 | 9.1 | 4.6 | 1.5 | 2.9 | 0.2 | 0.0 | 0.0 | 6.6 | 1.4 | 4.2 |
| 27 | 11.9 | 7.8 | 10.1 | 4.2 | 0.0 | 2.2 | 1.8 | 0.0 | 0.7 | 8.0 | 3.5 | 5.9 |
| 28 | 12.6 | 7.6 | 10.2 | 4.8 | 0.0 | 2.7 | 2.9 | 0.2 | 1.7 | 7.8 | 3.9 | 6.0 |
| 29 | 10.0 | 5.9 | 8.5 | 6.2 | 2.3 | 4.2 | 3.9 | 0.4 | 2.1 | 7.4 | 3.1 | 5.4 |
| 30 | 6.2 | 4.7 | 5.5 | 4.9 | 1.4 | 3.3 | 3.2 | 0.0 | 1.6 | 7.0 | 2.7 | 4.9 |
| 31 | 5.0 | 3.7 | 4.4 | --- | --- | --- | --- | --- | --- | 7.8 | 4.0 | 5.9 |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 8.4 | 4.1 | 6.3 | 8.8 | 3.0 | 5.6 | 16.4 | 9.3 | 13.0 | 18.2 | 12.3 | 15.3 |
| 2 | 8.6 | 4.9 | 6.6 | 9.1 | 3.2 | 5.9 | 16.5 | 10.0 | 12.9 | 18.2 | 12.1 | 15.3 |
| 3 | 7.4 | 3.9 | 5.5 | 9.7 | 2.9 | 6.5 | 14.7 | 8.7 | 11.4 | 19.6 | 12.4 | 15.6 |
| 4 | 6.3 | 1.3 | 4.0 | 6.7 | 2.7 | 4.7 | 12.5 | 7.4 | 10.0 | 18.5 | 12.0 | 14.7 |
| 5 | 4.2 | 1.5 | 3.2 | 7.7 | 1.9 | 4.4 | 9.9 | 7.2 | 8.6 | 18.8 | 10.9 | 14.5 |
| 6 | 3.5 | 0.3 | 1.5 | 9.8 | 2.5 | 6.1 | 11.5 | 6.6 | 8.7 | 19.1 | 12.0 | 15.2 |
| 7 | 1.3 | 0.0 | 0.2 | 11.4 | 4.1 | 7.9 | 12.1 | 7.6 | 9.6 | 19.1 | 12.8 | 15.6 |
| 8 | 1.5 | 0.0 | 0.4 | 12.1 | 5.6 | 8.9 | 13.5 | 6.0 | 9.7 | 18.2 | 11.4 | 14.8 |
| 9 | 1.0 | 0.0 | 0.2 | 12.7 | 5.5 | 9.2 | 15.6 | 7.1 | 11.3 | 19.3 | 11.6 | 15.1 |
| 10 | 3.4 | 0.0 | 1.3 | 13.6 | 6.3 | 9.9 | 17.3 | 9.1 | 13.1 | 16.7 | 11.4 | 13.8 |
| 11 | 4.5 | 0.0 | 2.3 | 14.2 | 6.7 | 10.5 | 18.2 | 10.4 | 14.3 | 18.5 | 9.0 | 13.9 |
| 12 | 6.0 | 0.0 | 3.2 | 14.8 | 7.8 | 11.5 | 17.3 | 11.1 | 14.3 | 20.0 | 11.1 | 15.8 |
| 13 | 5.9 | 2.5 | 4.3 | 15.6 | 8.2 | 12.0 | 18.9 | 10.8 | 14.8 | 19.1 | 12.4 | 15.9 |
| 14 | 7.7 | 3.0 | 5.3 | 16.0 | 9.0 | 12.4 | 16.5 | 11.7 | 14.5 | 20.7 | 13.0 | 17.1 |
| 15 | 5.5 | 3.4 | 4.3 | 16.3 | 9.6 | 12.9 | 15.2 | 10.7 | 13.1 | 18.3 | 14.3 | 15.7 |
| 16 | 5.5 | 2.4 | 3.9 | 13.6 | 9.9 | 11.8 | 16.9 | 8.4 | 12.6 | 22.0 | 13.0 | 17.4 |
| 17 | 8.8 | 3.1 | 6.0 | 11.3 | 8.8 | 9.8 | 16.9 | 9.9 | 13.3 | 21.6 | 15.0 | 18.5 |
| 18 | 6.8 | 4.7 | 5.9 | 8.9 | 6.9 | 7.8 | 17.2 | 10.0 | 13.6 | 19.0 | 15.3 | 17.4 |
| 19 | 8.2 | 1.4 | 5.5 | 7.4 | 4.2 | 6.1 | 13.9 | 10.7 | 12.1 | 17.1 | 13.0 | 15.2 |
| 20 | 7.5 | 1.4 | 4.6 | 12.2 | 5.1 | 9.0 | 16.4 | 9.7 | 12.9 | 13.6 | 11.6 | 12.7 |
| 21 | 8.7 | 2.8 | 5.4 | 9.8 | 7.8 | 8.8 | 17.0 | 11.0 | 13.8 | 17.4 | 10.1 | 13.5 |
| 22 | 7.6 | 2.8 | 5.2 | 14.2 | 6.3 | 10.2 | 18.1 | 11.6 | 14.5 | 20.6 | 12.9 | 16.6 |
| 23 | 5.5 | 2.1 | 3.8 | 15.1 | 8.2 | 11.7 | 15.3 | 9.4 | 12.4 | 21.2 | 15.4 | 18.1 |
| 24 | 3.8 | 0.0 | 1.4 | 14.7 | 8.9 | 11.7 | 17.3 | 8.4 | 12.5 | 19.9 | 8.4 | 16.2 |
| 25 | 2.3 | 0.0 | 0.8 | 16.5 | 10.0 | 13.0 | 18.4 | 10.1 | 14.3 | 18.7 | 16.1 | 16.7 |
| 26 | 4.1 | 0.0 | 2.0 | 14.6 | 9.3 | 12.0 | 19.6 | 11.2 | 15.2 | 17.3 | 14.6 | 16.0 |
| 27 | 6.9 | 0.8 | 3.8 | 12.5 | 7.8 | 9.8 | 18.8 | 12.0 | 15.4 | 18.4 | 14.6 | 16.3 |
| 28 | 6.8 | 2.1 | 4.4 | 12.2 | 6.0 | 8.7 | 19.8 | 13.1 | 16.0 | 18.3 | 15.3 | 16.7 |
| 29 | --- | --- | --- | 10.9 | 4.6 | 7.7 | 19.8 | 12.2 | 15.9 | 18.0 | 15.0 | 16.3 |
| 30 | --- | --- | --- | 12.9 | 5.1 | 9.0 | 19.4 | 12.9 | 16.2 | 17.4 | 13.0 | 15.5 |
| 31 | --- | --- | --- | 15.3 | 7.4 | 9.9 | --- | --- | --- | 16.5 | 14.8 | 15.3 |
| MONTH | 8.8 | 0.0 | 3.6 | 16.5 | 1.9 | 9.2 | 19.8 | 6.0 | 13.0 | 22.0 | 8.4 | 15.7 |

07097000 ARKANSAS RIVER AT PORTLAND, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 15.1 | 13.3 | 14.2 | 23.8 | 18.6 | 20.9 | 23.6 | 18.6 | 20.9 | 19.5 | 13.9 | 16.6 |
| 2 | 15.7 | 13.4 | 14.6 | 24.2 | 18.5 | 21.2 | 24.7 | 18.6 | 21.3 | 23.6 | 14.7 | 18.5 |
| 3 | 16.7 | 14.0 | 15.3 | 24.9 | 19.1 | 21.8 | 25.7 | 19.4 | 22.1 | 21.4 | 18.5 | 19.9 |
| 4 | --- | --- | --- | 24.7 | 19.4 | 21.5 | 26.4 | 20.7 | 23.2 | 23.3 | 16.4 | 19.8 |
| 5 | 15.5 | 13.4 | 14.3 | 24.5 | 18.8 | 21.1 | 25.7 | 20.2 | 22.8 | 24.1 | 17.5 | 20.6 |
| 6 | 16.2 | 12.7 | 14.3 | 22.9 | 18.3 | 20.5 | 25.8 | 20.0 | 22.5 | 23.0 | 15.9 | 19.7 |
| 7 | 14.7 | 12.7 | 13.4 | 22.7 | 17.9 | 20.1 | 25.3 | 19.5 | 22.2 | 21.4 | 16.5 | 19.3 |
| 8 | 18.1 | 12.7 | 15.2 | 24.1 | 17.9 | 20.9 | 24.8 | 20.1 | 22.3 | 22.5 | 16.8 | 19.6 |
| 9 | 19.0 | 15.1 | 16.7 | 24.3 | 18.7 | 21.3 | 24.6 | 20.2 | 22.3 | 19.7 | 16.9 | 18.3 |
| 10 | 19.2 | 15.4 | 16.6 | 25.1 | 18.4 | 21.6 | 25.3 | 19.9 | 22.3 | 19.9 | 15.5 | 17.4 |
| 11 | 19.1 | 14.4 | 16.8 | 24.2 | 19.1 | 21.7 | 25.3 | 20.0 | 22.3 | 19.2 | 13.6 | 16.1 |
| 12 | 18.2 | 15.9 | 17.2 | 24.0 | 19.4 | 21.6 | 25.2 | 19.5 | 22.0 | 19.8 | 13.0 | 16.2 |
| 13 | 17.7 | 15.0 | 16.3 | 24.6 | 19.3 | 21.8 | 25.4 | 19.8 | 22.3 | 16.6 | 12.5 | 14.2 |
| 14 | 17.5 | 14.2 | 15.8 | 24.3 | 19.2 | 21.7 | 25.2 | 18.7 | 21.9 | 17.0 | 10.9 | 13.7 |
| 15 | --- | --- | --- | 24.7 | 19.1 | 21.3 | 25.7 | 18.7 | 22.1 | 18.8 | 12.2 | 15.4 |
| 16 | --- | --- | --- | 25.4 | 19.5 | 21.9 | 25.8 | 18.9 | 21.0 | 20.0 | 13.4 | 16.5 |
| 17 | 18.4 | 9.6 | 15.3 | 25.3 | 19.5 | 22.1 | --- | --- | --- | 20.1 | 14.4 | 16.9 |
| 18 | 17.5 | 10.7 | 16.2 | 26.0 | 19.9 | 22.8 | 24.1 | 17.9 | 20.6 | 17.9 | 13.1 | 15.4 |
| 19 | 18.7 | 15.4 | 16.6 | 26.2 | 20.8 | 23.0 | 24.8 | 17.7 | 21.2 | 18.1 | 11.5 | 14.8 |
| 20 | 17.7 | 14.5 | 16.5 | 24.7 | 20.3 | 22.2 | 25.8 | 18.9 | 22.2 | 18.3 | 12.5 | 15.4 |
| 21 | 18.8 | 14.8 | 16.7 | 25.2 | 19.4 | 22.1 | 25.0 | 19.2 | 22.2 | 19.4 | 13.3 | 16.4 |
| 22 | 19.7 | 15.7 | 17.5 | 25.1 | 19.8 | 22.1 | 26.0 | 19.3 | 22.4 | 19.2 | 13.2 | 16.2 |
| 23 | 19.7 | 16.6 | 18.1 | 23.1 | 19.6 | 21.2 | 26.1 | 18.9 | 22.0 | 19.9 | 13.5 | 16.7 |
| 24 | 20.3 | 16.5 | 18.2 | 25.7 | 18.8 | 22.0 | 25.5 | 18.5 | 21.8 | 19.1 | 13.8 | 16.4 |
| 25 | 20.6 | 16.4 | 18.2 | 26.4 | 20.4 | 22.9 | 23.6 | 19.4 | 21.4 | 19.8 | 13.2 | 16.4 |
| 26 | 21.4 | 16.8 | 18.8 | 26.3 | 20.4 | 22.9 | 23.2 | 18.7 | 20.7 | 19.8 | 13.6 | 16.8 |
| 27 | 22.8 | 17.0 | 19.6 | 23.6 | 20.5 | 21.8 | 24.5 | 18.1 | 21.1 | 19.1 | 13.7 | 16.4 |
| 28 | 23.6 | 17.4 | 20.1 | 21.6 | 19.3 | 20.4 | 21.7 | 19.4 | 20.5 | 18.3 | 12.6 | 15.5 |
| 29 | 21.9 | 17.8 | 19.7 | 23.8 | 18.7 | 20.9 | 19.8 | 13.4 | 17.9 | 18.3 | 12.2 | 15.3 |
| 30 | 23.7 | 18.0 | 20.7 | 24.1 | 17.3 | 21.0 | 17.1 | 14.9 | 15.8 | 17.6 | 12.7 | 15.0 |
| 31 | --- | --- | --- | 22.7 | 19.1 | 20.8 | 17.1 | 14.4 | 15.4 | --- | --- | --- |
| MONTH | --- | --- | --- | 26.4 | 17.3 | 21.6 | --- | --- | --- | 24.1 | 10.9 | 16.8 |

07099050 BEAVER CREEK ABOVE UPPER BEAVER CEMETERY NEAR PENROSE, CO

LOCATION.--Lat 38°33'42", long 105°01'17", in NW¹/₄NE¹/₄ sec.20, T.17 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on left bank 40 ft upstream from bridge on Fremont County Road 132, 1 mi downstream from Banta Gulch, 1.3 mi northeast of Upper Beaver Cemetery, and 9.2 mi north of Penrose.

DRAINAGE AREA.--122 mi².

PERIOD OF RECORD.--March 1991 to current year (seasonal records only). For a complete listing of historical data available for this site see, http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099050

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,020 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for Oct. 21-23, 25-28, Nov. 4-7, July 20-21, and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation, and diversions for municipal use by the City of Colorado Springs.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 659 ft³/s, June 10, 1997, gage height, 5.57 ft, from rating curve extended above 602 ft³/s; maximum gage height, 6.70 ft, Sept. 4, 1991; minimum daily, 0.75 ft³/s, Sept. 8, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 113 ft³/s, June 20, gage height, 3.74 ft; minimum daily, 0.93 ft³/s, Oct. 22.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-----|-----|-----|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1.3 | 1.8 | --- | --- | --- | 2.9 | 6.8 | 14 | 34 | 39 | 11 | 10 |
| 2 | 1.8 | 1.8 | --- | --- | --- | 3.0 | 9.2 | 13 | 33 | 36 | 11 | 9.3 |
| 3 | 2.0 | 2.4 | --- | --- | --- | 3.2 | 9.9 | 13 | 37 | 33 | 10 | 9.7 |
| 4 | 1.7 | 1.6 | --- | --- | --- | 3.2 | 8.9 | 12 | 63 | 35 | 11 | 10 |
| 5 | 1.6 | 1.8 | --- | --- | --- | 3.0 | 7.7 | 11 | 66 | 34 | 10 | 9.4 |
| 6 | 1.6 | 1.7 | --- | --- | --- | 3.4 | 6.9 | 10 | 65 | 38 | 10 | 17 |
| 7 | 1.5 | 1.9 | --- | --- | --- | 3.6 | 6.3 | 9.4 | 64 | 44 | 9.8 | 20 |
| 8 | 1.1 | e2.0 | --- | --- | --- | 3.6 | 5.6 | 8.8 | 63 | 34 | 9.7 | 19 |
| 9 | 1.1 | e2.1 | --- | --- | --- | 3.7 | 6.2 | 8.5 | 58 | 26 | 9.7 | 18 |
| 10 | 1.0 | e2.0 | --- | --- | --- | 3.8 | 9.0 | 34 | 42 | 21 | 10 | 18 |
| 11 | 0.97 | e1.9 | --- | --- | --- | 4.3 | 11 | 34 | 39 | 22 | 9.8 | 19 |
| 12 | 0.97 | e1.0 | --- | --- | --- | 4.8 | 13 | 34 | 26 | 28 | 11 | 25 |
| 13 | 1.1 | 1.6 | --- | --- | --- | 5.4 | 14 | 33 | 26 | 28 | 10 | 25 |
| 14 | 1.1 | 1.6 | --- | --- | --- | 5.9 | 16 | 33 | 27 | 28 | 9.4 | 26 |
| 15 | 1.1 | 1.5 | --- | --- | --- | 6.5 | 14 | 33 | 27 | 29 | 9.2 | 25 |
| 16 | 1.1 | 1.2 | --- | --- | --- | 6.5 | 13 | 33 | 23 | 30 | 8.9 | 25 |
| 17 | 1.2 | 1.4 | --- | --- | --- | 6.5 | 14 | 32 | 13 | 29 | 9.0 | 24 |
| 18 | 1.1 | 1.5 | --- | --- | --- | 6.6 | 13 | 31 | e80 | 29 | 9.4 | 24 |
| 19 | 1.1 | e1.5 | --- | --- | --- | 6.1 | 13 | 31 | e60 | 30 | 9.3 | 24 |
| 20 | 1.2 | e1.5 | --- | --- | --- | 6.3 | 12 | 32 | 107 | 26 | 8.7 | 24 |
| 21 | 1.0 | e1.5 | --- | --- | --- | 7.0 | 11 | 31 | e70 | 22 | 8.3 | 24 |
| 22 | 0.93 | e1.5 | --- | --- | --- | 5.8 | 12 | 29 | e65 | 14 | 8.1 | 24 |
| 23 | 1.1 | e1.5 | --- | --- | --- | 6.4 | 15 | 29 | e60 | 12 | 9.1 | 24 |
| 24 | e1.3 | e1.6 | --- | --- | --- | 7.4 | 11 | 28 | e55 | 12 | 9.7 | 24 |
| 25 | 1.2 | e1.6 | --- | --- | --- | 8.9 | 13 | 28 | 48 | 11 | 9.3 | 23 |
| 26 | 1.1 | e1.6 | --- | --- | --- | 9.0 | 16 | 29 | 48 | 11 | 9.2 | 18 |
| 27 | 2.0 | e1.6 | --- | --- | --- | 9.4 | 16 | 31 | 54 | 15 | 9.0 | 18 |
| 28 | 2.2 | e1.7 | --- | --- | --- | 9.0 | 16 | 29 | 48 | 14 | 9.3 | 17 |
| 29 | 2.5 | e1.7 | --- | --- | --- | 7.6 | 16 | 30 | 41 | 15 | 9.9 | 17 |
| 30 | 2.2 | e1.7 | --- | --- | --- | 6.9 | 14 | 31 | 38 | 19 | 11 | 17 |
| 31 | 1.9 | --- | --- | --- | --- | 6.8 | --- | 34 | --- | 12 | 12 | --- |
| TOTAL | 43.07 | 49.8 | --- | --- | --- | 176.5 | 349.5 | 788.7 | 1,480 | 776 | 301.8 | 587.4 |
| MEAN | 1.39 | 1.66 | --- | --- | --- | 5.69 | 11.7 | 25.4 | 49.3 | 25.0 | 9.74 | 19.6 |
| MAX | 2.5 | 2.4 | --- | --- | --- | 9.4 | 16 | 34 | 107 | 44 | 12 | 26 |
| MIN | 0.93 | 1.0 | --- | --- | --- | 2.9 | 5.6 | 8.5 | 13 | 11 | 8.1 | 9.3 |
| AC-FT | 85 | 99 | --- | --- | --- | 350 | 693 | 1,560 | 2,940 | 1,540 | 599 | 1,170 |

e Estimated.

07099060 BEAVER CREEK ABOVE HIGHWAY 115 NEAR PENROSE, CO

LOCATION.--Lat 38°29'21", long 104°59'49", in NE¹/₄NE¹/₄ sec.16, T.18 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on left bank 300 ft downstream from Beaver Park Irrigation Company diversion dam, 1.8 mi upstream from State Highway 115, and 4.7 mi north of Penrose.

DRAINAGE AREA.--138 mi².

PERIOD OF RECORD.--March 1991 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099060

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,660 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, diversions for municipal use by Colorado Springs, and diversions for irrigation. Flows are regulated to some extent by Beaver Park Irrigation Company diversion dam 300 ft upstream. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 1,260 ft³/s, Sept. 6, 2003, gage height, 7.51 ft, from rating curve extended above 422 ft³/s on basis of flow over dam computation of peak flow; no flow on many days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 1,260 ft³/s, Sept. 6, gage height, 7.51 ft, from rating curve extended above 422 ft³/s on basis of flow over dam computation of peak flow; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-----|-----|-----|-------|-------|-------|--------|------|-------|-------|
| 1 | 0.00 | 0.00 | --- | --- | --- | 0.00 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 6.4 | 0.00 | 0.00 | 0.00 |
| 5 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 11 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 9.7 | 0.00 | 0.00 | 56 |
| 7 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 8.4 | 0.24 | 0.00 | 11 |
| 8 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 6.8 | 0.00 | 0.00 | 0.04 |
| 9 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 5.2 | 0.00 | 0.00 | 0.00 |
| 10 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 14 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | 0.00 | --- | --- | --- | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 19 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 25 | 0.00 | 0.00 | 0.00 |
| 20 | 0.00 | e0.00 | --- | --- | --- | 10 | 0.00 | 0.00 | 70 | 1.2 | 0.00 | 0.00 |
| 21 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 52 | 3.1 | 0.00 | 0.00 |
| 22 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 36 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 27 | 0.00 | 0.00 | 0.00 |
| 24 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 16 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 5.8 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 1.9 | 0.00 | 0.00 | 0.00 |
| 27 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 6.8 | 0.00 | 0.00 | 0.00 |
| 28 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 1.3 | 0.00 | 0.00 | 0.00 |
| 29 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | e0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | e0.00 | --- | 0.00 | --- | 0.00 | 0.00 | --- |
| TOTAL | 0.00 | 0.00 | --- | --- | --- | 10.02 | 0.00 | 0.00 | 289.30 | 4.54 | 0.00 | 67.04 |
| MEAN | 0.000 | 0.000 | --- | --- | --- | 0.32 | 0.000 | 0.000 | 9.64 | 0.15 | 0.000 | 2.23 |
| MAX | 0.00 | 0.00 | --- | --- | --- | 10 | 0.00 | 0.00 | 70 | 3.1 | 0.00 | 56 |
| MIN | 0.00 | 0.00 | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AC-FT | 0.00 | 0.00 | --- | --- | --- | 20 | 0.00 | 0.00 | 574 | 9.0 | 0.00 | 133 |

e Estimated.

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO

LOCATION.--Lat 38°29'59", long 104°54'48", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.8, T.18 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on right bank 0.8 mi downstream from Sullivan Park outflow, 1.5 mi south of Camp Red Devil, 1.5 mi east of State Highway 115, and 4.9 mi northeast of Penrose.

DRAINAGE AREA.--26.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 2000 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099080

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,783 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 2,320 ft³/s, Aug. 8, 2003, gage height, 5.81 ft, from rating curve based on slope-conveyance computation; no flow on most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 2,320 ft³/s, Aug. 8, gage height, 5.81 ft, from rating curve based on slope-conveyance computation; no flow on most days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-----|-----|-----|-----|-----|-------|-------|-------|--------|--------|-------|
| 1 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 114 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 12 | 0.00 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 93 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 18 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 48 | 0.00 | 0.00 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 4.0 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 39 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 27 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.00 | --- | 0.00 | 0.00 | --- |
| TOTAL | 0.00 | --- | --- | --- | --- | --- | 0.00 | 39.00 | 52.00 | 111.00 | 126.00 | 0.00 |
| MEAN | 0.000 | --- | --- | --- | --- | --- | 0.000 | 1.26 | 1.73 | 3.58 | 4.06 | 0.000 |
| MAX | 0.00 | --- | --- | --- | --- | --- | 0.00 | 39 | 48 | 93 | 114 | 0.00 |
| MIN | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AC-FT | 0.00 | --- | --- | --- | --- | --- | 0.00 | 77 | 103 | 220 | 250 | 0.00 |

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) |
|-------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|
| | | | | | | | | | |
| 1 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | | APRIL | | MAY | | | | JUNE | |
| 1 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 2 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 3 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 4 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 5 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 6 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 7 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 8 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 9 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 10 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 11 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 12 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 13 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 14 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 15 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 16 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 17 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 18 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 19 | 0.00 | --- | --- | 0.00 | --- | --- | 48 | --- | e232 |
| 20 | 0.00 | --- | --- | 0.00 | --- | --- | 4.0 | --- | e3.3 |
| 21 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 22 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 23 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 24 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 25 | 0.00 | --- | --- | 39 | --- | e285 | 0.00 | --- | --- |
| 26 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 27 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 28 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 29 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 30 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- |
| 31 | --- | --- | --- | 0.00 | --- | --- | --- | --- | --- |
| TOTAL | 0.00 | --- | --- | 39.00 | --- | --- | 52.00 | --- | --- |

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | JULY | | | AUGUST | | | SEPTEMBER | | |
|-------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|--|
| | | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | |
| 1 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 2 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 3 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 4 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 5 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 6 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 7 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 8 | 0.00 | --- | --- | 114 | 3,390 | 4,800 | 0.00 | --- | --- | |
| 9 | 0.00 | --- | --- | 12 | --- | e34 | 0.00 | --- | --- | |
| 10 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 11 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 12 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 13 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 14 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 15 | 93 | --- | e2,710 | 0.00 | --- | --- | 0.00 | --- | --- | |
| 16 | 18 | --- | e42 | 0.00 | --- | --- | 0.00 | --- | --- | |
| 17 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 18 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 19 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 20 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 21 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 22 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 23 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 24 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 25 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 26 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 27 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 28 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 29 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 30 | 0.00 | --- | --- | 0.00 | --- | --- | 0.00 | --- | --- | |
| 31 | 0.00 | --- | --- | 0.00 | --- | --- | --- | --- | --- | |
| TOTAL | 111.00 | --- | --- | 126.00 | --- | --- | 0.00 | --- | --- | |

e Estimated.

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only). Air-temperature data available, October 2000 to current year, in files of district office. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099080

GAGE.--Tipping-bucket rain gage with satellite telemetry. April 28, 1999 to July 25, 2000, at site 1.5 mi upstream.

REMARKS.--Records during estimated periods may be less accurate than the rest of the published records. Daily precipitation estimated using method based on NOAA Technical Memo NWS HYDRO 14, 1972.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 4.52 inches, Aug. 4, 1999, site then in use.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.08 inches, Sept. 6.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | e0.12 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | e0.07 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 |
| 3 | e0.05 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 |
| 4 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 |
| 5 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.33 | 0.00 | 0.00 | 0.00 |
| 6 | e0.00 | --- | --- | --- | --- | --- | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 1.08 |
| 7 | e0.00 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.03 | 0.00 | 0.00 | 0.09 |
| 8 | e0.07 | --- | --- | --- | --- | --- | 0.03 | 0.00 | 0.00 | 0.00 | 1.02 | 0.01 |
| 9 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| 10 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| 11 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| 12 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 13 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.14 |
| 14 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 |
| 15 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.39 | 0.00 | 0.73 | 0.00 | 0.00 |
| 16 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.42 | 0.00 | 0.07 | 0.00 |
| 19 | e0.00 | --- | --- | --- | --- | --- | 0.16 | 0.01 | 0.50 | 0.20 | 0.00 | 0.00 |
| 20 | e0.00 | --- | --- | --- | --- | --- | 0.01 | 0.01 | 0.08 | 0.50 | 0.00 | 0.00 |
| 21 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | e0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | e0.03 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.30 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | e0.28 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.00 | 0.54 | 0.01 | 0.00 |
| 27 | e0.48 | --- | --- | --- | --- | --- | 0.00 | 0.08 | 0.00 | 0.02 | 0.00 | 0.00 |
| 28 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.05 | 0.00 | 0.19 | 0.00 |
| 29 | e0.13 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 |
| 30 | e0.00 | --- | --- | --- | --- | --- | 0.00 | 0.31 | 0.00 | 0.00 | 0.18 | 0.00 |
| 31 | e0.00 | --- | --- | --- | --- | --- | --- | 0.00 | --- | 0.00 | 0.05 | --- |
| TOTAL | 1.24 | --- | --- | --- | --- | --- | 0.25 | 1.15 | 1.90 | 2.02 | 1.67 | 1.55 |
| MAX | 0.48 | --- | --- | --- | --- | --- | 0.16 | 0.39 | 0.50 | 0.73 | 1.02 | 1.08 |

e Estimated.

07099200 ARKANSAS RIVER NEAR PORTLAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°20'14", long 104°56'18", in NW¹/₄SW¹/₄ sec.6, T.20 S., R.67 W., Fremont County, Hydrologic Unit 11020002, on left bank at Hobson Ranch, 1.4 mi downstream from Willow Creek, and 5.4 mi southeast of Portland.

DRAINAGE AREA.--4,280 mi².

PERIOD OF RECORD.--October 1964 to September 1979, May to August 1987, March 1999 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099200

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, fltrd, mg/L (00681) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|---|--|---|---|--|---|--|
| APR 23... | 1100 | 168 | 11.5 | 8.6 | 644 | 12.5 | E.014 | 0.215 | 0.007 | 0.050 | 0.061 | 0.093 | 2.7 |
| JUN 18... | 1120 | e1800 | 8.5 | 7.9 | 204 | 17.0 | <0.015 | 0.138 | <0.002 | 0.009 | 0.015 | 0.072 | 2.1 |
| JUL 31... | 1040 | 618 | 7.3 | 7.9 | 337 | 21.0 | 0.051 | 0.331 | 0.008 | 0.051 | 0.063 | 0.33 | 2.5 |
| AUG 26... | 0845 | 358 | 7.4 | 8.1 | 452 | 19.0 | 0.042 | 0.313 | 0.007 | 0.053 | 0.065 | 0.34 | 2.6 |
| SEP 29... | 1130 | 230 | 10.0 | 8.4 | 559 | 15.0 | <0.015 | 0.037 | E.002 | 0.039 | 0.051 | 0.072 | 2.6 |

< -- Actual value is known to be less than the value shown.

E -- Estimated laboratory analysis value

e -- Estimated..

07099215 TURKEY CREEK NEAR FOUNTAIN, CO

LOCATION.--Lat 38°36'42", long 104°53'39", in NW¹/₄SE¹/₄ sec.33, T.16 S., R.67 W., El Paso County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank 100 ft downstream from State Highway 115 bridge, 0.7 mi downstream from Turkey Canyon, 0.8 mi upstream from Turkey Creek Ranch, and 9.4 mi southwest of Fountain.

DRAINAGE AREA.--13.0 mi².

PERIOD OF RECORD.--May 1978 to September 1989, May 1995 to September 1998, April 1999 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099215

REVISED RECORDS.--WDR CO-80-1: 1978-79 (M). WDR CO-96-1: 1980 (M), 1982-86 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,420 ft above NGVD of 1929, from topographic map. Prior to June 14, 2001, at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Records fair except for May 21 to June 30, which are poor. Natural flow of stream affected by upstream diversions for irrigation and livestock. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 850 ft³/s, June 10, 1997, from slope-area measurement of peak flow, gage height, 6.56 ft, from floodmarks; no flow on many days during many years.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 1.7 ft³/s, Apr. 2, gage height, 1.76 ft; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|-------|------|------|-------|-------|-------|
| 1 | 0.00 | --- | --- | --- | --- | --- | 0.61 | 0.29 | 0.09 | 0.26 | 0.00 | 0.00 |
| 2 | --- | --- | --- | --- | --- | --- | 0.82 | 0.27 | 0.10 | 0.25 | 0.00 | 0.00 |
| 3 | --- | --- | --- | --- | --- | --- | 0.62 | 0.26 | 0.09 | 0.25 | 0.00 | 0.00 |
| 4 | --- | --- | --- | --- | --- | --- | 0.51 | 0.26 | 0.09 | 0.25 | 0.00 | 0.00 |
| 5 | --- | --- | --- | --- | --- | --- | 0.48 | 0.23 | 0.10 | 0.22 | 0.00 | 0.00 |
| 6 | --- | --- | --- | --- | --- | --- | 0.43 | 0.21 | 0.09 | 0.22 | 0.00 | 0.00 |
| 7 | --- | --- | --- | --- | --- | --- | 0.32 | 0.20 | 0.11 | 0.21 | 0.00 | 0.00 |
| 8 | --- | --- | --- | --- | --- | --- | 0.27 | 0.19 | 0.17 | 0.20 | 0.00 | 0.00 |
| 9 | --- | --- | --- | --- | --- | --- | 0.25 | 0.18 | 0.15 | 0.18 | 0.00 | 0.00 |
| 10 | --- | --- | --- | --- | --- | --- | 0.22 | 0.16 | 0.12 | 0.04 | 0.00 | 0.00 |
| 11 | --- | --- | --- | --- | --- | --- | 0.31 | 0.15 | 0.13 | 0.00 | 0.00 | 0.00 |
| 12 | --- | --- | --- | --- | --- | --- | 0.38 | 0.15 | 0.13 | 0.00 | 0.00 | 0.00 |
| 13 | --- | --- | --- | --- | --- | --- | 0.43 | 0.15 | 0.14 | 0.00 | 0.00 | 0.00 |
| 14 | --- | --- | --- | --- | --- | --- | 0.48 | 0.14 | 0.18 | 0.00 | 0.00 | 0.00 |
| 15 | --- | --- | --- | --- | --- | --- | 0.45 | 0.15 | 0.18 | 0.02 | 0.00 | 0.00 |
| 16 | --- | --- | --- | --- | --- | --- | 0.39 | 0.15 | 0.18 | 0.00 | 0.00 | 0.00 |
| 17 | --- | --- | --- | --- | --- | --- | 0.42 | 0.17 | 0.19 | 0.00 | 0.00 | 0.00 |
| 18 | --- | --- | --- | --- | --- | --- | 0.37 | 0.17 | 0.19 | 0.00 | 0.00 | 0.00 |
| 19 | --- | --- | --- | --- | --- | --- | 0.31 | 0.17 | 0.21 | 0.00 | 0.00 | 0.00 |
| 20 | --- | --- | --- | --- | --- | --- | 0.25 | 0.19 | 0.20 | 0.02 | 0.00 | 0.00 |
| 21 | --- | --- | --- | --- | --- | --- | 0.23 | 0.20 | 0.22 | 0.00 | 0.00 | 0.00 |
| 22 | --- | --- | --- | --- | --- | --- | 0.25 | 0.19 | 0.22 | 0.00 | 0.00 | 0.00 |
| 23 | --- | --- | --- | --- | --- | --- | 0.21 | 0.16 | 0.20 | 0.00 | 0.00 | 0.00 |
| 24 | --- | --- | --- | --- | --- | --- | 0.18 | 0.14 | 0.22 | 0.00 | 0.00 | 0.00 |
| 25 | --- | --- | --- | --- | --- | --- | 0.24 | 0.15 | 0.22 | 0.00 | 0.00 | 0.00 |
| 26 | --- | --- | --- | --- | --- | --- | 0.27 | 0.15 | 0.25 | 0.00 | 0.00 | 0.00 |
| 27 | --- | --- | --- | --- | --- | --- | 0.29 | 0.16 | 0.24 | 0.00 | 0.00 | 0.00 |
| 28 | --- | --- | --- | --- | --- | --- | 0.29 | 0.17 | 0.23 | 0.00 | 0.00 | 0.00 |
| 29 | --- | --- | --- | --- | --- | --- | 0.32 | 0.17 | 0.24 | 0.00 | 0.00 | 0.00 |
| 30 | --- | --- | --- | --- | --- | --- | 0.30 | 0.13 | 0.27 | 0.00 | 0.00 | 0.00 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 0.10 | --- | 0.00 | 0.00 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | 10.90 | 5.56 | 5.15 | 2.12 | 0.00 | 0.00 |
| MEAN | --- | --- | --- | --- | --- | --- | 0.36 | 0.18 | 0.17 | 0.068 | 0.000 | 0.000 |
| MAX | --- | --- | --- | --- | --- | --- | 0.82 | 0.29 | 0.27 | 0.26 | 0.00 | 0.00 |
| MIN | --- | --- | --- | --- | --- | --- | 0.18 | 0.10 | 0.09 | 0.00 | 0.00 | 0.00 |
| AC-FT | --- | --- | --- | --- | --- | --- | 22 | 11 | 10 | 4.2 | 0.00 | 0.00 |

07099230 TURKEY CREEK ABOVE TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°27'54", long 104°49'36" (revised), in SW¹/₄SW¹/₄ sec.19, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank 0.7 mi northwest of intersection of military roads 9 and 1, 2.2 mi upstream from Teller Reservoir Dam, and 2.2 mi northeast of Stone City.

DRAINAGE AREA.--62.3 mi².

REVISED RECORDS.--WDR CO-89-1: Drainage area.

PERIOD OF RECORD.--May 1978 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099230

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,520 ft above NGVD of 1929, from topographic map. Prior to July 21, 1989, at site 0.6 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by diversions for irrigation. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 29 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 31 | 0.00 | --- | 0.00 | 0.00 | --- | 0.00 | --- | 0.00 | --- | 0.00 | 0.00 | --- |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| MEAN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| MAX | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| MIN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AC-FT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2003, BY WATER YEAR (WY)

| | 1978 | 1979 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 2.46 | 1.73 | 0.89 | 0.70 | 0.66 | 0.67 | 2.43 | 15.6 | 9.45 | 2.63 | 6.22 | 1.38 |
| MAX | 44.6 | 26.7 | 6.47 | 2.69 | 2.58 | 2.75 | 21.8 | 124 | 60.1 | 17.1 | 79.2 | 18.1 |
| (WY) | (1985) | (1985) | (1985) | (1985) | (1985) | (1985) | (1999) | (1999) | (1997) | (1985) | (1999) | (1982) |
| MIN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| (WY) | (1979) | (1979) | (1979) | (1979) | (1979) | (1979) | (1979) | (1979) | (1989) | (1978) | (1990) | (1978) |

SUMMARY STATISTICS

| | FOR 2002 CALENDAR YEAR | FOR 2003 WATER YEAR | WATER YEARS 1978 - 2003 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 0.00 | 0.02 | |
| ANNUAL MEAN | 0.000 | 0.000 | 3.82 |
| HIGHEST ANNUAL MEAN | | | 21.2 1999 |
| LOWEST ANNUAL MEAN | | | 0.000 2002 |
| HIGHEST DAILY MEAN | 0.00 Jan 1 | 0.02 May 25 | 836 Aug 5, 1999 |
| LOWEST DAILY MEAN | 0.00 Jan 1 | 0.00 Oct 1 | a0.00 May 18, 1978 |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 Jan 1 | 0.00 Oct 1 | 0.00 May 18, 1978 |
| MAXIMUM PEAK FLOW | | 0.56 May 25 | b3,640 Aug 20, 1982 |
| MAXIMUM PEAK STAGE | | 3.31 May 25 | c11.51 Aug 20, 1982 |
| ANNUAL RUNOFF (AC-FT) | 0.00 | 0.04 | 2,770 |
| 10 PERCENT EXCEEDS | 0.00 | 0.00 | 5.0 |
| 50 PERCENT EXCEEDS | 0.00 | 0.00 | 0.38 |
| 90 PERCENT EXCEEDS | 0.00 | 0.00 | 0.00 |

a No flow many days during many years.
b From rating curve extended above 95 ft³/s on basis of slope-area measurements at gage heights 7.64 ft and 11.27 ft, site and datum then in use.
c Maximum gage height, 11.88 ft, June 8, 1987, site and datum then in use.

07099233 TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°26'33", long 104°49'33" (revised), in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, at left upstream end of dam on Turkey Creek, 1.4 mi upstream from Booth Gulch, and 2.0 mi east of Stone City.

DRAINAGE AREA.--71.5 mi².

PERIOD OF RECORD.--September 1978 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099233

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,453 ft above NGVD of 1929, from topographic map.

REMARKS.--Reservoir is formed by an earthfill dam completed 1908. All figures represent total contents from area-capacity table effective Oct. 1, 2001, and based on a 1980 survey and adjusted for sedimentation from a partial area-capacity resurvey during May 2002. Total capacity, 2,603 acre-ft at elevation of about 92 ft. Capacity at spillway crest, 1,115 acre-ft at elevation of about 84 ft (since 1996). Capacity at uncontrolled tower outlet invert, 1,765 acre-ft at elevation of about 88 ft. Elevation of no contents, about 65.2 ft. There is a controlled outlet from reservoir; however, considerable leakage occurs along dam margins. Dead storage unknown. Reservoir is used by the Fort Carson Military Reservation for recreation and amphibious training.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,210 acre-ft, June 21, 1980, elevation, 90.15 ft, from capacity curve extended above 88 ft; no contents during many years.

EXTREMES FOR CURRENT YEAR.--No contents during year.

Capacity table
(Elevation, in feet, and contents, in acre-feet, effective Oct. 1, 2001)

| Elevation | Capacity | Elevation | Capacity |
|-----------|----------|-----------|----------|
| 65.20 | 0.0 | 80.00 | 637 |
| 67.50 | 13 | 82.50 | 921 |
| 70.00 | 76 | 85.00 | 1,270 |
| 72.50 | 167 | 87.50 | 1,680 |
| 75.00 | 280 | 90.00 | 2,160 |
| 77.50 | 428 | 92.00 | 2,600 |

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 2 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 3 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 4 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 5 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 6 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 7 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 8 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 9 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 10 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 11 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 12 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 13 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 14 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 15 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 16 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 17 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 18 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 19 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 20 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 21 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 22 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 23 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 24 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 25 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 26 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 27 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 28 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 29 | e0.00 | e0.00 | e0.00 | e0.00 | --- | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 30 | e0.00 | e0.00 | e0.00 | e0.00 | --- | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 | e0.00 |
| 31 | e0.00 | --- | e0.00 | e0.00 | --- | e0.00 | --- | e0.00 | --- | e0.00 | e0.00 | --- |
| MAX | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MIN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

e Estimated.

382629104493000 TURKEY CREEK EAST SEEPAGE BELOW TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°26'29", long 104°49'33" (revised), in SW¹/₄NW¹/₄ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, at base of left downstream end of Teller Dam on Turkey Creek, and 2.0 mi east of Stone City.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 2001 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=382629104493000

GAGE.--Water-stage recorder with satellite telemetry and V-notch sharp-crested weir. Elevation of gage is 5,420 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Flows less than 0.02 ft³/s can be in error by more than 25-percent. Natural flow of stream affected by Teller Reservoir contents (station 07099233) and saturation of earthfill dam.

EXTREMES FOR PERIOD OF RECORD (dam seepage only).--Maximum daily discharge, 0.17 ft³/s, Mar. 15, 17, 2002; minimum daily, 0.001 ft³/s (some estimated), on many days during 2003.

EXTREMES FOR CURRENT YEAR (dam seepage only).--Maximum daily discharge, 0.006 ft³/s, Oct. 1-6; minimum daily, 0.001 ft³/s (some estimated), on many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------|--------|-------|--------|--------|--------|--------|-------|-------|--------|--------|--------|--------|
| 1 | e0.006 | 0.002 | 0.003 | 0.004 | e0.004 | 0.004 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | e0.001 |
| 2 | e0.006 | 0.003 | 0.004 | 0.005 | e0.004 | 0.004 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | e0.001 |
| 3 | e0.006 | 0.002 | 0.002 | 0.004 | 0.004 | 0.004 | 0.001 | 0.002 | 0.001 | 0.001 | 0.001 | e0.001 |
| 4 | e0.006 | 0.003 | 0.003 | 0.004 | e0.004 | 0.004 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | e0.001 |
| 5 | 0.006 | 0.003 | 0.002 | 0.004 | 0.004 | 0.004 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | e0.001 |
| 6 | 0.006 | 0.003 | 0.001 | 0.004 | 0.004 | 0.004 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 7 | 0.005 | 0.003 | 0.003 | 0.004 | 0.004 | 0.004 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.002 |
| 8 | e0.005 | 0.004 | 0.002 | 0.004 | 0.004 | 0.004 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 9 | e0.005 | 0.004 | 0.003 | 0.004 | 0.004 | 0.004 | 0.002 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 10 | e0.005 | 0.003 | 0.004 | 0.003 | 0.004 | 0.004 | 0.003 | 0.002 | e0.001 | e0.001 | 0.001 | 0.001 |
| 11 | e0.005 | 0.002 | 0.003 | 0.001 | 0.004 | 0.004 | 0.002 | 0.002 | e0.001 | e0.001 | 0.001 | 0.001 |
| 12 | 0.005 | 0.002 | 0.003 | 0.002 | 0.004 | 0.004 | 0.002 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 13 | 0.004 | 0.003 | 0.003 | 0.004 | 0.004 | 0.003 | 0.003 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 14 | 0.004 | 0.002 | 0.004 | 0.004 | 0.004 | 0.004 | 0.003 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 15 | 0.004 | 0.002 | 0.004 | 0.004 | 0.004 | 0.003 | 0.004 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 16 | 0.004 | 0.002 | 0.004 | e0.003 | 0.003 | e0.002 | 0.004 | 0.001 | e0.001 | 0.001 | 0.001 | 0.001 |
| 17 | 0.004 | 0.003 | 0.004 | 0.003 | 0.004 | e0.002 | 0.005 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 18 | 0.004 | 0.004 | 0.004 | 0.002 | 0.004 | 0.002 | 0.005 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 19 | 0.004 | 0.003 | 0.004 | 0.001 | 0.004 | 0.004 | 0.004 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 20 | e0.004 | 0.002 | 0.004 | 0.004 | 0.004 | 0.001 | 0.004 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 21 | e0.004 | 0.002 | 0.004 | 0.004 | 0.004 | e0.001 | 0.004 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 22 | e0.004 | 0.003 | 0.003 | 0.004 | 0.004 | e0.001 | 0.004 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 23 | 0.002 | 0.004 | 0.001 | 0.003 | 0.004 | e0.001 | 0.004 | 0.001 | e0.001 | e0.001 | 0.001 | 0.001 |
| 24 | 0.002 | 0.004 | 0.001 | 0.002 | 0.004 | e0.001 | 0.004 | 0.001 | 0.001 | e0.001 | 0.001 | 0.001 |
| 25 | 0.003 | 0.003 | 0.001 | 0.004 | 0.004 | e0.001 | 0.004 | 0.002 | 0.001 | 0.001 | 0.001 | 0.001 |
| 26 | 0.003 | 0.002 | 0.001 | e0.004 | 0.004 | e0.001 | 0.004 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 27 | 0.004 | 0.002 | 0.001 | e0.004 | 0.004 | 0.001 | 0.004 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 28 | 0.004 | 0.003 | 0.003 | e0.004 | 0.004 | 0.001 | 0.004 | 0.001 | e0.001 | 0.001 | e0.001 | 0.001 |
| 29 | 0.003 | 0.004 | 0.004 | e0.004 | --- | e0.001 | 0.003 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| 30 | 0.002 | 0.003 | 0.004 | e0.004 | --- | e0.001 | 0.002 | 0.001 | 0.001 | 0.001 | e0.001 | 0.001 |
| 31 | 0.002 | --- | 0.004 | e0.004 | --- | e0.001 | --- | 0.001 | --- | 0.001 | e0.001 | --- |
| TOTAL | 0.131 | 0.085 | 0.091 | 0.109 | 0.111 | 0.080 | 0.091 | 0.043 | 0.030 | 0.031 | 0.031 | 0.031 |
| MEAN | 0.004 | 0.003 | 0.003 | 0.004 | 0.004 | 0.003 | 0.003 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| MAX | 0.006 | 0.004 | 0.004 | 0.005 | 0.004 | 0.004 | 0.005 | 0.002 | 0.001 | 0.001 | 0.001 | 0.002 |
| MIN | 0.002 | 0.002 | 0.001 | 0.001 | 0.003 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 |
| AC-FT | 0.3 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.09 | 0.06 | 0.06 | 0.06 | 0.06 |
| CAL YR | 2002 | TOTAL | 13.236 | MEAN | 0.036 | MAX | 0.17 | MIN | 0.001 | AC-FT | 26 | |
| WTR YR | 2003 | TOTAL | 0.864 | MEAN | 0.002 | MAX | 0.006 | MIN | 0.001 | AC-FT | 1.7 | |

e Estimated.

382628104493700 TURKEY CREEK WEST SEEPAGE BELOW TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°26'28", long 104°49'37", in SW¹/₄NW¹/₄ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, at base of right downstream end of Teller Dam on Turkey Creek, and 1.9 mi east of Stone City.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--October 2001 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=382628104493700

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,420 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by Teller Reservoir contents (station 07099233) and saturation of earthfill dam.

EXTREMES FOR PERIOD OF RECORD (dam seepage only).--No flow during period of record.

EXTREMES FOR CURRENT YEAR (dam seepage only).--No flow during current year.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|--------|-------|-------------|------------|-----------|-----------|------------|-------|-------|--------|-------|-------|-------|
| 1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 3 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 4 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 5 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 6 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 7 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 8 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 9 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 10 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 11 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 12 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 13 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 14 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 15 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 16 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 17 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 18 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 19 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 20 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 21 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 22 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | e0.000 | 0.000 | 0.000 | 0.000 |
| 23 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 24 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 25 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 26 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 27 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 28 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 29 | 0.000 | 0.000 | 0.000 | 0.000 | --- | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 30 | 0.000 | 0.000 | 0.000 | 0.000 | --- | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 31 | 0.000 | --- | 0.000 | 0.000 | --- | 0.000 | --- | 0.000 | --- | 0.000 | 0.000 | --- |
| TOTAL | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| MEAN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| MAX | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| MIN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| AC-FT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| CAL YR | 2002 | TOTAL 0.000 | MEAN 0.000 | MAX 0.000 | MIN 0.000 | AC-FT 0.00 | | | | | | |
| WTR YR | 2003 | TOTAL 0.000 | MEAN 0.000 | MAX 0.000 | MIN 0.000 | AC-FT 0.00 | | | | | | |

e Estimated.

07099235 TURKEY CREEK NEAR STONE CITY, CO

LOCATION.--Lat 38°25'56", long 104°49'58", in SE¹/₄SE¹/₄ sec.36, T.18 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank at downstream end of culverts on military road 14, 1.1 mi downstream from Teller Reservoir Dam, and 2.0 mi southeast of Stone City.

DRAINAGE AREA.--72.4 mi².

PERIOD OF RECORD.--May 1978 to September 1984, June 1987 to current year.For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099235

REVISED RECORDS.--WDR CO-80-1: 1979(M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,350 ft above NGVD of 1929, from topographic map. Prior to June 12, 1987, at site 1.0 mi upstream at different datum. June 12, 1987 to Dec. 6, 1989, at site 0.6 mi upstream at different datum. Dec. 7, 1989 to Dec. 9, 1999, at site 0.9 mi upstream at different datum.

REMARKS.--Records good. Natural flow of stream affected by erosion-control and livestock-watering reservoirs, storage reservoir, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Flow mostly regulated by Teller Reservoir (station 07099233) 1.1 mi upstream. Gage records seepage and releases from reservoir. Measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11 | e0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 29 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 31 | 0.00 | --- | 0.00 | 0.00 | --- | 0.00 | --- | 0.00 | --- | 0.00 | 0.00 | --- |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MEAN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| MAX | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| MIN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AC-FT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2003, BY WATER YEAR (WY)

| | 1978 | 1979 | 2000 | 2001 | 2002 | 2003 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.33 | 0.35 | 0.76 | 0.48 | 0.43 | 0.41 | 0.39 | 1.25 | 2.14 | 1.03 | 0.77 | 0.55 |
| MAX | 1.64 | 1.57 | 10.8 | 5.23 | 3.69 | 3.54 | 2.75 | 8.37 | 20.3 | 9.78 | 4.43 | 3.03 |
| (WY) | (1983) | (1983) | (2000) | (2000) | (2000) | (2000) | (2000) | (1995) | (1995) | (1995) | (1995) | (1995) |
| MIN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| (WY) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1978 - 2003

| | | | | |
|--------------------------|-------|-------|------|-------|
| ANNUAL TOTAL | 0.00 | 0.00 | | |
| ANNUAL MEAN | 0.000 | 0.000 | | |
| HIGHEST ANNUAL MEAN | | | 0.74 | 1995 |
| LOWEST ANNUAL MEAN | | | 3.93 | 2002 |
| HIGHEST DAILY MEAN | 0.00 | Jan 1 | 0.00 | Oct 1 |
| LOWEST DAILY MEAN | 0.00 | Jan 1 | 0.00 | Oct 1 |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 | Jan 1 | 0.00 | Oct 1 |
| MAXIMUM PEAK FLOW | | | 0.09 | Sep 7 |
| MAXIMUM PEAK STAGE | | | 3.45 | Sep 7 |
| ANNUAL RUNOFF (AC-FT) | 0.00 | | 0.00 | |
| 10 PERCENT EXCEEDS | 0.00 | | 0.00 | 539 |
| 50 PERCENT EXCEEDS | 0.00 | | 0.00 | 1.6 |
| 90 PERCENT EXCEEDS | 0.00 | | 0.00 | 0.15 |
| | | | | 0.00 |

e Estimated.

a Also occurred on many days during 2000-2002.

b From rating curve extended above 62 ft³/s.

c Site and datum then in use.

07099238 TELLER RESERVOIR SPILLWAY NEAR STONE CITY, CO

LOCATION.--Lat 38°26'20", long 104°49'15", in NE¹/₄SW¹/₄ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on right bank 0.4 mi southeast of Teller Reservoir Dam on Turkey Creek, and 1.2 mi southeast of Stone City.

DRAINAGE AREA.--71.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2000 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099238

GAGE.--Water-stage recorder with satellite telemetry and broad-crested weir. Elevation of gage is 5,480 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Records represent uncontrolled overflow from Teller Reservoir and local storm runoff. There was no overflow from Teller Reservoir during the year. Published flows represent local storm runoff.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 |
| 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.47 | 0.00 | 0.00 |
| 16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.99 | 0.00 | 0.00 | 0.76 | 0.00 | 0.00 | 0.00 |
| 19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 |
| 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 0.00 |
| 27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 |
| 28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 |
| 29 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 |
| 31 | 0.00 | --- | 0.00 | 0.00 | --- | 0.00 | --- | 0.00 | --- | 0.00 | 0.00 | --- |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.34 | 0.15 | 0.62 | 1.51 | 0.47 | 0.30 | 0.13 |
| MEAN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.043 | 0.005 | 0.020 | 0.050 | 0.015 | 0.010 | 0.004 |
| MAX | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.99 | 0.15 | 0.35 | 0.76 | 0.47 | 0.30 | 0.13 |
| MIN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AC-FT | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.7 | 0.3 | 1.2 | 3.0 | 0.9 | 0.6 | 0.3 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.014 | 0.002 | 0.008 | 0.029 | 0.016 | 0.006 | 0.002 |
| MAX | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.043 | 0.005 | 0.020 | 0.050 | 0.019 | 0.010 | 0.004 |
| (WY) | (2002) | (2001) | (2001) | (2001) | (2001) | (2003) | (2003) | (2003) | (2003) | (2002) | (2001) | (2003) |
| MIN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.015 | 0.000 | 0.000 |
| (WY) | (2002) | (2001) | (2001) | (2001) | (2001) | (2001) | (2001) | (2002) | (2002) | (2003) | (2002) | (2001) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 2001 - 2003

| | | | |
|--------------------------|------------|-------------|--------------------|
| ANNUAL TOTAL | 0.64 | 4.52 | |
| ANNUAL MEAN | 0.002 | 0.012 | 0.007 |
| HIGHEST ANNUAL MEAN | | | 0.012 2003 |
| LOWEST ANNUAL MEAN | | | 0.002 2002 |
| HIGHEST DAILY MEAN | 0.39 Jul 6 | 0.99 Mar 18 | 0.99 Mar 18, 2003 |
| LOWEST DAILY MEAN | 0.00 Jan 1 | a0.00 Oct 1 | a0.00 Oct 20, 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 Jan 1 | 0.00 Oct 1 | 0.00 Oct 20, 2000 |
| MAXIMUM PEAK FLOW | | b25 Jun 18 | b25 Jun 18, 2003 |
| MAXIMUM PEAK STAGE | | 3.97 Jun 18 | 3.97 Jun 18, 2003 |
| ANNUAL RUNOFF (AC-FT) | 1.3 | 9.0 | 5.1 |
| 10 PERCENT EXCEEDS | 0.00 | 0.00 | 0.00 |
| 50 PERCENT EXCEEDS | 0.00 | 0.00 | 0.00 |
| 90 PERCENT EXCEEDS | 0.00 | 0.00 | 0.00 |

a No flow on most days.

b From rating curve based on open-channel flow computations.

07099238 TELLER RESERVOIR SPILLWAY NEAR STONE CITY, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 2001 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099238

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records during Sept. 5-30 may be less accurate than the rest of the published records.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.38 inches, June 20, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.00 inch, Apr. 19.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.16 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 2 | 0.10 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | 0.05 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.58 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.20 | 0.00 | 0.09 | 0.01 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.14 | 0.00 | 0.04 | 0.00 | 0.00 | 0.32 |
| 8 | 0.05 | --- | --- | --- | --- | --- | 0.16 | 0.00 | 0.00 | 0.00 | 0.19 | 0.01 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.43 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.31 | 0.00 | 0.00 | 0.15 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.01 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.10 | 0.52 | 0.00 | 0.79 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.91 | 0.00 | 0.03 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 1.00 | 0.00 | 0.21 | 0.14 | 0.00 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.15 | 0.13 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.70 | 0.00 | 0.00 | 0.00 | 0.00 |
| 26 | 0.23 | --- | --- | --- | --- | --- | 0.00 | 0.04 | 0.00 | 0.20 | 0.50 | 0.00 |
| 27 | 0.03 | --- | --- | --- | --- | --- | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.34 | 0.11 | 0.25 | 0.00 |
| 29 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.01 | 0.01 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.39 | 0.00 | 0.00 | 0.39 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.02 | --- | 0.00 | 0.00 | --- |
| TOTAL | 0.66 | --- | --- | --- | --- | --- | 1.42 | 2.02 | 3.05 | 1.38 | 1.47 | 1.34 |
| MAX | 0.23 | --- | --- | --- | --- | --- | 1.00 | 0.70 | 0.91 | 0.79 | 0.50 | 0.58 |

07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO

LOCATION.--Lat 38°16'15", long 104°43'30", in NE¹/₄ sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at dam on Arkansas River, 7 mi west of Pueblo.

DRAINAGE AREA.--4,669 mi².

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--January 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,898.70 ft above NGVD of 1929, (levels by U.S. Bureau of Reclamation); gage readings at 2400 have been reduced to elevations above NGVD of 1929.

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 Fryngpan-Arkansas project and is used to provide flood control, municipal and industrial supplies, and to fulfill irrigation requirements in the Arkansas River Valley. Figures given are total contents.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 295,480 acre-ft, Feb. 12, 1985, elevation, 4,886.94 ft; minimum since appreciable storage was attained, 22,680 acre-ft, Nov. 13, 1974, elevation, 4,790.50 ft.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum contents, 114,210 acre-ft, Mar. 19, elevation, 4,840.70 ft; minimum contents, 66,170 acre-ft, Sept. 23, elevation, 4,820.65 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Elevation (feet) | Contents (acre-feet) | Change in contents (acre-feet) |
|-----------------------|------------------|----------------------|--------------------------------|
| Sept. 30 | 4,826.27 | 78,080 | - |
| Oct. 31 | 4,826.16 | 77,830 | -250 |
| Nov. 30 | 4,827.93 | 81,810 | +3,980 |
| Dec. 31 | 4,832.24 | 92,040 | +10,230 |
| CAL YR 2002 | - | - | -24,730 |
| Jan. 31 | 4,835.94 | 101,430 | +9,390 |
| Feb. 28 | 4,838.89 | 109,270 | +7,840 |
| Mar. 31 | 4,840.52 | 113,710 | +4,440 |
| Apr. 30 | 4,837.48 | 105,490 | -8,220 |
| May 31 | 4,832.15 | 91,820 | -13,670 |
| June 30 | 4,826.07 | 77,630 | -14,190 |
| July 31 | 4,823.66 | 72,420 | -5,210 |
| Aug. 31 | 4,821.32 | 67,540 | -4,880 |
| Sept. 30 | 4,820.66 | 66,190 | -1,350 |
| WTR YR 2003 | - | - | -11,890 |

PUEBLO RESERVOIR NEAR PUEBLO, CO—Continued

WATER-QUALITY RECORDS

Water-quality samples and field measurements were collected at various depths at a number of sites on transects located along the length of the reservoir. Data are collected in an effort to represent the complete seasonal cycle of lake dynamics.

381754104504000 PUEBLO RESERVOIR SITE 2B

LOCATION.--Lat 38°17'54", long 104°50'40", in SW¹/₄NW¹/₄ sec.24, T.20 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 1.1 mi downstream from Rush Creek, 1.1 mi upstream from Turkey Creek, 7.8 mi upstream from Pueblo Dam on Arkansas River, and 14.2 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year (site dry during 1990-92, 2002-03). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=381754104504000

REMARKS.--Site dry during all scheduled sampling events this year.

SITE DRY DURING 2003 WATER YEAR

ARKANSAS RIVER BASIN
PUEBLO RESERVOIR NEAR PUEBLO, CO—Continued

WATER-QUALITY RECORDS

381725104494400 PUEBLO RESERVOIR SITE 3B

LOCATION.--Lat 38°17'25", long 104°49'44", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.19, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 100 ft downstream from Turkey Creek, 6.7 mi upstream from Pueblo Dam on Arkansas River, and 13.4 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year (site dry during 2003). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=381725104494400

REMARKS.--Site dry during all scheduled sampling events this year.

SITE DRY DURING 2003 WATER YEAR

PUEBLO RESERVOIR NEAR PUEBLO, CO—Continued

WATER-QUALITY RECORDS

381647104475300 PUEBLO RESERVOIR SITE 4B

LOCATION.--Lat 38°16'47", long 104°47'53", in NW¹/₄SE¹/₄ sec.29, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 1.3 mi upstream from Peck Creek, 2.2 mi downstream from Turkey Creek, 4.5 mi upstream from Pueblo Dam on Arkansas River, and 10.9 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=381647104475300

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Sam- pling depth, feet (00003) | Trans- parency water unfltrd secchi disc feet (49701) | Dis- solved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conduc- tance, wat un- f uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) |
|-------|------|--|--|--|---|--|---|
| APR | | | | | | | |
| 25... | 1215 | 0.10 | 2.0 | 8.6 | 8.2 | 641 | 12.2 |
| 25... | 1216 | 6.00 | -- | 8.6 | 8.2 | 641 | 11.9 |
| 25... | 1217 | 12.0 | -- | 8.6 | 8.2 | 641 | 11.8 |
| 25... | 1218 | 18.0 | -- | 7.7 | 8.0 | 643 | 11.3 |
| 25... | 1220 | 21.5 | -- | 7.4 | 8.0 | 645 | 11.1 |
| JUN | | | | | | | |
| 03... | 1250 | 0.10 | 0.50 | 6.1 | 8.1 | 335 | 19.0 |
| 03... | 1251 | 6.00 | -- | 5.9 | 8.1 | 319 | 18.5 |
| 03... | 1252 | 12.0 | -- | 5.9 | 8.1 | 201 | 16.2 |
| 03... | 1253 | 14.0 | -- | 5.9 | 8.1 | 190 | 16.0 |
| 20... | 1310 | 0.10 | 1.0 | 8.8 | 8.8 | 268 | 21.8 |
| 20... | 1312 | 3.00 | -- | 8.8 | 8.8 | 268 | 21.5 |
| 20... | 1314 | 6.00 | -- | 8.2 | 8.8 | 268 | 21.2 |
| 20... | 1315 | 9.00 | -- | 6.6 | 8.0 | 298 | 18.4 |
| 20... | 1317 | 10.0 | -- | 6.5 | 7.9 | 309 | 17.9 |
| JUL | | | | | | | |
| 30... | 1114 | 0.10 | 1.5 | 8.5 | 8.5 | 333 | 24.1 |
| 30... | 1116 | 3.00 | -- | 8.5 | 8.5 | 333 | 24.0 |
| 30... | 1118 | 6.00 | -- | 6.5 | 7.9 | 329 | 21.1 |
| 30... | 1121 | 7.00 | -- | 6.3 | 7.6 | 330 | 20.4 |
| AUG | | | | | | | |
| 27... | 1100 | 0.10 | 0.50 | 7.2 | 8.4 | 432 | 23.7 |
| 27... | 1102 | 3.00 | -- | 6.0 | 8.1 | 453 | 22.4 |
| 27... | 1105 | 5.00 | -- | 5.4 | 7.9 | 462 | 21.3 |
| SEP | | | | | | | |
| 30... | 1037 | 0.10 | 1.0 | 8.7 | 8.6 | 500 | 16.9 |
| 30... | 1038 | 3.00 | -- | 8.1 | 8.4 | 580 | 13.4 |
| 30... | 1039 | 3.50 | -- | 7.9 | 8.4 | 585 | 13.0 |

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 $\frac{1}{4}$ NE $\frac{1}{4}$ sec.33, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.1 mi upstream from Peck Creek, 1.2 mi upstream from Rock Creek, 3.2 mi upstream from Pueblo Dam on Arkansas River, and 9.6 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=381559104465500

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Sam- pling depth, feet (00003) | Dis- solved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conduc- tance, wat un- f uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) |
|-------|------|--|--|---|--|---|
| APR | | | | | | |
| 25... | 1105 | 0.10 | 7.8 | 8.2 | 641 | 11.5 |
| 25... | 1108 | 3.00 | 7.9 | 8.2 | 641 | 11.5 |
| 25... | 1110 | 6.00 | 8.0 | 8.2 | 641 | 11.4 |
| 25... | 1111 | 9.00 | 8.0 | 8.2 | 641 | 11.4 |
| 25... | 1112 | 12.0 | 8.0 | 8.2 | 641 | 11.3 |
| 25... | 1113 | 15.0 | 7.9 | 8.1 | 641 | 11.1 |
| 25... | 1114 | 18.0 | 7.7 | 8.1 | 644 | 10.8 |
| 25... | 1116 | 21.0 | 7.5 | 8.0 | 646 | 10.6 |
| 25... | 1118 | 24.0 | 7.4 | 8.0 | 650 | 10.4 |
| 25... | 1119 | 27.0 | 7.4 | 8.0 | 650 | 10.2 |
| 25... | 1120 | 30.0 | 7.1 | 8.0 | 653 | 10.0 |
| 25... | 1121 | 31.0 | 7.0 | 8.0 | 653 | 10.0 |
| JUN | | | | | | |
| 03... | 1220 | 0.10 | 6.1 | 8.0 | 446 | 19.7 |
| 03... | 1221 | 3.00 | 6.1 | 8.0 | 444 | 19.7 |
| 03... | 1222 | 6.00 | 6.1 | 8.0 | 443 | 19.6 |
| 03... | 1223 | 9.00 | 6.0 | 8.0 | 436 | 19.6 |
| 03... | 1224 | 12.0 | 5.9 | 8.0 | 427 | 19.5 |
| 03... | 1225 | 15.0 | 5.8 | 8.0 | 359 | 18.6 |
| 03... | 1226 | 18.0 | 5.7 | 8.0 | 310 | 17.4 |
| 03... | 1227 | 21.0 | 5.5 | 8.0 | 252 | 16.7 |
| 03... | 1228 | 22.5 | 5.5 | 8.0 | 249 | 16.6 |
| 20... | 1125 | 0.10 | 9.5 | 8.9 | 264 | 21.6 |
| 20... | 1127 | 3.00 | 9.3 | 8.8 | 261 | 20.7 |
| 20... | 1128 | 6.00 | 8.6 | 8.6 | 263 | 19.8 |
| 20... | 1129 | 9.00 | 7.9 | 8.2 | 279 | 19.3 |
| 20... | 1131 | 12.0 | 7.3 | 8.0 | 279 | 19.1 |
| 20... | 1133 | 15.0 | 7.0 | 7.9 | 286 | 18.8 |
| 20... | 1134 | 18.0 | 6.7 | 7.9 | 281 | 18.7 |
| 20... | 1136 | 19.5 | 6.4 | 7.9 | 288 | 18.2 |
| JUL | | | | | | |
| 30... | 1018 | 0.10 | 8.4 | 8.6 | 331 | 25.1 |
| 30... | 1021 | 3.00 | 7.9 | 8.5 | 331 | 24.4 |
| 30... | 1023 | 6.00 | 7.3 | 8.4 | 332 | 24.2 |
| 30... | 1025 | 9.00 | 6.9 | 8.3 | 333 | 24.2 |
| 30... | 1027 | 12.0 | 6.4 | 8.1 | 333 | 24.0 |
| 30... | 1029 | 15.0 | 6.3 | 8.2 | 339 | 24.0 |
| 30... | 1031 | 16.0 | 5.5 | 8.1 | 338 | 23.8 |
| AUG | | | | | | |
| 27... | 1016 | 0.10 | 6.3 | 8.4 | 412 | 23.7 |
| 27... | 1017 | 3.00 | 5.8 | 8.3 | 409 | 23.1 |
| 27... | 1018 | 6.00 | 5.4 | 8.2 | 411 | 23.0 |
| 27... | 1020 | 9.00 | 5.0 | 8.1 | 404 | 22.9 |
| 27... | 1021 | 12.0 | 4.5 | 8.0 | 400 | 22.7 |
| 27... | 1023 | 15.0 | 3.9 | 7.9 | 422 | 22.7 |
| 27... | 1026 | 17.0 | 3.7 | 7.8 | 427 | 22.6 |
| SEP | | | | | | |
| 30... | 0933 | 0.10 | 7.9 | 8.4 | 422 | 17.6 |
| 30... | 0934 | 3.00 | 7.9 | 8.4 | 422 | 17.6 |
| 30... | 0935 | 6.00 | 8.0 | 8.4 | 422 | 17.6 |
| 30... | 0936 | 9.00 | 8.0 | 8.4 | 422 | 17.6 |
| 30... | 0937 | 12.0 | 8.0 | 8.5 | 424 | 17.6 |
| 30... | 0938 | 13.5 | 8.0 | 8.5 | 424 | 17.6 |

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO—Continued

381559104465500 PUEBLO RESERVOIR SITE 5C--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Lead, water, unfltrd recover- able, ug/L (01051) | Mangan- ese, water, fltrd, ug/L (01056) | Mangan- ese, water, unfltrd recover- able, ug/L (01055) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover- able, ug/L (01092) |
|-------|--|--|--|--|--|
| APR | | | | | |
| 25... | -- | -- | -- | -- | -- |
| 25... | -- | -- | -- | -- | -- |
| 25... | -- | -- | -- | -- | -- |
| JUN | | | | | |
| 20... | -- | -- | -- | -- | -- |
| 20... | -- | -- | -- | -- | -- |
| 20... | -- | -- | -- | -- | -- |
| JUL | | | | | |
| 30... | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- |
| AUG | | | | | |
| 27... | 1.45 | 1.1 | 57 | E.9 | 5 |
| 27... | 1.53 | 0.7 | 54 | 1 | 6 |
| 27... | -- | -- | -- | -- | -- |
| SEP | | | | | |
| 30... | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- |

< -- Actual value is known to be less than the value shown.

E -- Estimated laboratory analysis value.

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 $\frac{1}{4}$ SE $\frac{1}{4}$ sec.34, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.2 mi downstream from Rock Creek, 1.2 mi downstream from Peck Creek, 2.0 mi upstream from Pueblo Dam on Arkansas River, and 8.4 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=381548104453300

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Sam- pling depth, feet (00003) | Trans- parency water unfltrd secchi disc feet (49701) | Dis- solved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conduc- tance, wat un- f uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) |
|-------|------|--|--|--|---|--|---|
| APR | | | | | | | |
| 25... | 1030 | 0.10 | 6.0 | 8.0 | 8.0 | 651 | 10.8 |
| 25... | 1033 | 6.00 | -- | 7.8 | 8.0 | 651 | 10.7 |
| 25... | 1034 | 12.0 | -- | 7.7 | 8.0 | 654 | 10.4 |
| 25... | 1036 | 18.0 | -- | 7.7 | 8.0 | 654 | 10.3 |
| 25... | 1037 | 24.0 | -- | 7.6 | 8.0 | 654 | 10.2 |
| 25... | 1039 | 30.0 | -- | 7.6 | 8.0 | 654 | 10.2 |
| 25... | 1040 | 36.0 | -- | 7.6 | 8.0 | 654 | 10.2 |
| 25... | 1041 | 42.0 | -- | 7.5 | 8.0 | 654 | 10.2 |
| 25... | 1042 | 48.0 | -- | 7.4 | 8.0 | 654 | 9.9 |
| 25... | 1043 | 54.0 | -- | 7.3 | 8.0 | 654 | 9.9 |
| 25... | 1045 | 57.0 | -- | 7.0 | 7.9 | 654 | 9.9 |
| JUN | | | | | | | |
| 03... | 1140 | 0.10 | 2.0 | 6.3 | 8.0 | 471 | 19.5 |
| 03... | 1141 | 6.00 | -- | 6.3 | 8.1 | 469 | 19.4 |
| 03... | 1142 | 12.0 | -- | 6.2 | 8.1 | 466 | 19.2 |
| 03... | 1143 | 18.0 | -- | 6.1 | 8.1 | 458 | 19.1 |
| 03... | 1144 | 24.0 | -- | 5.5 | 8.0 | 398 | 18.0 |
| 03... | 1145 | 30.0 | -- | 5.1 | 7.9 | 381 | 17.1 |
| 03... | 1146 | 36.0 | -- | 5.1 | 8.0 | 289 | 16.4 |
| 03... | 1147 | 42.0 | -- | 4.9 | 7.9 | 301 | 16.2 |
| 03... | 1148 | 48.0 | -- | 4.8 | 7.9 | 292 | 15.5 |
| 20... | 1056 | 0.10 | 3.5 | 8.2 | 8.7 | 295 | 20.8 |
| 20... | 1059 | 6.00 | -- | 8.0 | 8.6 | 290 | 19.6 |
| 20... | 1101 | 12.0 | -- | 7.4 | 8.4 | 298 | 19.4 |
| 20... | 1103 | 18.0 | -- | 6.8 | 8.1 | 277 | 19.2 |
| 20... | 1105 | 24.0 | -- | 5.8 | 7.9 | 294 | 18.5 |
| 20... | 1106 | 30.0 | -- | 5.8 | 7.9 | 272 | 18.1 |
| 20... | 1107 | 36.0 | -- | 5.7 | 7.9 | 274 | 17.8 |
| 20... | 1109 | 42.0 | -- | 5.8 | 7.9 | 278 | 17.2 |
| 20... | 1111 | 46.0 | -- | 5.9 | 7.9 | 278 | 17.0 |
| JUL | | | | | | | |
| 30... | 0942 | 0.10 | 3.0 | 6.6 | 8.2 | 339 | 24.2 |
| 30... | 0943 | 6.00 | -- | 6.4 | 8.2 | 339 | 24.0 |
| 30... | 0945 | 12.0 | -- | 6.1 | 8.1 | 339 | 23.9 |
| 30... | 0947 | 18.0 | -- | 5.9 | 8.1 | 339 | 23.8 |
| 30... | 0948 | 24.0 | -- | 5.6 | 8.0 | 339 | 23.7 |
| 30... | 0950 | 30.0 | -- | 3.9 | 7.6 | 340 | 23.1 |
| 30... | 0951 | 36.0 | -- | 3.7 | 7.6 | 342 | 22.9 |
| 30... | 0954 | 41.5 | -- | 3.6 | 7.5 | 344 | 22.6 |
| AUG | | | | | | | |
| 27... | 0920 | 0.10 | 2.5 | 6.0 | 8.2 | 371 | 23.2 |
| 27... | 0921 | 6.00 | -- | 6.0 | 8.3 | 371 | 23.1 |
| 27... | 0922 | 12.0 | -- | 5.9 | 8.3 | 372 | 23.1 |
| 27... | 0924 | 18.0 | -- | 5.5 | 8.2 | 370 | 23.0 |
| 27... | 0925 | 24.0 | -- | 4.8 | 8.1 | 366 | 22.8 |
| 27... | 0926 | 30.0 | -- | 4.6 | 8.0 | 369 | 22.8 |
| 27... | 0927 | 36.0 | -- | 4.2 | 8.0 | 374 | 22.8 |
| 27... | 0929 | 40.5 | -- | 3.5 | 7.8 | 374 | 22.7 |
| SEP | | | | | | | |
| 30... | 0912 | 0.10 | 2.0 | 7.3 | 8.3 | 418 | 17.8 |
| 30... | 0913 | 6.00 | -- | 7.3 | 8.3 | 419 | 17.8 |
| 30... | 0914 | 12.0 | -- | 7.3 | 8.3 | 419 | 17.8 |
| 30... | 0915 | 18.0 | -- | 7.0 | 8.3 | 418 | 17.7 |
| 30... | 0916 | 24.0 | -- | 6.8 | 8.2 | 418 | 17.6 |
| 30... | 0917 | 30.0 | -- | 6.8 | 8.2 | 418 | 17.6 |
| 30... | 0918 | 36.0 | -- | 6.7 | 8.2 | 418 | 17.6 |
| 30... | 0919 | 38.5 | -- | 6.6 | 8.2 | 418 | 17.6 |

ARKANSAS RIVER BASIN
PUEBLO RESERVOIR NEAR PUEBLO, CO—Continued

WATER-QUALITY RECORDS

381602104435200 PUEBLO RESERVOIR SITE 7B

LOCATION.--Lat 38°16'02", long 104°43'52", in SE¹/₄ NW¹/₄ 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, 0.4 mi upstream from Pueblo Dam on Arkansas River, and 6.8 mi west of the Pueblo County Courthouse.

PERIOD OF RECORD.--June 1988 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=381602104435200

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Sam- pling depth, feet (00003) | Dis- solved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conduc- tance, wat unfiltered uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) |
|-------|------|--|--|---|---|---|
| APR | | | | | | |
| 25... | 0946 | 0.10 | 8.0 | 7.9 | 652 | 10.3 |
| 25... | 0947 | 3.00 | 8.0 | 7.9 | 652 | 10.3 |
| 25... | 0948 | 6.00 | 8.0 | 7.9 | 652 | 10.2 |
| 25... | 0950 | 9.00 | 8.0 | 7.9 | 652 | 10.2 |
| 25... | 0951 | 12.0 | 8.0 | 7.9 | 652 | 10.2 |
| 25... | 0952 | 15.0 | 8.0 | 7.9 | 652 | 10.1 |
| 25... | 0953 | 18.0 | 8.0 | 7.9 | 652 | 10.1 |
| 25... | 0954 | 21.0 | 8.0 | 7.9 | 652 | 10.1 |
| 25... | 0955 | 24.0 | 8.0 | 7.9 | 652 | 10.1 |
| 25... | 0956 | 27.0 | 8.0 | 7.9 | 652 | 10.1 |
| 25... | 0957 | 30.0 | 8.0 | 7.9 | 652 | 10.1 |
| 25... | 0958 | 33.0 | 8.0 | 7.9 | 652 | 10.1 |
| 25... | 0959 | 36.0 | 8.0 | 7.9 | 652 | 10.1 |
| 25... | 1001 | 39.0 | 7.9 | 7.9 | 652 | 10.1 |
| 25... | 1002 | 42.0 | 7.9 | 7.9 | 652 | 10.1 |
| 25... | 1003 | 45.0 | 7.9 | 7.9 | 652 | 10.0 |
| 25... | 1004 | 48.0 | 7.9 | 7.9 | 652 | 10.0 |
| 25... | 1005 | 51.0 | 7.9 | 7.9 | 652 | 10.0 |
| 25... | 1006 | 54.0 | 7.9 | 7.9 | 652 | 10.0 |
| 25... | 1007 | 57.0 | 7.9 | 7.9 | 652 | 10.0 |
| 25... | 1008 | 60.0 | 7.8 | 7.9 | 652 | 9.9 |
| 25... | 1009 | 63.0 | 7.8 | 7.9 | 652 | 9.9 |
| 25... | 1010 | 66.0 | 7.8 | 7.9 | 652 | 9.9 |
| 25... | 1011 | 69.0 | 7.8 | 7.9 | 652 | 9.9 |
| 25... | 1012 | 72.0 | 7.7 | 7.9 | 652 | 9.9 |
| 25... | 1013 | 75.0 | 7.7 | 7.9 | 653 | 9.9 |
| 25... | 1014 | 78.0 | 7.6 | 7.9 | 653 | 9.9 |
| 25... | 1015 | 80.0 | 7.3 | 7.9 | 654 | 9.8 |

PUEBLO RESERVOIR NEAR PUEBLO, CO—Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Sam- pling depth, feet (00003) | Dis- solved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conduc- tance, wat unf uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) |
|-------|------|--|--|---|--|---|
| JUN | | | | | | |
| 03... | 1101 | 0.10 | 6.4 | 7.9 | 473 | 19.1 |
| 03... | 1102 | 3.00 | 6.3 | 7.9 | 474 | 19.1 |
| 03... | 1103 | 6.00 | 6.2 | 8.0 | 477 | 19.0 |
| 03... | 1104 | 9.00 | 6.1 | 8.0 | 482 | 18.9 |
| 03... | 1105 | 12.0 | 6.0 | 8.0 | 489 | 18.6 |
| 03... | 1106 | 15.0 | 5.8 | 7.9 | 471 | 18.5 |
| 03... | 1107 | 18.0 | 5.6 | 7.9 | 440 | 18.0 |
| 03... | 1108 | 21.0 | 5.3 | 7.9 | 389 | 17.7 |
| 03... | 1109 | 24.0 | 5.3 | 7.8 | 383 | 17.6 |
| 03... | 1110 | 27.0 | 5.3 | 7.8 | 382 | 17.6 |
| 03... | 1111 | 30.0 | 5.2 | 7.8 | 373 | 17.5 |
| 03... | 1112 | 33.0 | 5.2 | 7.8 | 369 | 17.3 |
| 03... | 1113 | 36.0 | 5.1 | 7.8 | 441 | 16.7 |
| 03... | 1114 | 39.0 | 5.0 | 7.8 | 401 | 16.3 |
| 03... | 1115 | 42.0 | 5.0 | 7.8 | 390 | 16.2 |
| 03... | 1116 | 45.0 | 5.0 | 7.8 | 384 | 16.2 |
| 03... | 1117 | 48.0 | 4.9 | 7.8 | 424 | 15.9 |
| 03... | 1118 | 51.0 | 5.0 | 7.8 | 640 | 15.1 |
| 03... | 1119 | 54.0 | 5.0 | 7.8 | 660 | 14.4 |
| 03... | 1120 | 57.0 | 4.8 | 7.7 | 662 | 14.1 |
| 03... | 1121 | 60.0 | 4.8 | 7.7 | 668 | 13.6 |
| 03... | 1122 | 63.0 | 4.6 | 7.7 | 668 | 13.5 |
| 03... | 1123 | 66.0 | 4.6 | 7.7 | 671 | 13.3 |
| 03... | 1124 | 69.0 | 4.4 | 7.7 | 672 | 13.1 |
| 03... | 1125 | 72.0 | 4.0 | 7.7 | 673 | 12.9 |
| 20... | 0946 | 0.10 | 7.4 | 8.5 | 340 | 19.8 |
| 20... | 0947 | 3.00 | 7.5 | 8.5 | 340 | 19.4 |
| 20... | 0948 | 6.00 | 7.5 | 8.4 | 340 | 19.3 |
| 20... | 0949 | 9.00 | 7.4 | 8.4 | 341 | 19.3 |
| 20... | 0950 | 12.0 | 7.3 | 8.4 | 341 | 19.3 |
| 20... | 0951 | 15.0 | 7.3 | 8.4 | 342 | 19.3 |
| 20... | 0952 | 18.0 | 7.3 | 8.4 | 344 | 19.2 |
| 20... | 0953 | 21.0 | 7.0 | 8.3 | 346 | 19.1 |
| 20... | 0954 | 24.0 | 6.3 | 8.0 | 352 | 18.9 |
| 20... | 0955 | 27.0 | 6.0 | 8.0 | 352 | 18.8 |
| 20... | 0956 | 30.0 | 5.6 | 7.8 | 353 | 18.6 |
| 20... | 0957 | 33.0 | 5.1 | 7.7 | 345 | 18.2 |
| 20... | 0958 | 36.0 | 4.7 | 7.7 | 331 | 17.8 |
| 20... | 0959 | 39.0 | 4.6 | 7.7 | 321 | 17.7 |
| 20... | 1001 | 42.0 | 4.4 | 7.7 | 323 | 17.4 |
| 20... | 1002 | 45.0 | 4.2 | 7.7 | 330 | 17.2 |
| 20... | 1003 | 48.0 | 4.0 | 7.7 | 340 | 16.9 |
| 20... | 1004 | 51.0 | 3.5 | 7.7 | 352 | 16.4 |
| 20... | 1005 | 54.0 | 3.4 | 7.7 | 358 | 16.3 |
| 20... | 1006 | 57.0 | 3.2 | 7.6 | 373 | 16.0 |
| 20... | 1007 | 60.0 | 2.9 | 7.6 | 390 | 15.7 |
| 20... | 1009 | 63.0 | 2.7 | 7.6 | 400 | 15.6 |
| 20... | 1011 | 66.0 | 2.2 | 7.5 | 421 | 15.2 |
| 20... | 1012 | 69.0 | 1.5 | 7.5 | 440 | 14.8 |
| 20... | 1014 | 70.0 | 1.0 | 7.4 | 455 | 14.6 |
| JUL | | | | | | |
| 30... | 0848 | 0.10 | 5.4 | 8.0 | 336 | 23.6 |
| 30... | 0849 | 3.00 | 5.4 | 7.9 | 337 | 23.6 |
| 30... | 0850 | 6.00 | 5.4 | 7.9 | 337 | 23.6 |
| 30... | 0851 | 9.00 | 5.3 | 7.9 | 337 | 23.6 |
| 30... | 0852 | 12.0 | 5.2 | 7.9 | 337 | 23.5 |
| 30... | 0853 | 15.0 | 5.0 | 7.9 | 337 | 23.5 |
| 30... | 0854 | 18.0 | 4.9 | 7.9 | 337 | 23.5 |
| 30... | 0855 | 21.0 | 4.9 | 7.9 | 337 | 23.5 |
| 30... | 0856 | 24.0 | 4.9 | 7.9 | 337 | 23.4 |
| 30... | 0857 | 27.0 | 4.8 | 7.9 | 337 | 23.4 |
| 30... | 0858 | 30.0 | 4.8 | 7.8 | 337 | 23.3 |
| 30... | 0859 | 33.0 | 4.8 | 7.8 | 337 | 23.3 |
| 30... | 0901 | 36.0 | 4.8 | 7.8 | 337 | 23.2 |
| 30... | 0902 | 39.0 | 3.8 | 7.7 | 337 | 22.8 |
| 30... | 0904 | 42.0 | 3.2 | 7.6 | 337 | 22.7 |
| 30... | 0906 | 45.0 | 2.3 | 7.5 | 337 | 22.5 |
| 30... | 0908 | 48.0 | 1.4 | 7.4 | 337 | 22.1 |
| 30... | 0909 | 51.0 | 0.7 | 7.4 | 337 | 21.4 |
| 30... | 0911 | 54.0 | 0.6 | 7.4 | 337 | 21.2 |
| 30... | 0914 | 57.0 | 0.2 | 7.4 | 337 | 20.4 |

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO—Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Sam- pling depth, feet (00003) | Dis- solved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conduc- tance, wat unf uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) |
|-------|------|--|--|---|--|---|
| JUL | | | | | | |
| 30... | 0917 | 60.0 | 0.1 | 7.4 | 337 | 20.0 |
| 30... | 0920 | 63.0 | 0.0 | 7.4 | 337 | 19.6 |
| 30... | 0922 | 66.0 | 0.0 | 7.4 | 337 | 19.2 |
| AUG | | | | | | |
| 27... | 0831 | 0.10 | 6.4 | 8.3 | 362 | 23.1 |
| 27... | 0832 | 3.00 | 6.4 | 8.3 | 362 | 23.1 |
| 27... | 0833 | 6.00 | 6.4 | 8.4 | 362 | 23.1 |
| 27... | 0834 | 9.00 | 6.4 | 8.4 | 362 | 23.1 |
| 27... | 0835 | 12.0 | 6.4 | 8.4 | 362 | 23.1 |
| 27... | 0836 | 15.0 | 6.4 | 8.4 | 362 | 23.1 |
| 27... | 0837 | 18.0 | 6.4 | 8.4 | 362 | 23.1 |
| 27... | 0838 | 21.0 | 6.4 | 8.4 | 362 | 23.1 |
| 27... | 0839 | 24.0 | 6.3 | 8.4 | 362 | 23.1 |
| 27... | 0840 | 27.0 | 6.3 | 8.4 | 362 | 23.0 |
| 27... | 0841 | 30.0 | 6.2 | 8.4 | 362 | 23.0 |
| 27... | 0842 | 33.0 | 6.1 | 8.4 | 362 | 22.9 |
| 27... | 0843 | 36.0 | 5.6 | 8.2 | 362 | 22.8 |
| 27... | 0844 | 39.0 | 5.3 | 8.2 | 362 | 22.8 |
| 27... | 0846 | 42.0 | 5.3 | 8.2 | 362 | 22.7 |
| 27... | 0847 | 45.0 | 5.1 | 8.1 | 362 | 22.7 |
| 27... | 0848 | 48.0 | 4.6 | 8.0 | 362 | 22.7 |
| 27... | 0849 | 51.0 | 4.1 | 7.9 | 362 | 22.6 |
| 27... | 0850 | 54.0 | 3.3 | 7.8 | 364 | 22.6 |
| 27... | 0851 | 57.0 | 2.8 | 7.8 | 363 | 22.5 |
| 27... | 0852 | 60.0 | 2.3 | 7.7 | 363 | 22.4 |
| 27... | 0853 | 63.0 | 1.0 | 7.6 | 364 | 22.1 |
| 27... | 0854 | 64.5 | 1.0 | 7.6 | 365 | 22.0 |
| SEP | | | | | | |
| 30... | 0837 | 0.10 | 6.3 | 8.0 | 410 | 17.4 |
| 30... | 0838 | 3.00 | 6.4 | 8.1 | 410 | 17.4 |
| 30... | 0839 | 6.00 | 6.4 | 8.1 | 411 | 17.4 |
| 30... | 0840 | 9.00 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0841 | 12.0 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0842 | 15.0 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0843 | 18.0 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0844 | 21.0 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0846 | 24.0 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0847 | 27.0 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0848 | 30.0 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0849 | 33.0 | 6.4 | 8.2 | 411 | 17.4 |
| 30... | 0850 | 36.0 | 6.3 | 8.2 | 410 | 17.4 |
| 30... | 0851 | 39.0 | 6.2 | 8.2 | 410 | 17.4 |
| 30... | 0852 | 42.0 | 6.2 | 8.2 | 410 | 17.4 |
| 30... | 0853 | 45.0 | 6.1 | 8.2 | 410 | 17.4 |
| 30... | 0854 | 48.0 | 6.0 | 8.2 | 410 | 17.4 |
| 30... | 0855 | 51.0 | 5.9 | 8.1 | 410 | 17.4 |
| 30... | 0856 | 54.0 | 5.9 | 8.1 | 410 | 17.4 |
| 30... | 0857 | 57.0 | 5.9 | 8.1 | 410 | 17.4 |
| 30... | 0858 | 60.0 | 5.9 | 8.1 | 410 | 17.4 |
| 30... | 0859 | 63.0 | 5.3 | 8.0 | 412 | 17.3 |

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO—Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--CONTINUED

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Lead, water, unfltrd recover- able, ug/L (01051) | Mangan- ese, water, fltrd, ug/L (01056) | Mangan- ese, water, unfltrd recover- able, ug/L (01055) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover- able, ug/L (01092) |
|-------|--|--|--|--|--|
| APR | | | | | |
| 25... | -- | -- | -- | -- | -- |
| 25... | -- | -- | -- | -- | -- |
| 25... | -- | -- | -- | -- | -- |
| JUN | | | | | |
| 20... | -- | -- | -- | -- | -- |
| 20... | -- | -- | -- | -- | -- |
| 20... | -- | -- | -- | -- | -- |
| JUL | | | | | |
| 30... | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- |
| AUG | | | | | |
| 27... | 0.24 | 0.3 | 11 | E.8 | E2 |
| 27... | 0.35 | 0.6 | 18 | E.7 | 2 |
| 27... | -- | -- | -- | -- | -- |
| SEP | | | | | |
| 30... | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- |
| 30... | -- | -- | -- | -- | -- |

< -- Actual value is known to be less than the value shown.

E -- Estimated laboratory analysis value.

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO

LOCATION.--Lat 38°16'18", long 104°43'03", in NE¼NE¼ sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on left bank 200 ft downstream from northeast corner of Arkansas River bridge, 0.4 mi downstream from Pueblo Dam, and 7 mi west of Pueblo.

DRAINAGE AREA.--4,670 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year. Statistical summary computed for 1975 to current year subsequent to completion of Pueblo Reservoir. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099400

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,740 ft above NGVD of 1929, from topographic map. Prior to Mar. 23, 1967, at site 730 ft upstream at datum 2.23 ft higher. Mar. 24, 1967 to May 23 1974 at present site at datum 1.00 ft higher. May 24, 1974 to Feb. 24, 1975, at site 2,000 ft downstream, at different datum. Feb. 25, 1975 to Sept. 30, 2001, at or within 50 ft of present location at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow completely regulated by Pueblo Reservoir (station 07099350) 0.4 mi upstream 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|----------|----------|-------|-------|-------|-------|--------|--------|---------|--------|--------|-------|
| 1 | e0.55 | 82 | 0.46 | 1.3 | 20 | 27 | e91 | 181 | 4,020 | 816 | 280 | 223 |
| 2 | e0.55 | 82 | 0.45 | 1.3 | 21 | 27 | 211 | 144 | 4,530 | 759 | 400 | 165 |
| 3 | e25 | 82 | 0.57 | 1.2 | 21 | 27 | 239 | 142 | 4,690 | 607 | 376 | 91 |
| 4 | 103 | 93 | 0.57 | 1.3 | 22 | 28 | 256 | 142 | 4,160 | 581 | 367 | 84 |
| 5 | 103 | 102 | 0.57 | 1.3 | 22 | 27 | 290 | 156 | 3,400 | 690 | 368 | 105 |
| 6 | 104 | 102 | 0.61 | 1.4 | 23 | 27 | 309 | 165 | 2,100 | 693 | 383 | 117 |
| 7 | 103 | 103 | 0.64 | 1.4 | 22 | 27 | 310 | 165 | 1,570 | 692 | 387 | 133 |
| 8 | 95 | 103 | 0.59 | 1.5 | 23 | 27 | 261 | 69 | 1,260 | 689 | 197 | 167 |
| 9 | 53 | 103 | 0.63 | 1.7 | 23 | 27 | 237 | 37 | 1,020 | 689 | 141 | 214 |
| 10 | 32 | 103 | 0.66 | 1.7 | 23 | 27 | 237 | 60 | 953 | 685 | 141 | 255 |
| 11 | 26 | 103 | 0.75 | 1.6 | 26 | 27 | 233 | 55 | 1,360 | 567 | 138 | 285 |
| 12 | 8.7 | 103 | 0.82 | 1.7 | 27 | 27 | 224 | 55 | 1,590 | 502 | 138 | 328 |
| 13 | 1.3 | 103 | 0.71 | 1.7 | 27 | 28 | 224 | 178 | 1,630 | 499 | 136 | 342 |
| 14 | 1.3 | 93 | 0.68 | 1.8 | 27 | 27 | 213 | 252 | 1,710 | 523 | 145 | 332 |
| 15 | 4.6 | 1.5 | 0.67 | 1.6 | 27 | 27 | 196 | 269 | 1,710 | 556 | 149 | 331 |
| 16 | 9.0 | 0.84 | 0.73 | 8.3 | 27 | 27 | 196 | 357 | 1,700 | 516 | 135 | 297 |
| 17 | 1.0 | 0.62 | 0.65 | 20 | 26 | 27 | 196 | 559 | 1,650 | 488 | 135 | 220 |
| 18 | 1.0 | 0.60 | 0.76 | 20 | 27 | 58 | 178 | 589 | 1,590 | 428 | 136 | 137 |
| 19 | 1.1 | 0.47 | 0.79 | 20 | 27 | 108 | 232 | 639 | 1,600 | 393 | 136 | 113 |
| 20 | 1.1 | 0.53 | 0.77 | 20 | 27 | 160 | 232 | 758 | 1,450 | 303 | 136 | 146 |
| 21 | 1.1 | 0.52 | 0.77 | 20 | 27 | 180 | 210 | 952 | 1,520 | 262 | 135 | 151 |
| 22 | 1.1 | 0.45 | 0.81 | 20 | 27 | 180 | 211 | 1,030 | 1,620 | 264 | 135 | 126 |
| 23 | 8.5 | 0.50 | 0.96 | 20 | 28 | 180 | 229 | 1,080 | 1,390 | 264 | e135 | 113 |
| 24 | 15 | 0.52 | 1.0 | 20 | 28 | 147 | 230 | 1,260 | 1,210 | 243 | e135 | 88 |
| 25 | 15 | 0.56 | 1.1 | 20 | 27 | 126 | 210 | 1,580 | 1,110 | 217 | e160 | 66 |
| 26 | 16 | 0.46 | 1.0 | 20 | 27 | 125 | 139 | 1,990 | 973 | 186 | e185 | 48 |
| 27 | 16 | 0.50 | 0.92 | 20 | 27 | 126 | 140 | 2,030 | 893 | 176 | 184 | 42 |
| 28 | 33 | 0.54 | 1.0 | 20 | 27 | 104 | 141 | 2,010 | 892 | 192 | 203 | 40 |
| 29 | e60 | 0.50 | 1.1 | 20 | --- | 89 | 142 | 2,220 | 893 | 241 | 237 | 40 |
| 30 | e82 | 0.50 | 1.2 | 20 | --- | 69 | 175 | 2,690 | 859 | 263 | 309 | 40 |
| 31 | 82 | --- | 1.3 | 20 | --- | e56 | --- | 3,290 | --- | 247 | 278 | --- |
| TOTAL | 1,003.90 | 1,366.61 | 24.24 | 330.8 | 706 | 2,169 | 6,392 | 25,104 | 55,053 | 14,231 | 6,520 | 4,839 |
| MEAN | 32.4 | 45.6 | 0.78 | 10.7 | 25.2 | 70.0 | 213 | 810 | 1,835 | 459 | 210 | 161 |
| MAX | 104 | 103 | 1.3 | 20 | 28 | 180 | 310 | 3,290 | 4,690 | 816 | 400 | 342 |
| MIN | 0.55 | 0.45 | 0.45 | 1.2 | 20 | 27 | 91 | 37 | 859 | 176 | 135 | 40 |
| AC-FT | 1,990 | 2,710 | 48 | 656 | 1,400 | 4,300 | 12,680 | 49,790 | 109,200 | 28,230 | 12,930 | 9,600 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2003, BY WATER YEAR (WY)

| | MEAN | 338 | 247 | 153 | 167 | 201 | 308 | 574 | 1,151 | 2,292 | 1,562 | 986 | 432 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----|
| MAX | 1,103 | 505 | 553 | 558 | 837 | 718 | 1,389 | 2,564 | 4,219 | 4,110 | 2,716 | 1,040 | |
| (WY) | (1985) | (1985) | (1987) | (1985) | (1985) | (1985) | (1985) | (1984) | (1980) | (1995) | (1984) | (1982) | |
| MIN | 32.4 | 45.6 | 0.78 | 10.7 | 25.2 | 70.0 | 125 | 374 | 386 | 281 | 16.5 | 4.10 | |
| (WY) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (1978) | (1978) | (2002) | (2002) | (2002) | (2002) | |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1975 - 2003

| | | | |
|--------------------------|-----------|------------|-------|
| ANNUAL TOTAL | 51,811.06 | 117,739.55 | |
| ANNUAL MEAN | 142 | 323 | a703 |
| HIGHEST ANNUAL MEAN | | | 1,227 |
| LOWEST ANNUAL MEAN | | | 174 |
| HIGHEST DAILY MEAN | 870 | 4,690 | 1984 |
| LOWEST DAILY MEAN | 0.45 | 0.45 | 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 0.49 | 0.49 | 174 |
| MAXIMUM PEAK FLOW | | 4,760 | 1984 |
| MAXIMUM PEAK STAGE | | 7.20 | 2002 |
| ANNUAL RUNOFF (AC-FT) | 102,800 | 233,500 | 1984 |
| 10 PERCENT EXCEEDS | 356 | 952 | 1984 |
| 50 PERCENT EXCEEDS | 107 | 103 | 1984 |
| 90 PERCENT EXCEEDS | 0.58 | 0.80 | 1984 |

e Estimated.

a Average discharge for 8 years (water years 1966-73), 643 ft³/s; 465,900 acre-ft/yr, prior to completion of Pueblo Dam.

b Also the maximum daily discharge for period of record.

c Also occurred Dec 2, 2002. Also minimum daily discharge for period of record.

d Maximum discharge for period of record, 10,100 ft³/s, Aug 1, 1966, from rating curve extended above 1,600 ft³/s, on basis of slope-area measurement of peak flow.

f Datum then in use; maximum gage height, 7.57 ft, Jun 14, 1985, datum then in use; maximum gage height for period of record, 13.12 ft, Aug 1, 1966, site and datum then in use.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1965 to September 1970, December 1985 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099400

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.--Daily specific-conductance records are good except for Oct. 1, 12, 15-16, 23, Jan. 16, Apr. 27, 29, and May 8, which are fair. Daily water-temperature records are good except for Oct. 1, 12-23, and Nov. 16 to Jan. 16, which are fair. Daily data that are 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 DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,670 microsiemens/cm, Sept. 30, 2002; minimum, 223 microsiemens/cm, July 13, 1986.

WATER TEMPERATURE: Maximum, 26.9°C, Aug. 31, Sept. 5, 2002; minimum, 0.8°C, Dec. 26, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 808 microsiemens/cm, Nov. 16, but was probably higher during periods of unreliable record, Oct. 1, 12-30, and Nov. 17 to Jan. 16; minimum, 315 microsiemens/cm, June 22.

WATER TEMPERATURE: Maximum, 23.4°C, Aug. 17; minimum, 0.8°C, Dec. 26.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd std units (00400) | Specific conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd, mg/L (00665) | Organic carbon, water, fltrd, mg/L (00681) |
|-----------|------|--------------------------------------|--------------------------------|--------------------------------------|--|-----------------------------------|---|---|---|---|--|--|--|
| APR 23... | 1315 | 225 | 10.3 | 8.4 | 643 | 10.0 | 0.048 | 0.223 | 0.007 | <0.007 | 0.005 | 0.015 | 2.1 |
| JUN 18... | 1300 | 1,590 | 9.0 | 8.0 | 355 | 17.5 | E.011 | 0.362 | 0.017 | E.006 | 0.011 | 0.065 | 2.2 |
| JUL 31... | 1215 | 237 | 8.5 | 8.1 | 342 | 22.0 | 0.065 | 0.182 | 0.005 | 0.008 | 0.014 | 0.034 | 2.3 |
| AUG 26... | 0915 | 191 | 7.8 | 8.3 | 366 | 22.5 | 0.072 | 0.089 | E.002 | E.004 | 0.009 | 0.031 | 2.3 |
| SEP 29... | 1000 | 40 | 9.7 | 8.4 | 419 | 17.5 | E.011 | 0.107 | 0.008 | E.004 | 0.006 | 0.021 | 2.2 |

< -- Actual value is known to be less than the value shown.

E -- Estimated laboratory analysis value.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd std units (00400) | Specific conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Potassium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | ANC, wat unfiltered end pt, lab, mg/L as CaCO3 (90410) | Chloride, water, fltrd, mg/L (00940) | Fluoride, water, fltrd, mg/L (00950) |
|-----------|------|--------------------------------------|--------------------------------|--------------------------------------|--|-----------------------------------|------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|--|--------------------------------------|--------------------------------------|
| DEC 17... | 1030 | 0.72 | 9.3 | 8.1 | 822 | 4.5 | 95.7 | 28.0 | 3.54 | 44.0 | E177 | 11.7 | 0.81 |
| MAR 10... | 1210 | 27 | 12.0 | 8.5 | 653 | 6.0 | 70.3 | 22.8 | 3.08 | 36.0 | 138 | 10.9 | 0.63 |
| MAY 28... | 0745 | 2,020 | 8.9 | 8.3 | 660 | 14.5 | 65.1 | 20.8 | 3.17 | 34.1 | 137 | 13.4 | 0.6 |
| AUG 26... | 0915 | 191 | 7.8 | 8.3 | 366 | 22.5 | 43.1 | 10.4 | 2.17 | 15.8 | 95 | 5.91 | 0.5 |

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| 1 | 685 | 673 | 680 | 684 | 665 | 677 | 661 | 644 | 655 | 659 | 649 | 654 |
| 2 | 696 | 675 | 684 | 683 | 673 | 678 | 662 | 642 | 647 | 658 | 652 | 655 |
| 3 | 688 | 670 | 679 | 710 | 668 | 677 | 648 | 644 | 646 | 657 | 653 | 655 |
| 4 | 689 | 670 | 677 | 679 | 669 | 675 | 647 | 644 | 645 | 660 | 652 | 656 |
| 5 | 685 | 672 | 678 | 677 | 666 | 674 | 646 | 643 | 645 | 660 | 653 | 657 |
| 6 | 683 | 672 | 678 | 683 | 667 | 675 | 646 | 643 | 645 | 659 | 654 | 656 |
| 7 | 682 | 670 | 675 | 683 | 665 | 673 | 648 | 644 | 646 | 660 | 654 | 657 |
| 8 | 678 | 667 | 674 | 680 | 667 | 674 | 660 | 644 | 648 | 748 | 439 | 691 |
| 9 | 678 | 668 | 674 | 681 | 666 | 675 | 649 | 645 | 647 | 729 | 662 | 700 |
| 10 | 701 | 672 | 678 | 678 | 666 | 674 | 651 | 646 | 649 | 681 | 667 | 675 |
| 11 | 674 | 665 | 671 | 681 | 664 | 674 | 654 | 647 | 650 | 687 | 674 | 679 |
| 12 | 679 | 665 | 671 | 687 | 667 | 676 | 653 | 647 | 650 | 687 | 675 | 681 |
| 13 | 675 | 666 | 671 | 690 | 665 | 676 | 652 | 648 | 650 | 686 | 654 | 666 |
| 14 | 680 | 669 | 675 | 682 | 666 | 674 | 654 | 648 | 651 | 660 | 656 | 658 |
| 15 | 679 | 666 | 673 | 681 | 668 | 675 | 654 | 646 | 650 | 661 | 657 | 659 |
| 16 | 678 | 670 | 674 | 679 | 670 | 674 | 652 | 642 | 647 | 662 | 656 | 659 |
| 17 | 696 | 670 | 677 | 684 | 669 | 676 | 653 | 647 | 650 | 660 | 656 | 658 |
| 18 | 677 | 667 | 672 | 682 | 645 | 660 | 654 | 646 | 651 | 660 | 656 | 659 |
| 19 | 677 | 668 | 673 | 652 | 640 | 645 | 652 | 642 | 648 | 661 | 656 | 659 |
| 20 | 676 | 665 | 672 | 646 | 638 | 642 | 652 | 646 | 649 | 662 | 659 | 661 |
| 21 | 676 | 666 | 672 | 646 | 639 | 642 | 652 | 646 | 649 | 663 | 658 | 660 |
| 22 | 681 | 666 | 673 | 652 | 641 | 646 | 652 | 647 | 649 | 663 | 659 | 661 |
| 23 | 683 | 668 | 676 | 661 | 646 | 653 | 656 | 646 | 650 | 665 | 660 | 662 |
| 24 | 680 | 664 | 672 | 667 | 653 | 661 | 651 | 645 | 648 | 665 | 661 | 663 |
| 25 | 676 | 665 | 672 | 663 | 647 | 656 | 657 | 645 | 649 | 666 | 661 | 664 |
| 26 | 676 | 665 | 672 | 664 | 648 | 655 | 655 | 650 | 653 | 667 | 665 | 666 |
| 27 | 680 | 665 | 674 | 659 | 644 | 648 | 655 | 648 | 652 | 668 | 662 | 666 |
| 28 | 681 | 668 | 677 | 652 | 644 | 649 | --- | --- | --- | 672 | 661 | 666 |
| 29 | --- | --- | --- | 651 | 646 | 649 | 657 | 651 | 655 | 665 | 661 | 664 |
| 30 | --- | --- | --- | 662 | 646 | 656 | 657 | 648 | 652 | 670 | 658 | 665 |
| 31 | --- | --- | --- | 662 | 654 | 658 | --- | --- | --- | 667 | 599 | 655 |
| MONTH | 701 | 664 | 675 | 710 | 638 | 664 | --- | --- | --- | 748 | 439 | 664 |
| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 636 | 563 | 601 | 328 | 322 | 325 | 360 | 356 | 358 | 396 | 389 | 392 |
| 2 | 633 | 407 | 513 | 333 | 320 | 325 | 362 | 358 | 359 | 417 | 394 | 403 |
| 3 | 488 | 412 | 448 | 332 | 319 | 326 | 364 | 359 | 362 | 436 | 402 | 418 |
| 4 | 468 | 381 | 430 | 331 | 322 | 326 | 369 | 357 | 361 | 431 | 410 | 420 |
| 5 | 471 | 417 | 444 | 330 | 323 | 327 | 361 | 357 | 359 | 421 | 413 | 418 |
| 6 | 447 | 391 | 424 | 331 | 326 | 328 | 361 | 357 | 360 | 419 | 408 | 414 |
| 7 | 444 | 343 | 413 | 331 | 325 | 328 | 363 | 359 | 361 | 419 | 412 | 415 |
| 8 | 441 | 398 | 425 | 331 | 327 | 329 | 381 | 362 | 370 | 419 | 398 | 408 |
| 9 | 456 | 396 | 413 | 330 | 325 | 327 | 370 | 364 | 368 | 404 | 399 | 402 |
| 10 | 467 | 386 | 416 | 330 | 327 | 329 | 370 | 365 | 368 | 408 | 403 | 405 |
| 11 | 425 | 381 | 400 | 336 | 328 | 331 | 369 | 364 | 367 | 404 | 400 | 402 |
| 12 | 404 | 364 | 387 | 335 | 330 | 333 | 369 | 364 | 367 | 406 | 401 | 404 |
| 13 | 405 | 372 | 388 | 335 | 331 | 333 | 369 | 365 | 367 | 410 | 406 | 408 |
| 14 | 390 | 380 | 385 | 334 | 331 | 333 | 370 | 363 | 367 | 411 | 409 | 410 |
| 15 | 386 | 366 | 376 | 335 | 331 | 333 | 371 | 364 | 367 | 414 | 410 | 411 |
| 16 | 377 | 362 | 370 | 336 | 332 | 334 | 371 | 366 | 369 | 416 | 410 | 414 |
| 17 | 377 | 358 | 368 | 338 | 333 | 336 | 373 | 367 | 370 | 419 | 414 | 417 |
| 18 | 372 | 354 | 360 | 340 | 336 | 338 | 374 | 368 | 371 | 427 | 415 | 422 |
| 19 | 359 | 330 | 350 | 342 | 337 | 340 | 376 | 370 | 373 | 427 | 419 | 423 |
| 20 | 350 | 330 | 342 | 345 | 339 | 342 | 377 | 370 | 374 | 422 | 414 | 419 |
| 21 | 347 | 329 | 334 | 346 | 340 | 343 | 377 | 372 | 375 | 421 | 416 | 419 |
| 22 | 333 | 315 | 326 | 348 | 342 | 345 | 380 | 375 | 377 | 427 | 419 | 422 |
| 23 | 336 | 322 | 328 | 349 | 344 | 347 | 381 | 376 | 378 | 427 | 423 | 425 |
| 24 | 337 | 321 | 327 | 353 | 345 | 349 | 381 | 376 | 379 | 433 | 423 | 428 |
| 25 | 345 | 316 | 327 | 356 | 349 | 352 | 380 | 376 | 378 | 433 | 426 | 430 |
| 26 | 331 | 321 | 325 | 358 | 351 | 355 | 381 | 376 | 379 | 452 | 430 | 446 |
| 27 | 329 | 322 | 326 | 359 | 353 | 356 | 382 | 378 | 380 | 455 | 444 | 450 |
| 28 | 333 | 318 | 326 | 360 | 354 | 357 | 383 | 378 | 381 | 461 | 447 | 453 |
| 29 | 332 | 316 | 324 | 360 | 349 | 354 | 386 | 380 | 382 | 461 | 444 | 453 |
| 30 | 330 | 323 | 326 | 356 | 352 | 354 | 386 | 379 | 383 | 462 | 446 | 453 |
| 31 | --- | --- | --- | 359 | 354 | 356 | 392 | 385 | 388 | --- | --- | --- |
| MONTH | 636 | 315 | 384 | 360 | 319 | 338 | 392 | 356 | 371 | 462 | 389 | 420 |

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|-----|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 17.9 | 13.4 | 16.0 | 11.1 | 10.9 | 11.0 | 9.0 | 2.8 | 6.0 | 6.5 | 3.5 | 4.8 |
| 2 | 17.3 | 16.3 | 16.8 | 11.3 | 10.6 | 10.9 | 9.3 | 4.0 | 6.5 | 6.6 | 2.6 | 4.7 |
| 3 | 18.1 | 16.7 | 17.2 | 11.0 | 9.8 | 10.3 | 6.3 | 2.9 | 4.6 | 8.2 | 3.0 | 5.5 |
| 4 | 17.9 | 16.7 | 17.1 | 10.4 | 9.6 | 9.8 | 5.6 | 3.0 | 4.6 | 6.9 | 4.5 | 5.9 |
| 5 | 17.7 | 16.4 | 16.8 | 10.8 | 9.5 | 9.9 | 6.6 | 4.8 | 5.5 | 6.1 | 3.7 | 5.1 |
| 6 | 17.5 | 16.3 | 16.7 | 10.7 | 9.6 | 10 | 7.4 | 2.7 | 5.1 | 9.3 | 5.5 | 7.0 |
| 7 | 17.4 | 16.2 | 16.6 | 10.6 | 9.5 | 9.8 | 7.8 | 3.2 | 5.4 | 8.7 | 3.8 | 6.4 |
| 8 | 17.3 | 16.1 | 16.4 | 10.4 | 9.6 | 9.8 | 7.7 | 4.1 | 5.6 | 9.1 | 4.5 | 6.5 |
| 9 | 18.2 | 15.8 | 16.6 | 10.5 | 9.4 | 9.8 | 7.0 | 2.3 | 4.6 | 7.3 | 3.5 | 5.5 |
| 10 | 18.2 | 15.4 | 16.3 | 10.0 | 9.0 | 9.3 | 7.2 | 2.5 | 4.8 | 6.1 | 2.4 | 4.3 |
| 11 | 18.6 | 14.9 | 16.3 | 9.9 | 8.8 | 9.2 | 7.8 | 2.9 | 5.4 | 4.1 | 3.0 | 3.5 |
| 12 | 17.9 | 13.4 | 15.5 | 9.6 | 8.6 | 9.0 | 7.7 | 3.4 | 5.7 | 7.9 | 3.2 | 5.2 |
| 13 | 18.3 | 10.5 | 14.1 | 9.6 | 8.9 | 9.1 | 8.2 | 3.2 | 5.5 | 8.8 | 3.0 | 5.8 |
| 14 | 17.4 | 10.7 | 13.9 | 9.3 | 8.6 | 9.0 | 8.3 | 3.1 | 5.7 | 7.2 | 3.8 | 5.5 |
| 15 | 17.0 | 9.6 | 13.1 | 10.2 | 6.5 | 8.2 | 6.6 | 4.4 | 5.6 | 7.8 | 2.8 | 5.3 |
| 16 | 17.1 | --- | --- | 10.3 | 3.3 | 6.4 | 7.6 | 2.3 | 5.4 | 6.0 | 2.4 | 3.7 |
| 17 | 17.1 | 9.6 | 13.3 | 11.0 | 5.7 | 7.9 | 8.2 | 4.1 | 5.8 | 4.9 | 2.1 | 3.0 |
| 18 | 17.7 | 10.2 | 13.5 | 11.2 | 5.9 | 8.1 | 6.4 | 3.7 | 4.9 | 4.6 | 1.7 | 2.7 |
| 19 | 16.7 | 10.5 | 13.2 | 11.0 | 4.5 | 7.2 | 7.1 | 3.6 | 5.0 | 5.2 | 1.8 | 3.1 |
| 20 | 17.4 | 10.1 | 13.2 | 11.0 | 5.1 | 7.7 | 6.6 | 2.1 | 4.2 | 5.6 | 2.4 | 3.5 |
| 21 | --- | 10.7 | 12.6 | 11.9 | 4.8 | 8.1 | 6.3 | 2.9 | 4.2 | 4.8 | 2.3 | 3.1 |
| 22 | 14.7 | 10.3 | 12.2 | 11.3 | 5.1 | 8.2 | 5.9 | 2.1 | 4.1 | 2.6 | 1.9 | 2.2 |
| 23 | 12.0 | 8.1 | 10.6 | 11.7 | 4.9 | 8.2 | 4.2 | 2.5 | 3.4 | 4.7 | 1.9 | 2.6 |
| 24 | 11.6 | 11.6 | 11.6 | 6.8 | 4.3 | 5.5 | 4.4 | 1.8 | 2.8 | 4.5 | 2.0 | 2.9 |
| 25 | --- | --- | --- | 6.0 | 3.4 | 4.4 | 4.3 | 0.9 | 2.4 | 5.0 | 2.1 | 3.1 |
| 26 | --- | --- | --- | 5.5 | 1.9 | 3.6 | 4.2 | 0.8 | 2.3 | 5.4 | 1.8 | 3.2 |
| 27 | --- | --- | --- | 6.1 | 1.6 | 3.8 | 4.4 | 1.1 | 2.6 | 5.6 | 2.6 | 3.7 |
| 28 | --- | --- | --- | 7.6 | 2.7 | 5.0 | 5.2 | 1.9 | 3.5 | 5.8 | 2.5 | 3.5 |
| 29 | --- | --- | --- | 10.0 | 4.5 | 6.8 | 7.4 | 3.5 | 4.9 | 5.6 | 2.5 | 3.5 |
| 30 | --- | --- | --- | 8.7 | 4.1 | 6.1 | 7.6 | 3.2 | 5.0 | 4.4 | 2.3 | 3.2 |
| 31 | 11.5 | 11.0 | 11.3 | --- | --- | --- | 6.2 | 2.3 | 4.3 | 5.4 | 2.8 | 3.7 |
| MONTH | --- | --- | --- | 11.9 | 1.6 | 8.1 | 9.3 | 0.8 | 4.7 | 9.3 | 1.7 | 4.2 |
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| | | | | | | | | | | | | |
| 1 | 5.6 | 2.9 | 3.8 | 6.0 | 2.6 | 3.5 | 8.6 | 6.2 | 7.0 | 11.1 | 10.1 | 10.4 |
| 2 | 5.0 | 2.8 | 3.6 | 6.0 | 2.6 | 3.6 | 8.6 | 7.0 | 7.6 | 11.4 | 10.1 | 10.5 |
| 3 | 5.6 | 2.5 | 3.5 | 5.9 | 2.2 | 3.7 | 8.4 | 7.3 | 7.7 | 12.3 | 10.2 | 10.9 |
| 4 | 5.4 | 2.2 | 3.3 | 3.4 | 2.2 | 2.9 | 7.8 | 7.1 | 7.4 | 11.9 | 10.5 | 11.2 |
| 5 | 5.2 | 2.3 | 3.3 | 5.8 | 2.2 | 3.3 | 7.7 | 7.0 | 7.2 | 12.0 | 10.8 | 11.3 |
| 6 | 3.8 | 1.8 | 2.5 | 6.2 | 2.4 | 3.8 | 7.7 | 7.0 | 7.2 | 11.9 | 10.8 | 11.2 |
| 7 | 4.6 | 1.3 | 2.3 | 6.8 | 2.7 | 4.1 | 7.7 | 7.0 | 7.2 | 12.1 | 10.9 | 11.5 |
| 8 | 4.6 | 1.0 | 2.1 | 7.0 | 3.1 | 4.5 | 8.6 | 7.0 | 7.6 | 14.8 | 11.0 | 12.6 |
| 9 | 3.3 | 1.1 | 1.9 | 7.2 | 3.1 | 4.6 | 8.7 | 6.9 | 7.6 | 15.4 | 10.5 | 12.0 |
| 10 | 4.5 | 1.1 | 2.2 | 7.3 | 3.4 | 4.8 | 9.1 | 7.1 | 7.9 | 13.3 | 11.1 | 12.0 |
| 11 | 4.3 | 1.4 | 2.4 | 7.6 | 3.5 | 5.2 | 8.9 | 7.1 | 7.7 | 13.6 | 11.1 | 12.1 |
| 12 | 5.3 | 1.8 | 3.1 | 8.1 | 4.2 | 5.5 | 8.1 | 7.2 | 7.5 | 14.1 | 11.3 | 12.4 |
| 13 | 4.3 | 2.6 | 3.2 | 8.4 | 4.2 | 5.8 | 8.2 | 7.2 | 7.6 | 13.1 | 11.4 | 12.3 |
| 14 | 4.9 | 2.7 | 3.4 | 8.4 | 4.4 | 5.9 | 8.1 | 7.2 | 7.5 | 13.1 | 12.1 | 12.5 |
| 15 | 3.5 | 2.5 | 2.9 | 8.7 | 4.7 | 6.1 | 9.2 | 7.3 | 7.8 | 13.0 | 12.0 | 12.5 |
| 16 | 3.7 | 2.4 | 2.8 | 7.2 | 4.5 | 5.6 | 11.1 | 8.5 | 9.5 | 13.2 | 12.5 | 12.7 |
| 17 | 5.5 | 2.4 | 3.5 | 5.6 | 4.8 | 5.1 | 9.5 | 8.5 | 8.8 | 13.2 | 12.5 | 12.7 |
| 18 | 3.7 | 2.7 | 3.1 | 5.6 | 4.7 | 5.1 | 10.5 | 8.3 | 9.3 | 13.3 | 12.5 | 12.8 |
| 19 | 4.9 | 2.3 | 3.1 | 5.4 | 5.0 | 5.3 | 9.5 | 8.9 | 9.2 | 13.0 | 12.4 | 12.7 |
| 20 | 4.5 | 2.0 | 2.9 | 6.4 | 5.2 | 5.7 | 10.1 | 9.1 | 9.4 | 13.7 | 12.8 | 13.1 |
| 21 | 5.6 | 2.1 | 3.2 | 5.8 | 5.3 | 5.6 | 10.1 | 9.1 | 9.4 | 13.3 | 12.8 | 13.0 |
| 22 | 5.6 | 2.2 | 3.3 | 6.3 | 5.3 | 5.6 | 10.2 | 9.1 | 9.6 | 14.0 | 12.9 | 13.4 |
| 23 | 4.9 | 1.8 | 2.9 | 6.3 | 5.2 | 5.6 | 10.1 | 9.0 | 9.6 | 14.0 | 12.9 | 13.5 |
| 24 | 4.5 | 1.5 | 2.3 | 6.2 | 5.3 | 5.6 | 10.7 | 9.6 | 10.0 | 14.4 | 12.7 | 13.7 |
| 25 | 4.7 | 1.7 | 2.7 | 6.6 | 5.3 | 5.7 | 10.8 | 9.8 | 10.1 | 14.2 | 13.0 | 13.7 |
| 26 | 4.0 | 2.2 | 2.9 | 6.4 | 5.1 | 5.6 | 11.0 | 9.7 | 10.2 | 14.4 | 13.5 | 14.0 |
| 27 | 5.6 | 2.3 | 3.4 | 7.7 | 5.6 | 6.5 | --- | 9.8 | --- | 14.4 | 13.9 | 14.2 |
| 28 | 4.5 | 2.2 | 3.1 | 7.3 | 6.0 | 6.5 | --- | --- | --- | 14.8 | 14.0 | 14.4 |
| 29 | --- | --- | --- | 7.2 | 5.8 | 6.2 | 11.3 | 9.9 | 10.7 | 15.2 | 13.8 | 14.6 |
| 30 | --- | --- | --- | 8.0 | 5.7 | 6.4 | 11.1 | 9.9 | 10.3 | 15.4 | 14.2 | 14.9 |
| 31 | --- | --- | --- | 8.2 | 5.8 | 6.7 | --- | --- | --- | 15.8 | 14.5 | 15.2 |
| MONTH | 5.6 | 1.0 | 3.0 | 8.7 | 2.2 | 5.2 | --- | --- | --- | 15.8 | 10.1 | 12.7 |

ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 18.1 | 15.4 | 16.2 | 18.8 | 17.9 | 18.3 | 22.1 | 20.8 | 21.4 | 22.7 | 21.8 | 22.1 |
| 2 | 16.5 | 15.5 | 16.1 | 19.0 | 17.8 | 18.4 | 22.1 | 21.3 | 21.7 | 22.7 | 21.5 | 22.0 |
| 3 | 16.6 | 15.9 | 16.2 | 19.3 | 17.7 | 18.4 | 22.3 | 21.4 | 21.8 | 22.2 | 21.2 | 21.5 |
| 4 | 16.9 | 15.6 | 16.4 | 19.3 | 17.9 | 18.5 | 22.3 | 21.5 | 22.0 | 22.5 | 20.9 | 21.5 |
| 5 | 17.2 | 16.0 | 16.7 | 18.9 | 18.0 | 18.6 | 22.5 | 21.7 | 22.0 | 22.6 | 21.0 | 21.5 |
| 6 | 16.7 | 15.2 | 16.2 | 19.1 | 18.2 | 18.5 | 22.6 | 21.7 | 22.1 | 22.3 | 21.2 | 21.5 |
| 7 | 16.5 | 15.2 | 16.1 | 19.2 | 18.2 | 18.7 | 22.5 | 21.8 | 22.1 | 21.9 | 21.2 | 21.4 |
| 8 | 16.3 | 15.5 | 16.0 | 19.4 | 18.4 | 18.8 | 22.9 | 21.3 | 22.0 | 22.3 | 21.1 | 21.5 |
| 9 | 16.3 | 15.5 | 15.9 | 19.4 | 18.3 | 18.9 | 22.8 | 21.3 | 21.9 | 21.7 | 21.1 | 21.3 |
| 10 | 16.3 | 15.5 | 15.9 | 19.5 | 18.7 | 19.1 | 22.8 | 21.3 | 21.9 | 21.8 | 20.9 | 21.3 |
| 11 | 16.9 | 15.3 | 16.2 | 19.8 | 18.5 | 19.0 | 22.8 | 21.6 | 22.0 | 21.6 | 20.7 | 21.0 |
| 12 | 17.1 | 15.5 | 16.6 | 19.7 | 18.7 | 19.1 | 22.7 | 21.5 | 22.0 | 21.3 | 20.4 | 20.8 |
| 13 | 17.0 | 16.4 | 16.7 | 19.7 | 18.8 | 19.2 | 23.0 | 21.6 | 22.1 | 20.4 | 19.7 | 20.0 |
| 14 | 17.1 | 16.5 | 16.8 | 19.8 | 19.0 | 19.4 | 23.1 | 21.5 | 22.1 | 20.3 | 19.5 | 19.8 |
| 15 | 17.2 | 16.7 | 16.9 | 20.0 | 19.2 | 19.6 | 22.9 | 21.6 | 22.1 | 19.9 | 19.0 | 19.5 |
| 16 | 18.1 | 16.6 | 17.1 | 20.1 | 19.2 | 19.7 | 23.1 | 21.6 | 22.2 | 19.7 | 18.9 | 19.2 |
| 17 | 17.9 | 16.7 | 17.2 | 20.2 | 19.4 | 19.8 | 23.4 | 21.8 | 22.3 | 19.3 | 18.0 | 18.9 |
| 18 | 17.5 | 16.9 | 17.2 | 20.1 | 19.5 | 19.8 | 22.8 | 21.8 | 22.2 | 19.4 | 18.0 | 18.7 |
| 19 | 17.7 | 16.7 | 17.2 | 20.8 | 19.4 | 20.0 | 23.1 | 21.7 | 22.3 | 19.5 | 17.9 | 18.5 |
| 20 | 17.6 | 16.8 | 17.3 | 20.3 | 19.7 | 20.0 | 23.0 | 22.0 | 22.4 | 19.0 | 17.8 | 18.3 |
| 21 | 17.5 | 16.9 | 17.2 | 20.8 | 19.5 | 20.0 | 23.0 | 21.9 | 22.3 | 18.9 | 17.6 | 18.1 |
| 22 | 17.8 | 17.0 | 17.4 | 20.5 | 19.7 | 20.1 | 23.1 | 21.8 | 22.3 | 18.7 | 17.2 | 17.9 |
| 23 | 17.8 | 16.9 | 17.5 | 20.9 | 19.9 | 20.3 | 23.1 | 21.9 | 22.4 | 18.9 | 17.4 | 17.9 |
| 24 | 17.9 | 16.9 | 17.4 | 21.0 | 19.6 | 20.3 | 23.3 | 22.1 | 22.6 | 19.0 | 17.3 | 17.9 |
| 25 | 18.2 | 16.6 | 17.5 | 21.1 | 19.9 | 20.4 | 23.2 | 22.2 | 22.5 | 19.6 | 16.9 | 17.9 |
| 26 | 18.3 | 17.2 | 17.7 | 21.1 | 19.9 | 20.5 | 23.2 | 22.3 | 22.5 | 20.0 | 16.7 | 17.9 |
| 27 | 18.6 | 17.4 | 17.9 | 21.0 | 20.0 | 20.5 | 23.2 | 22.1 | 22.5 | 19.9 | 16.6 | 17.8 |
| 28 | 18.5 | 17.3 | 17.9 | 21.1 | 20.3 | 20.6 | 22.8 | 22.3 | 22.5 | 19.6 | 16.1 | 17.4 |
| 29 | 18.5 | 17.3 | 18.0 | 22.1 | 20.4 | 20.9 | 23.1 | 22.1 | 22.5 | 19.7 | 16.2 | 17.5 |
| 30 | 18.9 | 17.8 | 18.2 | 21.7 | 20.6 | 21.2 | 22.9 | 22.2 | 22.4 | 19.2 | 16.4 | 17.3 |
| 31 | --- | --- | --- | 22.0 | 20.8 | 21.2 | 22.5 | 22.0 | 22.2 | --- | --- | --- |
| MONTH | 18.9 | 15.2 | 16.9 | 22.1 | 17.7 | 19.6 | 23.4 | 20.8 | 22.2 | 22.7 | 16.1 | 19.6 |

382624104472400 POND 46.212 NEAR TELLER RESERVOIR AT FORT CARSON, CO

LOCATION (REVISED).--Lat 38°26'21", long 104°47'11", in NE¹/₄SW¹/₄ sec.33, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, near center of dam on unnamed tributary of Wildhorse Creek, 2.2 mi east of Teller Reservoir dam, and 3.2 mi southeast of Stone City.

DRAINAGE AREA.--0.35 mi² (from Agricultural Research Service).

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--April 1999 to September 2001, October 2001 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=382624104472400

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 5,580 ft above NGVD of 1929, from topographic map.

REMARKS.--Reservoir is formed by an earthfill dam. All figures represent total contents from area-capacity table effective Apr. 28, 1999, and based on a 1997 survey by the Agricultural Research Service. Total capacity, 7.26 acre-ft at elevation 15.28 ft. Elevation of high crest of spillway, about 15.28 ft. Elevation of no contents, about 1.81 ft. Reservoir is used for flood retention and erosion control.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 0.41 acre-ft, June 13, 2003, elevation, 5.20 ft; no contents on most days.

EXTREMES FOR CURRENT WATER YEAR.--Maximum contents, 0.41 acre-ft, June 13, elevation, 5.20 ft; no contents on most days.

Capacity table
(Elevation, in feet, and contents, in acre-feet, effective April 28, 1999)

| Elevation | Capacity | Elevation | Capacity | Elevation | Capacity | Elevation | Capacity |
|-----------|----------|-----------|----------|-----------|----------|-----------|----------|
| 1.81 | 0.000 | 5.04 | 0.36 | 8.81 | 1.94 | 12.81 | 4.79 |
| 2.00 | 0.002 | 5.75 | 0.57 | 9.81 | 2.53 | 13.81 | 5.71 |
| 2.94 | 0.02 | 7.00 | 1.05 | 10.81 | 3.21 | 14.81 | 6.20 |
| 3.99 | 0.13 | 7.81 | 1.41 | 11.81 | 3.96 | 15.28 | 7.26 |

RESERVOIR STORAGE, ACRE FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY OBSERVATION AT 2400 HOURS

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-----|------|-----|-----|-----|-----|-----|------|------|-------|------|------|------|
| 1 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.00 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | e0.03 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | e0.02 | 0.00 | 0.00 | 0.00 |
| 24 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | e0.01 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | e0.01 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 27 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.00 | --- | 0.00 | 0.00 | --- |
| MAX | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.32 | 0.00 | 0.00 | 0.00 |
| MIN | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

e Estimated.

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to September 2000 (seasonal records only), October 2000 to September 2001, October 2001 to current year (seasonal records only). Air temperature data available, April 1999 to current year, in files of the district office. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=382624104472400

GAGE.--Tipping-bucket rain gage with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.94 inches, Apr. 30, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.71 inch, Apr. 19.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.06 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 2 | 0.12 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 | 0.12 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.02 | 0.00 | 0.00 | 0.06 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.49 | 0.00 | 0.00 | 0.10 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.01 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.10 | 0.31 | 0.00 | 0.15 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.15 | 0.00 | 0.01 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.71 | 0.00 | 0.14 | 0.11 | 0.00 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.09 | 0.03 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.06 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | 0.04 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.07 | 0.00 | 0.00 | 0.05 | 0.00 |
| 26 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.05 | 0.00 |
| 27 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.17 | 0.00 | 0.01 | 0.00 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.19 | 0.00 | 0.16 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.16 | 0.00 | 0.00 | 0.41 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.01 | --- | 0.00 | 0.00 | --- |
| TOTAL | 0.41 | --- | --- | --- | --- | --- | 0.87 | 0.75 | 1.50 | 0.31 | 0.70 | 0.59 |
| MAX | 0.12 | --- | --- | --- | --- | --- | 0.71 | 0.31 | 0.49 | 0.15 | 0.41 | 0.33 |

0709969 ARKANSAS RIVER AT ST. CHARLES MESA DIVERSION AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'13", long 104°36'20", in SW¼NW¼ sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from intake of Saint Charles Mesa Water Association at Moffat Street at Pueblo, 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi².

PERIOD OF RECORD.--October 1988 to current year. Prior to October 1989, published as Arkansas River at Moffat Street at Pueblo (0709970). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=0709969

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records good except for Oct. 1-2, 11-29, Nov. 15 to Mar. 18, May 8-13, and Sept. 11-30, which are poor. Daily data that are not published are either missing or of unacceptable quality. Specific conductance data is not representative of the stream cross section at the site but is more representative of flow entering the diversion. Specific conductance data representative of the cross section at the site have been published as Arkansas River at Moffat Street at Pueblo (0709970) since the 1991 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,990 microsiemens/cm, Dec. 27, 2002, Jan. 1, 2003; minimum, 225 microsiemens/cm, Aug. 25, 1995.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,990 microsiemens/cm, Dec. 27, Jan. 1; minimum, 287 microsiemens/cm, June 20.

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | OCTOBER | | | NOVEMBER | | | DECEMBER | | | JANUARY | | |
|-------|---------|-------|-------|----------|-------|-------|----------|-------|-------|---------|-------|-------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 2,060 | 1,880 | 1,920 | 878 | 865 | 875 | 2,340 | 2,300 | 2,320 | 2,990 | 2,970 | 2,980 |
| 2 | 2,500 | 579 | 1,340 | 884 | 867 | 877 | 2,480 | 2,340 | 2,430 | 2,980 | 2,940 | 2,960 |
| 3 | 1,380 | 960 | 1,160 | 886 | 861 | 871 | 2,510 | 2,440 | 2,480 | 2,950 | 2,930 | 2,940 |
| 4 | 975 | 869 | 911 | 881 | 840 | 866 | 2,510 | 2,480 | 2,490 | 2,940 | 2,930 | 2,930 |
| 5 | 869 | 856 | 865 | 840 | 819 | 829 | 2,490 | 2,470 | 2,480 | 2,930 | 2,910 | 2,930 |
| 6 | 875 | 846 | 860 | 849 | 820 | 828 | 2,540 | 2,490 | 2,510 | 2,920 | 2,900 | 2,910 |
| 7 | 869 | 845 | 852 | 845 | 824 | 831 | 2,560 | 2,540 | 2,540 | 2,910 | 2,860 | 2,900 |
| 8 | 861 | 839 | 849 | 830 | 820 | 825 | 2,590 | 2,560 | 2,570 | 2,860 | 2,850 | 2,850 |
| 9 | 886 | 842 | 867 | 835 | 819 | 827 | 2,610 | 2,590 | 2,600 | 2,850 | 2,790 | 2,820 |
| 10 | 980 | 854 | 903 | 830 | 813 | 821 | 2,620 | 2,600 | 2,610 | 2,870 | 2,830 | 2,860 |
| 11 | 1,250 | 980 | 1,160 | 819 | 803 | 811 | 2,680 | 2,570 | 2,640 | 2,890 | 2,870 | 2,880 |
| 12 | 1,440 | 1,250 | 1,340 | 817 | 802 | 807 | 2,700 | 2,680 | 2,690 | 2,880 | 2,870 | 2,880 |
| 13 | 1,540 | 1,440 | 1,500 | 818 | 804 | 809 | 2,770 | 2,700 | 2,720 | 2,870 | 2,830 | 2,850 |
| 14 | 1,740 | 1,540 | 1,660 | 818 | 797 | 808 | 2,790 | 2,770 | 2,790 | 2,830 | 2,800 | 2,810 |
| 15 | 1,850 | 1,740 | 1,800 | 883 | 813 | 856 | 2,830 | 2,790 | 2,800 | 2,960 | 2,790 | 2,860 |
| 16 | 2,020 | 1,850 | 1,950 | 880 | 875 | 877 | 2,840 | 2,830 | 2,830 | 2,960 | 2,890 | 2,940 |
| 17 | 2,060 | 1,840 | 1,960 | 956 | 880 | 903 | 2,890 | 2,830 | 2,860 | 2,890 | 2,870 | 2,880 |
| 18 | 1,930 | 1,840 | 1,880 | 1,140 | 956 | 1,040 | 2,890 | 2,890 | 2,890 | 2,930 | 2,870 | 2,900 |
| 19 | 2,020 | 1,930 | 1,990 | 1,470 | 1,120 | 1,300 | 2,890 | 2,880 | 2,890 | 2,950 | 2,850 | 2,910 |
| 20 | 2,030 | 1,900 | 1,990 | 1,490 | 1,390 | 1,450 | 2,890 | 2,880 | 2,890 | 2,860 | 2,830 | 2,850 |
| 21 | 1,960 | 1,900 | 1,930 | 1,550 | 1,490 | 1,520 | 2,900 | 2,880 | 2,890 | 2,860 | 2,820 | 2,850 |
| 22 | 1,980 | 1,960 | 1,970 | 1,740 | 1,550 | 1,620 | 2,920 | 2,900 | 2,910 | 2,830 | 2,820 | 2,820 |
| 23 | 2,030 | 1,970 | 2,010 | 1,820 | 1,670 | 1,750 | 2,930 | 2,910 | 2,920 | 2,860 | 2,820 | 2,850 |
| 24 | 2,060 | 2,030 | 2,050 | 2,000 | 1,820 | 1,890 | 2,940 | 2,920 | 2,930 | 2,870 | 2,860 | 2,870 |
| 25 | 2,080 | 1,760 | 1,940 | 2,100 | 2,000 | 2,080 | 2,950 | 2,930 | 2,940 | 2,870 | 2,850 | 2,860 |
| 26 | 1,890 | 1,760 | 1,780 | 2,130 | 2,050 | 2,090 | 2,970 | 2,950 | 2,960 | 2,860 | 2,830 | 2,840 |
| 27 | 1,920 | 1,830 | 1,910 | 2,170 | 2,130 | 2,140 | 2,990 | 2,970 | 2,980 | 2,860 | 2,790 | 2,800 |
| 28 | 1,860 | 1,820 | 1,830 | 2,190 | 2,170 | 2,180 | 2,980 | 2,970 | 2,970 | 2,810 | 2,690 | 2,780 |
| 29 | 2,030 | 1,020 | 1,230 | 2,240 | 2,190 | 2,210 | 2,970 | 2,950 | 2,960 | 2,860 | 2,800 | 2,840 |
| 30 | 1,030 | 877 | 935 | 2,300 | 2,230 | 2,260 | 2,950 | 2,920 | 2,930 | 2,850 | 2,800 | 2,830 |
| 31 | 878 | 865 | 875 | --- | --- | --- | 2,990 | 2,940 | 2,970 | 2,860 | 2,840 | 2,860 |
| MONTH | 2,500 | 579 | 1,490 | 2,300 | 797 | 1,260 | 2,990 | 2,300 | 2,750 | 2,990 | 2,690 | 2,870 |

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO

LOCATION.--Lat 38°15'13", long 104°36'20", in SW¹/₄NW¹/₄ sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from Saint Charles Mesa Water District intake at Moffat Street at Pueblo, 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099970

REVISED RECORDS: WDR CO-90-1: 1989(M).

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 4,653 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for Nov. 16 to Mar. 17 and July 21, which are fair. Records do not include diversion for municipal supply of Saint Charles Mesa Water District. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow almost completely regulated by Pueblo Reservoir (station 07099350) 8 mi upstream since Jan. 9, 1974.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|---------|------|------|------|---------|--------|----------|---------|--------|-------|-------|
| 1 | 2.2 | 58 | 1.9 | 1.7 | 1.5 | 1.5 | 15 | 128 | 4,050 | 713 | 205 | 202 |
| 2 | 9.7 | 57 | 1.9 | 1.8 | 1.5 | 1.7 | 160 | 80 | 4,620 | 675 | 355 | 139 |
| 3 | 25 | 56 | 1.9 | 1.8 | 1.5 | 1.5 | 195 | 78 | 4,790 | 559 | 338 | 63 |
| 4 | 69 | 63 | 2.0 | 1.7 | 1.5 | 1.5 | 250 | 78 | 4,300 | 536 | 327 | 33 |
| 5 | 70 | 75 | 1.9 | 1.7 | 1.5 | 1.5 | 281 | 90 | 3,430 | 604 | 320 | 54 |
| 6 | 68 | 75 | 1.9 | 1.7 | 1.9 | 1.5 | 302 | 106 | 2,140 | 611 | 321 | 67 |
| 7 | 70 | 78 | 1.9 | 1.7 | 1.5 | 1.5 | 311 | 106 | 1,470 | 608 | 331 | 81 |
| 8 | 68 | 83 | 1.9 | 1.7 | 1.5 | 1.4 | 276 | 60 | 1,170 | 592 | 168 | 112 |
| 9 | 36 | 82 | 1.9 | 1.7 | 1.5 | 1.4 | 236 | 2.3 | 904 | 581 | 61 | 166 |
| 10 | 3.4 | 81 | 1.9 | 1.7 | 1.5 | 1.4 | 223 | 2.9 | 856 | 573 | 61 | 220 |
| 11 | 2.7 | 82 | 1.9 | 1.7 | 1.5 | 1.4 | 223 | 2.4 | 1,200 | 508 | 62 | 260 |
| 12 | 2.3 | 81 | 1.9 | 1.7 | 1.6 | 1.4 | 197 | 2.3 | 1,480 | 441 | 70 | 278 |
| 13 | 2.3 | 80 | 1.9 | 1.7 | 1.5 | 1.4 | 196 | 86 | 1,600 | 442 | 60 | 303 |
| 14 | 2.3 | 76 | 1.9 | 1.7 | 1.7 | 1.4 | 190 | 213 | 1,620 | 455 | 65 | 288 |
| 15 | 2.3 | 17 | 1.9 | 1.7 | 1.5 | 1.5 | 164 | 264 | 1,620 | 502 | 72 | 289 |
| 16 | 2.6 | 1.9 | 1.9 | 1.7 | 1.5 | 1.5 | 165 | 254 | 1,620 | 458 | 71 | 273 |
| 17 | 2.8 | 1.9 | 1.9 | 1.7 | 1.5 | 5.3 | 178 | 446 | 1,610 | 453 | 70 | 204 |
| 18 | 2.5 | 1.9 | 1.9 | 1.7 | 1.5 | 7.6 | 150 | 478 | 1,500 | 400 | 120 | 111 |
| 19 | 2.5 | 1.9 | 1.9 | 1.7 | 5.0 | 46 | 280 | 510 | 1,500 | 369 | 78 | 66 |
| 20 | 2.5 | 1.9 | 1.9 | 1.5 | 1.5 | 89 | 187 | 613 | 1,400 | 300 | 89 | 96 |
| 21 | 2.4 | 1.9 | 1.9 | 1.5 | 1.5 | 127 | 165 | 759 | 1,360 | e255 | 89 | 114 |
| 22 | 2.6 | 1.9 | 1.8 | 1.5 | 1.5 | 131 | 155 | 854 | 1,480 | 231 | 86 | 82 |
| 23 | 2.4 | 1.9 | 1.7 | 1.5 | 1.5 | 132 | 179 | 896 | 1,280 | 231 | 95 | 76 |
| 24 | 2.3 | 1.9 | 1.7 | 1.5 | 1.5 | 104 | 174 | 1,090 | 1,080 | 210 | 94 | 55 |
| 25 | 2.3 | 1.9 | 1.7 | 1.5 | 1.5 | 69 | 170 | 1,420 | 991 | 162 | 107 | 42 |
| 26 | 2.4 | 1.9 | 1.8 | 1.5 | 1.5 | 67 | 77 | 1,870 | 861 | 133 | 116 | 20 |
| 27 | 2.8 | 1.9 | 1.7 | 1.5 | 1.5 | 74 | 75 | 1,940 | 785 | 113 | 116 | 17 |
| 28 | 2.3 | 1.9 | 1.7 | 1.5 | 1.9 | 71 | 77 | 1,950 | 786 | 128 | 126 | 17 |
| 29 | 25 | 1.9 | 1.7 | 1.5 | --- | 43 | 74 | 2,150 | 784 | 197 | 196 | 17 |
| 30 | 54 | 1.9 | 1.7 | 1.5 | --- | 33 | 98 | 2,640 | 756 | 239 | 288 | 16 |
| 31 | 59 | --- | 1.7 | 1.5 | --- | 13 | --- | 3,280 | --- | 218 | 275 | --- |
| TOTAL | 603.6 | 1,072.5 | 57.2 | 50.5 | 46.6 | 1,035.4 | 5,423 | 22,448.9 | 53,043 | 12,497 | 4,832 | 3,761 |
| MEAN | 19.5 | 35.8 | 1.85 | 1.63 | 1.66 | 33.4 | 181 | 724 | 1,768 | 403 | 156 | 125 |
| MAX | 70 | 83 | 2.0 | 1.8 | 5.0 | 132 | 311 | 3,280 | 4,790 | 713 | 355 | 303 |
| MIN | 2.2 | 1.9 | 1.7 | 1.5 | 1.5 | 1.4 | 15 | 2.3 | 756 | 113 | 60 | 16 |
| AC-FT | 1,200 | 2,130 | 113 | 100 | 92 | 2,050 | 10,760 | 44,530 | 105,200 | 24,790 | 9,580 | 7,460 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2003, BY WATER YEAR (WY)

| | 229 | 201 | 104 | 97.0 | 128 | 289 | 531 | 1,072 | 2,071 | 1,366 | 843 | 321 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MAX | 431 | 491 | 330 | 355 | 312 | 623 | 1,031 | 1,716 | 4,111 | 4,290 | 1,616 | 699 |
| (WY) | (1996) | (1998) | (1998) | (2000) | (1996) | (1997) | (1998) | (1996) | (1997) | (1995) | (1995) | (1995) |
| MIN | 19.5 | 35.7 | 1.85 | 1.63 | 1.66 | 33.4 | 107 | 320 | 310 | 213 | 8.23 | 3.70 |
| (WY) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1989 - 2003

| | | | |
|--------------------------|----------|-----------|---------|
| ANNUAL TOTAL | 38,409.2 | 104,870.7 | |
| ANNUAL MEAN | 105 | 287 | 606 |
| HIGHEST ANNUAL MEAN | | | 1,107 |
| LOWEST ANNUAL MEAN | | | 129 |
| HIGHEST DAILY MEAN | 772 | 4,790 | 6,030 |
| LOWEST DAILY MEAN | 1.7 | 1.4 | a1.4 |
| ANNUAL SEVEN-DAY MINIMUM | 1.7 | 1.4 | 1.4 |
| MAXIMUM PEAK FLOW | | 4,880 | b10,400 |
| MAXIMUM PEAK STAGE | | 12.04 | 14.18 |
| ANNUAL RUNOFF (AC-FT) | 76,180 | 208,000 | 439,100 |
| 10 PERCENT EXCEEDS | 290 | 813 | 1,580 |
| 50 PERCENT EXCEEDS | 64 | 68 | 296 |
| 90 PERCENT EXCEEDS | 1.9 | 1.5 | 42 |

e Estimated.

a Also occurred Mar. 9-14, 2003.

b From rating curve extended above 5,190 ft³/s on basis of slope-conveyance and area-velocity study.

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1988 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099970

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to current year.

WATER TEMPERATURE: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance records are fair except for Oct. 1, 12-28, Nov. 15 to Mar. 16, May 11-12, and Sept. 11-30, which are poor. Daily water-temperature records are good except for Oct. 1-2 and May 9-13, which are poor. Daily water-temperature data that are not published are either missing or of unacceptable quality. Daily specific-conductance data that are not published are either during periods of estimated discharge, are missing for the day, or are of unacceptable quality. During low-flow periods in October and November through March, velocities in the gage pool at the monitoring location became sufficiently slow for the water column to become thermally stratified. Recorded water-temperature values during these periods became completely unrepresentative of the river and were not published.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 2,980 microsiemens/cm, Dec. 27, 2002, Jan. 1, 2003; minimum daily mean, 252 microsiemens/cm, June 29, 1993.

WATER TEMPERATURE: Maximum, 27.9°C, July 31, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 2,980 microsiemens/cm, Dec. 27, Jan. 1; minimum daily mean, 351 microsiemens/cm, July 2.

WATER TEMPERATURE: Maximum, 27.5°C, Aug. 11; minimum recorded, 3.1°C, Mar. 19, but was probably lower during periods of unreliable record, Oct. 11-29 and Nov. 15 to Mar. 17.

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Potassium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (90410) | Chloride, water, fltrd, mg/L (00940) | Fluoride, water, fltrd, mg/L (00950) | |
|------|-------|--------------------------------------|--------------------------------|---|---|-----------------------------------|------------------------------------|---------------------------------------|---------------------------------------|------------------------------------|---|--------------------------------------|--------------------------------------|------|
| DEC | 17... | 1300 | 1.9 | 14.4 | 8.4 | 2,720 | 10.5 | 355 | 102 | 4.27 | 198 | E180 | 67.1 | 1.19 |
| MAR | 10... | 1015 | 1.5 | 12.9 | 8.3 | 2,680 | 13.0 | 398 | 119 | 4.39 | 236 | 170 | 68.9 | 1.15 |
| MAY | 28... | 0915 | 1,960 | 8.8 | 8.4 | 673 | 16.0 | 65.4 | 21.0 | 3.22 | 34.7 | 138 | 13.6 | 0.6 |
| AUG | 26... | 1430 | 117 | 8.5 | 8.7 | 481 | 26.0 | 57.0 | 15.2 | 2.67 | 24.9 | 101 | 8.77 | 0.5 |

WATER-QUALITY DATA COLLECTED AS PART OF PREFERRED STORAGE OPTIONS PLAN,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Sulfate water, fltrd, mg/L (00945) | |
|------|------------------------------------|-------|
| DEC | 17... | 1,370 |
| MAR | 10... | 1,330 |
| MAY | 28... | 188 |
| AUG | 26... | 127 |

E -- Estimated laboratory analysis value.

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|-----|------|-------|------|------|------|------|------|
| | | | | | | | | | | | | |
| 1 | 15.8 | 14.8 | 15.3 | 6.8 | 5.5 | 6.2 | --- | --- | --- | --- | --- | --- |
| 2 | 15.1 | 12.6 | 13.4 | 9.2 | 6.5 | 7.7 | --- | --- | --- | --- | --- | --- |
| 3 | 15.2 | 11.4 | 13.2 | 11.1 | 7.2 | 8.7 | --- | --- | --- | --- | --- | --- |
| 4 | 17.6 | 11.6 | 14.2 | 9.5 | 6.9 | 8.1 | --- | --- | --- | --- | --- | --- |
| 5 | 19.1 | 12.9 | 15.6 | 10.4 | 6.4 | 8.3 | --- | --- | --- | --- | --- | --- |
| 6 | 17.9 | 13.3 | 15.5 | 10.8 | 6.3 | 8.5 | --- | --- | --- | --- | --- | --- |
| 7 | 18.8 | 13.0 | 15.7 | 10.4 | 6.6 | 8.7 | --- | --- | --- | --- | --- | --- |
| 8 | 19.1 | 13.5 | 16.2 | 10.7 | 7.6 | 9.2 | --- | --- | --- | --- | --- | --- |
| 9 | 20.2 | 15.0 | 17.4 | 12.0 | 8.3 | 10.0 | --- | --- | --- | --- | --- | --- |
| 10 | 18.9 | 16.9 | 17.8 | 9.9 | 7.0 | 8.5 | --- | --- | --- | --- | --- | --- |
| 11 | --- | --- | --- | 9.5 | 6.1 | 7.7 | --- | --- | --- | --- | --- | --- |
| 12 | --- | --- | --- | 8.9 | 5.4 | 7.2 | --- | --- | --- | --- | --- | --- |
| 13 | --- | --- | --- | 9.5 | 6.7 | 8.1 | --- | --- | --- | --- | --- | --- |
| 14 | --- | --- | --- | 10.0 | 8.1 | 8.8 | --- | --- | --- | --- | --- | --- |
| 15 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | 7.7 | 5.3 | 6.4 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | 6.7 | 5.7 | 6.2 | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MONTH | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | FEBRUARY | | | MARCH | | | APRIL | | | MAY | | |
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | --- | --- | --- | --- | --- | --- | 18.3 | 8.8 | 13.2 | 15.1 | 10.0 | 12.8 |
| 2 | --- | --- | --- | --- | --- | --- | 12.1 | 7.2 | 10.3 | 16.5 | 10.6 | 13.3 |
| 3 | --- | --- | --- | --- | --- | --- | 12.6 | 6.5 | 9.5 | 17.6 | 11.0 | 14.0 |
| 4 | --- | --- | --- | --- | --- | --- | 11.8 | 6.3 | 8.9 | 15.5 | 10.9 | 13.1 |
| 5 | --- | --- | --- | --- | --- | --- | 10.5 | 6.2 | 8.2 | 17.4 | 10.1 | 13.6 |
| 6 | --- | --- | --- | --- | --- | --- | 9.9 | 6.2 | 7.9 | 16.2 | 10.8 | 13.8 |
| 7 | --- | --- | --- | --- | --- | --- | 9.4 | 6.2 | 7.6 | 18.2 | 11.1 | 14.5 |
| 8 | --- | --- | --- | --- | --- | --- | 13.0 | 5.8 | 9.1 | 16.8 | 11.2 | 14.5 |
| 9 | --- | --- | --- | --- | --- | --- | 13.8 | 5.6 | 9.7 | 16.9 | 14.3 | 15.5 |
| 10 | --- | --- | --- | --- | --- | --- | 14.5 | 6.4 | 10.5 | 17.1 | 14.7 | 15.6 |
| 11 | --- | --- | --- | --- | --- | --- | 14.3 | 7.1 | 10.9 | 17.0 | 14.2 | 15.5 |
| 12 | --- | --- | --- | --- | --- | --- | 14.2 | 7.1 | 10.8 | 17.7 | 14.3 | 15.9 |
| 13 | --- | --- | --- | --- | --- | --- | 15.3 | 7.1 | 11.2 | 18.9 | 14.5 | 16.1 |
| 14 | --- | --- | --- | --- | --- | --- | 13.1 | 7.4 | 10.7 | 19.3 | 11.6 | 15.3 |
| 15 | --- | --- | --- | --- | --- | --- | 12.0 | 8.1 | 10.1 | 18.3 | 12.0 | 14.6 |
| 16 | --- | --- | --- | --- | --- | --- | 15.4 | 6.9 | 11.1 | 20.0 | 12.3 | 15.7 |
| 17 | --- | --- | --- | --- | --- | --- | 15.8 | 8.3 | 12.1 | 17.6 | 12.1 | 14.6 |
| 18 | --- | --- | --- | 9.0 | 5.9 | 7.1 | 15.0 | 8.1 | 11.8 | 16.4 | 12.3 | 14.1 |
| 19 | --- | --- | --- | 5.9 | 3.1 | 4.2 | 13.1 | 8.4 | 9.9 | 14.9 | 12.0 | 13.3 |
| 20 | --- | --- | --- | 11.0 | 4.4 | 7.6 | 15.4 | 8.5 | 11.6 | 15.9 | 11.8 | 13.3 |
| 21 | --- | --- | --- | 9.0 | 6.0 | 6.9 | 15.9 | 9.1 | 12.5 | 17.0 | 12.1 | 14.2 |
| 22 | --- | --- | --- | 11.0 | 4.3 | 7.7 | 15.9 | 9.3 | 12.6 | 18.1 | 12.5 | 14.7 |
| 23 | --- | --- | --- | 11.4 | 5.1 | 8.6 | 12.4 | 8.6 | 10.4 | 18.1 | 12.8 | 14.8 |
| 24 | --- | --- | --- | 10.2 | 5.3 | 8.1 | 15.1 | 7.8 | 11.0 | 17.8 | 12.6 | 14.6 |
| 25 | --- | --- | --- | 12.9 | 7.3 | 9.7 | 16.4 | 8.6 | 12.6 | 16.3 | 13.2 | 14.4 |
| 26 | --- | --- | --- | 11.4 | 6.7 | 9.3 | 17.9 | 9.6 | 13.4 | 16.3 | 13.6 | 14.6 |
| 27 | --- | --- | --- | 9.2 | 5.7 | 7.5 | 17.2 | 10.3 | 13.9 | 17.2 | 13.8 | 15.1 |
| 28 | --- | --- | --- | 9.2 | 3.6 | 6.3 | 18.0 | 11.6 | 14.5 | 17.2 | 14.4 | 15.2 |
| 29 | --- | --- | --- | 10.6 | 4.9 | 7.4 | 19.0 | 11.3 | 14.8 | 17.7 | 14.1 | 15.5 |
| 30 | --- | --- | --- | 13.1 | 4.9 | 8.8 | 16.2 | 11.4 | 14.1 | 17.3 | 14.2 | 15.6 |
| 31 | --- | --- | --- | 17.9 | 6.8 | 11.7 | --- | --- | --- | 17.1 | 14.8 | 15.7 |
| MONTH | --- | --- | --- | --- | --- | --- | 19.0 | 5.6 | 11.2 | 20.0 | 10.0 | 14.6 |

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| DAY | JUNE | | | JULY | | | AUGUST | | | SEPTEMBER | | |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
| 1 | 18.7 | 15.5 | 16.7 | 23.0 | 17.6 | 19.7 | 25.5 | 19.2 | 22.3 | 25.5 | 19.6 | 22.3 |
| 2 | 17.6 | 15.7 | 16.6 | 23.2 | 17.4 | 19.8 | 26.5 | 20.0 | 22.9 | 25.5 | 19.3 | 22.5 |
| 3 | 17.7 | 16.1 | 16.7 | 23.8 | 17.4 | 20.1 | 26.3 | 20.3 | 23.0 | 23.1 | 19.7 | 21.5 |
| 4 | 18.3 | 15.7 | 16.7 | 24.1 | 17.4 | 20.3 | 27.3 | 20.3 | 23.3 | 26.4 | 17.7 | 21.2 |
| 5 | 17.4 | 16.1 | 16.8 | 23.8 | 17.6 | 20.2 | 26.4 | 20.6 | 23.3 | 26.8 | 20.1 | 22.7 |
| 6 | 18.7 | 15.4 | 17.0 | 22.5 | 17.7 | 19.7 | 26.5 | 20.2 | 23.1 | 23.7 | 20.0 | 21.4 |
| 7 | 17.4 | 14.8 | 16.0 | 23.4 | 17.5 | 19.8 | 26.8 | 20.6 | 23.2 | 22.0 | 19.2 | 20.6 |
| 8 | 19.4 | 15.5 | 17.0 | 24.3 | 17.9 | 20.4 | 26.6 | 20.7 | 23.1 | 24.5 | 18.8 | 21.6 |
| 9 | 19.2 | 15.1 | 16.6 | 23.6 | 17.4 | 20.0 | 27.4 | 20.8 | 23.6 | 22.4 | 18.7 | 20.6 |
| 10 | 19.5 | 15.4 | 16.7 | 24.1 | 17.8 | 20.5 | 27.4 | 20.2 | 23.6 | 22.6 | 18.3 | 20.5 |
| 11 | 19.4 | 15.1 | 17.0 | 24.4 | 18.0 | 20.7 | 27.5 | 21.3 | 24.1 | 23.1 | 17.5 | 20.0 |
| 12 | 19.3 | 15.3 | 17.1 | 24.0 | 17.9 | 20.6 | 27.3 | 20.6 | 23.7 | 23.5 | 17.1 | 20.2 |
| 13 | 19.0 | 16.2 | 16.9 | 24.5 | 18.5 | 21.1 | 27.0 | 20.5 | 23.4 | 20.3 | 16.4 | 17.7 |
| 14 | 19.6 | 16.2 | 17.3 | 24.0 | 18.0 | 20.8 | 26.7 | 19.9 | 23.0 | 21.7 | 15.8 | 18.5 |
| 15 | 19.8 | 16.3 | 17.6 | 24.7 | 18.5 | 20.9 | 26.2 | 19.9 | 22.9 | 22.4 | 16.2 | 19.1 |
| 16 | 19.3 | 16.4 | 17.5 | 25.0 | 18.9 | 21.4 | 26.3 | 20.2 | 23.1 | 22.5 | 16.3 | 19.4 |
| 17 | 19.9 | 16.7 | 18.0 | 25.3 | 18.8 | 21.6 | 25.3 | 19.5 | 22.3 | 20.3 | 16.7 | 18.2 |
| 18 | 19.8 | 16.7 | 17.8 | 25.5 | 18.5 | 21.7 | 24.7 | 20.6 | 22.4 | 19.3 | 13.8 | 16.4 |
| 19 | 19.4 | 16.8 | 17.7 | 25.7 | 18.9 | 21.8 | 27.1 | 19.4 | 22.9 | 20.3 | 14.0 | 16.9 |
| 20 | 20.2 | 16.0 | 17.5 | 25.2 | 19.2 | 21.8 | 26.9 | 20.7 | 23.8 | 20.1 | 15.3 | 17.6 |
| 21 | 20.1 | 16.3 | 17.9 | 26.4 | --- | --- | 26.6 | 20.8 | 23.8 | 20.9 | 15.7 | 18.3 |
| 22 | 20.3 | 16.6 | 18.1 | 25.5 | 19.0 | 22.3 | 26.4 | 20.5 | 23.4 | 20.1 | 14.7 | 17.5 |
| 23 | 21.0 | 16.7 | 18.4 | 25.0 | 19.2 | 22.1 | 26.3 | 20.3 | 23.1 | 21.2 | 15.5 | 18.3 |
| 24 | 20.9 | 16.7 | 18.3 | 26.6 | 18.8 | 22.5 | 26.8 | 20.3 | 23.5 | 20.5 | 15.8 | 18.0 |
| 25 | 21.3 | 16.2 | 18.3 | 26.3 | 19.5 | 22.9 | 26.8 | 21.0 | 23.6 | 21.3 | 14.9 | 17.7 |
| 26 | 21.8 | 16.7 | 18.7 | 25.9 | 19.5 | 22.9 | 26.7 | 20.5 | 23.4 | 20.4 | 14.7 | 17.2 |
| 27 | 22.3 | 16.6 | 19.0 | 23.7 | 20.4 | 22.2 | 26.7 | 20.1 | 23.4 | 19.4 | 15.3 | 17.1 |
| 28 | 22.3 | 16.9 | 18.8 | 24.4 | 20.0 | 22.2 | 24.3 | 21.1 | 22.0 | 19.0 | 14.6 | 16.6 |
| 29 | 21.0 | 17.0 | 18.7 | 25.4 | 19.2 | 22.1 | 25.1 | 20.0 | 22.1 | 19.1 | 14.7 | 16.6 |
| 30 | 22.9 | 17.3 | 19.6 | 26.0 | 19.4 | 22.6 | 23.4 | 18.9 | 21.3 | 17.9 | 15.3 | 16.5 |
| 31 | --- | --- | --- | 24.6 | 19.1 | 22.0 | 22.9 | 20.0 | 21.2 | --- | --- | --- |
| MONTH | 22.9 | 14.8 | 17.6 | 26.6 | --- | --- | 27.5 | 18.9 | 23.0 | 26.8 | 13.8 | 19.1 |

07099990 FOUNTAIN CREEK AT GREEN MOUNTAIN FALLS, CO

LOCATION.--Lat 38°56'20", long 105°00'55", in NW¼NE¼ sec.8, T.13 S., R.68 W., El Paso County, Hydrologic Unit 11020003, on left bank at upstream side of bridge on Green Mountain Falls Road at Green Mountain Falls, 0.2 mi south of U.S. Highway 24, 0.4 mile upstream from North Catamount Creek, and 1.3 miles downstream from Crystola Creek.

DRAINAGE AREA.--16.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2001 to current year. Site was part of a hydrologic study, water-quality data available, May 1986 to September 1989, published as "Fountain Creek above Green Mountain Falls" (station 385620105005401). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099990

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 7,740 ft above NGVD of 1929, 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, ground-water withdrawals, 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|
| 1 | 0.61 | 0.65 | 0.54 | 0.56 | 0.66 | e0.67 | 0.78 | 1.6 | 1.4 | 1.4 | 0.98 | 0.66 |
| 2 | 0.68 | 0.69 | 0.55 | 0.60 | 0.69 | e0.66 | 0.77 | 1.6 | 1.2 | 1.0 | 1.1 | 0.62 |
| 3 | 0.65 | 0.71 | 0.56 | 0.56 | e0.68 | 0.65 | 0.76 | 1.6 | 1.0 | 1.1 | 0.94 | 2.5 |
| 4 | 0.64 | 0.68 | 0.55 | 0.56 | e0.66 | e0.64 | 0.72 | 1.5 | 1.0 | 0.89 | 1.00 | 0.63 |
| 5 | 0.67 | 0.72 | 0.57 | 0.56 | e0.65 | e0.66 | 0.71 | 1.4 | 1.3 | 0.78 | 1.0 | 0.52 |
| 6 | 0.75 | 0.73 | 0.57 | 0.56 | e0.65 | 0.70 | 0.71 | 1.4 | 1.1 | 0.69 | 1.0 | 0.53 |
| 7 | 0.77 | 0.75 | 0.57 | 0.56 | e0.63 | 0.66 | 0.67 | 1.4 | 1.0 | 0.71 | 0.96 | 2.3 |
| 8 | 0.80 | 0.77 | 0.54 | 0.61 | e0.65 | 0.69 | 0.70 | 1.3 | 0.97 | 0.57 | 1.0 | 0.60 |
| 9 | 0.80 | 0.78 | 0.55 | e0.62 | e0.67 | 0.67 | 0.80 | 1.3 | 0.88 | 0.50 | 1.2 | 0.42 |
| 10 | 0.76 | 0.77 | 0.61 | e0.62 | e0.68 | 0.66 | 1.2 | 1.3 | 0.86 | 0.68 | 0.74 | 0.47 |
| 11 | 0.65 | 0.71 | 0.57 | 0.62 | e0.68 | 0.73 | 1.6 | 1.3 | 0.78 | 0.45 | 0.86 | 0.43 |
| 12 | 0.63 | 0.66 | 0.58 | e0.62 | 0.65 | 0.79 | 2.0 | 1.2 | 0.80 | 0.46 | 0.65 | 0.38 |
| 13 | 0.64 | 0.68 | 0.55 | 0.61 | 0.66 | 0.90 | 2.8 | 1.2 | 0.78 | 0.51 | 0.48 | 0.35 |
| 14 | 0.63 | 0.72 | 0.54 | 0.61 | 0.71 | 0.92 | 2.8 | 1.2 | 0.84 | 0.50 | 0.42 | 0.34 |
| 15 | 0.63 | 0.66 | 0.54 | 0.59 | 0.71 | 0.92 | 2.6 | 1.2 | 0.78 | 0.54 | 0.45 | 0.36 |
| 16 | 0.64 | 0.64 | 0.54 | e0.59 | e0.69 | 0.89 | 2.5 | 1.3 | 0.75 | 0.50 | 0.48 | 0.40 |
| 17 | 0.64 | 0.63 | 0.56 | e0.59 | e0.70 | 0.92 | 2.5 | 1.3 | 0.90 | 0.52 | 0.47 | 0.45 |
| 18 | 0.63 | 0.63 | 0.55 | e0.59 | 0.72 | 1.3 | 2.4 | 1.2 | 1.1 | 0.55 | 0.93 | 0.41 |
| 19 | 0.64 | 0.60 | e0.54 | 0.59 | e0.70 | 1.2 | 2.3 | 1.2 | 0.92 | 1.0 | 0.40 | 0.34 |
| 20 | 0.67 | 0.59 | e0.53 | 0.58 | e0.68 | 0.79 | 2.3 | 1.2 | 1.00 | 0.29 | 0.43 | 0.35 |
| 21 | 0.68 | 0.60 | 0.55 | 0.57 | e0.69 | 0.75 | 2.7 | 1.2 | 0.81 | 0.28 | 0.40 | 0.30 |
| 22 | 0.70 | 0.61 | e0.52 | 0.56 | e0.70 | 0.78 | 2.8 | 1.2 | 0.89 | 0.29 | 0.34 | 0.37 |
| 23 | 0.72 | 0.61 | e0.52 | 0.58 | e0.68 | 0.88 | 2.6 | 1.1 | 0.87 | 0.39 | 0.39 | 0.34 |
| 24 | 0.72 | 0.60 | e0.51 | 0.58 | e0.65 | 0.92 | 2.5 | 1.1 | 0.82 | 0.34 | 1.1 | 0.36 |
| 25 | 0.74 | 0.57 | e0.52 | 0.58 | e0.64 | 0.95 | 2.3 | 1.2 | 0.89 | 0.32 | 0.30 | 0.40 |
| 26 | 0.75 | 0.57 | e0.55 | 0.60 | 0.65 | 0.94 | 2.0 | 1.2 | 3.0 | 0.33 | 0.35 | 0.46 |
| 27 | 0.84 | 0.63 | e0.57 | 0.62 | 0.67 | 0.86 | 1.8 | 1.1 | 1.5 | 0.33 | 0.45 | 0.52 |
| 28 | 0.82 | 0.56 | 0.58 | 0.64 | e0.67 | 0.70 | 1.8 | 1.1 | 1.1 | 0.40 | 0.55 | 0.50 |
| 29 | 0.78 | 0.56 | 0.58 | 0.64 | --- | 0.90 | 1.8 | 1.2 | 1.2 | 0.63 | 0.66 | 0.48 |
| 30 | 0.66 | 0.55 | 0.56 | 0.64 | --- | 0.85 | 1.8 | 1.2 | 1.9 | 1.0 | 0.65 | 0.49 |
| 31 | 0.64 | --- | 0.57 | 0.65 | --- | 0.76 | --- | 1.9 | --- | 1.0 | 0.95 | --- |
| TOTAL | 21.58 | 19.63 | 17.14 | 18.46 | 18.87 | 25.31 | 53.72 | 40.2 | 32.34 | 18.95 | 21.63 | 17.28 |
| MEAN | 0.70 | 0.65 | 0.55 | 0.60 | 0.67 | 0.82 | 1.79 | 1.30 | 1.08 | 0.61 | 0.70 | 0.58 |
| MAX | 0.84 | 0.78 | 0.61 | 0.65 | 0.72 | 1.3 | 2.8 | 1.9 | 3.0 | 1.4 | 1.2 | 2.5 |
| MIN | 0.61 | 0.55 | 0.51 | 0.56 | 0.63 | 0.64 | 0.67 | 1.1 | 0.75 | 0.28 | 0.30 | 0.30 |
| AC-FT | 43 | 39 | 34 | 37 | 37 | 50 | 107 | 80 | 64 | 38 | 43 | 34 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2003, BY WATER YEAR (WY)

| | 2001 | 2002 | 2003 | 2001 | 2002 | 2003 | 2001 | 2002 | 2003 | 2001 | 2002 | 2003 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.80 | 0.84 | 0.75 | 0.79 | 0.81 | 1.03 | 1.96 | 1.79 | 1.11 | 0.89 | 0.83 | 0.65 |
| MAX | 0.90 | 1.03 | 0.95 | 0.98 | 0.95 | 1.24 | 2.58 | 3.08 | 1.66 | 1.60 | 1.32 | 0.88 |
| (WY) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2001) | (2001) | (2001) | (2001) | (2001) | (2001) |
| MIN | 0.70 | 0.65 | 0.55 | 0.60 | 0.67 | 0.82 | 1.50 | 1.01 | 0.59 | 0.44 | 0.48 | 0.50 |
| (WY) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

| | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | WATER YEARS 2001 - 2003 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 291.65 | | 305.11 | | | |
| ANNUAL MEAN | 0.80 | | 0.84 | | 0.86 | |
| HIGHEST ANNUAL MEAN | | | | | 0.88 2002 | |
| LOWEST ANNUAL MEAN | | | | | 0.84 2003 | |
| HIGHEST DAILY MEAN | 2.3 | Apr 1 | 3.0 | Jun 26 | 8.1 | Jul 13, 2001 |
| LOWEST DAILY MEAN | 0.38 | Jun 30 | 0.28 | Jul 21 | 0.28 | Jul 21, 2003 |
| ANNUAL SEVEN-DAY MINIMUM | 0.42 | Jul 27 | 0.32 | Jul 20 | 0.32 | Jul 20, 2003 |
| MAXIMUM PEAK FLOW | | | a57 | Sep 3 | b183 | Jul 13, 2001 |
| MAXIMUM PEAK STAGE | | | 5.09 Sep 3 | | 6.43 | Jul 13, 2001 |
| ANNUAL RUNOFF (AC-FT) | 578 | | 605 | | 622 | |
| 10 PERCENT EXCEEDS | 1.2 | | 1.3 | | 1.3 | |
| 50 PERCENT EXCEEDS | 0.68 | | 0.67 | | 0.78 | |
| 90 PERCENT EXCEEDS | 0.44 | | 0.46 | | 0.45 | |

e Estimated.

a From rating curve extended above 3.9 ft³/s on basis of slope-conveyance measurement of peak flow.

b From slope-conveyance measurement of peak flow.

07099990 FOUNTAIN CREEK AT GREEN MOUNTAIN FALLS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2001 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07099990

GAGE.--Tipping-bucket rain gage with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.22 inches, Aug. 1, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.85 inch, Sept. 7.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.34 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| 2 | 0.12 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.29 | 0.13 |
| 3 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.06 | 0.48 |
| 4 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.06 | 0.00 | 0.11 | 0.00 |
| 5 | 0.01 | --- | --- | --- | --- | --- | 0.06 | 0.00 | 0.53 | 0.00 | 0.12 | 0.02 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.16 | 0.00 | 0.06 | 0.00 | 0.00 | 0.09 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.14 | 0.01 | 0.00 | 0.85 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.04 | 0.02 | 0.00 | 0.07 | 0.00 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.03 | 0.02 | 0.00 | 0.02 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.37 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.44 | 0.14 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.07 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.04 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.09 | 0.31 | 0.00 | 0.21 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.52 | 0.02 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.17 | 0.00 | 0.01 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.07 | 0.02 | 0.00 | 0.14 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.22 | 0.02 | 0.42 | 0.37 | 0.00 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.16 | 0.06 | 0.01 | 0.01 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.00 | 0.12 | 0.03 | 0.00 |
| 23 | 0.02 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.00 | 0.41 | 0.19 | 0.00 |
| 24 | 0.01 | --- | --- | --- | --- | --- | 0.60 | 0.06 | 0.00 | 0.00 | 0.44 | 0.00 |
| 25 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.25 | 0.01 | 0.01 | 0.00 |
| 26 | 0.14 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.15 | 0.01 | 0.04 | 0.00 |
| 27 | 0.32 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| 28 | 0.03 | --- | --- | --- | --- | --- | 0.00 | 0.06 | 0.16 | 0.01 | 0.04 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.08 | 0.66 | 0.29 | 0.25 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.13 | 0.15 | 0.00 | 0.32 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.43 | --- | 0.00 | 0.10 | --- |
| TOTAL | 1.01 | --- | --- | --- | --- | --- | 1.36 | 1.32 | 4.20 | 1.61 | 2.62 | 1.68 |
| MAX | 0.34 | --- | --- | --- | --- | --- | 0.60 | 0.43 | 0.66 | 0.41 | 0.44 | 0.85 |

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°51'17", long 104°52'39", in SE¹/₄SW¹/₄ sec.3, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 200 ft upstream from diversion to city of Colorado Springs, 0.5 mi east of bridge on U.S. Highway 24, 1.0 mi downstream from Sutherland Creek, and 3.3 mi northwest of courthouse in Colorado Spring.

DRAINAGE AREA.--103 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1958 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103700

REVISED RECORDS.--WDR CO-99-1: 1997(M).

GAGE.--Water-stage recorder with satellite telemetry, crest-stage gage, and V-notch weir. Elevation of gage is 6,110 ft above NGVD of 1929, from topographic map. Feb. 4 to Apr. 15, 1992, gage temporarily located 80 ft upstream, at same datum.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, and return flows from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| 1 | 4.2 | 5.4 | 4.6 | 4.1 | 4.4 | 5.0 | 8.0 | 10 | 14 | 12 | 5.3 | 9.8 |
| 2 | 5.3 | 5.5 | 4.7 | 4.0 | 4.5 | 5.7 | 9.1 | 10 | 12 | 10 | 14 | 8.9 |
| 3 | 4.9 | 5.4 | 4.6 | 4.2 | 4.6 | 5.8 | 9.1 | 10 | 11 | 9.2 | 8.8 | 15 |
| 4 | 4.2 | 5.4 | 4.7 | 3.8 | 3.5 | 5.1 | 8.1 | 10 | 13 | 8.4 | 10 | 12 |
| 5 | 3.9 | 5.1 | 4.5 | 4.1 | 4.1 | 4.9 | 9.0 | 9.8 | 18 | 8.7 | 7.1 | 10 |
| 6 | 3.8 | 5.0 | 3.9 | 4.3 | 3.9 | 5.0 | 9.7 | 9.3 | 14 | 8.3 | 6.6 | 10 |
| 7 | 3.8 | 4.7 | 3.6 | 4.3 | 3.3 | 5.3 | 8.0 | 9.9 | 13 | 8.1 | 5.3 | 14 |
| 8 | 3.8 | 4.7 | 4.0 | 4.4 | 3.6 | 5.3 | 8.0 | 9.7 | 11 | 7.5 | 5.3 | 11 |
| 9 | 3.8 | 5.0 | 4.1 | 4.3 | 4.2 | 5.1 | 8.2 | 9.4 | 13 | 6.7 | 6.7 | 9.9 |
| 10 | 3.6 | 5.0 | 3.4 | 2.8 | 4.9 | 5.2 | 9.0 | 9.3 | 10 | 6.3 | 8.7 | 9.7 |
| 11 | 3.6 | 4.9 | 3.3 | 4.5 | 4.9 | 5.3 | 10 | 8.8 | 10 | 6.1 | 9.3 | 8.1 |
| 12 | 3.6 | 4.6 | 3.5 | 4.8 | 4.9 | 5.4 | 10 | 8.7 | 12 | 7.0 | 11 | 8.5 |
| 13 | 3.9 | 5.5 | 3.5 | 4.4 | 5.0 | 5.5 | 11 | 8.9 | 13 | 7.7 | 8.4 | 8.1 |
| 14 | 3.9 | 5.4 | 4.4 | 4.3 | 5.4 | 5.6 | 12 | 8.0 | 11 | 6.6 | 7.4 | 8.6 |
| 15 | 4.2 | 5.5 | 5.2 | 4.3 | 5.0 | 5.9 | 12 | 9.1 | 10 | 8.7 | 6.9 | 8.3 |
| 16 | 3.8 | 5.3 | 4.6 | 3.9 | 4.8 | 6.1 | 11 | 10 | 11 | 10 | 6.2 | 7.4 |
| 17 | 4.1 | 5.5 | 4.5 | 3.6 | 4.8 | 6.9 | 11 | 9.5 | 13 | 8.1 | 6.0 | 7.1 |
| 18 | 4.2 | 5.3 | 4.3 | 3.5 | 4.7 | 8.1 | 11 | 10 | 13 | 7.0 | 7.2 | 6.2 |
| 19 | 3.8 | 5.0 | 3.2 | 4.6 | 5.1 | 6.1 | 11 | 11 | 17 | 6.9 | 7.6 | 7.4 |
| 20 | 3.8 | 4.9 | 2.7 | 4.7 | 4.3 | 7.0 | 10 | 11 | 21 | 8.7 | 6.6 | 7.2 |
| 21 | 4.2 | 4.5 | 3.8 | 4.3 | 4.7 | 7.1 | 10 | 11 | 15 | 6.8 | 5.0 | 6.9 |
| 22 | 4.0 | 4.3 | 3.4 | 4.4 | 4.8 | 6.3 | 12 | 10 | 13 | 5.8 | 5.0 | 6.2 |
| 23 | 4.4 | 4.4 | 3.5 | 4.3 | 4.3 | 6.7 | 14 | 9.8 | 13 | 8.2 | 4.8 | 6.3 |
| 24 | 4.7 | 4.5 | 3.3 | 4.4 | 3.1 | 9.1 | 13 | 11 | 13 | 7.8 | 5.8 | 6.3 |
| 25 | 4.5 | 4.3 | 3.3 | 4.3 | 4.5 | 12 | 11 | 12 | 12 | 6.3 | 8.3 | 7.5 |
| 26 | 5.7 | 2.8 | 3.2 | 4.3 | 5.2 | 11 | 11 | 13 | 23 | 6.3 | 6.9 | 7.0 |
| 27 | 8.4 | 3.1 | 3.9 | 4.4 | 5.3 | 12 | 11 | 12 | 12 | 7.2 | 11 | 6.7 |
| 28 | 5.9 | 4.0 | 4.6 | 4.5 | 5.2 | 11 | 12 | 11 | 11 | 7.1 | 8.0 | 6.6 |
| 29 | 5.3 | 5.4 | 4.7 | 4.4 | --- | 10 | 12 | 11 | 15 | 9.0 | 8.9 | 6.3 |
| 30 | 4.7 | 4.8 | 4.3 | 4.3 | --- | 11 | 11 | 11 | 14 | 8.1 | 12 | 5.8 |
| 31 | 5.2 | --- | 4.1 | 4.3 | --- | 9.2 | --- | 14 | --- | 5.8 | 14 | --- |
| TOTAL | 137.2 | 145.2 | 123.4 | 130.8 | 127.0 | 219.7 | 312.2 | 318.2 | 401 | 240.4 | 244.1 | 252.8 |
| MEAN | 4.43 | 4.84 | 3.98 | 4.22 | 4.54 | 7.09 | 10.4 | 10.3 | 13.4 | 7.75 | 7.87 | 8.43 |
| MAX | 8.4 | 5.5 | 5.2 | 4.8 | 5.4 | 12 | 14 | 14 | 23 | 12 | 14 | 15 |
| MIN | 3.6 | 2.8 | 2.7 | 2.8 | 3.1 | 4.9 | 8.0 | 8.0 | 10 | 5.8 | 4.8 | 5.8 |
| AC-FT | 272 | 288 | 245 | 259 | 252 | 436 | 619 | 631 | 795 | 477 | 484 | 501 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 12.7 | 10.8 | 8.84 | 8.13 | 7.71 | 9.08 | 14.7 | 32.9 | 31.2 | 21.3 | 20.4 | 14.4 |
| MAX | 44.0 | 34.6 | 18.8 | 18.5 | 13.6 | 16.9 | 65.1 | 172 | 198 | 108 | 90.5 | 43.2 |
| (WY) | (1985) | (1985) | (1985) | (1985) | (1986) | (1998) | (1999) | (1980) | (1997) | (1995) | (1999) | (1999) |
| MIN | 4.43 | 4.84 | 3.98 | 4.22 | 4.44 | 4.91 | 5.90 | 6.37 | 4.08 | 3.31 | 3.48 | 4.34 |
| (WY) | (2003) | (2003) | (2003) | (2003) | (1972) | (1965) | (1963) | (1989) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1958 - 2003

| | | | |
|--------------------------|---------|---------|------------|
| ANNUAL TOTAL | 1,939.2 | 2,652.0 | |
| ANNUAL MEAN | 5.31 | 7.27 | 16.0 |
| HIGHEST ANNUAL MEAN | | | 46.3 1999 |
| LOWEST ANNUAL MEAN | | | 5.72 2002 |
| HIGHEST DAILY MEAN | 16 | Sep 10 | 23 Jun 26 |
| LOWEST DAILY MEAN | 1.9 | Jul 3 | 2.7 Dec 20 |
| ANNUAL SEVEN-DAY MINIMUM | 2.3 | Jun 28 | 3.3 Dec 19 |
| MAXIMUM PEAK FLOW | | | 211 Aug 2 |
| MAXIMUM PEAK STAGE | | | 4.32 Aug 2 |
| ANNUAL RUNOFF (AC-FT) | 3,850 | 5,260 | 11,620 |
| 10 PERCENT EXCEEDS | 8.2 | 12 | 29 |
| 50 PERCENT EXCEEDS | 5.0 | 6.3 | 9.8 |
| 90 PERCENT EXCEEDS | 2.9 | 3.9 | 5.4 |

a From slope-area measurement of peak flow.

b Maximum gage height, 7.81 ft, Apr 29, 1999, from floodmark.

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1974 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103700

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: August 1995 to September 1997 (seasonal peaks only), April 1998 to October 2002 (seasonal records only) (discontinued).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Water-quality data collected July 24 were obtained to determine base-flow constituent concentrations.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,090 mg/L, June 6, 1997; minimum daily mean, 1 mg/L, Oct. 21, 23-24, 2002.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 41,800 tons, June 6, 1997; minimum daily, 0.0 ton (estimated), Oct. 25, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean during October, 86 mg/L, Oct. 27; minimum daily mean, 1 mg/L, Oct. 21, 23-24.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily during October, 2.4 tons, Oct. 27; minimum daily, 0.0 ton (estimated), Oct. 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Fluoride, water, fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Ortho-phosphate, water, fltrd, mg/L as P (00671) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|------------------------------------|---------------------------------------|--------------------------------------|------------------------------------|---|---|--|
| NOV 07... | 0930 | 4.8 | 11.0 | 8.3 | 498 | 3.0 | 53.0 | 11.3 | 2.60 | 21.0 | <0.015 | 0.814 | <0.02 |
| DEC 03... | 1015 | 4.6 | 11.1 | 8.3 | 496 | 2.5 | 54.0 | 11.4 | 2.50 | 21.0 | <0.015 | 0.949 | <0.02 |
| FEB 14... | 1015 | 5.0 | 10.9 | 8.4 | 480 | 4.5 | 47 | 10 | 2.5 | 22.4 | <0.015 | 0.933 | <0.02 |
| APR 28... | 1600 | 11 | 9.0 | 8.4 | 338 | 12.5 | 37 | 6.4 | 2.76 | 17.0 | <0.015 | 0.400 | <0.02 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Phosphorus, water, unfltrd mg/L (00665) | BOD, water, unfltrd 5 day, 20 degC mg/L (00310) | E coli, modif. m-TEC, water, col/100 mL (90902) | E coli, m-TEC MF, water, col/100 mL (31633) | Fecal coli-form, M-FC 0.7u MF col/100 mL (31625) | Arsenic water, fltrd, ug/L (01000) | Arsenic water, unfltrd ug/L (01002) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Cadmium water, fltrd, ug/L (01025) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, fltrd, ug/L (01030) | Chromium, water, unfltrd recover-able, ug/L (01034) |
|-----------|---|---|---|---|--|------------------------------------|-------------------------------------|-----------------------------------|--|------------------------------------|-------------------------------------|--------------------------------------|---|
| NOV 07... | <0.040 | <2.0 | -- | 44 | 38 | <0.60 | <0.80 | 65 | 69 | <0.10 | 30 | E1.6 | 1.7 |
| DEC 03... | <0.040 | <2.0 | -- | 52 | 46 | <0.60 | <0.80 | 60 | 60 | <0.10 | <0.10 | 2.7 | 1.8 |
| FEB 14... | E.036 | -- | -- | E19 | E17 | E.16 | <2 | 52.7 | 59.6 | <0.037 | <0.035 | <0.8 | <0.8 |
| APR 28... | E.033 | -- | 140 | -- | E260 | -- | <2 | 38 | 39 | -- | -- | -- | -- |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Cyanide water, unfltrd mg/L (00720) | Iron, water, fltrd, ug/L (01046) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, fltrd, ug/L (01049) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, fltrd, ug/L (71890) | Mercury water, unfltrd recover-able, ug/L (71900) | Nickel, water, fltrd, ug/L (01065) | Nickel, water, unfltrd recover-able, ug/L (01067) |
|-----------|------------------------------------|---|-------------------------------------|----------------------------------|---|----------------------------------|---|---------------------------------------|--|------------------------------------|---|------------------------------------|---|
| NOV 07... | 0.84 | 1.4 | <0.01 | 38.0 | 102 | <0.20 | 0.24 | 25 | 27 | <0.018 | <0.018 | 2.1 | 3.0 |
| DEC 03... | E1.5 | 2.0 | <0.01 | 12.0 | 124 | E.20 | E.27 | 18 | 21 | <0.018 | <0.018 | 1.6 | 1.5 |
| FEB 14... | 0.70 | 1.59 | <0.009 | 17 | 188 | <0.08 | 0.59 | 12.5 | 29.1 | <0.018 | <0.018 | 1.93 | 3.28 |
| APR 28... | 0.73 | 2.00 | -- | -- | -- | -- | 1.75 | 23.7 | 54.2 | -- | -- | -- | 1.38 |

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Selenium, water, fltrd, ug/L (01145) | Selenium, water, unfltrd, ug/L (01147) | Silver, water, fltrd, ug/L (01075) | Silver, water, unfltrd recover-able, ug/L (01077) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover-able, ug/L (01092) | Suspended sediment concentration, mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-----------|--------------------------------------|--|------------------------------------|---|----------------------------------|---|--|---|
| NOV 07... | 1.2 | E1.5 | 0.07 | <0.04 | <6.0 | <9.0 | 1.3 | 0.02 |
| DEC 03... | E.97 | 1.2 | <0.04 | <0.04 | 6.0 | <9.0 | 1.2 | 0.01 |
| FEB 14... | <0.50 | <0.48 | <0.20 | <0.16 | 2.9 | 6.7 | 15 | 0.20 |
| APR 28... | <0.50 | E.30 | -- | -- | 1.2 | 9.2 | 30 | 0.89 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd, uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Fluoride, water, fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia, water, fltrd, mg/L as N (00608) | Nitrite + nitrate, water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|------------------------------------|---------------------------------------|--------------------------------------|------------------------------------|--|--|---|
| JUL 24... | 1330 | 8.1 | 7.3 | 8.1 | 332 | 17.5 | 33.2 | 6.43 | 2.59 | 13 | <0.015 | 0.517 | <0.02 |
| AUG 11... | 2100 | 39 | 7.1 | 7.8 | 201 | 19.5 | 21.9 | 3.67 | 0.99 | 9.48 | 0.448 | 1.25 | E.01 |
| SEP 03... | 1850 | 32 | 8.4 | 8.0 | 205 | 13.5 | 20.4 | 3.43 | 2.36 | 9.73 | E.011 | 0.655 | E.01 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Phosphorus, water, unfltrd, mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC, 0.7u MF col/100 mL (31625) | Arsenic, water, unfltrd, ug/L (01002) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recover-able, ug/L (01055) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, fltrd, ug/L (01145) |
|-----------|--|---|--|---------------------------------------|-----------------------------------|--|------------------------------------|---|---|---------------------------------------|--|---|--------------------------------------|
| JUL 24... | E.020 | 530 | 780 | <2 | 35 | 47 | 0.688 | 1.30 | 1.06 | 9.39 | 35.9 | 1.16 | E.31 |
| AUG 11... | 1.38 | 33,000 | 54,000 | 2 | 34 | 50 | 2.20 | 37.2 | 98.8 | 29.8 | 1,390 | 18.9 | 0.66 |
| SEP 03... | 1.50 | 5,300 | 5,100 | 5 | 21 | 32 | 0.85 | 35.5 | 110 | 2.65 | 3,000 | 12.8 | <0.5 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Selenium, water, unfltrd, ug/L (01147) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover-able, ug/L (01092) | 2,6-Diethyl-aniline, water, fltrd, 0.7u GF, ug/L (82660) | CIAT, water, fltrd, ug/L (04040) | 9H-Fluorene, water, unfltrd, ug/L (34381) | Ace-naphthene, water, unfltrd, ug/L (34205) | Ace-naphthylene, water, unfltrd, ug/L (34200) | Aceto-chlor, water, fltrd, ug/L (49260) | Ala-chlor, water, fltrd, ug/L (46342) | alpha-HCH, water, fltrd, ug/L (34253) | Anthra-cene, water, unfltrd, ug/L (34220) | Atra-zine, water, fltrd, ug/L (39632) |
|-----------|--|----------------------------------|---|--|----------------------------------|---|---|---|---|---------------------------------------|---------------------------------------|---|---------------------------------------|
| JUL 24... | E.27 | 1.1 | 6.2 | <0.006 | <0.006 | <2 | <2 | <2 | <0.006 | <0.004 | <0.0046 | <2 | <0.007 |
| AUG 11... | 2.22 | 3.8 | 322 | <0.006 | <0.008 | E.0423 | <2 | <2 | <0.006 | <0.004 | <0.0046 | E.1050 | 0.0141 |
| SEP 03... | 3.25 | <1 | 381 | <0.006 | <0.006 | E.0181 | E.0208 | <2 | <0.006 | <0.004 | <0.0046 | E.0353 | <0.007 |

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686) | Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673) | Benzo-[a]-anthra-cene, water, unfltrd ug/L (34526) | Benzo-[a]-pyrene, water, unfltrd ug/L (34247) | Benzo-[b]-fluor-anthene water unfltrd ug/L (34230) | Benzo-[g,h,i]-per-ylene, water, unfltrd ug/L (34521) | Benzo-[k]-fluor-anthene water unfltrd ug/L (34242) | Butyl-ate, water, fltrd, ug/L (04028) | Car-baryl, water, fltrd 0.7u GF ug/L (82680) | Carbo-furan, water, fltrd 0.7u GF ug/L (82674) | Chlor-pyrifos water, fltrd, ug/L (38933) | Chrys-ene, water, unfltrd ug/L (34320) | cis-Per-methrin water fltrd 0.7u GF ug/L (82687) |
|-----------|--|---|--|---|--|--|--|---|---|---|--|--|---|
| JUL 24... | <0.05 | <0.010 | <2 | <1 | <2 | <3 | <2 | <0.002 | <0.041 | <0.020 | <0.005 | <3 | <0.006 |
| AUG 11... | <0.05 | <0.010 | E.4490 | E.7070 | E1 | E.4700 | E.3970 | <0.002 | E.277 | <0.020 | <0.005 | E.6400 | <0.006 |
| SEP 03... | <0.05 | <0.010 | E.2060 | E.3190 | E.4240 | E.2250 | E.2040 | <0.002 | E.091 | <0.020 | <0.005 | E.2250 | <0.006 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Cyana-zine, water, fltrd, ug/L (04041) | DCPA, water fltrd 0.7u GF ug/L (82682) | Desulf-inyl fipron-il, water, fltrd, ug/L (62170) | Diazi-non, water, fltrd, ug/L (39572) | Di-benzo-[a,h]-anthra-cene, wat unf ug/L (34556) | Diel-drin, water, fltrd, ug/L (39381) | Disul-foton, water, fltrd 0.7u GF ug/L (82677) | EPTC, water, fltrd 0.7u GF ug/L (82668) | Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663) | Etho-prop, water, fltrd 0.7u GF ug/L (82672) | Desulf-inyl-fipron-il amide, wat flt ug/L (62169) | Fipron-nil sulfide water, fltrd, ug/L (62167) | Fipron-nil sulfone water, fltrd, ug/L (62168) |
|-----------|--|---|---|---|--|---|---|--|---|---|---|---|---|
| JUL 24... | <0.018 | <0.0030 | <0.004 | <0.005 | <3 | <0.0048 | <0.021 | <0.0020 | <0.009 | <0.005 | <0.009 | <0.005 | <0.005 |
| AUG 11... | <0.018 | <0.0030 | <0.004 | 0.278 | E.1320 | <0.0048 | <0.021 | <0.0020 | <0.009 | <0.005 | <0.009 | <0.005 | <0.005 |
| SEP 03... | <0.018 | <0.0030 | <0.004 | E.0045 | <3 | <0.0048 | <0.021 | <0.0020 | <0.009 | <0.005 | <0.009 | <0.005 | <0.005 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Fipron-nil, water, fltrd, ug/L (62166) | Fluor-anthene water unfltrd ug/L (34376) | Fonofos water, fltrd, ug/L (04095) | Indeno-[1,2,-3-cd]-pyrene, water, unfltrd ug/L (34403) | Lindane water, fltrd, ug/L (39341) | Linuron water fltrd 0.7u GF ug/L (82666) | Malathion, water, fltrd, ug/L (39532) | Methyl para-thion, water, fltrd 0.7u GF ug/L (82667) | Metola-chlor, water, fltrd, ug/L (39415) | Metri-buzin, water, fltrd, ug/L (82630) | Moli-nate, water, fltrd 0.7u GF ug/L (82671) | Naprop-amide, water, fltrd 0.7u GF ug/L (82684) | Nitro-benzene water unfltrd ug/L (34447) |
|-----------|--|--|--|--|--|---|---|---|--|---|---|--|--|
| JUL 24... | <0.007 | E.0433 | <0.0027 | <3 | <0.0040 | <0.035 | <0.027 | <0.006 | <0.013 | <0.006 | <0.0016 | <0.007 | <2 |
| AUG 11... | <0.007 | E1 | <0.0027 | E.5670 | <0.0040 | <0.035 | 0.0419 | <0.006 | <0.013 | <0.006 | <0.0016 | <0.007 | <2 |
| SEP 03... | <0.007 | E.3970 | <0.0027 | E.2600 | <0.0040 | <0.035 | <0.027 | <0.006 | <0.013 | <0.006 | <0.0016 | <0.007 | <2 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | p,p'-DDE, water, fltrd, ug/L (34653) | Para-thion, water, fltrd, ug/L (39542) | Peb-ulate, water, fltrd 0.7u GF ug/L (82669) | Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683) | Phenan-threne, water, unfltrd ug/L (34461) | Phorate water fltrd 0.7u GF ug/L (82664) | Prome-ton, water, fltrd, ug/L (04037) | Pron-amide, water, fltrd 0.7u GF ug/L (82676) | Propa-chlor, water, fltrd, ug/L (04024) | Pro-panil, water, fltrd 0.7u GF ug/L (82679) | Propar-gite, water, fltrd 0.7u GF ug/L (82685) | Pyrene, water, unfltrd ug/L (34469) | Sima-zine, water, fltrd, ug/L (04035) |
|-----------|--|--|---|---|--|---|---|--|---|---|---|---|---|
| JUL 24... | <0.0025 | <0.010 | <0.004 | <0.022 | <2 | <0.011 | <0.015 | <0.0041 | <0.010 | <0.011 | <0.023 | E.0337 | <0.005 |
| AUG 11... | <0.0025 | <0.010 | <0.004 | <0.022 | E.4210 | <0.011 | <0.015 | <0.045 | <0.010 | <0.011 | <0.023 | E1 | <0.005 |
| SEP 03... | <0.0025 | <0.010 | <0.004 | <0.022 | E.1540 | <0.011 | E.0052 | <0.0041 | <0.010 | <0.011 | <0.023 | E.3730 | <0.005 |

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Tebu- thiuron water fltrd 0.7u GF ug/L (82670) | Terba- cil, water, fltrd 0.7u GF ug/L (82665) | Terbu- fos, water, fltrd 0.7u GF ug/L (82675) | Thio- bencarb water fltrd 0.7u GF ug/L (82681) | Tri- allate, water, fltrd 0.7u GF ug/L (82678) | Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661) | Naphth- alene, water, unfltrd ug/L (34696) | Sus- pended sedi- ment concen- tration mg/L (80154) | Sus- pended sedi- ment load, tons/d (80155) |
|--------------|--|---|---|--|--|---|---|--|---|
| JUL 24... | <0.016 | <0.034 | <0.017 | <0.0048 | <0.0023 | <0.009 | <2 | 12 | 0.26 |
| AUG 11... | <0.016 | <0.034 | <0.017 | <0.0048 | <0.0023 | <0.009 | <2 | 2,040 | 215 |
| SEP 03... | <0.016 | <0.034 | <0.017 | <0.0048 | <0.0023 | <0.009 | E.0342 | 1,880 | 162 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING MICROBIOLOGICAL SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instan- taneous dis- charge, cfs (00061) | Specif. conduc- tance, wat unf uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) | E coli, modif. m-TEC, water, col/ 100 mL (90902) | E coli, m-TEC MF, water, col/ 100 mL (31633) | Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625) |
|--------------|------|---|--|---|--|--|---|
| NOV 07... | 0930 | 4.8 | 498 | 3.0 | -- | 44 | 38 |
| DEC 03... | 1015 | 4.6 | 496 | 2.5 | -- | 52 | 46 |
| FEB 14... | 1015 | 5.0 | 480 | 4.5 | -- | E19 | E17 |
| APR 09... | 1600 | 8.1 | 447 | 12.5 | E12 | -- | E19 |
| 28... | 1600 | 11 | 338 | 12.5 | 140 | -- | E260 |
| MAY 12... | 1330 | 8.9 | 385 | 11.5 | 280 | -- | E410 |
| 28... | 1400 | 11 | 402 | 16.5 | E300 | -- | 220 |
| JUN 11... | 0947 | 11 | 300 | 11.5 | 660 | -- | E860 |
| 25... | 1340 | 12 | 204 | 14.5 | 150 | -- | 230 |
| JUL 08... | 1327 | 7.3 | 314 | 17.0 | 910 | -- | 1,200 |
| 24... | 1330 | 8.1 | 332 | 17.5 | 530 | -- | 780 |
| AUG 06... | 0915 | 8.1 | 343 | 15.0 | 960 | -- | 1,200 |
| 11... | 2100 | 39 | 201 | 19.5 | 33,000 | -- | 54,000 |
| 21... | 1230 | 5.6 | 385 | 17.5 | 350 | -- | 640 |
| SEP 03... | 1850 | 32 | 205 | 13.5 | 5,300 | -- | 5,100 |
| 18... | 1120 | 6.2 | 376 | 9.0 | 310 | -- | 370 |

E -- Estimated laboratory analysis value.

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO—Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, wat un f uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-------|------|--------------------------------------|--|-----------------------------------|---|---|
| OCT | | | | | | |
| 16... | 1015 | 3.9 | 553 | 6.5 | 3 | 0.03 |
| 16... | 1040 | 4.0 | 553 | 6.5 | -- | -- |
| NOV | | | | | | |
| 07... | 0930 | 4.8 | 498 | 3.0 | 1 | 0.02 |
| DEC | | | | | | |
| 03... | 1015 | 4.6 | 496 | 2.5 | 1 | 0.01 |
| FEB | | | | | | |
| 14... | 1015 | 5.0 | 480 | 4.5 | 15 | 0.20 |
| MAR | | | | | | |
| 06... | 1150 | 5.3 | 577 | 1.0 | -- | -- |
| APR | | | | | | |
| 28... | 1600 | 11 | 338 | 12.5 | 30 | 0.89 |
| MAY | | | | | | |
| 07... | 1319 | 9.9 | 369 | 10.5 | -- | -- |
| JUL | | | | | | |
| 24... | 1330 | 8.1 | 332 | 17.5 | 12 | 0.26 |
| AUG | | | | | | |
| 11... | 2100 | 39 | 201 | 19.5 | 2,040 | 215 |
| SEP | | | | | | |
| 03... | 1850 | 32 | 205 | 13.5 | 1,880 | 162 |

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) |
|---------|----------------------|---------------------------|-----------------|
| OCTOBER | | | |
| 1 | 4.2 | --- | e0.71 |
| 2 | 5.3 | 14 | 0.22 |
| 3 | 4.9 | 8 | 0.10 |
| 4 | 4.2 | 6 | 0.07 |
| 5 | 3.9 | --- | e0.07 |
| 6 | 3.8 | 7 | 0.07 |
| 7 | 3.8 | 8 | 0.08 |
| 8 | 3.8 | 7 | 0.07 |
| 9 | 3.8 | 6 | 0.06 |
| 10 | 3.6 | --- | e0.05 |
| 11 | 3.6 | 4 | 0.04 |
| 12 | 3.6 | 5 | 0.05 |
| 13 | 3.9 | 4 | 0.04 |
| 14 | 3.9 | 3 | 0.03 |
| 15 | 4.2 | --- | e0.02 |
| 16 | 3.8 | 2 | 0.02 |
| 17 | 4.1 | 3 | 0.03 |
| 18 | 4.2 | 2 | 0.03 |
| 19 | 3.8 | 2 | 0.02 |
| 20 | 3.8 | --- | e0.02 |
| 21 | 4.2 | 1 | 0.01 |
| 22 | 4.0 | 2 | 0.02 |
| 23 | 4.4 | 1 | 0.01 |
| 24 | 4.7 | 1 | 0.01 |
| 25 | 4.5 | --- | e0.00 |
| 26 | 5.7 | 27 | 1.1 |
| 27 | 8.4 | 86 | 2.4 |
| 28 | 5.9 | 16 | 0.26 |
| 29 | 5.3 | --- | e0.03 |
| 30 | 4.7 | --- | e0.03 |
| 31 | 5.2 | --- | e0.03 |
| TOTAL | 137.2 | --- | 5.70 |

e Estimated.

07103703 CAMP CREEK AT GARDEN OF THE GODS, CO

LOCATION.--Lat 38°52'37", long 104°52'20", in SE¼NE¼ sec.34, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank, 80 ft downstream from county road bridge at east entrance to Garden of the Gods Park at Colorado Springs, and 1.9 mi upstream from mouth.

DRAINAGE AREA.--9.45 mi².

PERIOD OF RECORD.--April 1992 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103703

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Concrete control since September 1993. Elevation of gage is 6,310 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream may be affected by Palmer Reservoir, 7.9 mi upstream. Measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| 3 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.01 |
| 4 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 | 0.00 |
| 5 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 6 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 8 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 |
| 10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 |
| 16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 19 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 26 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| 27 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| 28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 29 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 |
| 31 | 0.00 | --- | 0.00 | 0.00 | --- | 0.00 | --- | 0.05 | --- | 0.00 | 0.01 | --- |
| TOTAL | 0.05 | 0.00 | 0.00 | 0.00 | 0.01 | 0.07 | 0.08 | 0.20 | 0.20 | 0.01 | 0.13 | 0.01 |
| MEAN | 0.002 | 0.000 | 0.000 | 0.000 | 0.000 | 0.002 | 0.003 | 0.006 | 0.007 | 0.000 | 0.004 | 0.000 |
| MAX | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 | 0.03 | 0.03 | 0.07 | 0.05 | 0.01 | 0.07 | 0.01 |
| MIN | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| AC-FT | 0.1 | 0.00 | 0.00 | 0.00 | 0.02 | 0.1 | 0.2 | 0.4 | 0.4 | 0.02 | 0.3 | 0.02 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)

| | MEAN | MAX | MIN | (WY) | (WY) | (WY) | (WY) | (WY) | (WY) | (WY) | (WY) | (WY) |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.012 | 0.001 | 0.000 | 0.001 | 0.000 | 0.067 | 2.03 | 9.05 | 5.10 | 0.66 | 0.57 | 0.10 |
| MAX | 0.12 | 0.003 | 0.001 | 0.015 | 0.000 | 0.38 | 15.7 | 45.5 | 27.7 | 6.78 | 5.66 | 0.76 |
| (WY) | (1995) | (1999) | (1993) | (1995) | (1998) | (1996) | (1999) | (1999) | (1997) | (1995) | (1999) | (1994) |
| MIN | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.004 | 0.000 | 0.000 | 0.000 | 0.000 |
| (WY) | (1993) | (1993) | (1994) | (1993) | (1993) | (1994) | (1994) | (2000) | (2000) | (1993) | (1993) | (1993) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1992 - 2003

| | | | |
|--------------------------|-------|-------|------------|
| ANNUAL TOTAL | 0.32 | 0.76 | |
| ANNUAL MEAN | 0.001 | 0.002 | 1.57 |
| HIGHEST ANNUAL MEAN | | | 6.48 1999 |
| LOWEST ANNUAL MEAN | | | 0.001 2002 |
| HIGHEST DAILY MEAN | 0.06 | 0.07 | 240 |
| LOWEST DAILY MEAN | 0.00 | 0.00 | a0.00 |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 | 0.00 | 0.00 |
| MAXIMUM PEAK FLOW | | 2.7 | b430 |
| MAXIMUM PEAK STAGE | | 2.72 | c5.40 |
| ANNUAL RUNOFF (AC-FT) | 0.6 | 1.5 | 1,140 |
| 10 PERCENT EXCEEDS | 0.00 | 0.00 | 0.84 |
| 50 PERCENT EXCEEDS | 0.00 | 0.00 | 0.00 |
| 90 PERCENT EXCEEDS | 0.00 | 0.00 | 0.00 |

a No flow on many days during many years.

b From rating curve extended above 327 ft³/s.

c From floodmarks.

07103707 FOUNTAIN CREEK AT 8th STREET AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°49'46", long 104°50'21", in NW¼SE¼ sec.13, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, 270 ft downstream from 8th Street at Colorado Springs, and 0.4 mi upstream from Monument Creek.

DRAINAGE AREA.--119 mi².

PERIOD OF RECORD.--February 1981 to January 1982. March 1998 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103707

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Fluoride, water, fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|------------------------------------|---------------------------------------|--------------------------------------|------------------------------------|---|---|---|
| NOV 07... | 1105 | 0.99 | 9.4 | 7.9 | 1,960 | 6.0 | 153 | 92.6 | 4.30 | 750 | 0.340 | 0.952 | <0.02 |
| DEC 05... | 1010 | 0.72 | 10.8 | 8.0 | 1,530 | 3.5 | 135 | 66.1 | 3.40 | 530 | 0.088 | 1.24 | E.01 |
| FEB 13... | 1130 | 0.66 | 9.8 | 8.1 | 1,340 | 6.0 | 99 | 49 | 3.2 | 422 | 0.097 | 1.16 | <0.02 |
| APR 28... | 1310 | 3.0 | 7.7 | 8.2 | 839 | 17.0 | 75 | 25 | 2.98 | 205 | 0.033 | 0.723 | <0.02 |
| JUL 24... | 1545 | 0.31 | 5.7 | 7.7 | 2,200 | 27.0 | 163 | 89.3 | 4.25 | 878 | 0.102 | 1.07 | <0.02 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Phosphorus, water, unfltrd mg/L (00665) | BOD, water, unfltrd 5 day, 20 degC mg/L (00310) | E coli, modif. m-TEC, water, col/100 mL (90902) | E coli, m-TEC MF, water, col/100 mL (31633) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Arsenic water, fltrd, ug/L (01000) | Arsenic water unfltrd, ug/L (01002) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Cadmium water, fltrd, ug/L (01025) | Cadmium water, unfltrd, ug/L (01027) | Chromium, water, fltrd, ug/L (01030) | Chromium, water, unfltrd recover-able, ug/L (01034) |
|-----------|---|---|---|---|---|------------------------------------|-------------------------------------|-----------------------------------|--|------------------------------------|--------------------------------------|--------------------------------------|---|
| NOV 07... | 0.047 | <2.0 | -- | 1,600 | 1,600 | 2.6 | 4.6 | 217 | 213 | 3.0 | 4.4 | 1.7 | <1.0 |
| DEC 05... | 0.118 | <2.0 | -- | E110 | E120 | 2.8 | 6.0 | 187 | 175 | 3.6 | 4.5 | 2.7 | 3.3 |
| FEB 13... | 0.246 | -- | -- | E2400 | E1900 | 1.70 | 6 | 149 | 156 | 3.77 | 4.78 | <0.8 | 2.7 |
| APR 28... | 0.532 | -- | E140 | -- | E130 | -- | 18 | 102 | 112 | -- | -- | -- | -- |
| JUL 24... | <0.040 | -- | 840 | -- | 1,600 | -- | 3 | 261 | 289 | -- | -- | -- | -- |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Copper, water, unfltrd recover-able, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Cyanide water, unfltrd mg/L (00720) | Iron, water, fltrd, ug/L (01046) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, fltrd, ug/L (01049) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, fltrd, ug/L (71890) | Mercury water, unfltrd recover-able, ug/L (71900) | Nickel, water, fltrd, ug/L (01065) | Nickel, water, unfltrd recover-able, ug/L (01067) |
|-----------|---|---|-------------------------------------|----------------------------------|---|----------------------------------|---|---------------------------------------|--|------------------------------------|---|------------------------------------|---|
| NOV 07... | 4.9 | 10 | 0.18 | 10.0 | 974 | 0.29 | 7.0 | 5,350 | 5,420 | <0.018 | <0.018 | 15 | 16 |
| DEC 05... | -- | 13 | <0.01 | <10.0 | 2,940 | E.25 | 9.0 | 2,680 | 2,600 | <0.018 | E.011 | 8.0 | 9.2 |
| FEB 13... | 3.15 | 13.2 | 0.013 | <10 | 5,810 | <0.08 | 10.9 | 1,910 | 2,850 | <0.018 | 0.022 | 8.01 | 13.6 |
| APR 28... | 2.04 | 26.4 | -- | -- | -- | -- | 50.3 | 337 | 622 | -- | -- | -- | 11.8 |
| JUL 24... | 4.88 | 5.47 | -- | -- | -- | -- | 0.75 | 1,750 | 1,610 | -- | -- | -- | 8.19 |

ARKANSAS RIVER BASIN

07103707 FOUNTAIN CREEK AT 8th STREET AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Selenium, water, fltrd, ug/L (01145) | Selenium, water, unfltrd ug/L (01147) | Silver, water, fltrd, ug/L (01075) | Silver, water, unfltrd recover -able, ug/L (01077) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover -able, ug/L (01092) | Sus- pended sedi- ment concen- tration mg/L (80154) | Sus- pended sedi- ment load, tons/d (80155) |
|--------------|--|---|--|--|--|--|--|---|
| NOV 07... | 9.4 | 9.7 | 0.05 | 0.08 | 1,750 | 1,870 | 33 | 0.09 |
| DEC 05... | 11 | 10 | <0.04 | 0.06 | 927 | 973 | 104 | 0.20 |
| FEB 13... | 8.02 | 7.51 | <0.20 | E.09 | 831 | 1,170 | 205 | 0.37 |
| APR 28... | 7.39 | 6.82 | -- | -- | 26.9 | 394 | 397 | 3.2 |
| JUL 24... | 11.9 | 11.0 | -- | -- | 220 | 266 | 4 | 0.00 |

< -- Actual value is known to be less than the value shown.

E -- Estimated laboratory analysis value.

07103740 NORTH MONUMENT CREEK AT SPRING STREET AT PALMER LAKE, CO

LOCATION.--Lat 39°06'56", long 104°54'43", in SW¹/₄SE¹/₄ sec.5, T.11 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank at downstream side of bridge on Spring Street at Palmer Lake, 0.1 mi upstream from mouth, and 2.3 mi upstream from Monument Lake.

DRAINAGE AREA.--16.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 2002 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103740

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,120 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by storage reservoirs and diversions for municipal supply of Monument and Palmer Lake.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 38 ft³/s, Apr. 28, 2003, gage height, 4.57 ft, from rating curve extended above 21 ft³/s; no flow on many days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 38 ft³/s, Apr. 28, gage height, 4.57 ft, from rating curve extended above 21 ft³/s; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-------|-------|-------|-------|------|-------|-------|
| 1 | --- | --- | --- | --- | --- | 0.08 | 1.4 | 17 | 2.5 | 0.79 | 0.00 | 0.00 |
| 2 | --- | --- | --- | --- | --- | 0.08 | 2.4 | 15 | 2.2 | 0.60 | 0.00 | 0.00 |
| 3 | --- | --- | --- | --- | --- | 0.08 | 3.2 | 13 | 1.9 | 0.48 | 0.00 | 0.00 |
| 4 | --- | --- | --- | --- | --- | 0.07 | 3.2 | 12 | 1.6 | 0.39 | 0.00 | 0.00 |
| 5 | --- | --- | --- | --- | --- | 0.07 | 3.1 | 10 | 2.4 | 0.34 | 0.00 | 0.00 |
| 6 | --- | --- | --- | --- | --- | 0.07 | 3.9 | 9.3 | 2.8 | 0.31 | 0.00 | 0.00 |
| 7 | --- | --- | --- | --- | --- | 0.06 | 4.8 | 8.6 | 3.1 | 0.27 | 0.00 | 0.00 |
| 8 | --- | --- | --- | --- | --- | 0.06 | 4.5 | 7.8 | 2.8 | 0.23 | 0.00 | 0.00 |
| 9 | --- | --- | --- | --- | --- | 0.06 | 4.4 | 7.0 | 2.0 | 0.20 | 0.00 | 0.00 |
| 10 | --- | --- | --- | --- | --- | 0.07 | 5.2 | 6.4 | 1.9 | 0.17 | 0.00 | 0.00 |
| 11 | --- | --- | --- | --- | --- | 0.07 | 6.0 | 5.7 | 2.0 | 0.13 | 0.00 | 0.00 |
| 12 | --- | --- | --- | --- | --- | 0.08 | 6.8 | 5.4 | 1.6 | 0.11 | 0.00 | 0.00 |
| 13 | --- | --- | --- | --- | --- | 0.09 | 8.6 | 5.2 | 1.5 | 0.09 | 0.00 | 0.00 |
| 14 | --- | --- | --- | --- | --- | 0.09 | 11 | 4.9 | 1.7 | 0.07 | 0.00 | 0.00 |
| 15 | --- | --- | --- | --- | --- | 0.09 | 11 | 4.7 | 1.3 | 0.07 | 0.00 | 0.00 |
| 16 | --- | --- | --- | --- | --- | 0.10 | 11 | 5.0 | 1.1 | 0.06 | 0.00 | 0.00 |
| 17 | --- | --- | --- | --- | --- | 0.11 | 11 | 4.6 | 1.4 | 0.05 | 0.00 | 0.00 |
| 18 | --- | --- | --- | --- | --- | 0.13 | 10 | 4.2 | 3.0 | 0.04 | 0.00 | 0.00 |
| 19 | --- | --- | --- | --- | --- | 0.14 | 9.3 | 3.9 | 3.5 | 0.03 | 0.00 | 0.00 |
| 20 | --- | --- | --- | --- | --- | 0.17 | 8.6 | 3.8 | 3.1 | 0.02 | 0.00 | 0.00 |
| 21 | --- | --- | --- | --- | --- | 0.19 | 8.8 | 3.5 | 2.5 | 0.02 | 0.00 | 0.00 |
| 22 | --- | --- | --- | --- | --- | 0.21 | 10 | 3.2 | 1.9 | 0.01 | 0.00 | 0.00 |
| 23 | --- | --- | --- | --- | --- | 0.26 | 11 | 3.0 | 1.6 | 0.01 | 0.00 | 0.00 |
| 24 | --- | --- | --- | --- | --- | 0.38 | 12 | 2.8 | 1.3 | 0.01 | 0.00 | 0.00 |
| 25 | --- | --- | --- | --- | --- | 0.65 | 16 | 3.2 | 1.2 | 0.01 | 0.00 | 0.00 |
| 26 | --- | --- | --- | --- | --- | 1.1 | 23 | 3.1 | 1.2 | 0.01 | 0.00 | 0.00 |
| 27 | --- | --- | --- | --- | --- | 1.3 | 25 | 3.1 | 1.1 | 0.00 | 0.00 | 0.00 |
| 28 | --- | --- | --- | --- | --- | 1.3 | 26 | 2.6 | 1.0 | 0.01 | 0.00 | 0.00 |
| 29 | --- | --- | --- | --- | --- | 1.1 | 23 | 2.5 | 1.1 | 0.01 | 0.00 | 0.00 |
| 30 | --- | --- | --- | --- | --- | 1.0 | 20 | 2.3 | 0.94 | 0.01 | 0.00 | 0.00 |
| 31 | --- | --- | --- | --- | --- | 1.0 | --- | 2.2 | --- | 0.01 | 0.00 | --- |
| TOTAL | --- | --- | --- | --- | --- | 10.26 | 304.2 | 185.0 | 57.24 | 4.56 | 0.00 | 0.00 |
| MEAN | --- | --- | --- | --- | --- | 0.33 | 10.1 | 5.97 | 1.91 | 0.15 | 0.000 | 0.000 |
| MAX | --- | --- | --- | --- | --- | 1.3 | 26 | 17 | 3.5 | 0.79 | 0.00 | 0.00 |
| MIN | --- | --- | --- | --- | --- | 0.06 | 1.4 | 2.2 | 0.94 | 0.00 | 0.00 | 0.00 |
| AC-FT | --- | --- | --- | --- | --- | 20 | 603 | 367 | 114 | 9.0 | 0.00 | 0.00 |

07103740 NORTH MONUMENT CREEK AT SPRING STREET AT PALMER LAKE, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 2002 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103740

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.51 inches, Apr. 24, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.51 inches, Apr. 24.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|
| 1 | --- | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.04 | 0.01 | 0.10 | 0.00 |
| 2 | --- | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 |
| 3 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.31 |
| 4 | --- | --- | --- | --- | --- | --- | 0.05 | 0.23 | 0.34 | 0.00 | 0.00 | 0.01 |
| 5 | --- | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.40 | 0.00 | 0.07 | 0.00 |
| 6 | --- | --- | --- | --- | --- | --- | 0.14 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 |
| 7 | --- | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.31 | 0.00 | 0.00 | 0.25 |
| 8 | --- | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 9 | --- | --- | --- | --- | --- | --- | 0.00 | 0.04 | 0.01 | 0.00 | 0.00 | 0.02 |
| 10 | --- | --- | --- | --- | --- | --- | 0.00 | 0.19 | 0.33 | 0.00 | 0.00 | 0.01 |
| 11 | --- | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.01 | 0.00 | 0.04 | 0.00 |
| 12 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 13 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.10 |
| 14 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | --- | --- | --- | --- | --- | --- | 0.50 | 0.39 | 0.00 | 0.42 | 0.00 | 0.00 |
| 16 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 |
| 17 | --- | --- | --- | --- | --- | 0.09 | 0.00 | 0.00 | 1.05 | 0.00 | 0.06 | 0.05 |
| 18 | --- | --- | --- | --- | --- | 0.01 | 0.04 | 0.02 | 1.42 | 0.00 | 0.28 | 0.07 |
| 19 | --- | --- | --- | --- | --- | 0.02 | 0.62 | 0.13 | 0.14 | 0.17 | 0.00 | 0.00 |
| 20 | --- | --- | --- | --- | --- | 0.59 | 0.27 | 0.04 | 0.01 | 0.00 | 0.00 | 0.00 |
| 21 | --- | --- | --- | --- | --- | 0.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | --- | --- | --- | --- | --- | 0.08 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | --- | --- | --- | --- | --- | 0.00 | 0.10 | 0.00 | 0.00 | 0.28 | 0.15 | 0.00 |
| 24 | --- | --- | --- | --- | --- | 0.01 | 1.51 | 0.08 | 0.04 | 0.00 | 0.77 | 0.00 |
| 25 | --- | --- | --- | --- | --- | 0.11 | 0.03 | 0.01 | 0.43 | 0.00 | 0.00 | 0.00 |
| 26 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.00 | 0.09 | 0.13 | 0.00 | 0.00 |
| 27 | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 28 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.04 | 0.55 | 0.20 | 0.04 | 0.00 |
| 29 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.01 | 0.00 | 0.08 | 0.00 |
| 30 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.28 | 0.00 | 0.00 | 0.75 | 0.00 |
| 31 | --- | --- | --- | --- | --- | 0.00 | --- | 0.06 | --- | 0.02 | 0.03 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | 3.34 | 1.57 | 5.48 | 1.29 | 2.47 | 0.83 |
| MAX | --- | --- | --- | --- | --- | --- | 1.51 | 0.39 | 1.42 | 0.42 | 0.77 | 0.31 |

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 39°01'52", long 104°50'52", in SW¹/₄SW¹/₄ sec.1, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on U.S. Air Force Academy, on right bank 50 ft upstream from Denver and Rio Grande Western Railroad bridge, 0.8 mi upstream from North Gate Boulevard, and 1.5 mi downstream from Beaver Creek.

DRAINAGE AREA.--81.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1985 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103780

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,640 ft above NGVD of 1929, 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 municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|------|-------|-------|-------|-------|------|-------|------|
| 1 | 2.5 | 3.7 | 2.8 | e2.8 | 3.4 | e3.0 | 13 | 33 | 9.6 | 5.6 | 2.5 | 3.1 |
| 2 | 3.1 | 3.9 | 2.9 | e3.3 | e3.2 | 3.1 | 12 | 34 | 8.6 | 4.4 | 2.2 | 3.4 |
| 3 | 3.5 | 3.9 | 2.7 | 3.1 | e3.1 | 3.2 | 10 | 32 | 7.4 | 4.4 | 2.4 | 4.4 |
| 4 | 3.1 | 3.8 | 2.7 | 3.5 | e3.0 | 3.0 | 10 | 30 | 5.9 | 4.0 | 2.5 | 4.3 |
| 5 | 3.1 | 3.5 | e2.8 | 2.9 | e2.8 | e2.8 | 7.9 | 26 | 10 | 3.6 | 2.3 | 3.2 |
| 6 | 3.1 | 3.2 | e3.0 | 2.9 | e2.6 | e2.9 | 8.2 | 21 | 9.8 | 3.5 | 1.8 | 3.5 |
| 7 | 3.1 | 3.2 | e2.8 | 2.8 | e2.5 | 3.0 | 9.5 | 21 | 9.8 | 3.4 | 1.0 | 5.8 |
| 8 | 2.2 | 3.2 | e2.7 | 2.9 | e2.4 | 2.7 | 13 | 21 | 8.8 | 3.1 | 1.4 | 4.8 |
| 9 | 1.9 | 3.3 | e2.8 | e2.7 | e2.6 | 2.7 | 13 | 17 | 6.2 | 2.8 | 1.2 | 3.6 |
| 10 | 2.1 | 3.5 | e2.8 | e2.6 | e2.8 | 2.8 | 10 | 19 | 5.5 | 2.9 | 1.2 | 2.8 |
| 11 | 2.2 | 3.7 | e2.8 | e2.6 | e3.0 | 2.6 | 6.2 | 17 | 7.1 | 3.1 | 1.3 | 2.5 |
| 12 | 2.4 | 3.3 | e2.8 | e2.8 | e3.1 | 2.5 | 6.7 | 17 | 7.5 | e2.4 | 1.8 | 2.4 |
| 13 | 2.7 | 3.3 | e3.0 | 2.9 | 3.2 | 2.6 | 11 | 16 | 7.9 | e2.2 | 1.6 | 2.9 |
| 14 | 2.4 | 3.7 | e2.6 | 2.7 | 3.5 | 2.5 | 18 | 15 | 4.8 | e2.1 | 1.7 | 2.9 |
| 15 | 2.3 | 3.5 | e2.6 | e2.8 | 3.2 | 2.7 | 22 | 17 | 4.4 | e2.1 | 1.9 | 3.0 |
| 16 | 2.6 | 3.2 | e2.6 | e2.6 | 3.0 | 2.8 | 25 | 16 | 5.0 | e2.0 | 1.6 | 2.7 |
| 17 | 3.2 | 3.1 | e2.6 | e2.5 | 2.9 | 3.0 | 22 | 14 | 14 | e2.0 | 1.7 | 2.5 |
| 18 | 3.1 | 3.0 | e2.6 | e2.5 | 2.9 | 3.5 | 18 | 14 | 25 | e2.0 | 2.7 | 2.6 |
| 19 | 3.2 | 2.6 | e2.5 | e2.8 | 2.8 | e2.5 | 20 | 15 | 20 | e2.1 | 2.4 | 4.1 |
| 20 | 3.2 | 2.5 | e2.4 | 2.9 | 2.7 | 5.2 | 20 | 14 | 25 | e2.3 | 1.5 | 2.4 |
| 21 | 3.0 | 2.6 | e2.5 | e2.8 | 3.1 | 5.5 | 18 | 12 | 13 | 2.4 | 1.1 | 2.3 |
| 22 | 3.2 | 2.5 | e2.6 | e2.7 | 2.8 | 5.2 | 13 | 11 | 8.6 | 2.8 | 1.3 | 2.5 |
| 23 | 3.3 | 2.7 | e2.5 | e2.7 | e2.8 | 6.3 | 20 | 11 | 8.5 | 2.7 | 1.1 | 2.4 |
| 24 | 3.5 | 2.8 | e2.5 | 3.1 | e2.6 | 6.9 | 35 | 9.0 | 7.8 | 2.7 | 0.96 | 1.8 |
| 25 | 3.1 | 2.8 | e2.5 | e2.7 | e2.7 | 6.4 | 31 | 8.6 | 7.5 | 2.8 | 1.2 | 1.7 |
| 26 | 3.6 | e2.7 | e2.5 | e2.8 | 2.8 | 9.3 | 19 | 8.3 | 11 | 2.5 | 1.3 | 1.7 |
| 27 | 4.5 | e2.6 | e2.7 | 2.9 | 2.9 | 11 | 7.9 | 8.0 | 8.1 | 2.9 | 1.7 | 1.7 |
| 28 | 3.8 | e2.7 | e3.0 | 2.8 | e2.8 | 7.4 | 32 | 6.5 | 8.0 | 2.6 | 1.7 | 2.0 |
| 29 | 3.5 | e2.7 | e3.0 | 3.2 | --- | 5.2 | 46 | 6.6 | 13 | 2.6 | 1.9 | 2.3 |
| 30 | 3.2 | 2.7 | e2.9 | 3.3 | --- | 4.6 | 33 | 16 | 7.3 | 2.2 | 3.4 | 2.8 |
| 31 | 3.6 | --- | e3.0 | 3.7 | --- | 5.8 | --- | 12 | --- | 2.2 | 1.3 | --- |
| TOTAL | 93.3 | 93.9 | 84.2 | 89.3 | 81.2 | 132.7 | 530.4 | 518.0 | 295.1 | 88.4 | 65.36 | 88.1 |
| MEAN | 3.01 | 3.13 | 2.72 | 2.88 | 2.90 | 4.28 | 17.7 | 16.7 | 9.84 | 2.85 | 2.11 | 2.94 |
| MAX | 4.5 | 3.9 | 3.0 | 3.7 | 3.5 | 11 | 46 | 34 | 25 | 5.6 | 13 | 5.8 |
| MIN | 1.9 | 2.5 | 2.4 | 2.5 | 2.4 | 2.5 | 6.2 | 6.5 | 4.4 | 2.0 | 0.96 | 1.7 |
| AC-FT | 185 | 186 | 167 | 177 | 161 | 263 | 1,050 | 1,030 | 585 | 175 | 130 | 175 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2003, BY WATER YEAR (WY)

| | 5.20 | 6.10 | 5.24 | 4.94 | 5.24 | 8.45 | 26.3 | 47.3 | 22.6 | 8.77 | 8.14 | 5.10 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 5.20 | 6.10 | 5.24 | 4.94 | 5.24 | 8.45 | 26.3 | 47.3 | 22.6 | 8.77 | 8.14 | 5.10 |
| MAX | 11.4 | 13.0 | 9.91 | 10.1 | 10.8 | 21.1 | 75.5 | 210 | 77.8 | 30.6 | 36.7 | 15.7 |
| (WY) | (2000) | (1998) | (2000) | (2000) | (2000) | (1998) | (1999) | (1999) | (1999) | (1995) | (1999) | (1997) |
| MIN | 0.95 | 1.63 | 1.54 | 1.08 | 1.81 | 2.38 | 5.67 | 5.23 | 2.74 | 1.04 | 0.90 | 1.16 |
| (WY) | (1990) | (1990) | (1990) | (1990) | (1990) | (1991) | (2002) | (2002) | (2002) | (1989) | (1989) | (1989) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1985 - 2003

| | | | |
|--------------------------|---------|----------|-----------|
| ANNUAL TOTAL | 1,237.0 | 2,159.96 | |
| ANNUAL MEAN | 3.39 | 5.92 | 12.4 |
| HIGHEST ANNUAL MEAN | | | 39.6 1999 |
| LOWEST ANNUAL MEAN | | | 3.58 2002 |
| HIGHEST DAILY MEAN | 10 | Apr 21 | 1,250 |
| LOWEST DAILY MEAN | 1.2 | Aug 17 | 0.58 |
| ANNUAL SEVEN-DAY MINIMUM | 1.4 | Aug 6 | 0.69 |
| MAXIMUM PEAK FLOW | | a130 | b1,790 |
| MAXIMUM PEAK STAGE | | 7.84 | c9.01 |
| ANNUAL RUNOFF (AC-FT) | 2,450 | 4,280 | 8,970 |
| 10 PERCENT EXCEEDS | 5.2 | 14 | 26 |
| 50 PERCENT EXCEEDS | 3.1 | 3.0 | 5.6 |
| 90 PERCENT EXCEEDS | 1.8 | 2.2 | 2.0 |

e Estimated.

a From rating curve extended above 54 ft³/s on basis of slope-area measurement of peak flow.

b From slope-area measurement of peak flow.

c From floodmarks.

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1984 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103780

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Fluoride, water, fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|------------------------------------|---------------------------------------|--------------------------------------|------------------------------------|---|---|---|
| NOV 07... | 1320 | 3.4 | 14.7 | 9.1 | 498 | 8.0 | 37 | 8.2 | 1.05 | 41.2 | 0.204 | 1.03 | 1.5 |
| DEC 03... | 0830 | 2.3 | 11.1 | 7.7 | 493 | 2.5 | 34 | 8.0 | 1.12 | 42.4 | 0.568 | 1.30 | 2.1 |
| FEB 14... | 1215 | 3.9 | 11.6 | 8.5 | 483 | 7.5 | 29 | 7.7 | 1.1 | 39.8 | 0.149 | 5.11 | 2.2 |
| JUL 31... | 1030 | 2.6 | 10.1 | 8.5 | 512 | 19.5 | 34.3 | 12.1 | 1.39 | 35.1 | E.008 | 1.26 | 1.6 |
| AUG 21... | 1115 | 1.5 | 8.2 | 8.1 | 487 | 21.0 | 30.2 | 7.20 | 1.42 | 33.8 | 0.042 | 0.108 | 1.7 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Phosphorus, water, unfltrd mg/L (00665) | BOD, water, unfltrd 5 day, 20 degC mg/L (00310) | E coli, modif. m-TEC, water, col/100 mL (90902) | E coli, m-TEC MF, water, col/100 mL (31633) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Arsenic water, fltrd, ug/L (01000) | Arsenic water unfltrd ug/L (01002) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Cadmium water, fltrd, ug/L (01025) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, fltrd, ug/L (01030) | Chromium, water, unfltrd recover-able, ug/L (01034) |
|-----------|---|---|---|---|---|------------------------------------|------------------------------------|-----------------------------------|--|------------------------------------|-------------------------------------|--------------------------------------|---|
| NOV 07... | 1.66 | <2.0 | -- | 11 | 13 | <1.9 | <2 | 225 | 222 | 0.058 | <0.22 | E.5 | <0.8 |
| DEC 03... | 2.26 | 2.0 | -- | E10 | 15 | <1.9 | <2 | 282 | 276 | 0.081 | <0.22 | <0.8 | <0.8 |
| FEB 14... | 2.46 | -- | -- | 10 | E9 | E.86 | <2 | 238 | 229 | E.096 | E.028 | <0.8 | <0.8 |
| JUL 31... | 2.11 | -- | 130 | -- | 120 | E1.4 | E2 | 252 | 248 | 0.075 | <0.22 | <0.8 | <0.8 |
| AUG 21... | 2.23 | -- | 92 | -- | 78 | 1.78 | 3 | 228 | 248 | E.024 | E.029 | <0.8 | E.5 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Cyanide water unfltrd mg/L (00720) | Iron, water, fltrd, ug/L (01046) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, fltrd, ug/L (01049) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, fltrd, ug/L (71890) | Mercury water, unfltrd recover-able, ug/L (71900) | Nickel, water, fltrd, ug/L (01065) | Nickel, water, unfltrd recover-able, ug/L (01067) |
|-----------|------------------------------------|---|------------------------------------|----------------------------------|---|----------------------------------|---|---------------------------------------|--|------------------------------------|---|------------------------------------|---|
| NOV 07... | 2.55 | 2 | <0.009 | 85 | 292 | 0.21 | E.5 | 22.5 | 39.9 | <0.018 | <0.018 | 2.83 | E2 |
| DEC 03... | 3.49 | 4 | <0.009 | 59 | 346 | 0.37 | E.6 | 42.6 | 60.9 | <0.018 | <0.018 | 3.63 | 3 |
| FEB 14... | 5.75 | 6.00 | <0.009 | 43 | 193 | 0.53 | 0.62 | 20.4 | 31.0 | <0.018 | <0.018 | 4.43 | 5.32 |
| JUL 31... | 2.30 | 3 | <0.009 | 54.1 | 775 | 0.18 | E.8 | 54.6 | 96.5 | <0.018 | <0.018 | 3.55 | 4 |
| AUG 21... | 1.43 | 2.42 | <0.009 | 45.8 | 1,040 | 0.12 | 0.77 | 61.6 | 133 | <0.018 | <0.018 | 4.15 | 4.49 |

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Selenium, water, fltrd, ug/L (01145) | Selenium, water, unfltrd ug/L (01147) | Silver, water, fltrd, ug/L (01075) | Silver, water, unfltrd recover-able, ug/L (01077) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover-able, ug/L (01092) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-----------|--------------------------------------|---------------------------------------|------------------------------------|---|----------------------------------|---|---|---|
| NOV 07... | <2.6 | <2.6 | <0.20 | <0.26 | 14.9 | <25 | 6 | 0.06 |
| DEC 03... | <2.6 | <2.6 | <0.20 | <0.26 | 20.5 | E24.3 | 6 | 0.04 |
| FEB 14... | <2.50 | E.29 | <1.00 | <0.16 | 29.4 | 28.9 | 5 | 0.05 |
| JUL 31... | <3 | <3 | <0.20 | <0.26 | 12.3 | 15.4 | 12 | 0.08 |
| AUG 21... | E.39 | 0.69 | <0.20 | <0.16 | 6.4 | 10.5 | -- | -- |

< -- Actual value is known to be less than the value shown.
 E -- Estimated laboratory analysis value.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specif. conductance, wat unflab, uS/cm 25 degC (90095) | Specif. conductance, wat unfl 25 degC (00095) | Temperature, water, deg C (00010) |
|-----------|------|--------------------------------------|--|---|-----------------------------------|
| NOV 05... | 1530 | 3.3 | -- | 495 | 7.0 |
| DEC 03... | 0820 | 2.3 | -- | 478 | 2.0 |
| DEC 17... | 1035 | 2.9 | -- | 479 | 3.0 |
| JAN 02... | 1545 | 4.6 | -- | 515 | 3.5 |
| FEB 04... | 1550 | 4.4 | -- | 548 | 5.0 |
| MAR 06... | 0815 | 2.0 | -- | 499 | 0.0 |
| MAR 31... | 1000 | 6.2 | -- | 489 | 8.0 |
| APR 29... | 1340 | 54 | -- | 182 | 15.0 |
| MAY 14... | 1335 | 16 | -- | 253 | 17.5 |
| JUN 09... | 1445 | 6.3 | -- | 418 | 19.5 |
| JUN 09... | 1446 | 6.3 | -- | 414 | 19.5 |
| JUL 21... | 1300 | 2.4 | 378 | -- | -- |
| AUG 07... | 1715 | 0.92 | 483 | -- | -- |
| SEP 05... | 1345 | 3.5 | 492 | -- | -- |

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to September 2003 (discontinued) (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103780

GAGE.--Tipping-bucket rain gage with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.56 inches, May 8, 2000 and Aug. 30, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.56 inches, Aug. 30.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.19 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 |
| 2 | 0.11 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.01 |
| 3 | 0.08 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 0.38 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.06 | 0.12 | 0.00 | 0.02 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.49 | 0.00 | 0.08 | 0.01 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.29 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 |
| 7 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.20 | 0.00 | 0.10 | 0.56 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.18 | 0.01 | 0.00 | 0.39 | 0.03 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.16 | 0.12 | 0.00 | 0.06 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.01 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.04 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.26 | 0.44 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.32 | 0.03 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 1.04 | 0.00 | 0.01 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.10 | 0.02 | 0.21 | 0.00 | 0.44 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.24 | 0.00 | 0.48 | 0.61 | 0.00 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.10 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.47 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 |
| 24 | 0.05 | --- | --- | --- | --- | --- | 0.47 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 |
| 25 | 0.01 | --- | --- | --- | --- | --- | 0.01 | 0.01 | 0.31 | 0.03 | 0.00 | 0.00 |
| 26 | 0.41 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.35 | 0.23 | 0.00 | 0.00 |
| 27 | 0.15 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 0.00 |
| 28 | 0.02 | --- | --- | --- | --- | --- | 0.00 | 0.05 | 0.09 | 0.22 | 0.04 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.01 | 0.20 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.82 | 0.00 | 0.00 | 1.56 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.07 | --- | 0.01 | 0.14 | --- |
| TOTAL | 1.03 | --- | --- | --- | --- | --- | 2.24 | 1.83 | 3.90 | 1.17 | 4.47 | 1.04 |
| MAX | 0.41 | --- | --- | --- | --- | --- | 0.47 | 0.82 | 1.04 | 0.61 | 1.56 | 0.56 |

07103785 DEADMANS CREEK ABOVE DEADMANS LAKE AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 39°01'27", long 104°54'03", in NE¹/₄NW¹/₄ sec.9, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on U.S. Air Force Academy, on left bank 100 ft upstream from Deadmans Lake, 1.2 mi northwest of the Air Force Academy Chapel, 3.7 mi west of Interstate-25, and 5.0 mi southwest of Monument.

DRAINAGE AREA.--1.55 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2000 to September 2003 (discontinued). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103785

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,220 ft above NGVD of 1929, 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|
| 1 | 0.00 | 0.00 | 0.02 | 0.01 | 0.02 | 0.04 | 0.14 | 0.40 | 0.06 | 0.05 | 0.00 | 0.00 |
| 2 | 0.00 | 0.00 | 0.02 | 0.01 | 0.02 | 0.04 | 0.19 | 0.36 | 0.06 | 0.05 | 0.00 | 0.00 |
| 3 | 0.00 | 0.00 | 0.02 | 0.01 | 0.02 | 0.04 | 0.21 | 0.33 | 0.06 | 0.04 | 0.00 | 0.00 |
| 4 | 0.00 | 0.00 | 0.02 | 0.01 | 0.02 | 0.04 | 0.19 | 0.30 | 0.05 | 0.03 | 0.00 | 0.00 |
| 5 | 0.00 | 0.00 | 0.02 | 0.01 | 0.02 | 0.05 | 0.18 | 0.26 | 0.07 | 0.03 | 0.00 | 0.00 |
| 6 | 0.00 | 0.00 | 0.02 | 0.01 | e0.02 | 0.05 | 0.18 | 0.25 | 0.08 | 0.03 | 0.00 | 0.00 |
| 7 | 0.00 | 0.00 | 0.02 | 0.01 | e0.02 | 0.04 | 0.15 | 0.23 | 0.08 | 0.02 | 0.00 | 0.00 |
| 8 | 0.00 | 0.00 | 0.02 | 0.01 | e0.02 | 0.04 | 0.14 | 0.21 | 0.06 | 0.02 | 0.00 | 0.00 |
| 9 | 0.00 | 0.00 | 0.02 | 0.01 | e0.02 | 0.04 | 0.17 | 0.22 | 0.06 | 0.02 | 0.00 | 0.00 |
| 10 | 0.00 | 0.00 | 0.02 | 0.01 | e0.02 | 0.04 | 0.21 | 0.22 | 0.07 | 0.02 | 0.00 | 0.00 |
| 11 | 0.00 | 0.00 | 0.02 | 0.01 | e0.03 | 0.05 | 0.24 | 0.20 | 0.06 | 0.02 | 0.00 | 0.00 |
| 12 | 0.00 | 0.00 | 0.02 | 0.01 | 0.03 | 0.04 | 0.26 | 0.19 | 0.06 | 0.01 | 0.00 | 0.00 |
| 13 | 0.00 | 0.00 | 0.02 | 0.01 | 0.03 | 0.05 | 0.29 | 0.17 | 0.06 | 0.01 | 0.00 | 0.00 |
| 14 | 0.00 | 0.01 | 0.02 | 0.01 | 0.02 | 0.05 | 0.32 | 0.16 | 0.06 | 0.01 | 0.00 | 0.00 |
| 15 | 0.00 | 0.01 | 0.02 | 0.01 | 0.02 | 0.05 | 0.32 | 0.20 | 0.06 | 0.01 | 0.00 | 0.00 |
| 16 | 0.00 | 0.02 | 0.02 | 0.02 | 0.03 | 0.05 | 0.31 | 0.21 | 0.06 | 0.01 | 0.00 | 0.00 |
| 17 | 0.00 | 0.02 | 0.02 | 0.02 | 0.03 | 0.05 | 0.30 | 0.16 | 0.06 | 0.01 | 0.00 | 0.00 |
| 18 | 0.00 | 0.02 | 0.02 | e0.01 | 0.03 | 0.06 | 0.27 | 0.14 | 0.06 | 0.00 | 0.00 | 0.00 |
| 19 | 0.00 | 0.02 | 0.02 | 0.01 | 0.02 | 0.04 | 0.25 | 0.14 | 0.06 | 0.00 | 0.00 | 0.00 |
| 20 | 0.00 | 0.02 | 0.02 | 0.01 | 0.03 | 0.05 | 0.23 | 0.14 | 0.06 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | 0.02 | 0.02 | 0.01 | 0.03 | 0.05 | 0.26 | 0.12 | 0.06 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | 0.02 | 0.02 | 0.01 | 0.03 | 0.06 | 0.31 | 0.10 | 0.06 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | 0.02 | e0.01 | 0.01 | e0.03 | 0.08 | 0.36 | 0.10 | 0.06 | 0.00 | 0.00 | 0.00 |
| 24 | 0.00 | 0.02 | e0.01 | 0.01 | e0.03 | 0.08 | 0.36 | 0.09 | 0.06 | 0.00 | 0.00 | 0.00 |
| 25 | 0.00 | 0.02 | e0.01 | 0.02 | e0.03 | 0.09 | 0.46 | 0.09 | 0.06 | 0.00 | 0.00 | 0.00 |
| 26 | 0.00 | 0.02 | e0.01 | 0.02 | 0.03 | 0.12 | 0.64 | 0.09 | 0.05 | 0.00 | 0.00 | 0.00 |
| 27 | 0.00 | 0.02 | e0.01 | 0.02 | 0.03 | 0.12 | 0.61 | 0.08 | 0.05 | 0.00 | 0.00 | 0.00 |
| 28 | 0.00 | 0.02 | 0.01 | 0.02 | 0.04 | 0.09 | 0.55 | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 |
| 29 | 0.00 | 0.02 | 0.01 | 0.02 | --- | 0.09 | 0.51 | 0.07 | 0.06 | 0.00 | 0.00 | 0.00 |
| 30 | 0.00 | 0.02 | 0.01 | 0.02 | --- | 0.09 | 0.46 | 0.07 | 0.06 | 0.00 | 0.00 | 0.00 |
| 31 | 0.00 | --- | 0.01 | 0.02 | --- | 0.11 | --- | 0.07 | --- | 0.00 | 0.00 | --- |
| TOTAL | 0.00 | 0.32 | 0.53 | 0.40 | 0.72 | 1.89 | 9.07 | 5.44 | 1.82 | 0.39 | 0.00 | 0.00 |
| MEAN | 0.000 | 0.011 | 0.017 | 0.013 | 0.026 | 0.061 | 0.30 | 0.18 | 0.061 | 0.013 | 0.000 | 0.000 |
| MAX | 0.00 | 0.02 | 0.02 | 0.02 | 0.04 | 0.12 | 0.64 | 0.40 | 0.08 | 0.05 | 0.00 | 0.00 |
| MIN | 0.00 | 0.00 | 0.01 | 0.01 | 0.02 | 0.04 | 0.14 | 0.07 | 0.05 | 0.00 | 0.00 | 0.00 |
| AC-FT | 0.00 | 0.6 | 1.1 | 0.8 | 1.4 | 3.7 | 18 | 11 | 3.6 | 0.8 | 0.00 | 0.00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

| | 2000 | 2001 | 2002 | 2003 | 2000 | 2001 | 2002 | 2003 | 2000 | 2001 | 2002 | 2003 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.051 | 0.068 | 0.061 | 0.063 | 0.059 | 0.099 | 0.46 | 0.35 | 0.097 | 0.028 | 0.017 | 0.025 |
| MAX | 0.10 | 0.12 | 0.11 | 0.12 | 0.10 | 0.16 | 1.02 | 0.58 | 0.16 | 0.050 | 0.040 | 0.072 |
| (WY) | (2001) | (2001) | (2001) | (2001) | (2001) | (2001) | (2000) | (2000) | (2000) | (2000) | (2000) | (2000) |
| MIN | 0.000 | 0.011 | 0.017 | 0.013 | 0.026 | 0.061 | 0.13 | 0.089 | 0.024 | 0.000 | 0.000 | 0.000 |
| (WY) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 2000 - 2003

| | | | |
|--------------------------|-------------|--------------|-------------------|
| ANNUAL TOTAL | 13.73 | 20.58 | |
| ANNUAL MEAN | 0.038 | 0.056 | 0.088 |
| HIGHEST ANNUAL MEAN | | | 0.16 2001 |
| LOWEST ANNUAL MEAN | | | 0.051 2002 |
| HIGHEST DAILY MEAN | 0.17 Apr 7 | 0.64 Apr 26 | 1.3 Apr 14, 2000 |
| LOWEST DAILY MEAN | 0.00 Jun 27 | 0.00 Oct 1 | a0.00 Aug 2, 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 Jun 27 | 0.00 Oct 1 | 0.00 Aug 8, 2000 |
| MAXIMUM PEAK FLOW | | b0.81 Apr 26 | b1.5 Apr 9, 2000 |
| MAXIMUM PEAK STAGE | | 3.89 Apr 26 | 4.05 Apr 9, 2000 |
| ANNUAL RUNOFF (AC-FT) | 27 | 41 | 64 |
| 10 PERCENT EXCEEDS | 0.10 | 0.19 | 0.21 |
| 50 PERCENT EXCEEDS | 0.02 | 0.02 | 0.05 |
| 90 PERCENT EXCEEDS | 0.00 | 0.00 | 0.00 |

e Estimated.

a No flow on many days during most years.

b From rating curve extended above 0.90 ft³/s.

07103785 DEADMANS CREEK ABOVE DEADMANS LAKE AT U. S. AIR FORCE ACADEMY, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to September 2003 (discontinued) (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103785

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.66 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.92 inch, July 19.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.38 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 |
| 2 | 0.16 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 |
| 3 | 0.02 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.79 | 0.33 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.03 | --- | 0.00 | 0.09 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.04 | 0.00 | --- | 0.00 | 0.32 | 0.00 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.24 | 0.00 | --- | 0.00 | 0.00 | 0.01 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | 0.03 | 0.44 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | --- | 0.00 | 0.01 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.14 | 0.03 | 0.00 | 0.35 | 0.02 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.16 | 0.14 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.33 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.07 |
| 14 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.42 | 0.61 | 0.00 | 0.02 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.02 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.12 | 0.00 | 0.01 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.06 | 0.02 | 0.06 | 0.01 | 0.85 | 0.02 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.43 | 0.04 | 0.24 | 0.92 | 0.01 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.16 | 0.03 | 0.01 | 0.01 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.07 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.22 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 |
| 24 | 0.08 | --- | --- | --- | --- | --- | 0.81 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 |
| 25 | 0.01 | --- | --- | --- | --- | --- | 0.01 | 0.02 | 0.34 | 0.00 | 0.00 | 0.00 |
| 26 | 0.30 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.45 | 0.55 | 0.00 | 0.00 |
| 27 | 0.18 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.52 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.03 | 0.04 | 0.03 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.05 | 0.00 | 0.22 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.00 | 0.00 | 0.86 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.33 | --- | 0.02 | 0.13 | --- |
| TOTAL | 1.14 | --- | --- | --- | --- | --- | 2.83 | 1.47 | --- | 1.65 | 4.78 | 0.92 |
| MAX | 0.38 | --- | --- | --- | --- | --- | 0.81 | 0.61 | --- | 0.92 | 0.86 | 0.44 |

07103790 MONUMENT CREEK BELOW SEWAGE TREATMENT PLANT AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°58'53", long 104°49'50", in NW¹/₄NW¹/₄ sec.30, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on U.S. Air Force Academy, on right bank 100 ft upstream from Sante Fe Recreation Trail footbridge, 1.0 mi west of Interstate 25, 1.2 mi southeast of Falcon Stadium, and 1.5 mi northwest of the south entrance to the U.S. Air Force Academy.

DRAINAGE AREA.--122 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2000 to September 2003 (seasonal records only) (discontinued). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103790

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,420 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 30 ft³/s, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 218 ft³/s, Aug. 31, 2003, gage height, 4.95 ft, from rating curve extended above 44 ft³/s; minimum daily, 1.5 ft³/s, Aug. 17, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 218 ft³/s, Aug. 31, gage height, 4.95 ft, from rating curve extended above 44 ft³/s; minimum daily, 1.7 ft³/s, Aug. 24.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|
| 1 | 3.3 | 5.3 | --- | --- | --- | --- | 12 | 35 | 12 | 6.9 | 2.6 | 9.5 |
| 2 | 4.1 | 5.4 | --- | --- | --- | --- | 13 | 36 | 11 | 4.9 | 2.4 | 6.8 |
| 3 | 4.8 | 5.5 | --- | --- | --- | --- | 12 | 35 | 9.7 | 4.6 | 2.4 | 7.0 |
| 4 | 4.3 | 5.4 | --- | --- | --- | --- | 12 | 34 | 7.7 | 4.1 | 2.8 | 7.7 |
| 5 | 4.2 | 4.9 | --- | --- | --- | --- | 10 | 32 | 12 | 3.7 | 2.4 | 5.8 |
| 6 | 4.1 | 4.8 | --- | --- | --- | --- | 10 | 24 | 12 | 3.7 | 2.2 | 5.5 |
| 7 | 4.3 | 4.8 | --- | --- | --- | --- | 10 | 23 | 12 | 3.8 | 1.8 | 6.9 |
| 8 | 3.4 | 4.7 | --- | --- | --- | --- | 13 | 22 | 12 | 3.5 | 2.1 | 8.2 |
| 9 | 2.8 | 4.6 | --- | --- | --- | --- | 14 | 19 | 9.1 | 3.1 | 2.2 | 6.1 |
| 10 | 2.8 | 4.8 | --- | --- | --- | --- | 12 | 21 | 8.1 | 3.2 | 2.5 | 5.3 |
| 11 | 2.9 | 4.8 | --- | --- | --- | --- | 8.7 | 19 | 8.9 | 3.5 | 3.2 | 4.2 |
| 12 | 2.9 | 4.8 | --- | --- | --- | --- | 8.4 | 18 | 9.6 | 3.0 | 3.8 | 4.1 |
| 13 | e3.7 | 4.6 | --- | --- | --- | --- | 11 | 17 | 10 | 2.8 | 2.8 | 4.1 |
| 14 | e3.5 | 4.7 | --- | --- | --- | --- | 16 | 16 | 6.5 | 2.6 | 2.5 | 4.7 |
| 15 | e3.4 | 4.7 | --- | --- | --- | --- | 22 | 18 | 5.1 | 2.5 | 2.5 | 4.2 |
| 16 | e3.5 | 4.6 | --- | --- | --- | --- | 27 | 19 | 5.8 | 2.5 | 2.2 | 4.1 |
| 17 | 3.8 | 4.5 | --- | --- | --- | --- | 25 | 15 | 12 | 2.4 | 2.2 | 3.6 |
| 18 | 3.9 | 4.2 | --- | --- | --- | --- | 21 | 15 | 27 | 2.4 | 2.8 | 3.6 |
| 19 | 3.9 | 3.8 | --- | --- | --- | --- | 21 | 16 | 29 | 2.5 | 3.5 | 4.8 |
| 20 | 4.1 | 3.5 | --- | --- | --- | --- | 23 | 17 | 31 | 3.0 | 2.3 | 3.3 |
| 21 | 4.1 | 3.5 | --- | --- | --- | --- | 21 | 15 | 17 | 2.8 | 1.9 | 3.0 |
| 22 | 4.2 | 3.6 | --- | --- | --- | --- | 17 | 13 | 10 | 2.9 | 1.9 | 3.1 |
| 23 | 4.5 | 3.7 | --- | --- | --- | --- | 19 | 13 | 9.7 | 3.0 | 1.8 | 3.5 |
| 24 | 4.7 | 3.9 | --- | --- | --- | --- | 38 | 12 | 8.9 | 2.9 | 1.7 | 2.6 |
| 25 | 4.7 | 4.0 | --- | --- | --- | --- | 38 | 11 | 8.5 | 2.9 | 1.9 | 2.5 |
| 26 | 4.6 | e3.8 | --- | --- | --- | --- | 25 | 11 | 13 | 2.9 | 1.8 | 2.4 |
| 27 | 6.3 | e3.6 | --- | --- | --- | --- | 12 | 11 | 10 | 3.0 | 2.9 | 2.4 |
| 28 | 5.9 | e3.7 | --- | --- | --- | --- | 29 | 8.9 | 8.8 | 2.8 | 2.8 | 2.6 |
| 29 | 5.4 | e3.8 | --- | --- | --- | --- | 54 | 8.0 | 14 | 2.8 | 4.8 | 2.8 |
| 30 | 5.0 | e4.0 | --- | --- | --- | --- | 37 | 12 | 9.2 | 2.9 | 24 | 3.6 |
| 31 | 5.0 | --- | --- | --- | --- | --- | --- | 18 | --- | 2.6 | 69 | --- |
| TOTAL | 128.1 | 132.0 | --- | --- | --- | --- | 591.1 | 583.9 | 359.6 | 100.2 | 165.7 | 138.0 |
| MEAN | 4.13 | 4.40 | --- | --- | --- | --- | 19.7 | 18.8 | 12.0 | 3.23 | 5.35 | 4.60 |
| MAX | 6.3 | 5.5 | --- | --- | --- | --- | 54 | 36 | 31 | 6.9 | 69 | 9.5 |
| MIN | 2.8 | 3.5 | --- | --- | --- | --- | 8.4 | 8.0 | 5.1 | 2.4 | 1.7 | 2.4 |
| AC-FT | 254 | 262 | --- | --- | --- | --- | 1,170 | 1,160 | 713 | 199 | 329 | 274 |

e Estimated.

07103790 MONUMENT CREEK BELOW SEWAGE TREATMENT PLANT AT U.S. AIR FORCE ACADEMY, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to September 2003 (discontinued) (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103790

GAGE.--Tipping-bucket rain gage with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.91 inches, Aug. 30, 2003,

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.91 inches, Aug. 30.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.17 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.26 | 0.00 | 0.03 | 0.00 |
| 2 | 0.05 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.05 |
| 3 | 0.06 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.13 | 0.47 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.03 | 0.29 | 0.00 | 0.04 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.03 | 0.00 | 0.44 | 0.00 | 0.06 | 0.01 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.19 | 0.01 | 0.08 | 0.00 | 0.00 | 0.11 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.18 | 0.00 | 0.14 | 0.47 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.01 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.22 | 0.06 | 0.00 | 0.08 | 0.07 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.09 | 0.16 | 0.00 | 0.11 | 0.01 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.08 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.13 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.16 | 0.02 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.63 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.12 | 0.02 | 0.06 | 0.19 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.17 | 0.01 | 0.54 | 0.49 | 0.01 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.37 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.51 | 0.03 | 0.00 | 0.02 | 0.00 | 0.00 |
| 24 | 0.03 | --- | --- | --- | --- | --- | 0.55 | 0.00 | 0.00 | 0.00 | 0.37 | 0.00 |
| 25 | 0.03 | --- | --- | --- | --- | --- | 0.01 | 0.02 | 0.44 | 0.14 | 0.00 | 0.00 |
| 26 | 0.46 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.51 | 0.39 | 0.00 | 0.00 |
| 27 | 0.13 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.03 | 0.35 | 0.00 |
| 28 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.03 | 0.12 | 0.03 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.01 | 1.67 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 1.91 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.04 | --- | 0.06 | 0.06 | --- |
| TOTAL | 0.94 | --- | --- | --- | --- | --- | 2.03 | 0.73 | 3.92 | 1.34 | 5.33 | 1.24 |
| MAX | 0.46 | --- | --- | --- | --- | --- | 0.55 | 0.22 | 0.63 | 0.49 | 1.91 | 0.47 |

07103797 WEST MONUMENT CREEK BELOW RAMPART RESERVOIR, CO

LOCATION.--Lat 38°58'30", long 104°57'18", in NE¹/₄SE¹/₄ sec.26, T.12 S., R.68 W., El Paso County, Hydrologic Unit 11020003, on Pike National Forest, on right bank 0.1 mi below Wildcat Gulch, and 0.5 mi below Rampart Reservoir.

DRAINAGE AREA.--7.29 mi².

PERIOD OF RECORD.--November 1993 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103797

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,710 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoir and transmountain diversions. Flow mostly regulated by Rampart Reservoir 0.5 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 3.4 | 3.5 | 3.4 | 3.5 | 3.8 | 3.6 | 3.8 | 3.3 | 3.5 | 3.4 | 3.8 | 4.6 |
| 2 | 3.5 | 3.5 | 3.4 | 3.5 | 3.8 | 3.6 | 4.0 | 3.2 | 3.4 | 3.4 | 3.7 | 4.6 |
| 3 | 3.4 | 3.6 | 3.4 | 3.5 | 3.8 | 3.6 | 4.0 | 3.3 | 3.4 | 3.4 | 3.8 | 4.5 |
| 4 | 3.5 | 3.6 | 3.3 | 3.6 | 3.8 | 3.6 | 3.9 | 3.3 | 3.4 | 3.3 | 3.8 | 4.3 |
| 5 | 3.6 | 3.5 | 3.3 | 3.6 | 3.8 | 3.6 | 3.6 | 3.2 | 3.9 | 3.3 | 3.8 | 4.3 |
| 6 | 3.5 | 3.6 | 3.3 | 3.6 | 3.8 | 3.6 | 3.6 | 3.4 | 4.0 | 3.3 | 3.8 | 4.3 |
| 7 | 3.5 | 3.6 | 3.4 | 3.6 | 3.8 | 3.6 | 3.6 | 3.5 | 3.9 | 3.3 | 3.8 | 4.4 |
| 8 | 3.5 | 3.6 | 3.5 | 3.3 | 3.8 | 3.6 | 3.6 | 3.5 | 3.6 | 3.3 | 3.9 | 4.3 |
| 9 | 3.6 | 3.7 | 3.5 | 3.2 | 3.9 | 3.6 | 3.7 | 3.4 | 3.5 | 3.3 | 4.0 | 4.1 |
| 10 | 3.6 | 3.6 | 3.6 | 3.3 | 4.0 | 3.6 | 3.8 | 3.5 | 3.5 | 3.4 | 3.9 | 4.1 |
| 11 | 3.6 | 3.5 | 3.5 | 3.3 | 4.0 | 3.7 | 3.9 | 3.4 | 3.4 | 3.4 | 4.0 | 4.1 |
| 12 | 3.6 | 3.4 | 3.6 | 3.3 | 4.0 | 3.6 | 3.7 | 3.4 | 3.5 | 3.4 | 4.0 | 4.1 |
| 13 | 3.4 | 3.4 | 3.7 | 3.3 | 4.0 | 3.5 | 3.6 | 3.4 | 3.6 | 3.5 | 4.0 | 4.1 |
| 14 | 3.5 | 3.4 | 3.6 | 3.3 | 4.0 | 3.5 | 3.5 | 3.4 | 3.5 | 3.5 | 3.9 | 4.1 |
| 15 | 3.6 | 3.4 | 3.7 | 3.3 | 4.0 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.9 | 4.0 |
| 16 | 3.6 | 3.4 | 4.0 | 3.3 | 4.0 | 3.5 | 3.5 | 3.8 | 3.5 | 3.5 | 3.9 | 4.0 |
| 17 | 3.6 | 3.4 | 4.1 | 3.3 | 4.0 | 3.7 | 3.5 | 3.8 | 3.5 | 3.7 | 4.0 | 4.0 |
| 18 | 3.8 | 3.4 | 3.8 | 3.3 | 4.1 | 3.6 | 3.4 | 3.7 | 3.5 | 3.7 | 4.1 | 4.1 |
| 19 | 3.9 | 3.4 | 3.6 | 3.3 | 4.1 | 3.6 | 3.4 | 3.7 | 3.7 | 3.7 | 4.1 | 4.0 |
| 20 | e3.8 | 3.4 | 3.6 | 3.3 | 4.1 | 3.6 | 3.4 | 3.6 | 3.7 | 3.7 | 4.1 | 4.0 |
| 21 | 3.8 | 3.4 | 3.6 | 3.3 | 4.1 | 3.6 | 3.5 | 3.4 | 3.5 | e3.7 | 4.1 | 4.0 |
| 22 | 3.8 | 3.4 | 3.6 | 3.3 | 4.2 | 3.6 | 3.5 | 3.4 | 3.5 | e3.7 | 4.1 | 4.0 |
| 23 | 3.8 | 3.4 | 3.5 | 3.4 | 4.2 | 3.7 | 3.6 | 3.4 | 3.4 | 3.7 | 4.2 | 4.0 |
| 24 | 3.8 | 3.4 | 3.4 | 3.4 | 4.0 | 3.7 | 3.7 | 3.4 | 3.4 | 3.7 | 4.3 | 4.1 |
| 25 | 3.8 | 3.4 | 3.4 | 3.6 | 3.9 | 3.7 | 4.0 | 3.4 | 3.5 | 3.7 | 4.4 | 4.1 |
| 26 | 3.8 | 3.4 | 3.4 | 3.7 | 3.7 | 3.6 | 3.8 | 3.4 | 3.7 | 3.8 | 4.5 | 4.1 |
| 27 | 3.8 | 3.4 | 3.5 | 3.7 | 3.5 | 3.6 | 3.5 | 3.3 | 3.4 | 3.7 | 4.5 | 4.1 |
| 28 | 3.8 | 3.4 | 3.5 | 3.7 | 3.6 | 3.5 | 3.5 | 3.4 | 3.4 | 3.8 | 4.5 | 4.1 |
| 29 | 3.8 | 3.4 | 3.5 | 3.7 | --- | 3.5 | 3.5 | 3.4 | 3.5 | 3.8 | 4.5 | 4.1 |
| 30 | 3.7 | 3.4 | 3.5 | 3.8 | --- | 3.5 | 3.4 | 3.4 | 3.5 | 3.7 | 4.6 | 4.1 |
| 31 | 3.5 | --- | 3.5 | 3.8 | --- | 3.7 | --- | 3.5 | --- | 3.7 | 4.7 | --- |
| TOTAL | 112.9 | 103.9 | 109.7 | 107.1 | 109.8 | 111.5 | 109.0 | 106.7 | 106.3 | 110.0 | 126.7 | 124.7 |
| MEAN | 3.64 | 3.46 | 3.54 | 3.45 | 3.92 | 3.60 | 3.63 | 3.44 | 3.54 | 3.55 | 4.09 | 4.16 |
| MAX | 3.9 | 3.7 | 4.1 | 3.8 | 4.2 | 3.7 | 4.0 | 3.8 | 4.0 | 3.8 | 4.7 | 4.6 |
| MIN | 3.4 | 3.4 | 3.3 | 3.2 | 3.5 | 3.5 | 3.4 | 3.2 | 3.4 | 3.3 | 3.7 | 4.0 |
| AC-FT | 224 | 206 | 218 | 212 | 218 | 221 | 216 | 212 | 211 | 218 | 251 | 247 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 4.47 | 4.97 | 5.60 | 5.42 | 5.60 | 5.39 | 5.74 | 6.82 | 7.03 | 7.75 | 6.84 | 5.56 |
| MAX | 10.1 | 10.6 | 9.68 | 9.36 | 8.75 | 10.7 | 10.5 | 17.5 | 15.1 | 20.6 | 15.7 | 12.2 |
| (WY) | (1995) | (1995) | (1994) | (1996) | (1996) | (1994) | (1996) | (1996) | (1996) | (1994) | (1994) | (1994) |
| MIN | 3.35 | 2.86 | 2.90 | 3.15 | 3.22 | 3.16 | 3.58 | 3.40 | 3.14 | 3.08 | 3.36 | 2.90 |
| (WY) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2001) |

| SUMMARY STATISTICS | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | WATER YEARS 1994 - 2003 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--|
| ANNUAL TOTAL | 1,219.9 | | 1,338.3 | | 5,44 | |
| ANNUAL MEAN | 3.34 | | 3.67 | | 10.0 1996 | |
| HIGHEST ANNUAL MEAN | | | | | 3.21 2002 | |
| LOWEST ANNUAL MEAN | | | | | 29 Jul 10, 1994 | |
| HIGHEST DAILY MEAN | 4.8 | Mar 10 | 4.7 | Aug 31 | 1.4 Jan 14, 1997 | |
| LOWEST DAILY MEAN | 2.8 | Jan 10 | 3.2 | Jan 9 | 2.7 Nov 9, 2001 | |
| ANNUAL SEVEN-DAY MINIMUM | 2.9 | Mar 12 | 3.3 | Jan 8 | a46 Jun 6, 1997 | |
| MAXIMUM PEAK FLOW | | | 6.7 | May 16 | 5.54 Jun 6, 1997 | |
| MAXIMUM PEAK STAGE | | | 4.54 | May 16 | | |
| ANNUAL RUNOFF (AC-FT) | 2,420 | | 2,650 | | 3,940 | |
| 10 PERCENT EXCEEDS | 3.6 | | 4.1 | | 9.2 | |
| 50 PERCENT EXCEEDS | 3.4 | | 3.6 | | 4.2 | |
| 90 PERCENT EXCEEDS | 3.0 | | 3.4 | | 3.3 | |

e Estimated.

a From rating curve extended above 30 ft³/s.

07103800 WEST MONUMENT CREEK AT U.S. AIR FORCE ACADEMY, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 2000 to September 2003 (discontinued) (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103800

GAGE.--Tipping-bucket rain gage with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.34 inches, May 5, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.93 inch, July 26.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.22 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.05 | 0.00 | 0.02 | 0.01 |
| 2 | 0.14 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.15 |
| 3 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.78 | 0.27 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.19 | 0.00 | 0.22 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.06 | 0.00 | 0.50 | 0.00 | 0.08 | 0.00 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.31 | 0.00 | 0.26 | 0.00 | 0.00 | 0.01 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.45 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.28 | 0.09 | 0.00 | 0.06 | 0.04 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.08 | 0.06 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.13 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.09 | 0.01 | 0.00 | 0.04 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.41 | 0.34 | 0.00 | 0.11 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.34 | 0.01 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.14 | 0.00 | 0.00 | 0.01 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.09 | 0.11 | 0.01 | 0.01 | 0.30 | 0.06 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.37 | 0.05 | 0.54 | 0.39 | 0.00 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.09 | 0.03 | 0.01 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.50 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.17 | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 |
| 24 | 0.04 | --- | --- | --- | --- | --- | 0.78 | 0.01 | 0.00 | 0.00 | 0.37 | 0.00 |
| 25 | 0.11 | --- | --- | --- | --- | --- | 0.01 | 0.03 | 0.42 | 0.19 | 0.01 | 0.00 |
| 26 | 0.39 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.29 | 0.93 | 0.00 | 0.00 |
| 27 | 0.29 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.57 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.03 | 0.13 | 0.03 | 0.06 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.04 | 0.11 | 0.02 | 0.23 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.01 | 0.00 | 0.90 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.16 | --- | 0.01 | 0.26 | --- |
| TOTAL | 1.20 | --- | --- | --- | --- | --- | 2.79 | 1.21 | 3.77 | 1.95 | 4.28 | 1.04 |
| MAX | 0.39 | --- | --- | --- | --- | --- | 0.78 | 0.34 | 0.54 | 0.93 | 0.90 | 0.45 |

07103930 WEST MONUMENT CREEK AT MOUTH AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°57'32", long 104°50'08", in NW¼SE¼ sec.36, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 75 ft downstream from Union Pacific railroad bridge at U. S. Air Force Academy, 0.2 mi north of Ice Lake, and 2.0 mi west of Interstate 25.

DRAINAGE AREA.--23.5 mi².

PERIOD OF RECORD.--March 2000 to September 2003 (discontinued). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103930

GAGE.--Water-stage recorder and satellite telemetry. Elevation of gage is 6,380 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for Aug. 30-31, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, and diversions for municipal use. Flow partly regulated by Rampart Reservoir 9.3 mi upstream, Nichols Reservoir 8.3 mi upstream, and Northfield Reservoir 7.5 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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|------|------|-------|-------|-------|-------|-------|-------|
| 1 | 0.00 | 0.51 | 0.65 | 0.09 | 0.09 | 0.14 | 0.25 | 2.2 | 0.35 | 0.36 | 0.02 | 0.63 |
| 2 | 0.00 | 0.45 | 0.64 | 0.08 | 0.10 | 0.15 | 0.26 | 2.0 | 0.29 | 0.24 | 0.00 | 0.48 |
| 3 | 0.38 | 0.41 | 0.65 | 0.09 | 0.11 | 0.18 | 0.25 | 1.9 | 0.36 | 0.16 | 0.00 | 0.63 |
| 4 | 0.68 | 0.68 | 0.66 | 0.07 | 0.09 | 0.15 | 0.27 | 1.8 | 0.44 | 0.12 | 0.00 | 2.1 |
| 5 | 0.81 | 0.95 | 0.70 | 0.06 | 0.10 | 0.15 | 0.29 | 1.6 | 0.51 | 0.10 | 0.00 | 2.4 |
| 6 | 0.86 | 0.68 | 0.67 | 0.05 | 0.10 | 0.16 | 0.31 | 1.5 | 0.44 | 0.07 | 0.00 | 3.0 |
| 7 | 0.94 | 0.63 | 0.69 | 0.05 | 0.12 | 0.19 | 0.30 | 1.3 | 0.45 | 0.72 | 0.00 | 4.1 |
| 8 | 1.0 | 0.79 | 0.70 | 0.05 | 0.10 | 0.21 | 0.31 | 1.2 | 0.40 | 0.82 | 0.39 | 3.9 |
| 9 | 1.1 | 1.1 | 0.67 | 0.04 | 0.11 | 0.17 | 0.30 | 1.1 | 0.37 | 0.78 | 0.26 | 3.8 |
| 10 | 1.1 | 1.4 | 0.68 | 0.03 | 0.16 | 0.20 | 0.29 | 1.2 | 0.35 | 0.61 | 0.07 | 3.5 |
| 11 | 1.2 | 0.81 | 0.70 | 0.04 | 0.16 | 0.22 | 0.28 | 1.0 | 1.5 | 0.62 | 0.05 | 3.5 |
| 12 | 1.3 | 0.63 | 0.58 | 0.05 | 0.15 | 0.21 | 0.27 | 0.93 | 2.8 | 0.59 | 0.23 | 3.3 |
| 13 | 1.3 | 1.9 | 0.49 | 0.04 | 0.14 | 0.22 | 0.29 | 0.86 | 3.6 | 0.63 | 0.30 | 3.2 |
| 14 | 1.2 | 0.86 | 0.37 | 0.04 | 0.13 | 0.23 | 0.29 | 0.80 | 4.2 | 1.2 | 0.09 | 3.1 |
| 15 | 1.4 | 0.94 | 0.33 | 0.05 | 0.08 | 0.22 | 0.29 | 0.77 | 5.1 | 1.2 | 0.82 | 3.0 |
| 16 | 1.4 | 0.79 | 0.33 | 0.04 | 0.08 | 0.21 | 0.29 | 0.73 | 5.4 | 1.9 | 0.30 | 3.0 |
| 17 | 1.4 | 0.75 | 0.35 | 0.04 | 0.08 | 0.21 | 0.29 | 0.76 | 6.4 | 0.92 | 0.15 | 2.9 |
| 18 | 1.4 | 0.71 | 0.33 | 0.03 | 0.08 | 0.26 | 0.29 | 0.74 | 4.6 | 0.61 | 0.10 | 3.0 |
| 19 | 1.4 | 0.71 | 0.28 | 0.10 | 0.11 | 0.19 | 0.31 | 0.70 | 2.0 | 0.53 | 0.13 | 3.0 |
| 20 | 1.4 | 0.65 | 0.26 | 0.17 | 0.10 | 0.25 | 0.31 | 0.68 | 1.7 | 0.43 | 0.06 | 2.9 |
| 21 | 1.4 | 0.61 | 0.25 | 0.15 | 0.09 | 0.29 | 0.31 | 0.61 | 1.1 | 0.29 | 0.04 | 2.9 |
| 22 | 1.5 | 0.54 | 0.20 | 0.14 | 0.09 | 0.29 | 0.37 | 0.54 | 0.89 | 0.14 | 0.02 | 2.9 |
| 23 | 1.8 | 0.45 | 0.19 | 0.15 | 0.08 | 0.31 | 0.51 | 0.48 | 0.74 | 0.10 | 0.06 | 3.0 |
| 24 | 1.9 | 0.41 | 0.19 | 0.15 | 0.07 | 0.32 | 0.76 | 0.46 | 0.65 | 0.07 | 0.04 | 3.1 |
| 25 | 2.0 | 0.37 | 0.13 | 0.13 | 0.09 | 0.31 | 0.78 | 0.45 | 0.64 | 0.04 | 0.02 | 3.1 |
| 26 | 2.0 | 0.30 | 0.08 | 0.13 | 0.12 | 0.30 | 0.88 | 0.41 | 1.1 | 0.04 | 0.01 | 2.7 |
| 27 | 2.3 | 0.35 | 0.13 | 0.13 | 0.12 | 0.30 | 1.1 | 0.37 | 0.65 | 0.62 | 0.01 | 2.9 |
| 28 | 1.1 | 0.44 | 0.16 | 0.08 | 0.13 | 0.27 | 1.2 | 0.38 | 0.57 | 0.11 | 0.13 | 2.9 |
| 29 | 0.79 | 0.58 | 0.14 | 0.07 | --- | 0.26 | 1.7 | 0.36 | 0.55 | 0.09 | 0.79 | 2.9 |
| 30 | 0.68 | 0.61 | 0.09 | 0.09 | --- | 0.26 | 2.2 | 0.32 | 0.45 | 0.06 | 4.9 | 2.9 |
| 31 | 0.59 | --- | 0.10 | 0.09 | --- | 0.26 | --- | 0.32 | --- | 0.04 | 3.6 | --- |
| TOTAL | 36.33 | 21.01 | 12.39 | 2.52 | 2.98 | 7.09 | 15.55 | 28.47 | 48.60 | 14.21 | 12.59 | 84.74 |
| MEAN | 1.17 | 0.70 | 0.40 | 0.081 | 0.11 | 0.23 | 0.52 | 0.92 | 1.62 | 0.46 | 0.41 | 2.82 |
| MAX | 2.3 | 1.9 | 0.70 | 0.17 | 0.16 | 0.32 | 2.2 | 2.2 | 6.4 | 1.9 | 4.9 | 4.1 |
| MIN | 0.00 | 0.30 | 0.08 | 0.03 | 0.07 | 0.14 | 0.25 | 0.32 | 0.29 | 0.04 | 0.00 | 0.48 |
| AC-FT | 72 | 42 | 25 | 5.0 | 5.9 | 14 | 31 | 56 | 96 | 28 | 25 | 168 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 1.85 | 3.26 | 0.55 | 0.76 | 0.72 | 0.50 | 2.54 | 1.81 | 1.00 | 0.70 | 0.47 | 1.02 |
| MAX | 3.82 | 8.35 | 0.93 | 1.51 | 1.10 | 0.94 | 7.38 | 2.99 | 1.62 | 1.63 | 1.14 | 2.82 |
| (WY) | (2001) | (2001) | (2001) | (2001) | (2002) | (2001) | (2000) | (2000) | (2003) | (2001) | (2001) | (2003) |
| MIN | 0.55 | 0.70 | 0.31 | 0.081 | 0.11 | 0.23 | 0.52 | 0.35 | 0.20 | 0.028 | 0.000 | 0.000 |
| (WY) | (2002) | (2003) | (2002) | (2003) | (2003) | (2003) | (2003) | (2002) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 2000 - 2003

| | | | | | | |
|--------------------------|--------|--------|-------------|--------|-------------------|--|
| ANNUAL TOTAL | 171.92 | | 286.48 | | 1.10 | |
| ANNUAL MEAN | 0.47 | | 0.78 | | 2.09 2001 | |
| HIGHEST ANNUAL MEAN | | | | | 0.41 2002 | |
| LOWEST ANNUAL MEAN | | | | | 16 Apr 14, 2000 | |
| HIGHEST DAILY MEAN | 2.3 | Oct 27 | 6.4 | Jun 17 | a0.00 Jul 8, 2001 | |
| LOWEST DAILY MEAN | 0.00 | Jun 30 | 0.00 | Oct 1 | 0.00 Jul 22, 2002 | |
| ANNUAL SEVEN-DAY MINIMUM | 0.00 | Jul 22 | 0.00 | Aug 1 | b193 Aug 30, 2003 | |
| MAXIMUM PEAK FLOW | | | b193 Aug 30 | | b193 Aug 30, 2003 | |
| MAXIMUM PEAK STAGE | | | 5.31 Aug 30 | | 5.31 Aug 30, 2003 | |
| ANNUAL RUNOFF (AC-FT) | 341 | | 568 | | 794 | |
| 10 PERCENT EXCEEDS | 1.3 | | 2.2 | | 2.3 | |
| 50 PERCENT EXCEEDS | 0.35 | | 0.37 | | 0.58 | |
| 90 PERCENT EXCEEDS | 0.00 | | 0.07 | | 0.04 | |

a Also occurred July 9-11, 2001, and on many days during 2002 and 2003.

b From rating curve extended above 10 ft³/s.

07103940 MONUMENT CREEK AT SOUTH BOUNDARY AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°57'15", long 104°50'00", in NE¹/₄NE¹/₄ sec. 1, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on the U. S. Air Force Academy, on left bank at the south boundary, 400 feet downstream from the Sante Fe Recreation Trail footbridge, 0.2 mi south of Ice Lake, and 1.5 mi west of Interstate 25.

DRAINAGE AREA.--150 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2000 to September 2003 (discontinued). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103940

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,350 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 30 ft³/s, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage treatment plants. Several measurements 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 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 3.6 | 6.0 | e5.5 | e5.0 | 5.7 | e5.8 | 13 | 39 | 12 | 7.8 | 3.4 | 13 |
| 2 | 4.5 | 6.1 | 5.5 | e5.2 | 5.7 | 6.0 | 14 | 42 | 11 | 6.4 | 3.2 | 8.2 |
| 3 | 5.2 | 6.2 | 5.1 | e5.7 | 6.0 | 6.0 | 13 | 39 | 9.9 | 5.7 | 3.1 | 8.0 |
| 4 | 5.2 | 6.3 | 5.1 | 5.6 | e5.8 | 5.6 | 12 | 37 | 8.4 | 5.5 | 3.6 | 11 |
| 5 | 5.2 | 6.3 | 5.0 | 5.8 | e5.6 | e5.2 | 11 | 34 | 12 | 4.9 | 3.2 | 9.0 |
| 6 | 5.2 | 5.8 | e5.0 | 5.6 | e5.3 | 5.3 | 11 | 28 | 13 | 4.9 | 2.9 | 8.9 |
| 7 | 5.3 | 5.7 | e4.8 | e5.7 | e4.9 | 5.4 | 11 | 27 | 13 | 5.1 | 2.3 | 10 |
| 8 | 4.9 | 5.8 | e4.5 | e6.0 | e5.0 | 5.1 | 14 | 26 | 13 | 4.6 | 2.7 | 12 |
| 9 | 4.2 | 6.0 | e4.8 | e5.3 | e5.2 | 4.9 | 14 | 22 | 9.4 | 4.0 | 2.8 | 9.7 |
| 10 | 4.2 | 6.5 | e5.1 | e5.0 | e5.5 | 5.1 | 13 | 24 | 8.6 | 3.8 | 2.8 | 8.8 |
| 11 | 4.3 | 6.3 | e4.8 | e5.1 | e5.7 | 5.1 | 9.6 | 21 | 9.9 | 3.9 | 3.6 | 6.7 |
| 12 | 4.2 | 6.0 | e4.5 | e5.4 | e6.0 | 4.9 | 8.6 | 21 | 11 | 3.8 | 4.0 | 6.0 |
| 13 | 4.9 | 6.7 | e4.6 | e5.7 | 6.2 | 4.7 | 10 | 20 | 13 | 3.6 | 3.5 | 5.6 |
| 14 | 4.7 | 6.3 | e4.7 | e5.6 | 6.3 | 4.9 | 16 | 18 | 10 | 3.9 | 3.1 | 6.4 |
| 15 | 4.6 | 6.5 | e4.7 | e5.7 | 6.0 | 5.2 | 22 | 19 | 9.3 | 3.7 | 3.6 | 6.1 |
| 16 | 4.8 | 6.1 | e4.5 | e5.2 | 5.8 | 5.2 | 28 | 21 | 9.9 | 4.3 | 3.1 | 6.1 |
| 17 | 5.6 | 6.0 | e4.5 | e5.0 | 5.6 | 5.5 | 27 | 15 | 15 | 3.6 | 3.0 | 5.6 |
| 18 | 5.2 | 5.7 | e4.4 | e4.9 | 5.5 | 7.2 | 22 | 16 | 31 | 3.3 | 3.5 | 6.1 |
| 19 | 5.3 | 5.8 | e4.2 | e5.5 | 5.7 | 5.6 | 23 | 18 | 35 | 3.6 | 4.3 | 8.0 |
| 20 | 5.5 | 5.5 | e4.0 | e5.4 | 5.5 | 8.4 | 24 | 18 | 35 | 4.1 | 3.2 | 6.6 |
| 21 | 5.3 | 5.4 | e4.2 | e4.9 | 5.6 | 10 | 23 | 16 | 19 | 3.4 | 2.6 | 6.0 |
| 22 | 5.2 | 5.5 | e4.2 | e4.7 | 5.5 | 9.6 | 18 | 14 | 11 | 3.7 | 2.6 | 6.5 |
| 23 | 5.6 | 5.4 | e4.0 | e5.0 | e5.0 | 11 | 22 | 14 | 11 | 3.8 | 2.4 | 7.5 |
| 24 | 5.8 | 5.5 | e3.8 | e5.1 | e4.6 | 12 | 40 | 13 | 9.4 | 3.8 | 2.4 | 6.9 |
| 25 | 5.7 | 5.5 | e3.8 | e5.4 | e4.7 | 11 | 45 | 12 | 9.1 | 3.8 | 2.7 | 6.8 |
| 26 | 5.8 | e5.2 | e4.0 | e5.5 | e4.9 | 13 | 30 | 11 | 15 | 3.9 | 2.5 | 6.4 |
| 27 | 8.4 | e5.0 | e4.6 | 5.3 | 5.4 | 15 | 12 | 11 | 11 | 4.1 | 3.3 | 6.2 |
| 28 | 7.3 | e4.8 | e4.9 | 5.1 | 5.3 | 12 | 28 | 9.0 | 9.0 | 4.0 | 3.5 | 6.0 |
| 29 | 6.9 | 5.2 | e5.0 | 5.5 | --- | 9.9 | 60 | 8.3 | 15 | 3.9 | 6.4 | 6.0 |
| 30 | 5.8 | 5.5 | e4.5 | 5.6 | --- | 8.8 | 41 | 9.8 | 10 | 3.6 | 20 | 6.3 |
| 31 | 5.7 | --- | e4.8 | 5.9 | --- | 8.7 | --- | 20 | --- | 3.4 | 86 | --- |
| TOTAL | 164.1 | 174.6 | 143.1 | 166.4 | 154.0 | 232.1 | 635.2 | 643.1 | 408.9 | 131.9 | 199.3 | 226.4 |
| MEAN | 5.29 | 5.82 | 4.62 | 5.37 | 5.50 | 7.49 | 21.2 | 20.7 | 13.6 | 4.25 | 6.43 | 7.55 |
| MAX | 8.4 | 6.7 | 5.5 | 6.0 | 6.3 | 15 | 60 | 42 | 35 | 7.8 | 86 | 13 |
| MIN | 3.6 | 4.8 | 3.8 | 4.7 | 4.6 | 4.7 | 8.6 | 8.3 | 8.4 | 3.3 | 2.3 | 5.6 |
| AC-FT | 325 | 346 | 284 | 330 | 305 | 460 | 1,260 | 1,280 | 811 | 262 | 395 | 449 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

| | 7.71 | 8.53 | 7.38 | 8.40 | 8.51 | 10.1 | 26.1 | 26.1 | 11.1 | 7.14 | 6.69 | 6.43 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 7.71 | 8.53 | 7.38 | 8.40 | 8.51 | 10.1 | 26.1 | 26.1 | 11.1 | 7.14 | 6.69 | 6.43 |
| MAX | 9.85 | 11.6 | 10.6 | 11.7 | 12.0 | 14.8 | 51.7 | 39.7 | 13.6 | 11.4 | 9.55 | 8.37 |
| (WY) | (2001) | (2001) | (2001) | (2001) | (2001) | (2001) | (2000) | (2001) | (2003) | (2001) | (2000) | (2000) |
| MIN | 5.29 | 5.82 | 4.62 | 5.37 | 5.50 | 7.49 | 8.69 | 7.65 | 4.82 | 3.98 | 2.76 | 3.52 |
| (WY) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 2000 - 2003

| | | | |
|--------------------------|------------|-------------|-------------------|
| ANNUAL TOTAL | 2,162.1 | 3,279.1 | |
| ANNUAL MEAN | 5.92 | 8.98 | 9.95 |
| HIGHEST ANNUAL MEAN | | | 14.3 2001 |
| LOWEST ANNUAL MEAN | | | 6.55 2002 |
| HIGHEST DAILY MEAN | 14 Jan 9 | 86 Aug 31 | 86 Aug 31, 2003 |
| LOWEST DAILY MEAN | 1.9 Aug 17 | 2.3 Aug 7 | 1.9 Aug 17, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 2.2 Aug 11 | 2.6 Aug 20 | 2.2 Aug 11, 2002 |
| MAXIMUM PEAK FLOW | | a218 Aug 31 | a218 Aug 31, 2003 |
| MAXIMUM PEAK STAGE | | 4.85 Aug 31 | 4.85 Aug 31, 2003 |
| ANNUAL RUNOFF (AC-FT) | 4,290 | 6,500 | 7,210 |
| 10 PERCENT EXCEEDS | 8.7 | 18 | 17 |
| 50 PERCENT EXCEEDS | 5.8 | 5.7 | 7.6 |
| 90 PERCENT EXCEEDS | 3.1 | 3.8 | 3.7 |

e Estimated.

a From rating curve extended above 58 ft³/s.

07103940 MONUMENT CREEK AT SOUTH BOUNDARY AT U.S. AIR FORCE ACADEMY, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to September 2003 (discontinued) (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103940

GAGE.--Tipping-bucket rain gage with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.83 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.47 inches, Aug. 30.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.18 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.55 | 0.00 | 0.03 | 0.00 |
| 2 | 0.04 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.12 |
| 3 | 0.05 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.45 |
| 4 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.17 | 0.00 | 0.18 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.04 | 0.00 | 0.46 | 0.00 | 0.02 | 0.01 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.16 | 0.00 | 0.10 | 0.00 | 0.00 | 0.04 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.29 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.21 | 0.10 | 0.00 | 0.09 | 0.02 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.05 | 0.05 | 0.00 | 0.04 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.11 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.05 | 0.03 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.04 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.07 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 1.18 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.11 | 0.00 | 0.00 | 0.11 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.11 | 0.00 | 0.61 | 0.31 | 0.01 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.67 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.47 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | 0.02 | --- | --- | --- | --- | --- | 0.37 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 |
| 25 | 0.05 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.44 | 0.02 | 0.00 | 0.00 |
| 26 | 0.49 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.59 | 0.20 | 0.00 | 0.00 |
| 27 | 0.18 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.06 | 0.17 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.08 | 0.08 | 0.01 | 0.00 |
| 29 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.00 | 0.63 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 1.47 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.03 | --- | 0.03 | 0.08 | --- |
| TOTAL | 1.02 | --- | --- | --- | --- | --- | 1.90 | 0.78 | 4.65 | 0.73 | 3.37 | 0.97 |
| MAX | 0.49 | --- | --- | --- | --- | --- | 0.67 | 0.21 | 1.18 | 0.31 | 1.47 | 0.45 |

385854104470100 KETTLE CREEK ABOVE OLD RANCH ROAD NEAR COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°58'58", long 104°47'03", in NE¹/₄NW¹/₄ sec.28, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank 250 ft upstream from bridge on Old Ranch Road, 1.5 mi east of Interstate 25, 4.0 mi upstream from the mouth, 5.1 mi northeast of Pulpit Rock, and 10.7 mi northeast of courthouse in Colorado Springs. Elevation of gage is 6,670 ft above NGVD of 1929, from topographic map.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--August to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=385854104470100

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, uS/cm wat unfiltered 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, filtered, mg/L as N (00608) | Nitrite + nitrate water, filtered, mg/L as N (00631) | Orthophosphate, water, filtered, mg/L as P (00671) | Phosphorus, water, unfiltered, mg/L (00665) | E coli, modified, water, col/100 mL (90902) | Fecal coliform, M-FC, 0.7u MF col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|--|--|--|---|---|--|---|
| AUG 27... | 1945 | 3.9 | 7.1 | 7.1 | 308 | 18.0 | <0.015 | 0.62 | <0.02 | 5.36 | E100000 | E86000 | 21,000 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| AUG 27... | 221 |

< -- Actual value is known to be less than the value shown.
 E -- Estimated laboratory analysis value.

07103960 KETTLE CREEK ABOVE U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°58'34", long 104°47'55", in NW¹/₄SE¹/₄ sec.29, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 70 ft downstream from State Highway 83, 0.5 mi upstream from flood-retention dam, 0.6 mi east of Interstate 25, 2.7 mi upstream from mouth, and 5.4 mi southeast of U.S. Air Force Academy Chapel.

DRAINAGE AREA.--16.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2000 to September 2003 (seasonal records only). October 2003 converted to crest-stage partial-record station. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103960

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,620 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, those above 5.0 ft³/s, and those below 0.30 ft³/s, which are poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs and ground-water withdrawals.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 202 ft³/s, July 5, 2002, from rating curve extended above 5.0 ft³/s, gage height, 5.52 ft, from floodmarks; no flow on many days during 2002 and 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 123 ft³/s, Aug. 30, gage height, 5.28 ft, from rating curve extended above 5.0 ft³/s on the basis of step-backwater analysis of flow; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-------|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|
| 1 | 0.08 | e0.09 | --- | --- | --- | --- | 1.1 | 0.47 | 1.5 | 0.13 | 0.08 | 3.1 |
| 2 | 0.12 | 0.12 | --- | --- | --- | --- | 0.93 | 0.53 | 0.86 | 0.11 | 0.04 | 3.0 |
| 3 | 0.09 | 0.10 | --- | --- | --- | --- | 0.95 | 0.45 | 0.37 | 0.11 | 0.06 | e2.0 |
| 4 | 0.11 | 0.13 | --- | --- | --- | --- | 1.0 | 0.52 | 1.1 | 0.03 | 0.08 | e1.0 |
| 5 | 0.12 | 0.12 | --- | --- | --- | --- | 1.00 | 0.73 | 1.8 | 0.02 | 0.10 | 1.4 |
| 6 | 0.10 | 0.12 | --- | --- | --- | --- | 0.52 | 0.65 | 1.5 | 0.02 | 0.06 | 1.6 |
| 7 | 0.09 | 0.10 | --- | --- | --- | --- | 0.40 | 0.55 | 1.2 | 0.02 | 0.01 | 1.7 |
| 8 | 0.09 | 0.07 | --- | --- | --- | --- | 0.45 | 0.51 | 0.84 | 0.01 | 0.00 | 1.4 |
| 9 | 0.12 | 0.06 | --- | --- | --- | --- | 0.47 | 0.62 | 0.81 | 0.00 | 0.57 | 0.98 |
| 10 | 0.12 | 0.03 | --- | --- | --- | --- | 0.45 | e0.50 | 0.59 | 0.00 | 0.46 | 0.68 |
| 11 | 0.09 | 0.02 | --- | --- | --- | --- | 0.46 | e0.45 | 0.64 | 0.00 | 0.25 | 0.44 |
| 12 | 0.13 | 0.02 | --- | --- | --- | --- | 0.44 | 0.42 | 0.65 | 0.00 | 0.16 | 0.51 |
| 13 | 0.12 | 0.08 | --- | --- | --- | --- | 0.42 | 0.55 | 0.48 | 0.00 | 0.57 | 0.34 |
| 14 | 0.08 | 0.13 | --- | --- | --- | --- | 0.42 | 0.35 | 0.27 | 0.00 | 0.03 | 0.23 |
| 15 | 0.08 | 0.10 | --- | --- | --- | --- | 0.49 | 0.43 | 0.21 | 0.00 | 0.01 | 0.21 |
| 16 | 0.10 | 0.05 | --- | --- | --- | --- | 0.33 | 0.46 | 0.36 | 0.00 | 0.00 | 0.20 |
| 17 | 0.12 | 0.06 | --- | --- | --- | --- | 0.48 | 0.45 | 0.31 | 0.00 | 0.00 | 0.18 |
| 18 | 0.12 | 0.03 | --- | --- | --- | --- | 0.43 | 0.44 | 0.13 | 0.00 | 0.20 | 0.16 |
| 19 | 0.12 | 0.02 | --- | --- | --- | --- | 0.53 | 0.66 | 1.3 | 0.14 | 0.01 | 0.18 |
| 20 | 0.13 | 0.03 | --- | --- | --- | --- | 0.36 | 0.72 | 0.63 | 0.05 | 0.01 | 0.20 |
| 21 | 0.14 | 0.06 | --- | --- | --- | --- | 0.45 | 0.40 | 0.24 | 0.01 | 0.01 | 0.18 |
| 22 | 0.14 | 0.06 | --- | --- | --- | --- | 1.4 | 0.33 | 0.19 | 0.00 | 0.04 | 0.33 |
| 23 | 0.16 | 0.14 | --- | --- | --- | --- | 1.1 | 0.25 | 0.20 | 0.00 | 0.00 | 0.39 |
| 24 | 0.13 | 0.14 | --- | --- | --- | --- | 2.9 | 0.21 | 0.17 | 0.00 | 0.05 | 0.30 |
| 25 | 0.12 | 0.09 | --- | --- | --- | --- | 1.5 | 0.19 | 0.35 | 0.00 | 0.13 | 0.24 |
| 26 | 0.24 | 0.04 | --- | --- | --- | --- | 0.68 | 0.17 | 1.6 | 0.02 | 0.08 | 0.20 |
| 27 | 0.19 | e0.03 | --- | --- | --- | --- | 0.55 | 0.15 | 0.54 | 0.11 | 0.56 | 0.15 |
| 28 | 0.09 | e0.03 | --- | --- | --- | --- | 0.48 | 0.18 | 0.34 | 0.11 | 0.18 | 0.20 |
| 29 | 0.09 | 0.09 | --- | --- | --- | --- | 0.52 | 0.24 | 0.26 | 0.07 | 7.2 | 0.25 |
| 30 | 0.10 | 0.09 | --- | --- | --- | --- | 0.50 | 0.16 | 0.14 | 0.04 | 8.8 | 0.14 |
| 31 | 0.08 | --- | --- | --- | --- | --- | --- | 0.09 | --- | 0.03 | 6.0 | --- |
| TOTAL | 3.61 | 2.25 | --- | --- | --- | --- | 21.71 | 12.83 | 19.58 | 1.03 | 25.75 | 21.89 |
| MEAN | 0.12 | 0.075 | --- | --- | --- | --- | 0.72 | 0.41 | 0.65 | 0.033 | 0.83 | 0.73 |
| MAX | 0.24 | 0.14 | --- | --- | --- | --- | 2.9 | 0.73 | 1.8 | 0.14 | 8.8 | 3.1 |
| MIN | 0.08 | 0.02 | --- | --- | --- | --- | 0.33 | 0.09 | 0.13 | 0.00 | 0.00 | 0.14 |
| AC-FT | 7.2 | 4.5 | --- | --- | --- | --- | 43 | 25 | 39 | 2.0 | 51 | 43 |

e Estimated.

07103960 KETTLE CREEK ABOVE U.S. AIR FORCE ACADEMY, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103960

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| JUN 24... | 1645 | 0.07 | 6.0 | 7.7 | 607 | 23.5 | 0.025 | 0.08 | <0.02 | 0.04 | E60 | E70 | 25 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 24... | 0.00 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| AUG 27... | 2020 | 3.1 | 7.1 | 7.7 | 355 | 18.0 | 0.032 | 0.40 | <0.02 | 3.94 | E130000 | E140000 | 13,800 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| AUG 27... | 116 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

07103960 KETTLE CREEK ABOVE U.S. AIR FORCE ACADEMY, CO—Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, wat unflab, uS/cm 25 degC (90095) | Specific conductance, wat unflab, uS/cm 25 degC (00095) | Temperature, water, deg C (00010) |
|-------|------|--------------------------------------|---|---|-----------------------------------|
| NOV | | | | | |
| 05... | 0750 | 0.06 | -- | 646 | 0.5 |
| DEC | | | | | |
| 02... | 1645 | 0.35 | -- | 514 | 0.5 |
| MAR | | | | | |
| 24... | 1120 | 1.4 | -- | 505 | 6.0 |
| APR | | | | | |
| 09... | 1435 | 0.58 | -- | 533 | 19.5 |
| MAY | | | | | |
| 12... | 1115 | 0.48 | -- | 540 | 16.5 |
| 28... | 1225 | 0.25 | -- | 573 | 25.5 |
| JUN | | | | | |
| 05... | 0845 | 3.4 | 285 | -- | 10.5 |
| JUL | | | | | |
| 31... | 1145 | 0.04 | 633 | -- | -- |
| AUG | | | | | |
| 11... | 1130 | 0.27 | 519 | -- | -- |
| SEP | | | | | |
| 04... | 1350 | 0.99 | 484 | -- | -- |

07103960 KETTLE CREEK ABOVE U.S. AIR FORCE ACADEMY, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to September 2003 (discontinued) (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103960

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Daily data that are not published during period of operation are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.03 inches, Aug. 30, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 2.03 inches, Aug. 30.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.24 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.49 | 0.00 | 0.01 | 0.00 |
| 2 | 0.03 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 |
| 3 | 0.02 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | --- |
| 4 | 0.04 | --- | --- | --- | --- | --- | 0.00 | 0.08 | 0.65 | 0.00 | 0.06 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.00 | 0.47 | 0.00 | 0.10 | 0.00 |
| 6 | 0.00 | --- | --- | --- | --- | --- | 0.28 | 0.02 | 0.06 | 0.00 | 0.00 | 0.10 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.22 | 0.00 | 0.02 | 0.39 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.17 | 0.09 | 0.00 | 0.61 | 0.02 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.09 | 0.14 | 0.00 | 0.09 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.13 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.18 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.16 | 0.03 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.47 | 0.00 | 0.00 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.02 | 0.06 | 0.02 | 0.03 | 0.28 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.21 | 0.00 | 0.75 | 0.48 | 0.00 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.72 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.60 | 0.09 | 0.00 | 0.03 | 0.00 | 0.01 |
| 24 | 0.03 | --- | --- | --- | --- | --- | 0.55 | 0.00 | 0.00 | 0.01 | 0.13 | 0.00 |
| 25 | 0.01 | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.52 | 0.03 | 0.01 | 0.00 |
| 26 | 0.47 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.54 | 0.24 | 0.00 | 0.00 |
| 27 | 0.13 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.09 | 0.45 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.04 | 0.32 | 0.02 | 0.00 |
| 29 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 1.13 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.04 | 0.00 | 0.00 | 2.03 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.02 | --- | 0.02 | 0.05 | --- |
| TOTAL | 0.97 | --- | --- | --- | --- | --- | 2.63 | 0.71 | 4.74 | 1.28 | 5.27 | --- |
| MAX | 0.47 | --- | --- | --- | --- | --- | 0.72 | 0.17 | 0.75 | 0.48 | 2.03 | --- |

385750104475001 PINE CREEK ABOVE HIGHWAY 83 AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°57'50", long 104°47'50", in SE¹/₄NE¹/₄ sec.32, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 0.2 mi upstream from State Highway 83 at Colorado Springs, 0.3 mi east of Interstate 25, 3.4 mi southeast of Falcon Stadium at U.S. Air Force Academy, and 3.6 mi northeast of Pulpit Rock. Elevation of gage is 6,540 ft above NGVD of 1929, from topographic map.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--June to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=385750104475001

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| JUN 24... | 1330 | 0.87 | 7.7 | 8.4 | 539 | 18.0 | 0.110 | 1.23 | 0.07 | 0.10 | 2,300 | 3,300 | 8 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 24... | 0.02 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| JUN 17... | 1810 | 19 | 7.0 | 7.7 | 179 | 15.0 | 0.245 | 0.79 | 0.10 | 0.77 | 7,400 | 10,000 | 1,950 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 17... | 99 |

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°56'02", long 104°49'00", in SW¼NE¼ sec.7, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 0.1 mi upstream from Woodmen Road at Colorado Springs, 0.2 mi west of Interstate 25, and 0.5 mi upstream from Cottonwood Creek.

DRAINAGE AREA.--181 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1996 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103970

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 6,270 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 7.6 | 9.0 | e7.0 | 6.9 | 8.2 | 12 | 16 | 44 | 42 | 11 | 5.6 | 22 |
| 2 | 10 | 11 | 7.2 | e7.0 | 8.3 | 13 | 18 | 45 | 17 | 9.4 | 5.4 | 16 |
| 3 | 7.2 | 9.4 | 7.0 | e7.4 | e8.5 | 11 | 16 | 42 | 13 | 8.9 | 7.8 | 38 |
| 4 | 6.9 | 8.2 | 6.9 | 6.8 | e7.8 | 8.8 | 15 | 41 | 25 | 9.1 | 17 | 18 |
| 5 | 6.9 | 7.6 | 6.8 | 6.7 | e7.5 | 8.8 | 18 | 39 | 34 | 8.5 | 7.4 | 13 |
| 6 | 7.0 | 7.3 | e7.3 | 6.3 | e7.0 | 8.1 | 20 | 33 | 19 | 8.4 | 5.6 | 16 |
| 7 | 7.3 | 7.6 | e7.5 | 6.8 | e6.5 | 8.6 | 14 | 33 | 22 | 8.2 | 4.4 | 23 |
| 8 | 7.2 | 7.8 | e7.2 | 7.2 | e6.8 | 8.2 | 16 | 32 | 17 | 7.3 | 4.7 | 19 |
| 9 | 6.5 | 7.8 | e7.4 | 6.8 | e7.0 | 8.0 | 17 | 30 | 15 | 6.3 | 26 | 14 |
| 10 | 6.6 | 8.4 | e7.6 | e6.5 | e7.8 | 8.0 | 16 | 35 | 13 | 5.6 | 5.2 | 12 |
| 11 | 6.9 | 9.0 | e7.2 | e6.8 | e8.3 | 8.1 | 13 | 28 | 14 | 5.5 | 7.9 | 9.7 |
| 12 | 7.1 | 8.6 | e6.8 | e7.0 | e8.8 | 8.1 | 11 | 26 | 17 | 5.5 | 7.3 | 9.9 |
| 13 | 8.8 | 9.8 | e7.3 | e7.5 | 8.9 | 7.9 | 13 | 24 | 19 | 5.1 | 6.1 | 10 |
| 14 | 8.8 | 9.5 | e7.5 | 7.4 | 8.5 | 8.2 | 17 | 23 | 16 | 5.2 | 4.8 | 11 |
| 15 | 8.6 | 9.7 | e7.7 | e7.5 | 7.6 | 8.7 | 25 | 25 | 14 | 5.2 | 5.4 | 10 |
| 16 | 8.7 | 8.9 | e7.5 | e6.8 | 7.3 | 8.9 | 31 | 29 | 15 | 7.8 | 4.7 | 9.7 |
| 17 | 9.6 | 8.5 | 7.4 | e6.7 | 6.9 | 12 | 29 | 23 | 64 | 5.8 | 4.3 | 8.5 |
| 18 | 8.6 | 8.1 | e7.2 | e6.5 | 6.7 | 20 | 26 | 24 | 39 | 5.0 | 7.7 | 9.3 |
| 19 | 8.4 | 8.0 | e6.7 | e8.0 | 11 | 13 | 27 | 24 | 70 | 13 | 6.8 | 11 |
| 20 | 8.7 | 7.6 | e6.4 | e7.8 | 7.5 | 28 | 27 | 24 | 52 | 9.2 | 4.6 | 9.7 |
| 21 | 8.5 | 7.6 | e7.0 | e7.2 | 7.1 | 24 | 27 | 21 | 27 | 5.3 | 3.8 | 9.1 |
| 22 | 8.7 | 7.6 | e6.8 | e6.8 | 7.1 | 19 | 53 | 18 | 16 | 5.4 | 3.8 | 10 |
| 23 | 9.2 | 7.2 | e7.0 | e7.3 | 6.7 | 21 | 58 | 21 | 14 | 5.6 | 3.7 | 11 |
| 24 | 9.6 | 6.9 | e6.2 | e7.4 | 5.8 | 29 | 71 | 16 | 13 | 5.6 | 8.3 | 10 |
| 25 | 10 | 7.2 | e6.0 | e7.6 | e6.5 | 21 | 51 | 15 | 15 | 6.0 | 4.2 | 11 |
| 26 | 15 | e6.7 | e6.2 | e7.8 | e7.5 | 16 | 39 | 15 | 52 | 6.4 | 3.5 | 14 |
| 27 | 18 | e6.5 | e7.0 | 7.8 | 8.0 | 17 | 19 | 14 | 17 | 15 | 18 | 10 |
| 28 | 10 | e6.3 | e7.8 | 7.2 | 9.7 | 14 | 32 | 12 | 13 | 16 | 7.2 | 9.8 |
| 29 | 9.8 | e7.0 | 7.6 | 7.6 | --- | 13 | 58 | 11 | 20 | 8.1 | 32 | 10 |
| 30 | 8.4 | 6.8 | 6.5 | 7.8 | --- | 12 | 47 | 11 | 14 | 5.8 | 79 | 11 |
| 31 | 8.5 | --- | e6.7 | 8.2 | --- | 12 | --- | 26 | --- | 5.3 | 157 | --- |
| TOTAL | 273.1 | 241.6 | 218.4 | 223.1 | 215.3 | 415.4 | 840 | 804 | 738 | 234.5 | 469.2 | 395.7 |
| MEAN | 8.81 | 8.05 | 7.05 | 7.20 | 7.69 | 13.4 | 28.0 | 25.9 | 24.6 | 7.56 | 15.1 | 13.2 |
| MAX | 18 | 11 | 7.8 | 8.2 | 11 | 29 | 71 | 45 | 70 | 16 | 157 | 38 |
| MIN | 6.5 | 6.3 | 6.0 | 6.3 | 5.8 | 7.9 | 11 | 11 | 13 | 5.0 | 3.5 | 8.5 |
| AC-FT | 542 | 479 | 433 | 443 | 427 | 824 | 1,670 | 1,590 | 1,460 | 465 | 931 | 785 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2003, BY WATER YEAR (WY)

| | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 18.0 | 17.8 | 15.4 | 15.6 | 15.7 | 19.8 | 53.4 | 98.2 | 55.4 | 25.1 | 32.3 | 16.1 |
| MAX | 30.3 | 30.1 | 22.1 | 23.2 | 22.1 | 35.5 | 124 | 383 | 152 | 66.0 | 100 | 29.3 |
| (WY) | (2000) | (1998) | (2001) | (2000) | (2000) | (1998) | (1999) | (1999) | (1999) | (1999) | (1999) | (1999) |
| MIN | 8.81 | 8.05 | 7.05 | 7.20 | 7.69 | 12.3 | 12.5 | 13.0 | 8.09 | 7.56 | 5.22 | 7.11 |
| (WY) | (2003) | (2003) | (2003) | (2003) | (2003) | (1997) | (2002) | (2002) | (2002) | (2003) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1997 - 2003

| | | | | |
|--------------------------|---------|---------|--------|--------|
| ANNUAL TOTAL | 3,723.1 | 5,068.3 | | |
| ANNUAL MEAN | 10.2 | 13.9 | | 32.0 |
| HIGHEST ANNUAL MEAN | | | | 80.2 |
| LOWEST ANNUAL MEAN | | | | 11.2 |
| HIGHEST DAILY MEAN | 63 | 157 | Aug 31 | 2,000 |
| LOWEST DAILY MEAN | 4.1 | 3.5 | Aug 26 | 3.5 |
| ANNUAL SEVEN-DAY MINIMUM | 4.4 | 4.6 | Aug 20 | 4.4 |
| MAXIMUM PEAK FLOW | | 963 | Aug 30 | a3,580 |
| MAXIMUM PEAK STAGE | | 6.74 | Aug 30 | b10.98 |
| ANNUAL RUNOFF (AC-FT) | 7,380 | 10,050 | | 23,170 |
| 10 PERCENT EXCEEDS | 15 | 27 | | 58 |
| 50 PERCENT EXCEEDS | 9.0 | 8.6 | | 17 |
| 90 PERCENT EXCEEDS | 5.0 | 6.3 | | 8.1 |

e Estimated.

a From rating curve extended above 636 ft³/s.

b From floodmark.

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1997 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103970

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: May to September 1997 (seasonal peaks only), April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Water-quality data collected July 25 were obtained to determine base-flow constituent concentrations.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,580 mg/L, Aug. 19, 1998; minimum daily mean, 2 mg/L, June 9, 2000.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 49,100 tons (estimated), Apr. 30, 1999; minimum daily, 0.08 ton, June 9, 2000, Sept. 30, 2002, Aug. 21, 2003.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,350 mg/L, Aug. 31; minimum daily mean, 7 mg/L, Sept. 29.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 2,430 tons, Aug. 31; minimum daily, 0.08 ton, Aug. 21.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Fluoride, water, fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|------------------------------------|---------------------------------------|--------------------------------------|------------------------------------|---|--|---|
| NOV 06... | 1455 | 6.9 | 10.3 | 8.4 | 470 | 6.0 | 47.6 | 8.72 | 1.00 | 57.0 | <0.015 | 1.01 | 0.27 |
| DEC 03... | 0900 | 6.9 | 11.4 | 7.9 | 468 | 1.5 | 48.3 | 8.40 | 1.00 | 58.0 | <0.015 | 1.38 | 0.41 |
| FEB 13... | 1345 | 9.1 | 11.3 | 8.3 | 495 | 2.5 | 42 | 8.4 | 1.0 | 56.8 | 0.023 | 2.82 | 0.57 |
| APR 28... | 1125 | 29 | 9.0 | 8.1 | 372 | 11.5 | 41 | 6.2 | 1.23 | 52.7 | 0.055 | 0.618 | 0.37 |
| JUL 22... | 1050 | 6.3 | 6.9 | 8.2 | 438 | 22.0 | 47.9 | 7.44 | 1.19 | 48.0 | 0.020 | 0.764 | 0.27 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Phosphorus, water, unfltrd mg/L (00665) | BOD, water, unfltrd 5 day, 20 degC mg/L (00310) | E coli, modif. m-TEC, water, col/100 mL (90902) | E coli, m-TEC MF, water, col/100 mL (31633) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Arsenic water, fltrd, ug/L (01000) | Arsenic water, unfltrd ug/L (01002) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Cadmium water, fltrd, ug/L (01025) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, fltrd, ug/L (01030) | Chromium, water, unfltrd recover-able, ug/L (01034) |
|-----------|---|---|---|---|---|------------------------------------|-------------------------------------|-----------------------------------|--|------------------------------------|-------------------------------------|--------------------------------------|---|
| NOV 06... | 0.346 | <2.0 | -- | E9 | E17 | 1.4 | 1.3 | 121 | 129 | <0.10 | 0.11 | <1.0 | 1.3 |
| DEC 03... | 0.443 | <2.0 | -- | 34 | 32 | 1.1 | 1.3 | 115 | 111 | <0.10 | <0.10 | 1.7 | 1.5 |
| FEB 13... | 0.636 | -- | -- | E12 | 12 | 1.09 | <2 | 117 | 111 | 0.043 | <0.035 | <0.8 | <0.8 |
| APR 28... | 0.551 | -- | E19 | -- | E19 | -- | E2 | 56 | 62 | -- | -- | -- | -- |
| JUL 22... | 0.402 | -- | 180 | -- | 310 | -- | E2 | 73 | 84 | -- | -- | -- | -- |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Cyanide water unfltrd mg/L (00720) | Iron, water, fltrd, ug/L (01046) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, fltrd, ug/L (01049) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, fltrd, ug/L (71890) | Mercury water, unfltrd recover-able, ug/L (71900) | Nickel, water, fltrd, ug/L (01065) | Nickel, water, unfltrd recover-able, ug/L (01067) |
|-----------|------------------------------------|---|------------------------------------|----------------------------------|---|----------------------------------|---|---------------------------------------|--|------------------------------------|---|------------------------------------|---|
| NOV 06... | 1.8 | 2.8 | <0.01 | 19.0 | 293 | 0.24 | 0.53 | 42 | 49 | <0.018 | <0.018 | 3.4 | 4.2 |
| DEC 03... | 2.3 | 2.7 | <0.01 | 29.0 | 230 | E.26 | 0.33 | 47 | 47 | <0.018 | <0.018 | 3.0 | 2.9 |
| FEB 13... | 2.20 | 2.99 | <0.009 | 22 | 411 | 0.21 | 1.08 | 31.7 | 51.4 | <0.018 | <0.018 | 3.55 | 4.67 |
| APR 28... | 1.06 | 3.46 | -- | -- | -- | -- | 3.12 | 72.2 | 137 | -- | -- | -- | 2.63 |
| JUL 22... | 1.12 | 3.16 | -- | -- | -- | -- | 5.74 | 38.6 | 78.6 | -- | -- | -- | 3.33 |

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Selenium, water, fltrd, ug/L (01145) | Selenium, water, unfltrd ug/L (01147) | Silver, water, fltrd, ug/L (01075) | Silver, water, unfltrd recover-able, ug/L (01077) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover-able, ug/L (01092) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-----------|--------------------------------------|---------------------------------------|------------------------------------|---|----------------------------------|---|---|---|
| NOV 06... | 2.4 | E2.2 | 0.09 | <0.04 | E7.0 | E9.0 | 3 | 0.06 |
| DEC 03... | 2.0 | 1.7 | <0.04 | <0.04 | E9.0 | <9.0 | 4 | 0.07 |
| FEB 13... | 1.12 | 1.33 | <0.20 | <0.16 | 11.1 | 15.1 | 36 | 0.88 |
| APR 28... | 0.96 | 1.11 | -- | -- | 5.1 | 16.1 | 92 | 7.2 |
| JUL 22... | 1.20 | 1.21 | -- | -- | 3.4 | 22.3 | 64 | 1.1 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium, water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Fluoride, water, fltrd, mg/L (00950) | Sulfate, water, fltrd, mg/L (00945) | Ammonia, water, fltrd, mg/L as N (00608) | Nitrite + nitrate, water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|-------------------------------------|---------------------------------------|--------------------------------------|-------------------------------------|--|--|---|
| JUN 05... | 1230 | 68 | 8.4 | 7.3 | 182 | 11.0 | 19.7 | 2.97 | 0.39 | 19.0 | 0.183 | 0.589 | 0.15 |
| JUL 25... | 1130 | 6.3 | 7.9 | 8.5 | 452 | 25.0 | -- | -- | -- | -- | -- | -- | -- |
| SEP 03... | 1745 | 61 | 7.7 | 8.0 | 227 | 16.5 | 24.8 | 3.38 | 0.39 | 29.2 | 0.080 | 0.680 | 0.09 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, col/100 mL (90902) | Fecal coliform, M-FC 0.7u MF 100 mL (31625) | Arsenic, water, unfltrd ug/L (01002) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recover-able, ug/L (01055) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, fltrd, ug/L (01145) |
|-----------|---|--|---|--------------------------------------|-----------------------------------|--|------------------------------------|---|---|---------------------------------------|--|---|--------------------------------------|
| JUN 05... | 0.524 | E1800 | E3400 | E2 | 26 | 35 | 1.75 | 12.4 | 25.3 | 18.5 | 210 | 5.82 | E.37 |
| JUL 25... | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| SEP 03... | 0.641 | 11,000 | 8,800 | 3 | 31 | 35 | 1.83 | 16.6 | 30.8 | 16.1 | 322 | 8.38 | 0.74 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Selenium, water, unfltrd ug/L (01147) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover-able, ug/L (01092) | 2,6-Diethyl-aniline, water, fltrd 0.7u GF (82660) | CIAT, water, fltrd, ug/L (04040) | 9H-Fluorene, water, unfltrd ug/L (34381) | Ace-naphth-ene, water, unfltrd ug/L (34205) | Ace-naphth-ylene, water, unfltrd ug/L (34200) | Aceto-chlor, water, fltrd, ug/L (49260) | Ala-chlor, water, fltrd, ug/L (46342) | alpha-HCH, water, fltrd, ug/L (34253) | Anthra-cene, water, unfltrd ug/L (34220) | Atra-zine, water, fltrd, ug/L (39632) |
|-----------|---------------------------------------|----------------------------------|---|---|----------------------------------|--|---|---|---|---------------------------------------|---------------------------------------|--|---------------------------------------|
| JUN 05... | 1.67 | 3.6 | 69.5 | <0.006 | <0.0060 | E.2 | E.09 | E.2 | <0.006 | <0.004 | <0.0046 | E.2 | 0.0140 |
| JUL 25... | -- | -- | -- | <0.006 | <0.006 | E.0206 | E.0187 | <2 | <0.006 | <0.004 | <0.0046 | <2 | <0.007 |
| SEP 03... | 1.92 | 1.7 | 93.8 | <0.006 | <0.006 | <2 | <2 | <2 | <0.006 | <0.004 | <0.0046 | <2 | <0.007 |

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686) | Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673) | Benzo-[a]-anthra-cene, water, unfltrd ug/L (34526) | Benzo-[a]-pyrene, water, unfltrd ug/L (34247) | Benzo-[b]-fluor-anthene, water, unfltrd ug/L (34230) | Benzo-[g,h,i]-per-ylene, water, unfltrd ug/L (34521) | Benzo-[k]-fluor-anthene, water, unfltrd ug/L (34242) | Butyl-ate, water, fltrd, ug/L (04028) | Car-baryl, water, fltrd 0.7u GF ug/L (82680) | Carbo-furan, water, fltrd 0.7u GF ug/L (82674) | Chlor-pyrifos water, fltrd, ug/L (38933) | Chrys-ene, water, unfltrd ug/L (34320) | cis-Per-methrin water fltrd 0.7u GF ug/L (82687) |
|-----------|--|---|--|---|--|--|--|---|---|---|--|--|---|
| JUN 05... | <0.0500 | <0.0100 | E.3 | E.4 | E.5 | E.3 | E.3 | <0.002 | E.430 | E.0083 | <0.0100 | E.3 | <0.0060 |
| JUL 25... | <0.05 | <0.010 | <2 | <1 | <2 | <3 | <2 | <0.002 | E.009 | <0.020 | <0.005 | <3 | <0.006 |
| SEP 03... | <0.05 | <0.010 | <2 | E.0321 | <2 | <3 | <2 | <0.002 | E.099 | <0.020 | <0.005 | E.0237 | <0.006 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Cyana-zine, water, fltrd, ug/L (04041) | DCPA, water fltrd 0.7u GF ug/L (82682) | Desulf-inyl fipronil, water, fltrd, ug/L (62170) | Diazi-non, water, fltrd, ug/L (39572) | Di-benzo-[a,h]-anthra-cene, wat unf ug/L (34556) | Diel-drin, water, fltrd, ug/L (39381) | Disul-foton, water, fltrd 0.7u GF ug/L (82677) | EPTC, water, fltrd 0.7u GF ug/L (82668) | Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663) | Etho-prop, water, fltrd 0.7u GF ug/L (82672) | Desulf-inyl-fipronil amide, wat flt ug/L (62169) | Fipron- nil sulfide water, fltrd, ug/L (62167) | Fipron- nil sulfone water, fltrd, ug/L (62168) |
|-----------|--|---|--|---|--|---|---|--|---|---|--|--|--|
| JUN 05... | <0.0180 | <0.0030 | <0.0040 | 0.120 | E.2 | <0.0048 | <0.0210 | <0.0020 | <0.0090 | <0.0050 | <0.0090 | <0.0050 | <0.0050 |
| JUL 25... | <0.018 | <0.0030 | <0.004 | <0.005 | <3 | <0.0048 | <0.021 | <0.0020 | <0.009 | <0.005 | <0.009 | <0.005 | <0.005 |
| SEP 03... | <0.018 | <0.0030 | <0.004 | 0.0324 | <3 | <0.0048 | <0.021 | <0.0020 | <0.009 | <0.005 | <0.009 | <0.005 | <0.005 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Fipron- nil, water, fltrd, ug/L (62166) | Fluor-anthene water unfltrd ug/L (34376) | Fonofos water, fltrd, ug/L (04095) | Indeno-[1,2,-3-cd]-pyrene, water, unfltrd ug/L (34403) | Lindane water, fltrd, ug/L (39341) | Linuron water fltrd 0.7u GF ug/L (82666) | Malathion, water, fltrd, ug/L (39532) | Methyl para-thion, water, fltrd 0.7u GF ug/L (82667) | Metola-chlor, water, fltrd, ug/L (39415) | Metri-buzin, water, fltrd, ug/L (82630) | Moli-nate, water, fltrd 0.7u GF ug/L (82671) | Naprop- amide, water, fltrd 0.7u GF ug/L (82684) | Nitro-benzene water unfltrd ug/L (34447) |
|-----------|---|--|--|--|--|---|---|---|--|---|---|---|--|
| JUN 05... | <0.0070 | E.8 | <0.0027 | E.3 | <0.0040 | <0.0350 | <0.0300 | <0.0060 | <0.0130 | <0.0060 | <0.0016 | <0.0070 | <2 |
| JUL 25... | <0.007 | E.0369 | <0.0027 | <3 | <0.0040 | <0.035 | <0.027 | <0.006 | <0.013 | <0.006 | <0.0016 | <0.007 | <2 |
| SEP 03... | <0.007 | E.1020 | <0.0027 | <3 | <0.0040 | <0.035 | <0.027 | <0.006 | <0.013 | <0.006 | <0.0016 | <0.007 | <2 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | p,p'-DDE, water, fltrd, ug/L (34653) | Para-thion, water, fltrd, ug/L (39542) | Peb-ulate, water, fltrd 0.7u GF ug/L (82669) | Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683) | Phenan-threne, water, unfltrd ug/L (34461) | Phorate water fltrd 0.7u GF ug/L (82664) | Prome-ton, water, fltrd, ug/L (04037) | Pron-amide, water, fltrd 0.7u GF ug/L (82676) | Propa-chlor, water, fltrd, ug/L (04024) | Pro-panil, water, fltrd 0.7u GF ug/L (82679) | Propar-gite, water, fltrd 0.7u GF ug/L (82685) | Pyrene, water, unfltrd ug/L (34469) | Sima-zine, water, fltrd, ug/L (04035) |
|-----------|--|--|---|---|--|---|---|--|---|---|---|---|---|
| JUN 05... | <0.0025 | <0.010 | <0.004 | <0.022 | E.3 | <0.0110 | E.0108 | <0.0041 | <0.0100 | <0.0110 | <0.0230 | E.7 | <0.005 |
| JUL 25... | <0.0025 | <0.010 | <0.004 | <0.022 | E.0577 | <0.011 | 0.0164 | <0.0041 | <0.010 | <0.011 | <0.023 | E.0207 | <0.005 |
| SEP 03... | <0.0025 | <0.010 | <0.004 | <0.022 | E.0410 | <0.011 | E.0103 | <0.0041 | <0.010 | <0.011 | <0.023 | E.0784 | <0.005 |

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Tebu- thiuron water fltrd 0.7u GF ug/L (82670) | Terba- cil, water, fltrd 0.7u GF ug/L (82665) | Terbu- fos, water, fltrd 0.7u GF ug/L (82675) | Thio- bencarb water fltrd 0.7u GF ug/L (82681) | Tri- allate, water, fltrd 0.7u GF ug/L (82678) | Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661) | Naphth- alene, water, unfltrd ug/L (34696) | Sus- pended sedi- ment concen- tration mg/L (80154) | Sus- pended sedi- ment load, tons/d (80155) |
|--------------|--|---|---|--|--|---|---|--|---|
| JUN 05... | <0.0160 | <0.0340 | <0.0170 | <0.0048 | <0.0023 | <0.0090 | <2 | 2,160 | 397 |
| JUL 25... | <0.016 | <0.034 | <0.017 | <0.0048 | <0.0023 | <0.009 | E.0564 | -- | -- |
| SEP 03... | <0.016 | <0.034 | <0.017 | <0.0048 | <0.0023 | <0.009 | <2 | 1,440 | 237 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING MICROBIOLOGICAL SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instan- taneous dis- charge, cfs (00061) | Specif. conduc- tance, wat unf uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) | E coli, modif. m-TEC, water, col/ 100 mL (90902) | Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625) |
|--------------|------|---|--|---|--|---|
| APR 09... | 1515 | 17 | 467 | 14.5 | E2 | E1 |
| MAY 12... | 1300 | 25 | 316 | 15.5 | E3 | E4 |
| MAY 28... | 1515 | 11 | 404 | 26.0 | E6 | E7 |
| JUN 11... | 0910 | 15 | 394 | 15.0 | E170 | E170 |
| JUN 25... | 1010 | 12 | 376 | 16.5 | 88 | 71 |
| JUL 08... | 1245 | 8.3 | 408 | 24.5 | 78 | 83 |
| AUG 06... | 0820 | 6.3 | 479 | 18.0 | 140 | >120 |
| AUG 21... | 1300 | 3.7 | 478 | 23.5 | 59 | 67 |
| SEP 18... | 1150 | 10 | 389 | 13.0 | 41 | 54 |

> -- Actual value is known to be greater than the value shown.
E -- Estimated laboratory analysis value.

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO—Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instan- taneous dis- charge, cfs (00061) | Specif. conduc- tance, wat unf lab, uS/cm 25 degC (90095) | Specif. conduc- tance, wat unf uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) | Sus- pended sedi- ment concen- tration mg/L (80154) | Sus- pended sedi- ment load, tons/d (80155) |
|-------|------|---|--|--|---|--|---|
| OCT | | | | | | | |
| 07... | 1545 | 7.6 | -- | 455 | 14.5 | 27 | 0.55 |
| 18... | 1300 | 9.1 | -- | 451 | 10.0 | 23 | 0.57 |
| NOV | | | | | | | |
| 04... | 1300 | 9.1 | -- | 473 | 4.5 | 6 | 0.15 |
| 06... | 1455 | 6.9 | -- | 470 | 6.0 | 3 | 0.06 |
| 13... | 0805 | 9.9 | -- | 470 | 2.0 | -- | -- |
| DEC | | | | | | | |
| 03... | 0900 | 6.9 | -- | 468 | 1.5 | 4 | 0.07 |
| 03... | 1150 | 7.6 | -- | 470 | 2.0 | -- | -- |
| JAN | | | | | | | |
| 02... | 1100 | 6.3 | -- | 578 | 0.0 | 40 | 0.68 |
| FEB | | | | | | | |
| 13... | 1345 | 9.1 | -- | 495 | 2.5 | 36 | 0.88 |
| MAR | | | | | | | |
| 24... | 0915 | 18 | -- | 486 | 5.0 | -- | -- |
| APR | | | | | | | |
| 01... | 1800 | 17 | -- | 506 | 14.0 | 34 | 1.6 |
| 14... | 1545 | 18 | -- | 412 | 15.0 | 19 | 0.92 |
| 24... | 1215 | 82 | 279 | -- | 9.5 | 1,350 | 299 |
| 28... | 1125 | 29 | -- | 372 | 11.5 | 92 | 7.2 |
| 30... | 1300 | 46 | -- | 258 | 12.5 | 66 | 8.2 |
| MAY | | | | | | | |
| 12... | 1245 | 24 | -- | 319 | 15.5 | 155 | 10 |
| JUN | | | | | | | |
| 02... | 1445 | 15 | 380 | -- | 23.0 | 89 | 3.6 |
| 04... | 1830 | 52 | 227 | -- | 12.0 | 1,420 | 199 |
| 05... | 1230 | 68 | -- | 182 | 11.0 | 2,160 | 397 |
| 12... | 1215 | 16 | 384 | -- | 18.0 | 31 | 1.3 |
| 19... | 0830 | 39 | 323 | -- | 13.5 | 535 | 56 |
| 26... | 1200 | 28 | -- | 360 | 19.0 | 227 | 17 |
| JUL | | | | | | | |
| 21... | 1130 | 6.3 | -- | 437 | 24.5 | 12 | 0.20 |
| 22... | 1050 | 6.3 | -- | 438 | 22.0 | 64 | 1.1 |
| 25... | 1130 | 6.3 | -- | 452 | 25.0 | -- | -- |
| 31... | 1015 | 5.7 | -- | 474 | 20.0 | 53 | 0.82 |
| AUG | | | | | | | |
| 07... | 1345 | 4.0 | -- | 464 | 27.0 | -- | -- |
| 21... | 0815 | 4.2 | -- | 495 | 16.0 | 4 | 0.05 |
| 27... | 1945 | 70 | -- | 232 | 20.5 | 1,580 | 299 |
| 28... | 1100 | 6.9 | -- | 449 | 19.0 | 24 | 0.45 |
| SEP | | | | | | | |
| 03... | 1745 | 61 | -- | 227 | 16.5 | 1,440 | 237 |
| 11... | 1330 | 11 | 400 | -- | -- | -- | -- |

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) |
|---------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|
| OCTOBER | | | NOVEMBER | | | DECEMBER | | | |
| 1 | 7.6 | 139 | 15 | 9.0 | --- | --- | e7.0 | --- | --- |
| 2 | 10 | 334 | 16 | 11 | --- | --- | 7.2 | --- | --- |
| 3 | 7.2 | 34 | 0.65 | 9.4 | --- | --- | 7.0 | --- | --- |
| 4 | 6.9 | 20 | 0.37 | 8.2 | --- | --- | 6.9 | --- | --- |
| 5 | 6.9 | 20 | 0.37 | 7.6 | --- | --- | 6.8 | --- | --- |
| 6 | 7.0 | --- | e0.39 | 7.3 | --- | --- | e7.3 | --- | --- |
| 7 | 7.3 | 26 | 0.51 | 7.6 | --- | --- | e7.5 | --- | --- |
| 8 | 7.2 | 33 | 0.64 | 7.8 | --- | --- | e7.2 | --- | --- |
| 9 | 6.5 | --- | e0.49 | 7.8 | --- | --- | e7.4 | --- | --- |
| 10 | 6.6 | 22 | 0.39 | 8.4 | --- | --- | e7.6 | --- | --- |
| 11 | 6.9 | 16 | 0.30 | 9.0 | --- | --- | e7.2 | --- | --- |
| 12 | 7.1 | 14 | 0.27 | 8.6 | --- | --- | e6.8 | --- | --- |
| 13 | 8.8 | --- | e0.39 | 9.8 | --- | --- | e7.3 | --- | --- |
| 14 | 8.8 | --- | e0.46 | 9.5 | --- | --- | e7.5 | --- | --- |
| 15 | 8.6 | 22 | 0.51 | 9.7 | --- | --- | e7.7 | --- | --- |
| 16 | 8.7 | 16 | 0.37 | 8.9 | --- | --- | e7.5 | --- | --- |
| 17 | 9.6 | --- | e0.43 | 8.5 | --- | --- | 7.4 | --- | --- |
| 18 | 8.6 | 23 | 0.53 | 8.1 | --- | --- | e7.2 | --- | --- |
| 19 | 8.4 | --- | e0.50 | 8.0 | --- | --- | e6.7 | --- | --- |
| 20 | 8.7 | 21 | 0.48 | 7.6 | --- | --- | e6.4 | --- | --- |
| 21 | 8.5 | 16 | 0.36 | 7.6 | --- | --- | e7.0 | --- | --- |
| 22 | 8.7 | 15 | 0.35 | 7.6 | --- | --- | e6.8 | --- | --- |
| 23 | 9.2 | 19 | 0.48 | 7.2 | --- | --- | e7.0 | --- | --- |
| 24 | 9.6 | --- | e0.55 | 6.9 | --- | --- | e6.2 | --- | --- |
| 25 | 10 | 24 | 0.65 | 7.2 | --- | --- | e6.0 | --- | --- |
| 26 | 15 | 314 | 41 | e6.7 | --- | --- | e6.2 | --- | --- |
| 27 | 18 | 413 | 33 | e6.5 | --- | --- | e7.0 | --- | --- |
| 28 | 10 | 32 | 0.91 | e6.3 | --- | --- | e7.8 | --- | --- |
| 29 | 9.8 | 38 | 1.1 | e7.0 | --- | --- | 7.6 | --- | --- |
| 30 | 8.4 | --- | e0.40 | 6.8 | --- | --- | 6.5 | --- | --- |
| 31 | 8.5 | --- | e0.35 | --- | --- | --- | e6.7 | --- | --- |
| TOTAL | 273.1 | --- | 118.20 | 241.6 | --- | --- | 218.4 | --- | --- |
| JANUARY | | | FEBRUARY | | | MARCH | | | |
| 1 | 6.9 | --- | --- | 8.2 | --- | --- | 12 | --- | --- |
| 2 | e7.0 | --- | --- | 8.3 | --- | --- | 13 | --- | --- |
| 3 | e7.4 | --- | --- | e8.5 | --- | --- | 11 | --- | --- |
| 4 | 6.8 | --- | --- | e7.8 | --- | --- | 8.8 | --- | --- |
| 5 | 6.7 | --- | --- | e7.5 | --- | --- | 8.8 | --- | --- |
| 6 | 6.3 | --- | --- | e7.0 | --- | --- | 8.1 | --- | --- |
| 7 | 6.8 | --- | --- | e6.5 | --- | --- | 8.6 | --- | --- |
| 8 | 7.2 | --- | --- | e6.8 | --- | --- | 8.2 | --- | --- |
| 9 | 6.8 | --- | --- | e7.0 | --- | --- | 8.0 | --- | --- |
| 10 | e6.5 | --- | --- | e7.8 | --- | --- | 8.0 | --- | --- |
| 11 | e6.8 | --- | --- | e8.3 | --- | --- | 8.1 | --- | --- |
| 12 | e7.0 | --- | --- | e8.8 | --- | --- | 8.1 | --- | --- |
| 13 | e7.5 | --- | --- | 8.9 | --- | --- | 7.9 | --- | --- |
| 14 | 7.4 | --- | --- | 8.5 | --- | --- | 8.2 | --- | --- |
| 15 | e7.5 | --- | --- | 7.6 | --- | --- | 8.7 | --- | --- |
| 16 | e6.8 | --- | --- | 7.3 | --- | --- | 8.9 | --- | --- |
| 17 | e6.7 | --- | --- | 6.9 | --- | --- | 12 | --- | --- |
| 18 | e6.5 | --- | --- | 6.7 | --- | --- | 20 | --- | --- |
| 19 | e8.0 | --- | --- | 11 | --- | --- | 13 | --- | --- |
| 20 | e7.8 | --- | --- | 7.5 | --- | --- | 28 | --- | --- |
| 21 | e7.2 | --- | --- | 7.1 | --- | --- | 24 | --- | --- |
| 22 | e6.8 | --- | --- | 7.1 | --- | --- | 19 | --- | --- |
| 23 | e7.3 | --- | --- | 6.7 | --- | --- | 21 | --- | --- |
| 24 | e7.4 | --- | --- | 5.8 | --- | --- | 29 | --- | --- |
| 25 | e7.6 | --- | --- | e6.5 | --- | --- | 21 | --- | --- |
| 26 | e7.8 | --- | --- | e7.5 | --- | --- | 16 | --- | --- |
| 27 | 7.8 | --- | --- | 8.0 | --- | --- | 17 | --- | --- |
| 28 | 7.2 | --- | --- | 9.7 | --- | --- | 14 | --- | --- |
| 29 | 7.6 | --- | --- | --- | --- | --- | 13 | --- | --- |
| 30 | 7.8 | --- | --- | --- | --- | --- | 12 | --- | --- |
| 31 | 8.2 | --- | --- | --- | --- | --- | 12 | --- | --- |
| TOTAL | 223.1 | --- | --- | 215.3 | --- | --- | 415.4 | --- | --- |

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) |
|-------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|
| | | | | | | | | | |
| 1 | 16 | 29 | 1.3 | 44 | 55 | 6.6 | 42 | 1,030 | 365 |
| 2 | 18 | 30 | 1.4 | 45 | 51 | 6.2 | 17 | 173 | 8.3 |
| 3 | 16 | 20 | 0.83 | 42 | --- | e6.0 | 13 | 84 | 2.9 |
| 4 | 15 | --- | e0.78 | 41 | 95 | 11 | 25 | 404 | 59 |
| 5 | 18 | --- | e1.6 | 39 | 187 | 20 | 34 | 506 | 70 |
| 6 | 20 | --- | e2.1 | 33 | 138 | 12 | 19 | 145 | 7.8 |
| 7 | 14 | 29 | 1.1 | 33 | 102 | 9.0 | 22 | --- | e16 |
| 8 | 16 | --- | e1.3 | 32 | --- | e8.5 | 17 | 85 | 3.9 |
| 9 | 17 | --- | e1.3 | 30 | 119 | 10 | 15 | 60 | 2.5 |
| 10 | 16 | 31 | 1.3 | 35 | 179 | 19 | 13 | 42 | 1.5 |
| 11 | 13 | --- | e1.1 | 28 | 93 | 6.9 | 14 | 49 | 1.8 |
| 12 | 11 | 30 | 0.93 | 26 | 129 | 8.9 | 17 | 43 | 2.0 |
| 13 | 13 | 25 | 0.87 | 24 | --- | e6.1 | 19 | 46 | 2.4 |
| 14 | 17 | 22 | 1.0 | 23 | 77 | 4.8 | 16 | 28 | 1.2 |
| 15 | 25 | 49 | 3.4 | 25 | 75 | 5.4 | 14 | 25 | 0.94 |
| 16 | 31 | --- | e5.2 | 29 | 138 | 12 | 15 | 33 | 1.4 |
| 17 | 29 | 46 | 3.6 | 23 | 76 | 4.8 | 64 | 1,160 | 695 |
| 18 | 26 | 36 | 2.5 | 24 | --- | e6.1 | 39 | 483 | 69 |
| 19 | 27 | --- | e2.8 | 24 | 103 | 6.8 | 70 | 921 | 282 |
| 20 | 27 | 40 | 3.0 | 24 | 66 | 4.2 | 52 | 594 | 97 |
| 21 | 27 | --- | e2.7 | 21 | 65 | 3.7 | 27 | 222 | 17 |
| 22 | 53 | 1,100 | 386 | 18 | 48 | 2.4 | 16 | --- | e3.6 |
| 23 | 58 | 1,210 | 247 | 21 | --- | e9.7 | 14 | 124 | 4.6 |
| 24 | 71 | 1,240 | 250 | 16 | --- | e3.4 | 13 | 257 | 8.7 |
| 25 | 51 | 694 | 102 | 15 | --- | e3.1 | 15 | 176 | 9.5 |
| 26 | 39 | 198 | 21 | 15 | --- | e2.9 | 52 | 595 | 165 |
| 27 | 19 | 122 | 6.5 | 14 | --- | e2.8 | 17 | --- | e4.3 |
| 28 | 32 | 150 | 15 | 12 | 66 | 2.1 | 13 | 78 | 2.8 |
| 29 | 58 | --- | e51 | 11 | 39 | 1.2 | 20 | 179 | 11 |
| 30 | 47 | 105 | 14 | 11 | 50 | 1.6 | 14 | 121 | 4.8 |
| 31 | --- | --- | --- | 26 | 309 | 26 | --- | --- | --- |
| TOTAL | 840 | --- | 1,132.61 | 804 | --- | 233.2 | 738 | --- | 1,920.94 |
| | | JULY | | AUGUST | | | SEPTEMBER | | |
| 1 | 11 | 65 | 2.0 | 5.6 | --- | e0.27 | 22 | 222 | 15 |
| 2 | 9.4 | --- | e1.2 | 5.4 | 13 | 0.19 | 16 | --- | e3.4 |
| 3 | 8.9 | 47 | 1.1 | 7.8 | 67 | 3.1 | 38 | 767 | 180 |
| 4 | 9.1 | 20 | 0.49 | 17 | 257 | 29 | 18 | 193 | 11 |
| 5 | 8.5 | 13 | 0.30 | 7.4 | 40 | 0.82 | 13 | --- | e2.8 |
| 6 | 8.4 | 19 | 0.44 | 5.6 | --- | e0.47 | 16 | 97 | 4.7 |
| 7 | 8.2 | --- | e0.61 | 4.4 | 14 | 0.17 | 23 | 181 | 14 |
| 8 | 7.3 | 29 | 0.58 | 4.7 | 10 | 0.12 | 19 | 93 | 5.1 |
| 9 | 6.3 | 21 | 0.36 | 26 | 705 | 395 | 14 | 36 | 1.4 |
| 10 | 5.6 | --- | e0.30 | 5.2 | 99 | 1.4 | 12 | --- | e1.0 |
| 11 | 5.5 | --- | e0.29 | 7.9 | --- | e1.5 | 9.7 | 32 | 0.84 |
| 12 | 5.5 | --- | e0.28 | 7.3 | 48 | 0.98 | 9.9 | 21 | 0.58 |
| 13 | 5.1 | --- | e0.25 | 6.1 | 32 | 0.54 | 10 | 16 | 0.43 |
| 14 | 5.2 | --- | e0.25 | 4.8 | 18 | 0.23 | 11 | 22 | 0.62 |
| 15 | 5.2 | --- | e0.25 | 5.4 | 23 | 0.34 | 10 | --- | e0.72 |
| 16 | 7.8 | 50 | 1.8 | 4.7 | --- | e0.29 | 9.7 | 22 | 0.60 |
| 17 | 5.8 | --- | e0.94 | 4.3 | 18 | 0.21 | 8.5 | 13 | 0.30 |
| 18 | 5.0 | --- | e1.2 | 7.7 | 33 | 1.3 | 9.3 | 25 | 0.69 |
| 19 | 13 | 502 | 86 | 6.8 | 25 | 0.48 | 11 | 29 | 0.93 |
| 20 | 9.2 | 69 | 2.6 | 4.6 | 12 | 0.15 | 9.7 | --- | e0.79 |
| 21 | 5.3 | 15 | 0.22 | 3.8 | 8 | 0.08 | 9.1 | 20 | 0.50 |
| 22 | 5.4 | 45 | 0.67 | 3.8 | 16 | 0.16 | 10 | 14 | 0.38 |
| 23 | 5.6 | 20 | 0.30 | 3.7 | 20 | 0.20 | 11 | 9 | 0.27 |
| 24 | 5.6 | 13 | 0.20 | 8.3 | 109 | 10 | 10 | 9 | 0.25 |
| 25 | 6.0 | 63 | 1.3 | 4.2 | 34 | 0.43 | 11 | --- | e1.1 |
| 26 | 6.4 | --- | e1.7 | 3.5 | --- | e0.14 | 14 | 179 | 6.8 |
| 27 | 15 | 136 | 12 | 18 | 486 | 90 | 10 | 33 | 0.94 |
| 28 | 16 | 241 | 46 | 7.2 | 64 | 1.7 | 9.8 | 10 | 0.25 |
| 29 | 8.1 | 43 | 1.1 | 32 | 1,500 | 350 | 10 | 7 | 0.20 |
| 30 | 5.8 | 30 | 0.46 | 79 | 1,330 | 743 | 11 | --- | e0.21 |
| 31 | 5.3 | 40 | 0.58 | 157 | 3,350 | 2,430 | --- | --- | --- |
| TOTAL | 234.5 | --- | 165.77 | 469.2 | --- | 4,062.27 | 395.7 | --- | 255.80 |

e Estimated.

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°57'04", long 104°42'47", in SE¹/₄NW¹/₄ sec.6, T.13 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on left bank on downstream side of bridge on Cowpoke Road at Colorado Springs, 1.0 mi upstream from Woodmen Road, and 5.3 mi east of Interstate 25.

DRAINAGE AREA.--5.93 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1998 to October 2002 (seasonal records only) (discontinued). October 2002 to September 2003 (annual maximum only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103977

GAGE.--Water-stage recorder with satellite telemetry and artificial control. Elevation of gage is 6,875 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs and ground-water withdrawals. Station operated as both a crest-stage partial-record station and continuous-record station in October and as only a crest-stage partial-record station beginning in November.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 230 ft³/s, June 23, 1999, from rating curve extended above 42 ft³/s on basis of velocity-area study, gage height, 6.25 ft, from floodmarks; minimum daily, 0.01 ft³/s (estimated), July 12, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Minimum daily discharge during October, 0.04 ft³/s (estimated), Oct. 21; maximum discharge for the 2003 water year is published in the "Maximum Discharge at Crest-Stage Partial-Record Stations" section of this report.

**DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 2 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 4 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 6 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 7 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 10 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 11 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 12 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 13 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 14 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 15 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 16 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 17 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 18 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 19 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 20 | e0.05 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 21 | e0.04 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 22 | e0.05 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 23 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 24 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 25 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 26 | e0.07 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 27 | e0.08 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 28 | e0.06 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 29 | e0.05 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 30 | e0.05 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 31 | e0.05 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 1.96 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN | 0.063 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX | 0.08 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN | 0.04 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| AC-FT | 3.9 | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |

e Estimated.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103977

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to October 2002 (seasonal records only) (discontinued).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are poor.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 6,760 mg/L, May 25, 1999; minimum daily mean, 7 mg/L, June 13, 2000.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 2,510 tons (estimated), Apr. 30, 1999; minimum daily, 0.0 ton (most estimated), on many days in 2000 and 2002.

EXTREMES FOR CURRENT YEAR.--

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily during October, 0.09 ton (estimated), Oct. 2-3; minimum daily, 0.03 ton (estimated), Oct. 20-22.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | E coli, m-TEC MF, water, col/100 mL (31633) | Fecal coliform, M-FC col/100 mL (31625) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| NOV 06... | 1300 | 0.05 | 8.8 | 7.9 | 412 | 10.0 | 0.052 | E.04 | <0.02 | 0.47 | -- | E2100 | E1600 |
| JUN 24... | 1035 | 0.05 | 6.5 | 7.6 | 503 | 22.5 | 0.043 | E.04 | <0.02 | 0.08 | 4,200 | -- | 3,900 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-----------|---|---|
| NOV 06... | 2,000 | 0.27 |
| JUN 24... | 178 | 0.02 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| JUL 28... | 1935 | 2.5 | 7.3 | e5.5 | 273 | 17.0 | 0.635 | 1.04 | <0.02 | 4.30 | 18,000 | 20,000 | 17,600 |

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Sus- pended sediment load, tons/d (80155) |
|--------------|--|
| JUL 28... | 121 |

< -- Actual value is
known to be less
than the value
shown.
e -- Estimated.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instan- taneous dis- charge, cfs (00061) | Specif. conduc- tance, wat unf uS/cm 25 degC (00095) | Temper- ature, water, deg C (00010) | Sus- pended sediment concentra- tion mg/L (80154) | Sus- pended sediment load, tons/d (80155) |
|-------|------|---|--|---|---|--|
| OCT | | | | | | |
| 02... | 1045 | 0.07 | 453 | 9.0 | 501 | 0.09 |
| 09... | 0800 | 0.07 | 435 | 7.5 | 253 | 0.05 |
| 22... | 1145 | 0.05 | 453 | 9.5 | 214 | 0.03 |
| NOV | | | | | | |
| 05... | 0745 | 0.05 | 534 | 0.0 | 580 | 0.08 |
| 06... | 1300 | 0.05 | 412 | 10.0 | 2,000 | 0.27 |
| JUN | | | | | | |
| 24... | 1035 | 0.05 | 503 | 22.5 | 178 | 0.02 |
| JUL | | | | | | |
| 28... | 1935 | 2.5 | 273 | 17.0 | 17,600 | 121 |

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
 WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/ day) |
|---------|----------------------------|---------------------------------|------------------------|
| OCTOBER | | | |
| 1 | e0.07 | --- | e0.07 |
| 2 | e0.07 | --- | e0.09 |
| 3 | e0.07 | --- | e0.09 |
| 4 | e0.07 | --- | e0.08 |
| 5 | e0.07 | --- | e0.07 |
| 6 | e0.07 | --- | e0.07 |
| 7 | e0.07 | --- | e0.06 |
| 8 | e0.07 | --- | e0.05 |
| 9 | e0.07 | --- | e0.05 |
| 10 | e0.07 | --- | e0.05 |
| 11 | e0.07 | --- | e0.05 |
| 12 | e0.07 | --- | e0.05 |
| 13 | e0.07 | --- | e0.05 |
| 14 | e0.07 | --- | e0.04 |
| 15 | e0.06 | --- | e0.04 |
| 16 | e0.06 | --- | e0.04 |
| 17 | e0.06 | --- | e0.04 |
| 18 | e0.06 | --- | e0.04 |
| 19 | e0.06 | --- | e0.04 |
| 20 | e0.05 | --- | e0.03 |
| 21 | e0.04 | --- | e0.03 |
| 22 | e0.05 | --- | e0.03 |
| 23 | e0.06 | --- | e0.04 |
| 24 | e0.06 | --- | e0.04 |
| 25 | e0.06 | --- | e0.05 |
| 26 | e0.07 | --- | e0.06 |
| 27 | e0.08 | --- | e0.07 |
| 28 | e0.06 | --- | e0.07 |
| 29 | e0.05 | --- | e0.06 |
| 30 | e0.05 | --- | e0.06 |
| 31 | e0.05 | --- | e0.06 |
| TOTAL | 1.96 | --- | 1.67 |

e Estimated.

07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°56'22", long 104°44'26", in NE¼NE¼ sec.11, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank, 250 ft downstream from Woodmen Road, 4.0 mi east of Interstate 25, 5.0 mi upstream from mouth, and 8.2 mi northeast of courthouse in Colorado Springs.

DRAINAGE AREA.--10.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1992 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103980

REVISED RECORDS.--WDR CO-93-1: Drainage area. WDR CO-96-1: 1995 (M)

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,680 ft above NGVD of 1929, from topographic map. Prior to Apr. 13, 1999, at site 150 ft upstream at datum 10 ft higher.

REMARKS.--Records fair except for estimated daily discharges and those above 10 ft³/s, which are poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs and ground-water withdrawals.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 1.3 | 0.38 | 0.62 | 0.35 | 0.34 | 2.0 | 0.73 | 0.70 | 3.1 | 0.90 | 0.45 | 1.7 |
| 2 | 1.2 | 1.0 | 0.53 | e0.30 | 0.36 | 0.87 | 0.73 | 0.90 | 0.59 | 0.94 | 0.26 | 1.2 |
| 3 | 0.63 | 0.70 | 0.57 | e0.30 | 0.66 | 0.93 | 0.63 | 0.74 | 0.65 | 0.79 | 1.5 | 4.4 |
| 4 | 0.56 | 0.56 | 0.40 | 0.46 | e0.56 | 0.52 | 0.53 | 1.3 | 6.7 | 0.70 | 2.3 | 0.65 |
| 5 | 0.58 | 0.46 | 0.34 | 0.36 | e0.52 | 1.6 | 1.8 | 0.69 | 3.9 | 0.63 | 0.35 | 1.2 |
| 6 | 0.56 | 0.38 | 0.33 | 0.33 | e0.48 | 0.78 | 1.1 | 0.78 | 0.88 | 0.55 | 0.33 | 6.6 |
| 7 | 0.45 | 0.42 | 0.34 | 0.39 | e0.46 | 0.57 | 0.65 | 0.72 | 2.0 | 0.55 | 0.26 | 3.8 |
| 8 | 0.54 | 0.37 | 0.29 | 0.47 | e0.40 | 0.40 | 0.64 | 0.59 | 0.92 | 0.54 | 0.27 | 1.7 |
| 9 | 0.50 | 0.42 | 0.25 | 0.41 | e0.50 | 0.34 | 0.49 | 0.58 | 1.2 | 0.50 | 0.53 | 1.3 |
| 10 | 0.51 | 0.34 | 0.30 | e0.35 | e0.46 | 0.43 | 0.38 | 1.1 | 0.85 | 0.44 | 0.47 | 0.84 |
| 11 | 0.49 | 0.32 | 0.33 | e0.30 | e0.50 | 0.58 | 0.42 | 0.68 | 0.71 | 0.44 | 0.53 | 0.88 |
| 12 | 0.50 | 0.32 | 0.31 | 0.58 | e0.60 | 0.55 | 0.42 | 0.57 | 1.2 | 0.52 | 0.50 | 1.0 |
| 13 | 0.51 | 0.63 | 0.34 | 0.61 | 0.66 | 0.49 | 0.52 | 0.67 | 1.2 | 0.48 | 0.44 | 0.84 |
| 14 | 0.53 | 0.59 | 0.24 | 0.48 | 0.60 | 0.46 | 0.40 | 0.62 | 1.0 | 0.45 | 0.36 | 0.87 |
| 15 | 0.44 | 0.50 | 0.20 | 0.45 | 0.52 | 0.55 | 1.2 | 1.00 | 1.0 | 0.51 | 0.39 | 1.0 |
| 16 | 0.35 | 0.49 | 0.23 | e0.38 | 0.57 | 0.50 | 0.97 | 0.83 | 1.2 | 0.60 | 0.42 | 0.83 |
| 17 | 0.37 | 0.33 | 0.21 | e0.40 | 0.66 | 1.4 | 0.82 | 0.76 | e17 | 0.61 | 0.41 | 0.79 |
| 18 | 0.39 | 0.25 | 0.22 | e0.30 | 0.92 | 1.8 | 0.61 | 0.68 | e1.2 | 0.53 | 1.9 | 0.91 |
| 19 | 0.38 | 0.31 | e0.20 | e0.25 | 2.6 | 7.0 | 1.2 | 0.60 | 11 | 4.4 | 0.50 | 0.84 |
| 20 | 0.37 | 0.33 | e0.20 | e0.25 | 1.1 | 4.2 | 0.68 | 0.60 | 0.90 | 0.33 | 0.48 | 0.68 |
| 21 | 0.31 | 0.39 | 0.30 | e0.27 | 0.72 | 2.4 | 0.58 | 0.50 | 0.54 | 0.26 | 0.42 | 0.63 |
| 22 | 0.35 | 0.44 | e0.25 | e0.29 | 0.44 | 2.3 | 2.5 | 0.50 | 1.1 | 0.36 | 0.52 | 0.80 |
| 23 | 0.45 | 0.52 | 0.30 | e0.30 | 0.68 | 2.3 | 3.7 | 1.2 | 0.94 | 0.67 | 0.48 | 0.80 |
| 24 | 0.45 | 0.51 | 0.27 | 0.37 | 0.80 | 4.4 | 4.6 | 0.54 | 1.00 | 0.96 | 0.70 | 0.70 |
| 25 | 0.47 | 0.44 | e0.30 | 0.33 | 1.1 | 2.2 | 0.49 | 0.71 | 1.5 | 1.6 | 0.60 | 0.60 |
| 26 | 2.4 | e0.45 | e0.30 | 0.37 | e0.90 | 1.3 | 0.49 | 0.62 | 4.0 | 2.3 | 0.63 | 0.63 |
| 27 | 1.1 | e0.60 | 0.25 | 0.38 | 0.69 | 0.78 | 0.44 | 0.57 | 0.44 | 2.5 | 3.2 | 0.53 |
| 28 | 0.51 | 0.59 | 0.29 | 0.30 | 1.1 | 0.88 | 0.46 | 0.65 | 0.57 | 11 | 0.49 | 0.57 |
| 29 | 0.36 | 0.57 | 0.30 | 0.29 | --- | 1.2 | 0.51 | 1.1 | 0.69 | 0.59 | 0.56 | 0.61 |
| 30 | 0.44 | 0.52 | 0.26 | 0.36 | --- | 0.75 | 0.62 | 0.70 | 0.80 | 0.53 | 19 | 0.65 |
| 31 | 0.54 | --- | 0.28 | 0.43 | --- | 0.79 | --- | 0.88 | --- | 0.44 | 14 | --- |
| TOTAL | 18.54 | 14.13 | 9.55 | 11.41 | 19.90 | 45.27 | 29.31 | 23.08 | 68.78 | 36.62 | 53.25 | 38.55 |
| MEAN | 0.60 | 0.47 | 0.31 | 0.37 | 0.71 | 1.46 | 0.98 | 0.74 | 2.29 | 1.18 | 1.72 | 1.28 |
| MAX | 2.4 | 1.0 | 0.62 | 0.61 | 2.6 | 7.0 | 4.6 | 1.3 | 17 | 11 | 19 | 6.6 |
| MIN | 0.31 | 0.25 | 0.20 | 0.25 | 0.34 | 0.34 | 0.38 | 0.50 | 0.44 | 0.26 | 0.26 | 0.53 |
| AC-FT | 37 | 28 | 19 | 23 | 39 | 90 | 58 | 46 | 136 | 73 | 106 | 76 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 1.20 | 1.06 | 0.76 | 0.66 | 0.80 | 1.25 | 1.83 | 3.09 | 2.96 | 2.22 | 2.38 | 1.33 |
| MAX | 2.59 | 3.20 | 1.71 | 1.36 | 1.26 | 3.34 | 6.42 | 13.6 | 8.85 | 5.07 | 6.36 | 2.82 |
| (WY) | (1995) | (1998) | (2000) | (1998) | (1998) | (1998) | (1999) | (1999) | (1995) | (1999) | (1999) | (1995) |
| MIN | 0.35 | 0.47 | 0.31 | 0.33 | 0.42 | 0.49 | 0.50 | 0.64 | 0.49 | 0.24 | 0.40 | 0.47 |
| (WY) | (1993) | (1993) | (2003) | (1994) | (1994) | (1995) | (1996) | (1993) | (1994) | (1994) | (2002) | (1992) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1992 - 2003

| | | | | |
|--------------------------|--------|--------|-------|--------|
| ANNUAL TOTAL | 262.68 | 368.39 | | |
| ANNUAL MEAN | 0.72 | 1.01 | | |
| HIGHEST ANNUAL MEAN | | | | 1.67 |
| LOWEST ANNUAL MEAN | | | | 3.63 |
| HIGHEST DAILY MEAN | | | | 0.65 |
| LOWEST DAILY MEAN | 12 | Jul 5 | 19 | Aug 30 |
| ANNUAL SEVEN-DAY MINIMUM | 0.20 | Dec 15 | 0.20 | Dec 15 |
| MAXIMUM PEAK FLOW | 0.21 | Dec 14 | 0.21 | Dec 14 |
| MAXIMUM PEAK STAGE | | | b511 | Jun 17 |
| ANNUAL RUNOFF (AC-FT) | 521 | | d7.07 | Jun 17 |
| 10 PERCENT EXCEEDS | 1.0 | | | 1,210 |
| 50 PERCENT EXCEEDS | 0.56 | | | 3.0 |
| 90 PERCENT EXCEEDS | 0.33 | | | 0.83 |
| | | | | 0.36 |

e Estimated.

a Also occurred Jan 23, Feb 3 (estimated), 1996.

b From rating curve extended above 19 ft³/s on basis of velocity-area study.

c From rating curve extended above 1.1 ft³/s on basis of slope-area measurement of peak flow at gage height 4.45 ft, site and datum then in use.

d From floodmarks.

f From floodmarks, site and datum then in use. Maximum gage height, 7.84 ft, May 25, 1999.

07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year (seasonal peaks only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103980

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, wat unflab, uS/cm 25 degC (90095) | Specific conductance, wat unflab, uS/cm 25 degC (00095) | Suspnd. sediment, sieve diameter percent <.063mm (70331) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-------|------|--------------------------------------|---|---|--|---|---|
| APR | | | | | | | |
| 08... | 1045 | 0.86 | -- | 760 | -- | -- | -- |
| MAY | | | | | | | |
| 14... | 0735 | 0.65 | -- | 726 | -- | -- | -- |
| JUN | | | | | | | |
| 18... | 1520 | 1.4 | 649 | -- | -- | 2,740 | 10 |
| JUL | | | | | | | |
| 28... | 2045 | 23 | -- | 262 | 95 | 8,450 | 516 |
| AUG | | | | | | | |
| 19... | 1300 | 0.41 | 716 | -- | -- | -- | -- |
| SEP | | | | | | | |
| 10... | 1030 | 0.90 | 721 | -- | -- | -- | -- |
| 10... | 1040 | 1.6 | 765 | -- | -- | -- | -- |

07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2003 (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103980

GAGE.--Tipping-bucket rain gage with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.75 inches, June 17, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation for period April to September, 1.75 inches, June 17.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-----|-------|------|------|------|------|------|
| 1 | --- | --- | --- | --- | --- | --- | --- | 0.00 | 0.42 | 0.00 | 0.01 | 0.00 |
| 2 | --- | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 |
| 3 | --- | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.30 | 0.32 |
| 4 | --- | --- | --- | --- | --- | --- | --- | 0.09 | 0.28 | 0.00 | 0.12 | 0.00 |
| 5 | --- | --- | --- | --- | --- | --- | --- | 0.00 | 0.42 | 0.00 | 0.01 | 0.00 |
| 6 | --- | --- | --- | --- | --- | --- | --- | 0.00 | 0.04 | 0.00 | 0.00 | 0.65 |
| 7 | --- | --- | --- | --- | --- | --- | --- | 0.00 | 0.19 | 0.00 | 0.00 | 0.25 |
| 8 | --- | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | --- | --- | --- | --- | --- | --- | e0.00 | 0.05 | 0.12 | 0.00 | 0.07 | 0.00 |
| 10 | --- | --- | --- | --- | --- | --- | 0.00 | 0.10 | 0.01 | 0.00 | 0.13 | 0.00 |
| 11 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 |
| 12 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.14 | 0.01 | 0.00 | 0.00 |
| 13 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.02 |
| 14 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 15 | --- | --- | --- | --- | --- | --- | 0.11 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 |
| 16 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 |
| 17 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 1.75 | 0.00 | 0.02 | 0.00 |
| 18 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.01 | 0.16 | 0.00 |
| 19 | --- | --- | --- | --- | --- | --- | 0.11 | 0.00 | 1.12 | 0.55 | 0.00 | 0.00 |
| 20 | --- | --- | --- | --- | --- | --- | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.04 |
| 21 | --- | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | --- | --- | --- | --- | --- | --- | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 |
| 23 | --- | --- | --- | --- | --- | --- | 0.31 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | --- | --- | --- | --- | --- | --- | 0.36 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 |
| 25 | --- | --- | --- | --- | --- | --- | 0.00 | 0.03 | 0.16 | 0.06 | 0.00 | 0.00 |
| 26 | --- | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.34 | 0.22 | 0.01 | 0.00 |
| 27 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.15 | 0.50 | 0.00 |
| 28 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.07 | 0.67 | 0.03 | 0.00 |
| 29 | --- | --- | --- | --- | --- | --- | 0.00 | 0.12 | 0.00 | 0.00 | 0.09 | 0.00 |
| 30 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 1.69 | 0.00 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 0.01 | --- | 0.00 | 0.41 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 0.77 | 5.08 | 1.71 | 3.67 | 1.48 |
| MAX | --- | --- | --- | --- | --- | --- | --- | 0.19 | 1.75 | 0.67 | 1.69 | 0.65 |

e Estimated.

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103985

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to October 2002 (seasonal records only) (discontinued).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,990 mg/L, Apr. 30, 1999; minimum daily mean, 1 mg/L, June 11, Sept. 24-25, 2002.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 1,250 tons, June 7, 2001; minimum daily, 0.0 ton, on many days (some estimated) in 1999, 2000, 2002, and 2003.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean during October, 40 mg/L, Oct. 27; minimum daily mean, 1 mg/L, Oct. 10, 12, 17.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily during October, 0.68 ton, Oct. 26; minimum daily, 0.0 ton, on many days (some estimated).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/ 100 mL (90902) | E coli, m-TEC MF, water, col/ 100 mL (31633) | Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|---|---|---|--|--|--|
| NOV 06... | 1200 | e0.60 | 9.1 | 8.4 | 1,120 | 11.0 | 0.022 | 6.28 | 0.02 | 0.04 | -- | E20 | E10 |
| JUN 24... | 1145 | 1.1 | 6.9 | 8.3 | 1,080 | 20.0 | 0.108 | 5.45 | 0.02 | 0.07 | E230 | -- | E270 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-----------|---|---|
| NOV 06... | 2 | E.00 |
| JUN 24... | 83 | 0.24 |

e -- Estimated.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/ 100 mL (90902) | Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|---|---|---|--|--|---|
| JUN 12... | 1655 | 31 | 7.1 | 8.0 | 150 | 16.5 | 0.556 | 0.93 | 0.12 | 0.67 | 2,800 | 4,100 | 765 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 12... | 64 |

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO—Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, wat unf uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-------|------|--------------------------------------|---|-----------------------------------|---|---|
| OCT | | | | | | |
| 22... | 1100 | 0.62 | 1,070 | 11.5 | 0.0 | 0.00 |
| NOV | | | | | | |
| 05... | 0845 | 0.61 | 1,110 | 4.5 | 8 | 0.01 |
| 06... | 1200 | e0.60 | 1,120 | 11.0 | 2 | e0.00 |
| JUN | | | | | | |
| 12... | 1655 | 31 | 150 | 16.5 | 765 | 64 |
| 24... | 1145 | 1.1 | 1,080 | 20.0 | 83 | 0.24 |

e -- Estimated.

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) |
|---------|----------------------|---------------------------|-----------------|
| OCTOBER | | | |
| 1 | 0.85 | --- | e0.18 |
| 2 | 0.87 | 18 | 0.09 |
| 3 | 0.67 | --- | e0.03 |
| 4 | 0.54 | 2 | 0.00 |
| 5 | 0.58 | --- | e0.00 |
| 6 | 0.55 | --- | e0.00 |
| 7 | 0.56 | --- | e0.00 |
| 8 | 0.59 | --- | e0.00 |
| 9 | 0.61 | --- | e0.00 |
| 10 | 0.60 | 1 | 0.00 |
| 11 | 0.57 | --- | e0.00 |
| 12 | 0.55 | 1 | 0.00 |
| 13 | 0.56 | --- | e0.00 |
| 14 | 0.56 | --- | e0.00 |
| 15 | 0.56 | --- | e0.00 |
| 16 | 0.61 | --- | e0.00 |
| 17 | 0.61 | 1 | 0.00 |
| 18 | 0.61 | --- | e0.00 |
| 19 | 0.61 | --- | e0.00 |
| 20 | 0.61 | --- | e0.00 |
| 21 | 0.60 | --- | e0.00 |
| 22 | 0.77 | 11 | 0.06 |
| 23 | 0.72 | --- | e0.04 |
| 24 | 0.63 | --- | e0.00 |
| 25 | 0.64 | --- | e0.00 |
| 26 | 2.1 | 26 | 0.68 |
| 27 | 1.0 | 40 | 0.24 |
| 28 | 0.61 | --- | e0.02 |
| 29 | 0.61 | --- | e0.02 |
| 30 | 0.61 | --- | e0.01 |
| 31 | 0.67 | --- | e0.01 |
| TOTAL | 21.23 | --- | 1.38 |

e Estimated.

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO

LOCATION.--Lat 38°55'41", long 104°48'35", in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.8, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 20 ft upstream from Vincent Drive bridge, 0.3 mi south of Woodmen Road, 0.3 mi upstream from mouth, and 1.2 mi northeast of Pikeview.

DRAINAGE AREA.--18.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1985 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103990

GAGE.--Water-stage recorder with satellite telemetry, crest-stage gage, and concrete control. Elevation of gage is 6,265 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs and ground-water withdrawals.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 6.8 | 3.7 | 5.2 | e3.5 | e3.0 | e4.0 | 4.9 | 3.2 | 16 | 3.0 | 3.1 | 7.8 |
| 2 | 9.9 | 10 | 4.9 | e3.0 | e3.5 | e5.0 | 4.6 | 3.3 | 2.7 | 2.8 | 4.1 | 13 |
| 3 | 4.6 | 4.6 | 5.9 | e3.0 | e3.5 | e3.0 | 3.8 | 2.9 | 2.6 | 2.7 | 8.5 | 18 |
| 4 | 4.4 | 3.3 | 5.3 | e4.0 | e3.0 | 3.5 | 4.1 | 4.1 | 15 | 2.5 | 9.9 | 4.1 |
| 5 | 3.9 | 3.4 | 5.2 | e4.0 | e3.0 | e3.0 | 11 | 2.2 | 21 | 2.7 | 3.0 | 3.7 |
| 6 | 4.0 | e3.0 | e5.0 | e5.0 | 4.0 | e3.0 | 8.4 | 2.8 | 3.0 | 3.4 | 3.5 | 12 |
| 7 | 3.9 | e3.0 | e4.5 | e5.0 | 3.4 | e2.5 | 3.0 | 2.6 | 8.3 | 2.4 | 3.9 | 12 |
| 8 | 4.1 | e3.0 | e4.0 | e5.5 | e3.0 | e5.5 | 3.5 | 2.6 | 4.2 | 3.2 | 3.2 | e6.0 |
| 9 | 4.4 | e3.0 | e4.0 | e6.1 | e3.0 | 2.4 | 3.1 | 3.1 | 6.3 | 2.2 | 7.3 | e5.0 |
| 10 | 3.8 | e4.0 | e3.5 | 4.9 | e3.0 | 3.6 | 3.2 | 7.1 | 3.7 | 2.8 | e4.0 | 4.0 |
| 11 | e3.8 | e4.0 | e3.0 | e4.0 | e3.0 | 3.9 | 3.3 | 2.8 | 4.3 | 2.6 | 3.7 | 4.3 |
| 12 | 3.6 | e4.0 | e3.0 | 4.5 | e4.0 | 4.1 | 2.9 | 2.4 | 8.6 | 3.7 | e4.0 | 4.8 |
| 13 | 4.1 | e3.0 | e3.5 | e5.0 | e5.0 | 4.3 | 3.3 | 2.4 | 6.9 | 3.0 | e3.0 | 7.7 |
| 14 | 3.8 | e3.0 | e4.0 | e5.0 | 4.7 | 5.3 | 3.0 | e2.0 | 5.3 | 2.9 | e3.0 | 7.3 |
| 15 | 3.1 | e3.0 | 4.5 | e5.0 | 5.7 | 4.5 | 4.3 | 4.9 | 5.7 | 3.0 | e2.5 | 7.1 |
| 16 | 4.4 | e3.0 | 3.5 | e5.0 | 4.5 | 4.4 | 3.6 | 3.4 | 5.9 | 5.8 | e2.5 | 5.2 |
| 17 | 4.9 | e3.0 | 4.7 | e4.0 | 4.7 | 9.7 | 3.0 | 2.5 | 53 | 2.4 | e2.5 | 4.0 |
| 18 | 3.3 | e3.0 | 4.9 | e4.0 | 5.3 | 15 | e3.5 | 2.4 | 7.9 | 2.2 | 4.6 | 4.2 |
| 19 | 3.2 | e3.0 | e5.0 | e4.0 | 13 | 8.9 | 4.6 | 2.5 | 33 | 13 | e4.0 | 4.6 |
| 20 | 2.8 | e3.0 | e4.5 | 3.7 | 6.5 | 32 | 4.2 | 2.3 | 10 | 3.9 | e3.0 | 3.4 |
| 21 | 2.6 | e4.0 | e4.0 | 3.9 | 4.1 | 14 | 3.4 | 2.0 | 6.5 | 2.7 | e3.0 | 3.1 |
| 22 | 3.6 | e4.0 | e4.0 | 3.7 | 4.6 | 12 | 15 | 3.5 | 6.0 | 4.0 | e3.0 | 3.8 |
| 23 | 3.7 | e4.0 | e4.0 | e6.0 | 5.3 | 11 | 21 | 8.0 | 5.7 | 4.4 | e3.0 | 3.4 |
| 24 | 5.3 | e4.0 | e4.0 | 5.0 | e4.5 | 22 | 29 | 2.3 | 5.3 | 3.3 | 5.0 | 3.4 |
| 25 | 4.2 | e5.0 | e4.0 | 6.1 | e4.0 | 12 | 3.5 | 3.5 | 6.9 | 4.2 | 4.9 | 4.3 |
| 26 | 15 | e5.0 | e4.0 | 5.6 | e4.0 | 7.1 | 3.1 | 4.6 | 15 | 5.2 | 5.8 | 3.4 |
| 27 | 12 | e5.0 | e4.5 | 4.3 | e4.0 | 6.2 | 3.2 | 2.8 | 2.5 | 13 | 16 | 3.7 |
| 28 | 3.0 | e5.0 | e4.5 | 5.5 | e4.0 | 5.2 | 3.9 | 2.5 | 3.0 | 30 | 4.4 | 3.8 |
| 29 | e3.0 | 4.7 | e4.5 | e4.0 | --- | 5.3 | 3.4 | 6.7 | 3.2 | 4.2 | 30 | 4.6 |
| 30 | 4.7 | 4.1 | e4.5 | e3.5 | --- | 5.4 | 2.5 | 3.4 | 3.3 | 3.3 | 36 | 3.7 |
| 31 | 3.8 | --- | e4.0 | e3.0 | --- | 5.8 | --- | 3.8 | --- | 2.8 | 53 | --- |
| TOTAL | 147.7 | 117.8 | 134.1 | 138.8 | 123.3 | 233.6 | 173.3 | 104.6 | 280.8 | 147.3 | 247.4 | 175.4 |
| MEAN | 4.76 | 3.93 | 4.33 | 4.48 | 4.40 | 7.54 | 5.78 | 3.37 | 9.36 | 4.75 | 7.98 | 5.85 |
| MAX | 15 | 10 | 5.9 | 6.1 | 13 | 32 | 29 | 8.0 | 53 | 30 | 53 | 18 |
| MIN | 2.6 | 3.0 | 3.0 | 3.0 | 3.0 | 2.4 | 2.5 | 2.0 | 2.5 | 2.2 | 2.5 | 3.1 |
| AC-FT | 293 | 234 | 266 | 275 | 245 | 463 | 344 | 207 | 557 | 292 | 491 | 348 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2003, BY WATER YEAR (WY)

| | MEAN | 5.75 | 5.14 | 4.49 | 4.36 | 4.56 | 5.58 | 6.84 | 9.25 | 9.64 | 9.65 | 9.32 | 6.43 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MAX | 9.59 | 9.18 | 7.90 | 7.60 | 7.56 | 11.1 | 33.3 | 40.7 | 26.4 | 26.2 | 27.7 | 13.9 | |
| (WY) | (1995) | (1998) | (1998) | (2000) | (2000) | (1992) | (1999) | (1999) | (1999) | (1995) | (2001) | (1999) | (1999) |
| MIN | 1.93 | 2.90 | 1.92 | 2.30 | 2.28 | 2.57 | 3.31 | 2.71 | 3.05 | 2.34 | 3.93 | 2.67 | |
| (WY) | (1987) | (1987) | (1992) | (1987) | (1990) | (1999) | (1989) | (1986) | (1990) | (1992) | (2002) | (1986) | |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1986 - 2003

| | | | |
|--------------------------|------------|---------------|----------------------|
| ANNUAL TOTAL | 1,853.8 | 2,024.1 | |
| ANNUAL MEAN | 5.08 | 5.55 | 6.91 |
| HIGHEST ANNUAL MEAN | | | 15.7 1999 |
| LOWEST ANNUAL MEAN | | | 4.01 1989 |
| HIGHEST DAILY MEAN | 140 Jul 5 | 53 Jun 17 | e500 Apr 30, 1999 |
| LOWEST DAILY MEAN | 2.3 Jun 19 | 2.0 May 14 | a0.01 Jul 10, 1989 |
| ANNUAL SEVEN-DAY MINIMUM | 2.6 Jun 17 | 2.7 May 16 | 0.12 Jul 5, 1989 |
| MAXIMUM PEAK FLOW | | b1,440 Jun 17 | c,d2,710 Jul 9, 2001 |
| MAXIMUM PEAK STAGE | | 7.87 Jun 17 | d,f9.53 Jul 9, 2001 |
| ANNUAL RUNOFF (AC-FT) | 3,680 | 4,010 | 5,000 |
| 10 PERCENT EXCEEDS | 5.4 | 9.2 | 10 |
| 50 PERCENT EXCEEDS | 4.0 | 4.0 | 4.7 |
| 90 PERCENT EXCEEDS | 3.0 | 2.8 | 2.5 |

e Estimated.

a Also occurred Jul 11, 1989.

b From rating curve extended above 213 ft³/s, on basis of critical-depth measurement of peak flow at gage height 9.02 ft.

c From rating curve extended above 900 ft³/s, on basis of critical-depth measurement of peak flow at gage height 9.02 ft.

d Also occurred Jul 13, 2001.

f From floodmarks.

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07103990

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 7,870 mg/L, May 25, 1999; minimum daily mean, 96 mg/L, Oct. 2, 2001.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 13,500 tons (estimated), April 30, 1999; minimum daily, 0.59 ton (estimated), Oct. 11, 2002.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,390 mg/L, July 28; minimum daily mean, 134 mg/L, Oct. 7.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 1,900 tons, June 17; minimum daily, 0.59 ton (estimated), Oct. 11.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfiltered, uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, filtered, mg/L as N (00608) | Nitrite + nitrate water filtered, mg/L as N (00631) | Orthophosphate, water, filtered, mg/L as P (00671) | Phosphorus, water, unfiltered, mg/L (00665) | E coli, modified, water, col/100 mL (90902) | E coli, m-TEC, MF, water, col/100 mL (31633) | Fecal coliform, M-FC col/100 mL (31625) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|--|---|--|---|---|--|---|
| NOV 06... | 1030 | e3.6 | 10.4 | 8.4 | 737 | 5.0 | E.009 | 5.11 | E.01 | 0.12 | -- | E44 | 50 |
| JUN 24... | 0915 | 6.6 | 7.3 | 8.3 | 786 | 18.0 | E.022 | 4.14 | 0.03 | 0.23 | E620 | -- | E640 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment concentration, mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-----------|--|---|
| NOV 06... | 376 | E3.7 |
| JUN 24... | 490 | 8.7 |

E -- Estimated laboratory analysis value.
e -- Estimated.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfiltered, uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, filtered, mg/L as N (00608) | Nitrite + nitrate water filtered, mg/L as N (00631) | Orthophosphate, water, filtered, mg/L as P (00671) | Phosphorus, water, unfiltered, mg/L (00665) | E coli, modified, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration, mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|--|---|--|---|---|---|--|
| JUN 12... | 1815 | 47 | 7.9 | 8.1 | 354 | 16.0 | 0.210 | 1.81 | 0.06 | 1.98 | 7,400 | E15000 | 4,090 |

ARKANSAS RIVER BASIN

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO—Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 12... | 519 |

E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING MICROBIOLOGICAL SAMPLING,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, wat unf uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | E coli, modif. m-TEC, water, col/ 100 mL (90902) | Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625) |
|-----------|------|--------------------------------------|---|-----------------------------------|--|--|
| JUN 25... | 1110 | 4.0 | 717 | 21.0 | E140 | 230 |

E -- Estimated laboratory analysis value.

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO—Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA,
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specif. conductance, wat unf lab, uS/cm 25 degC (90095) | Specif. conductance, wat unf uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-------|------|--------------------------------------|---|--|-----------------------------------|---|---|
| OCT | | | | | | | |
| 10... | 0800 | 4.2 | -- | 730 | 6.5 | 175 | 2.0 |
| 24... | 1000 | 7.3 | -- | 724 | 3.0 | 141 | 2.8 |
| NOV | | | | | | | |
| 05... | 1145 | 3.6 | -- | 759 | 6.5 | 387 | 3.8 |
| 06... | 1030 | e3.6 | -- | 737 | 5.0 | 376 | e3.7 |
| MAR | | | | | | | |
| 31... | 1400 | 3.9 | -- | 729 | 20.5 | 427 | 4.5 |
| APR | | | | | | | |
| 08... | 1230 | 3.5 | -- | 702 | 16.0 | -- | -- |
| 08... | 1245 | 4.2 | -- | 702 | 16.0 | 466 | 5.3 |
| 21... | 1200 | 2.7 | -- | 691 | 15.5 | 720 | 5.2 |
| 24... | 1530 | 33 | -- | 294 | 16.0 | 1,870 | 167 |
| MAY | | | | | | | |
| 12... | 1015 | 3.7 | -- | 714 | 15.5 | 222 | 2.2 |
| 12... | 1145 | 4.2 | -- | 712 | 20.5 | 232 | 2.6 |
| 30... | 0930 | 3.7 | -- | 667 | 20.0 | 369 | 3.7 |
| JUN | | | | | | | |
| 02... | 1300 | 2.7 | -- | 659 | 25.5 | 294 | 2.1 |
| 12... | 1245 | 3.7 | -- | 716 | 19.5 | 170 | 1.7 |
| 12... | 1815 | 47 | -- | 354 | 16.0 | 4,090 | 519 |
| 18... | 1815 | 7.2 | -- | 604 | -- | 619 | 12 |
| 24... | 0915 | 6.6 | -- | 786 | 18.0 | 490 | 8.7 |
| 25... | 1130 | 4.2 | -- | 757 | 22.0 | 571 | 6.5 |
| 30... | 1215 | 4.2 | -- | 719 | -- | 268 | 3.0 |
| JUL | | | | | | | |
| 01... | 1245 | 2.7 | -- | 638 | -- | 316 | 2.3 |
| 08... | 1030 | 3.7 | 696 | -- | 23.0 | 526 | 5.3 |
| 18... | 1400 | 3.2 | -- | 703 | -- | 255 | 2.2 |
| AUG | | | | | | | |
| 01... | 1315 | 3.7 | 728 | -- | -- | 235 | 2.3 |
| 11... | 1230 | 2.7 | 700 | -- | -- | 191 | 1.4 |
| 25... | 1130 | 4.8 | 690 | -- | -- | 289 | 3.7 |
| 29... | 1430 | 203 | 198 | -- | -- | 4,270 | 2,340 |
| 29... | 1500 | 124 | 278 | -- | -- | 3,350 | 1,120 |
| SEP | | | | | | | |
| 02... | 1600 | 5.3 | 759 | -- | -- | 259 | 3.7 |
| 09... | 1130 | 4.8 | 734 | -- | -- | 235 | 3.0 |
| 17... | 1415 | 4.2 | 732 | -- | -- | 313 | 3.5 |

e -- Estimated.

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) |
|----------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|
| OCTOBER | | | | | | | | | |
| 1 | 6.8 | --- | e10.0 | 3.7 | --- | --- | 5.2 | --- | --- |
| 2 | 9.9 | --- | e18.0 | 10 | --- | --- | 4.9 | --- | --- |
| 3 | 4.6 | --- | e2.4 | 4.6 | --- | --- | 5.9 | --- | --- |
| 4 | 4.4 | 173 | 2.1 | 3.3 | --- | --- | 5.3 | --- | --- |
| 5 | 3.9 | --- | e1.7 | 3.4 | --- | --- | 5.2 | --- | --- |
| 6 | 4.0 | --- | e1.5 | e3.0 | --- | --- | e5.0 | --- | --- |
| 7 | 3.9 | 134 | 1.4 | e3.0 | --- | --- | e4.5 | --- | --- |
| 8 | 4.1 | --- | e1.6 | e3.0 | --- | --- | e4.0 | --- | --- |
| 9 | 4.4 | --- | e1.9 | e3.0 | --- | --- | e4.0 | --- | --- |
| 10 | 3.8 | 157 | 1.6 | e4.0 | --- | --- | e3.5 | --- | --- |
| 11 | e3.8 | --- | e0.59 | e4.0 | --- | --- | e3.0 | --- | --- |
| 12 | 3.6 | 163 | 1.6 | e4.0 | --- | --- | e3.0 | --- | --- |
| 13 | 4.1 | 197 | 2.2 | e3.0 | --- | --- | e3.5 | --- | --- |
| 14 | 3.8 | --- | e2.0 | e3.0 | --- | --- | e4.0 | --- | --- |
| 15 | 3.1 | --- | e1.6 | e3.0 | --- | --- | 4.5 | --- | --- |
| 16 | 4.4 | --- | e2.2 | e3.0 | --- | --- | 3.5 | --- | --- |
| 17 | 4.9 | --- | e2.4 | e3.0 | --- | --- | 4.7 | --- | --- |
| 18 | 3.3 | --- | e1.6 | e3.0 | --- | --- | 4.9 | --- | --- |
| 19 | 3.2 | --- | e1.4 | e3.0 | --- | --- | e5.0 | --- | --- |
| 20 | 2.8 | --- | e1.2 | e3.0 | --- | --- | e4.5 | --- | --- |
| 21 | 2.6 | --- | e1.1 | e4.0 | --- | --- | e4.0 | --- | --- |
| 22 | 3.6 | --- | e1.5 | e4.0 | --- | --- | e4.0 | --- | --- |
| 23 | 3.7 | --- | e1.4 | e4.0 | --- | --- | e4.0 | --- | --- |
| 24 | 5.3 | 141 | 2.0 | e4.0 | --- | --- | e4.0 | --- | --- |
| 25 | 4.2 | --- | e1.6 | e5.0 | --- | --- | e4.0 | --- | --- |
| 26 | 15 | --- | e40.0 | e5.0 | --- | --- | e4.0 | --- | --- |
| 27 | 12 | --- | e30.0 | e5.0 | --- | --- | e4.5 | --- | --- |
| 28 | 3.0 | 270 | 2.2 | e5.0 | --- | --- | e4.5 | --- | --- |
| 29 | e3.0 | --- | e1.3 | 4.7 | --- | --- | e4.5 | --- | --- |
| 30 | 4.7 | --- | e2.9 | 4.1 | --- | --- | e4.5 | --- | --- |
| 31 | 3.8 | --- | e2.3 | --- | --- | --- | e4.0 | --- | --- |
| TOTAL | 147.7 | --- | 145.29 | 117.8 | --- | --- | 134.1 | --- | --- |
| JANUARY | | | | | | | | | |
| 1 | e3.5 | --- | --- | e3.0 | --- | --- | e4.0 | --- | --- |
| 2 | e3.0 | --- | --- | e3.5 | --- | --- | e5.0 | --- | --- |
| 3 | e3.0 | --- | --- | e3.5 | --- | --- | e3.0 | --- | --- |
| 4 | e4.0 | --- | --- | e3.0 | --- | --- | 3.5 | --- | --- |
| 5 | e4.0 | --- | --- | e3.0 | --- | --- | e3.0 | --- | --- |
| 6 | e5.0 | --- | --- | 4.0 | --- | --- | e3.0 | --- | --- |
| 7 | e5.0 | --- | --- | 3.4 | --- | --- | e2.5 | --- | --- |
| 8 | e5.5 | --- | --- | e3.0 | --- | --- | e5.5 | --- | --- |
| 9 | 6.1 | --- | --- | e3.0 | --- | --- | 2.4 | --- | --- |
| 10 | 4.9 | --- | --- | e3.0 | --- | --- | 3.6 | --- | --- |
| 11 | e4.0 | --- | --- | e3.0 | --- | --- | 3.9 | --- | --- |
| 12 | 4.5 | --- | --- | e4.0 | --- | --- | 4.1 | --- | --- |
| 13 | e5.0 | --- | --- | e5.0 | --- | --- | 4.3 | --- | --- |
| 14 | e5.0 | --- | --- | 4.7 | --- | --- | 5.3 | --- | --- |
| 15 | e5.0 | --- | --- | 5.7 | --- | --- | 4.5 | --- | --- |
| 16 | e5.0 | --- | --- | 4.5 | --- | --- | 4.4 | --- | --- |
| 17 | e4.0 | --- | --- | 4.7 | --- | --- | 9.7 | --- | --- |
| 18 | e4.0 | --- | --- | 5.3 | --- | --- | 15 | --- | --- |
| 19 | e4.0 | --- | --- | 13 | --- | --- | 8.9 | --- | --- |
| 20 | 3.7 | --- | --- | 6.5 | --- | --- | 32 | --- | --- |
| 21 | 3.9 | --- | --- | 4.1 | --- | --- | 14 | --- | --- |
| 22 | 3.7 | --- | --- | 4.6 | --- | --- | 12 | --- | --- |
| 23 | e6.0 | --- | --- | 5.3 | --- | --- | 11 | --- | --- |
| 24 | 5.0 | --- | --- | e4.5 | --- | --- | 22 | --- | --- |
| 25 | 6.1 | --- | --- | e4.0 | --- | --- | 12 | --- | --- |
| 26 | 5.6 | --- | --- | e4.0 | --- | --- | 7.1 | --- | --- |
| 27 | 4.3 | --- | --- | e4.0 | --- | --- | 6.2 | --- | --- |
| 28 | 5.5 | --- | --- | e4.0 | --- | --- | 5.2 | --- | --- |
| 29 | e4.0 | --- | --- | --- | --- | --- | 5.3 | --- | --- |
| 30 | e3.5 | --- | --- | --- | --- | --- | 5.4 | --- | --- |
| 31 | e3.0 | --- | --- | --- | --- | --- | 5.8 | --- | --- |
| TOTAL | 138.8 | --- | --- | 123.3 | --- | --- | 233.6 | --- | --- |
| FEBRUARY | | | | | | | | | |
| MARCH | | | | | | | | | |

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) |
|-------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|
| | | | | | | | | | |
| 1 | 4.9 | --- | e5.5 | 3.2 | --- | e2.3 | 16 | 1,470 | 235 |
| 2 | 4.6 | --- | e5.2 | 3.3 | --- | e2.4 | 2.7 | 334 | 2.5 |
| 3 | 3.8 | --- | e4.4 | 2.9 | --- | e2.0 | 2.6 | --- | e2.1 |
| 4 | 4.1 | --- | e4.7 | 4.1 | --- | e6.6 | 15 | 1,070 | 198 |
| 5 | 11 | --- | e29 | 2.2 | --- | e1.6 | 21 | --- | e125 |
| 6 | 8.4 | --- | e20 | 2.8 | --- | e1.9 | 3.0 | --- | e2.6 |
| 7 | 3.0 | --- | e4.0 | 2.6 | --- | e1.8 | 8.3 | --- | e20 |
| 8 | 3.5 | 454 | 4.3 | 2.6 | --- | e1.8 | 4.2 | --- | e3.1 |
| 9 | 3.1 | --- | e3.5 | 3.1 | --- | e3.3 | 6.3 | --- | e13 |
| 10 | 3.2 | 434 | 3.8 | 7.1 | 677 | 24 | 3.7 | --- | e2.6 |
| 11 | 3.3 | 491 | 4.4 | 2.8 | --- | e1.8 | 4.3 | --- | e2.4 |
| 12 | 2.9 | 374 | 2.9 | 2.4 | 227 | 1.5 | 8.6 | 731 | 53 |
| 13 | 3.3 | 284 | 2.6 | 2.4 | 211 | 1.3 | 6.9 | --- | e13 |
| 14 | 3.0 | --- | e2.1 | e2.0 | --- | e0.99 | 5.3 | --- | e6.0 |
| 15 | 4.3 | 376 | 6.9 | 4.9 | 540 | 25 | 5.7 | --- | e6.0 |
| 16 | 3.6 | --- | e7.9 | 3.4 | --- | e6.2 | 5.9 | 370 | 5.9 |
| 17 | 3.0 | --- | e5.5 | 2.5 | --- | e2.7 | 53 | 2,850 | 1,900 |
| 18 | e3.5 | --- | e2.4 | 2.4 | 325 | 2.1 | 7.9 | 878 | 20 |
| 19 | 4.6 | --- | e7.9 | 2.5 | --- | e1.9 | 33 | --- | e564 |
| 20 | 4.2 | 647 | 7.3 | 2.3 | --- | e1.8 | 10 | --- | e34 |
| 21 | 3.4 | 710 | 6.6 | 2.0 | --- | e1.4 | 6.5 | --- | e10 |
| 22 | 15 | 1,380 | 124 | 3.5 | --- | e2.5 | 6.0 | --- | e8.5 |
| 23 | 21 | 1,900 | 164 | 8.0 | --- | e26 | 5.7 | --- | e7.7 |
| 24 | 29 | 1,840 | 168 | 2.3 | --- | e2.1 | 5.3 | --- | e7.2 |
| 25 | 3.5 | --- | e5.9 | 3.5 | --- | e2.9 | 6.9 | 565 | 11 |
| 26 | 3.1 | --- | e3.0 | 4.6 | --- | e6.1 | 15 | --- | e81 |
| 27 | 3.2 | --- | e2.6 | 2.8 | --- | e2.8 | 2.5 | --- | e2.2 |
| 28 | 3.9 | --- | e3.1 | 2.5 | --- | e2.1 | 3.0 | --- | e3.2 |
| 29 | 3.4 | --- | e2.7 | 6.7 | --- | e26 | 3.2 | --- | e3.1 |
| 30 | 2.5 | --- | e1.9 | 3.4 | 380 | 3.4 | 3.3 | 281 | 2.5 |
| 31 | --- | --- | --- | 3.8 | 336 | 3.5 | --- | --- | --- |
| TOTAL | 173.3 | --- | 616.1 | 104.6 | --- | 171.79 | 280.8 | --- | 3,344.6 |
| | | JULY | | | AUGUST | | | SEPTEMBER | |
| 1 | 3.0 | 305 | 2.5 | 3.1 | 240 | 2.0 | 7.8 | --- | e6.8 |
| 2 | 2.8 | 286 | 2.2 | 4.1 | 252 | 2.8 | 13 | 635 | 40 |
| 3 | 2.7 | 291 | 2.1 | 8.5 | 385 | 15 | 18 | --- | e65 |
| 4 | 2.5 | --- | e2.6 | 9.9 | 426 | 22 | 4.1 | --- | e3.6 |
| 5 | 2.7 | 540 | 4.0 | 3.0 | --- | e1.6 | 3.7 | --- | e2.5 |
| 6 | 3.4 | 638 | 5.8 | 3.5 | 151 | 1.4 | 12 | --- | e74 |
| 7 | 2.4 | --- | e3.8 | 3.9 | --- | e1.5 | 12 | --- | e35 |
| 8 | 3.2 | 533 | 4.6 | 3.2 | --- | e1.3 | e6.0 | --- | e4.7 |
| 9 | 2.2 | --- | e3.3 | 7.3 | 486 | 31 | e5.0 | --- | e3.4 |
| 10 | 2.8 | 539 | 4.1 | e4.0 | --- | e1.2 | 4.0 | 243 | 2.7 |
| 11 | 2.6 | 426 | 3.0 | 3.7 | 287 | 4.6 | 4.3 | 267 | 3.1 |
| 12 | 3.7 | --- | e4.6 | e4.0 | --- | e1.1 | 4.8 | --- | e4.5 |
| 13 | 3.0 | 353 | 2.9 | e3.0 | --- | e0.69 | 7.7 | 379 | 7.9 |
| 14 | 2.9 | --- | e3.1 | e3.0 | --- | e0.90 | 7.3 | 361 | 7.2 |
| 15 | 3.0 | 420 | 3.4 | e2.5 | --- | e1.0 | 7.1 | --- | e6.6 |
| 16 | 5.8 | 604 | 19 | e2.5 | --- | e1.0 | 5.2 | --- | e4.6 |
| 17 | 2.4 | 476 | 3.1 | e2.5 | --- | e0.76 | 4.0 | 323 | 3.4 |
| 18 | 2.2 | 294 | 1.8 | 4.6 | --- | e13 | 4.2 | 340 | 3.9 |
| 19 | 13 | 672 | 69 | e4.0 | --- | e1.1 | 4.6 | 311 | 3.8 |
| 20 | 3.9 | --- | e5.4 | e3.0 | --- | e1.4 | 3.4 | 285 | 2.6 |
| 21 | 2.7 | --- | e2.2 | e3.0 | --- | e1.2 | 3.1 | --- | e2.5 |
| 22 | 4.0 | --- | e3.3 | e3.0 | --- | e1.2 | 3.8 | --- | e3.2 |
| 23 | 4.4 | --- | e3.7 | e3.0 | --- | e1.2 | 3.4 | 312 | 2.9 |
| 24 | 3.3 | --- | e2.7 | 5.0 | 380 | 15 | 3.4 | --- | e2.6 |
| 25 | 4.2 | --- | e3.6 | 4.9 | 325 | 4.6 | 4.3 | 244 | 2.8 |
| 26 | 5.2 | 341 | 7.5 | 5.8 | 220 | 3.4 | 3.4 | 201 | 1.9 |
| 27 | 13 | --- | e92 | 16 | 1,250 | 169 | 3.7 | --- | e2.1 |
| 28 | 30 | 3,390 | 942 | 4.4 | --- | e5.5 | 3.8 | 301 | 3.1 |
| 29 | 4.2 | --- | e6.0 | 30 | 1,100 | 446 | 4.6 | --- | e5.7 |
| 30 | 3.3 | --- | e2.5 | 36 | --- | e295 | 3.7 | 596 | 5.8 |
| 31 | 2.8 | --- | e2.0 | 53 | --- | e797 | --- | --- | --- |
| TOTAL | 147.3 | --- | 1,217.8 | 247.4 | --- | 1,844.45 | 175.4 | --- | 317.9 |

e Estimated.

385501104483701 MONUMENT CREEK TRIBUTARY 1 NEAR PULPIT ROCK AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°55'01", long 104°48'37", in NW¼SW¼ sec.17, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank 0.3 mi east of Interstate 25 at Colorado Springs, 0.3 mi north of Pulpit Rock, 0.5 mi upstream from mouth, and 5.8 mi southeast of Falcon Stadium at U.S. Air Force Academy. Elevation of gage is 6,260 ft above NGVD of 1929, from topographic map.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--June to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=385501104483701

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, filtered, mg/L as N (00608) | Nitrite + nitrate water filtered, mg/L as N (00631) | Orthophosphate, water, filtered, mg/L as P (00671) | Phosphorus, water, unfiltered, mg/L (00665) | E coli, modified, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|--|---|--|---|---|---|---|
| JUN 25... | 1050 | 0.03 | 7.5 | 8.2 | 685 | 23.5 | E.011 | <0.06 | <0.02 | E.02 | 130 | 170 | 4 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 25... | 0.00 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, filtered, mg/L as N (00608) | Nitrite + nitrate water filtered, mg/L as N (00631) | Orthophosphate, water, filtered, mg/L as P (00671) | Phosphorus, water, unfiltered, mg/L (00665) | E coli, modified, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------|---|--|-----------------------------------|--|---|--|---|---|---|---|
| JUN 05... | 1310 | 8.4 | 7.3 | 133 | 11.5 | 0.182 | 0.48 | 0.07 | 0.33 | E3000 | E3100 | 237 |

E -- Estimated laboratory analysis value.

07104050 NORTH ROCKRIMMON CREEK ABOVE DELMONICO DRIVE AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°54'56", long 104°49'35", in SW¹/₄NE¹/₄ sec.18, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, 300 ft upstream from Delmonico Drive at Colorado Springs, 0.2 mi west of Interstate 25, 0.3 mi upstream from mouth, and 2.0 mi downstream from Woodmen Road. Elevation of site is 6,220 feet above NGVD of 1929, from topographic map.

DRAINAGE AREA.--1.82 mi².

PERIOD OF RECORD.-- June to September 2003. Miscellaneous field and suspended-sediment discharge data may be available, August 1998 to current year (seasonal peaks only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07104050

REMARKS.--Annual maximum discharge data are published in the "Maximum Discharge at Crest-Stage Partial-Record Stations" section of this report.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, uS/cm wat unfltrd 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| JUN 25... | 1220 | 0.04 | 8.1 | 8.2 | 2,090 | 22.0 | E.109 | 13.3 | E.01 | E.03 | 110 | E150 | 2 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 25... | 0.00 |

E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, uS/cm wat unfltrd 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| AUG 30... | 1025 | 3.0 | 7.8 | 7.9 | 431 | 15.5 | 0.174 | 2.48 | 0.09 | 0.17 | 1,600 | 4,500 | 271 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| AUG 30... | 2.2 |

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, uS/cm wat unfltrd 25 degC (00095) | Temperature, water, deg C (00010) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-----------|------|--------------------------------------|---|-----------------------------------|---|---|
| JUN 06... | 1430 | 3.8 | 427 | -- | 2,360 | 24 |
| JUN 06... | 1431 | 3.8 | 427 | -- | 2,330 | 24 |
| JUN 25... | 1220 | 0.04 | 2,090 | 22.0 | 2 | 0.00 |
| AUG 30... | 1025 | 3.0 | 431 | 15.5 | 271 | 2.2 |

385204104510101 MONUMENT CREEK TRIBUTARY 2 BELOW FILLMORE STREET AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°52'04", long 104°51'01", in SE¹/₄SE¹/₄ sec.35, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank 0.5 mi southeast of Coronado High School at Colorado Springs, 0.6 mi downstream from Fillmore Street, 0.8 mi downstream from Mesa Water Treatment Plant pond, and 1.8 mi upstream from mouth. Elevation of gage is 6,340 ft above NGVD of 1929, from topographic map.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--June to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=385204104510101

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| JUN 25... | 1415 | 0.30 | 7.4 | 8.4 | 576 | 17.5 | <0.015 | 1.18 | <0.02 | <0.04 | E32 | E32 | 2 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 25... | 0.00 |

< -- Actual value is known to be less than the value shown.
 E -- Estimated laboratory analysis value.

385124104501301 MONUMENT CREEK TRIBUTARY 2 AT SONDERMANN PARK AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°51'24", long 104°50'13", in SW¹/₄SE¹/₄ sec.1, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank at Sonderrmann Park at Colorado Springs, 200 ft downstream from small right-bank tributary, 0.2 mi east of Interstate 25, 0.4 mi upstream from mouth, and 1.6 mi southeast of Coronado High School. Elevation of gage is 6,060 ft above NGVD of 1929, from topographic map.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--June to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=385124104501301

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| JUN 25... | 1545 | 0.46 | 7.0 | 8.2 | 654 | 17.0 | 0.022 | 0.90 | <0.02 | E.03 | 420 | 530 | 38 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 25... | 0.05 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| AUG 30... | 1120 | 1.0 | 8.1 | 8.2 | 538 | 14.0 | 0.018 | 0.95 | <0.02 | 0.05 | E1600 | 4,200 | 49 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| AUG 30... | 0.14 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°50'14", long 104°49'44", in NW¹/₄NW¹/₄ sec.18, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank 250 ft downstream from bridge on Bijou Street at Colorado Springs, 250 ft east of Interstate 25, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--235 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07104905

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,980 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 300 ft³/s, which are poor. Natural flow of stream affected by storage reservoirs, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,850 ft³/s, Aug. 31, 2003, gage height, 8.19 ft, from rating curve extended above 309 ft³/s; minimum daily, 4.0 ft³/s, July 21, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 2,850 ft³/s, Aug. 31, gage height, 8.19 ft, from rating curve extended above 309 ft³/s; minimum daily, 4.0 ft³/s, July 21.

**DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-----|-------|-------|-------|-------|---------|-------|
| 1 | --- | --- | --- | --- | --- | --- | e20 | 56 | 69 | 16 | 16 | 36 |
| 2 | --- | --- | --- | --- | --- | --- | e20 | 56 | 24 | 12 | 19 | 44 |
| 3 | --- | --- | --- | --- | --- | --- | 19 | 54 | 32 | 13 | 25 | 76 |
| 4 | --- | --- | --- | --- | --- | --- | 18 | 53 | 87 | 16 | 31 | 20 |
| 5 | --- | --- | --- | --- | --- | --- | 37 | 52 | 99 | 12 | 12 | 21 |
| 6 | --- | --- | --- | --- | --- | --- | 59 | 44 | 33 | 14 | 9.8 | 31 |
| 7 | --- | --- | --- | --- | --- | --- | 20 | 42 | 45 | 15 | 9.1 | 35 |
| 8 | --- | --- | --- | --- | --- | --- | 23 | 39 | 28 | 12 | 10 | 20 |
| 9 | --- | --- | --- | --- | --- | --- | 25 | 40 | 26 | 8.7 | 35 | 20 |
| 10 | --- | --- | --- | --- | --- | --- | 22 | 56 | 23 | 8.5 | 8.8 | 20 |
| 11 | --- | --- | --- | --- | --- | --- | 20 | 29 | 19 | 9.4 | 10 | 20 |
| 12 | --- | --- | --- | --- | --- | --- | 19 | 33 | 28 | 15 | 17 | 22 |
| 13 | --- | --- | --- | --- | --- | --- | 20 | 32 | 27 | 15 | 7.5 | 22 |
| 14 | --- | --- | --- | --- | --- | --- | 20 | 30 | 22 | 10 | 7.0 | 22 |
| 15 | --- | --- | --- | --- | --- | --- | 34 | 40 | 16 | 14 | 6.5 | e20 |
| 16 | --- | --- | --- | --- | --- | --- | 49 | 45 | 16 | 14 | 6.2 | e17 |
| 17 | --- | --- | --- | --- | --- | --- | 36 | 28 | 266 | 11 | 6.0 | e16 |
| 18 | --- | --- | --- | --- | --- | --- | 28 | 30 | 76 | 9.7 | 9.3 | e15 |
| 19 | --- | --- | --- | --- | --- | --- | 39 | 30 | 135 | 20 | 8.7 | e17 |
| 20 | --- | --- | --- | --- | --- | --- | 37 | 33 | 52 | 17 | 7.1 | e17 |
| 21 | --- | --- | --- | --- | --- | --- | 38 | 31 | 26 | 4.0 | 6.4 | e17 |
| 22 | --- | --- | --- | --- | --- | --- | 111 | 29 | 25 | 4.1 | 5.8 | 18 |
| 23 | --- | --- | --- | --- | --- | --- | 168 | 45 | 29 | 5.1 | 6.0 | 16 |
| 24 | --- | --- | --- | --- | --- | --- | 170 | 33 | 28 | 7.0 | 7.5 | 16 |
| 25 | --- | --- | --- | --- | --- | --- | 67 | 36 | 41 | 5.7 | 17 | 16 |
| 26 | --- | --- | --- | --- | --- | --- | 55 | 26 | 86 | 5.8 | 11 | 21 |
| 27 | --- | --- | --- | --- | --- | --- | 37 | 22 | 33 | 32 | 52 | 18 |
| 28 | --- | --- | --- | --- | --- | --- | 47 | 20 | 30 | 43 | 28 | 14 |
| 29 | --- | --- | --- | --- | --- | --- | 73 | 21 | 40 | 13 | 120 | 14 |
| 30 | --- | --- | --- | --- | --- | --- | 60 | 20 | 28 | 9.4 | 89 | 16 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 55 | --- | 14 | 565 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | 1,391 | 1,160 | 1,489 | 405.4 | 1,168.7 | 677 |
| MEAN | --- | --- | --- | --- | --- | --- | 46.4 | 37.4 | 49.6 | 13.1 | 37.7 | 22.6 |
| MAX | --- | --- | --- | --- | --- | --- | 170 | 56 | 266 | 43 | 565 | 76 |
| MIN | --- | --- | --- | --- | --- | --- | 18 | 20 | 16 | 4.0 | 5.8 | 14 |
| AC-FT | --- | --- | --- | --- | --- | --- | 2,760 | 2,300 | 2,950 | 804 | 2,320 | 1,340 |

e Estimated.

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1979 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07104905

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April to September 2003 (seasonal records only).

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 5,070 mg/L, June 17, 2003; minimum daily mean, 6 mg/L, July 22, 2003.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 14,100 tons, June 17, 2003; minimum daily, 0.06 ton, July 22, 2003.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 5,070 mg/L, June 17; minimum daily mean, 6 mg/L, July 22.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 14,100 tons, June 17; minimum daily, 0.06 ton, July 22.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Fluoride, water, fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|------------------------------------|---------------------------------------|--------------------------------------|------------------------------------|---|---|---|
| NOV 05... | 1310 | 18 | 9.9 | 8.4 | 789 | 9.0 | 83.1 | 15.5 | 1.00 | 140 | E.009 | 2.65 | 0.11 |
| DEC 05... | 1210 | 13 | 11.2 | 8.4 | 785 | 3.5 | 90.3 | 17.7 | 1.00 | 160 | E.008 | 2.96 | 0.13 |
| FEB 12... | 1230 | 20 | 11.7 | 8.5 | 914 | 0.0 | 90 | 18 | 1.0 | 173 | E.011 | 3.39 | 0.20 |
| APR 30... | 1140 | 61 | 8.5 | 8.1 | 427 | 15.0 | 41 | 7.3 | 1.37 | 75.5 | 0.017 | 1.20 | 0.24 |
| JUL 22... | 1250 | 4.5 | 6.5 | 8.3 | 832 | 28.5 | 92.1 | 18.3 | 1.17 | 208 | E.013 | 1.72 | 0.10 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Phosphorus, water, unfltrd mg/L (00665) | BOD, water, unfltrd 5 day, 20 degC mg/L (00310) | E coli, modif. m-TEC, water, col/100 mL (90902) | E coli, m-TEC MF, water, col/100 mL (31633) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Arsenic water, fltrd, ug/L (01000) | Arsenic water unfltrd ug/L (01002) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Cadmium water, fltrd, ug/L (01025) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, fltrd, ug/L (01030) | Chromium, water, unfltrd recover-able, ug/L (01034) |
|-----------|---|---|---|---|---|------------------------------------|------------------------------------|-----------------------------------|--|------------------------------------|-------------------------------------|--------------------------------------|---|
| NOV 05... | 0.229 | <2.0 | -- | 140 | 140 | 1.5 | 1.9 | 93 | 92 | <0.10 | 0.27 | 2.0 | 2.3 |
| DEC 05... | 0.284 | <2.0 | -- | 140 | E120 | 1.6 | 2.2 | 92 | 85 | E.13 | 0.33 | <1.0 | 2.1 |
| FEB 12... | 0.367 | -- | -- | E84 | 60 | 1.33 | E1 | 106 | 93.1 | 0.045 | 0.077 | <0.8 | E.6 |
| APR 30... | 0.605 | -- | 40 | -- | 44 | -- | 3 | 53 | 52 | -- | -- | -- | -- |
| JUL 22... | 0.111 | -- | 280 | -- | 380 | -- | <2 | 81 | 97 | -- | -- | -- | -- |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Cyanide water unfltrd mg/L (00720) | Iron, water, fltrd, ug/L (01046) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, fltrd, ug/L (01049) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, fltrd, ug/L (71890) | Mercury water, unfltrd recover-able, ug/L (71900) | Nickel, water, fltrd, ug/L (01065) | Nickel, water, unfltrd recover-able, ug/L (01067) |
|-----------|------------------------------------|---|------------------------------------|----------------------------------|---|----------------------------------|---|---------------------------------------|--|------------------------------------|---|------------------------------------|---|
| NOV 05... | E1.6 | 5.8 | <0.01 | <10.0 | 2,030 | E.21 | 2.9 | 2.0 | 54 | <0.018 | <0.018 | 5.3 | 6.3 |
| DEC 05... | 3.3 | 11 | <0.01 | <10.0 | 3,270 | <0.20 | 4.5 | <2.0 | 81 | <0.018 | E.009 | 3.2 | 4.5 |
| FEB 12... | 2.55 | 6.27 | <0.009 | <10 | 2,940 | 0.12 | 3.94 | 2.71 | 82.9 | <0.018 | E.011 | 4.46 | 6.98 |
| APR 30... | 1.41 | 9.79 | -- | -- | -- | -- | 8.36 | 1.56 | 195 | -- | -- | -- | 4.38 |
| JUL 22... | 2.40 | 4.13 | -- | -- | -- | -- | 0.19 | 5.87 | 7.8 | -- | -- | -- | 4.66 |

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Selenium, water, fltrd, ug/L (01145) | Selenium, water, unfltrd ug/L (01147) | Silver, water, fltrd, ug/L (01075) | Silver, water, unfltrd recover-able, ug/L (01077) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover-able, ug/L (01092) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-----------|--------------------------------------|---------------------------------------|------------------------------------|---|----------------------------------|---|---|---|
| NOV 05... | 8.0 | 7.8 | 0.04 | <0.04 | <6.0 | 16 | 113 | 5.5 |
| DEC 05... | 2.0 | 10 | 0.15 | <0.04 | <6.0 | E20 | 253 | 8.9 |
| FEB 12... | 8.45 | 7.39 | <0.20 | <0.16 | 5.8 | 22.3 | 267 | 14 |
| APR 30... | 3.11 | 2.93 | -- | -- | 3.1 | 40.5 | 511 | 84 |
| JUL 22... | 8.71 | 8.84 | -- | -- | 2.2 | 3.2 | 5 | 0.06 |

< -- Actual value is known to be less than the value shown.
 E -- Estimated laboratory analysis value.

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Fluoride, water, fltrd, mg/L (00950) | Sulfate water, fltrd, mg/L (00945) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|------------------------------------|---------------------------------------|--------------------------------------|------------------------------------|---|---|---|
| APR 23... | 1600 | 293 | -- | 7.7 | 228 | 7.5 | 21 | 3.6 | 0.40 | 32.3 | 0.133 | 0.686 | 0.11 |
| AUG 27... | 2210 | 149 | 6.7 | 7.9 | 244 | 20.5 | 26.9 | 4.00 | 0.28 | 39.2 | 0.155 | 1.52 | 0.04 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC, 0.7u MF col/100 mL (31625) | Arsenic water unfltrd ug/L (01002) | Boron, water, fltrd, ug/L (01020) | Boron, water, unfltrd recover-able, ug/L (01022) | Copper, water, fltrd, ug/L (01040) | Copper, water, unfltrd recover-able, ug/L (01042) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, fltrd, ug/L (01056) | Manganese, water, unfltrd recover-able, ug/L (01055) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, fltrd, ug/L (01145) |
|-----------|---|---|--|------------------------------------|-----------------------------------|--|------------------------------------|---|---|---------------------------------------|--|---|--------------------------------------|
| APR 23... | 2.17 | 1,200 | 1,400 | 9 | 30 | 35 | 2.01 | 44.7 | 64.9 | 2.99 | 1,380 | 30.0 | 1.52 |
| AUG 27... | 2.39 | 24,000 | 24,000 | 6 | 21 | 27 | 1.94 | 50.7 | 57.2 | 1.21 | 1,100 | 24.7 | 2.38 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Selenium, water, unfltrd ug/L (01147) | Zinc, water, fltrd, ug/L (01090) | Zinc, water, unfltrd recover-able, ug/L (01092) | 2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660) | CIAT, water, fltrd, ug/L (04040) | 9H-Fluorene, water, unfltrd ug/L (34381) | Ace-naphthene, water, unfltrd ug/L (34205) | Ace-naphthylene, water, unfltrd ug/L (34200) | Aceto-chlor, water, fltrd, ug/L (49260) | Ala-chlor, water, fltrd, ug/L (46342) | alpha-HCH, water, fltrd, ug/L (34253) | Anthra-cene, water, unfltrd ug/L (34220) | Atra-zine, water, fltrd, ug/L (39632) |
|-----------|---------------------------------------|----------------------------------|---|--|----------------------------------|--|--|--|---|---------------------------------------|---------------------------------------|--|---------------------------------------|
| APR 23... | 4.18 | 3.4 | 280 | <0.006 | <0.0060 | E.3 | E.2 | E.2 | <0.015 | <0.004 | <0.0046 | E.4 | 0.0099 |
| AUG 27... | 3.70 | 3.2 | 241 | <0.006 | E.005 | E.0608 | E.0564 | <2 | <0.006 | <0.004 | <0.0046 | E.1480 | E.006 |

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686) | Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673) | Benzo-[a]-anthra-cene, water, unfltrd ug/L (34526) | Benzo-[a]-pyrene, water, unfltrd ug/L (34247) | Benzo-[b]-fluor-anthene, water, unfltrd ug/L (34230) | Benzo-[g,h,i]-per-ylene, water, unfltrd ug/L (34521) | Benzo-[k]-fluor-anthene, water, unfltrd ug/L (34242) | Butyl-ate, water, fltrd, ug/L (04028) | Car-baryl, water, fltrd 0.7u GF ug/L (82680) | Carbo-furan, water, fltrd 0.7u GF ug/L (82674) | Chlor-pyrifos water, fltrd, ug/L (38933) | Chrys-ene, water, unfltrd ug/L (34320) | cis-Per-methrin water fltrd 0.7u GF ug/L (82687) |
|-----------|--|---|--|---|--|--|--|---|---|---|--|--|---|
| APR 23... | <0.0500 | E.0080 | E1 | E2 | E3 | E1 | E1.0 | <0.002 | E.540 | <0.0200 | <0.0050 | E2 | <0.0060 |
| AUG 27... | <0.05 | <0.010 | E.4940 | E.7530 | E1 | E.4580 | E.4490 | <0.002 | E.504 | <0.020 | <0.030 | E.8110 | <0.006 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Cyana-zine, water, fltrd, ug/L (04041) | DCPA, water, fltrd 0.7u GF ug/L (82682) | Desulf-inyl fipron- nil, water, fltrd, ug/L (62170) | Diazi-non, water, fltrd, ug/L (39572) | Di-benzo-[a,h]- anthra-cene, wat unfltrd ug/L (34556) | Diel-drin, water, fltrd, ug/L (39381) | Disul-foton, water, fltrd 0.7u GF ug/L (82677) | EPTC, water, fltrd 0.7u GF ug/L (82668) | Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663) | Etho-prop, water, fltrd 0.7u GF ug/L (82672) | Desulf-inyl-fipron- nil amide, wat flt ug/L (62169) | Fipron- nil sulfide water, fltrd, ug/L (62167) | Fipron- nil sulfone water, fltrd, ug/L (62168) |
|-----------|--|--|---|---|---|---|---|--|---|---|---|--|--|
| APR 23... | <0.0180 | <0.0030 | <0.0040 | 0.0315 | E.4 | <0.0048 | <0.0210 | <0.0020 | <0.0090 | <0.0050 | <0.0090 | <0.0050 | <0.0050 |
| AUG 27... | <0.018 | <0.0030 | <0.004 | E.044 | <3 | <0.0048 | <0.021 | <0.0020 | <0.009 | <0.005 | E.004 | <0.005 | <0.005 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Fipron- nil, water, fltrd, ug/L (62166) | Fluor-anthene water, unfltrd ug/L (34376) | Fonofos water, fltrd, ug/L (04095) | Indeno-[1,2,-3-cd]-pyrene, water, unfltrd ug/L (34403) | Lindane water, fltrd, ug/L (39341) | Linuron water fltrd 0.7u GF ug/L (82666) | Malathion, water, fltrd, ug/L (39532) | Methyl para-thion, water, fltrd 0.7u GF ug/L (82667) | Metola-chlor, water, fltrd, ug/L (39415) | Metri-buzin, water, fltrd, ug/L (82630) | Moli-nate, water, fltrd 0.7u GF ug/L (82671) | Naprop-amide, water, fltrd 0.7u GF ug/L (82684) | Nitro-benzene water unfltrd ug/L (34447) |
|-----------|---|---|--|--|--|---|---|---|--|---|---|--|--|
| APR 23... | <0.0070 | 4 | <0.0027 | E1 | <0.0040 | <0.0350 | <0.0400 | <0.0060 | <0.0130 | <0.0060 | <0.0016 | <0.0070 | <2 |
| AUG 27... | <0.007 | E1 | <0.0027 | E.5410 | <0.0040 | <0.035 | E.046 | <0.006 | <0.013 | <0.006 | <0.0016 | <0.007 | <2 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | p,p'-DDE, water, fltrd, ug/L (34653) | Para-thion, water, fltrd, ug/L (39542) | Peb-ulate, water, fltrd 0.7u GF ug/L (82669) | Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683) | Phenan-threne, water, unfltrd ug/L (34461) | Phorate water fltrd 0.7u GF ug/L (82664) | Prome-ton, water, fltrd, ug/L (04037) | Pron-amide, water, fltrd 0.7u GF ug/L (82676) | Propa-chlor, water, fltrd, ug/L (04024) | Pro-panil, water, fltrd 0.7u GF ug/L (82679) | Propar-gite, water, fltrd 0.7u GF ug/L (82685) | Pyrene, water, unfltrd ug/L (34469) | Sima-zine, water, fltrd, ug/L (04035) |
|-----------|--|--|---|---|--|---|---|--|---|---|---|---|---|
| APR 23... | <0.0025 | <0.010 | <0.004 | E.021 | 2 | <0.0110 | 0.0170 | <0.0041 | <0.0100 | <0.0110 | <0.0230 | 3 | <0.005 |
| AUG 27... | <0.0025 | <0.010 | <0.004 | <0.022 | E.5780 | <0.011 | E.08 | <0.040 | <0.010 | <0.011 | <0.023 | E1 | <0.005 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Tebu-thiuron water fltrd 0.7u GF ug/L (82670) | Terba-cil, water, fltrd 0.7u GF ug/L (82665) | Terbu-fos, water, fltrd 0.7u GF ug/L (82675) | Thio-bencarb water fltrd 0.7u GF ug/L (82681) | Tri-allate, water, fltrd 0.7u GF ug/L (82678) | Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661) | Naphth-alene, water, unfltrd ug/L (34696) | Sus-pended sedi-ment concen-tration mg/L (80154) | Sus-pended sedi-ment load, tons/d (80155) |
|-----------|--|---|---|--|--|---|---|--|---|
| APR 23... | <0.0300 | <0.0340 | <0.0170 | <0.0048 | <0.0023 | <0.0090 | E.2 | -- | -- |
| AUG 27... | <0.016 | <0.034 | <0.017 | <0.0048 | <0.0023 | <0.009 | E.0673 | 4,230 | 1,700 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO—Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, wat unf uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Suspended sediment concentration mg/L (80154) | Suspended sediment load, tons/d (80155) |
|-------|------|--------------------------------------|---|-----------------------------------|---|---|
| NOV | | | | | | |
| 05... | 1310 | 18 | 789 | 9.0 | 113 | 5.5 |
| DEC | | | | | | |
| 05... | 1210 | 13 | 785 | 3.5 | 253 | 8.9 |
| FEB | | | | | | |
| 12... | 1230 | 20 | 914 | 0.0 | 267 | 14 |
| APR | | | | | | |
| 03... | 1315 | 18 | 753 | 19.0 | 108 | 5.2 |
| 09... | 1345 | 28 | 696 | 18.5 | 171 | 13 |
| 17... | 1440 | 35 | 540 | -- | -- | -- |
| 23... | 1300 | 56 | 471 | 10.5 | 548 | 83 |
| 24... | 1530 | 149 | 280 | 13.5 | 1,390 | 559 |
| 30... | 1140 | 61 | 427 | 15.0 | 511 | 84 |
| MAY | | | | | | |
| 05... | 1405 | 54 | 433 | -- | -- | -- |
| 15... | 1200 | 31 | 526 | 18.0 | 100 | 8.4 |
| JUN | | | | | | |
| 02... | 1620 | 26 | 583 | -- | -- | -- |
| 05... | 1500 | 213 | -- | -- | 2,030 | 1,170 |
| 11... | 1015 | 26 | 665 | 20.0 | 125 | 8.8 |
| 26... | 1715 | 37 | 456 | 22.0 | 169 | 17 |
| JUL | | | | | | |
| 22... | 1250 | 4.5 | 832 | 28.5 | 5 | 0.06 |
| 30... | 1355 | 11 | 669 | 28.0 | 81 | 2.4 |
| AUG | | | | | | |
| 25... | 1235 | 13 | 690 | -- | -- | -- |
| 27... | 2210 | 149 | 244 | 20.5 | 4,230 | 1,700 |
| 27... | 2215 | 149 | 244 | 20.5 | 4,230 | 1,700 |
| SEP | | | | | | |
| 22... | 1100 | 20 | 680 | 15.0 | 110 | 5.9 |

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO—Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY)
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Day | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | Mean discharge (cfs) | Mean concentration (mg/l) | Load (tons/day) | |
|-------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|----------------------|---------------------------|-----------------|--|
| | | APRIL | | | MAY | | | JUNE | | |
| 1 | e20 | --- | e3.5 | 56 | 512 | 78 | 69 | 1,510 | 873 | |
| 2 | e20 | --- | e3.5 | 56 | 513 | 78 | 24 | --- | e18 | |
| 3 | 19 | 107 | 3.4 | 54 | 572 | 83 | 32 | 428 | 53 | |
| 4 | 18 | 103 | 4.9 | 53 | 492 | 70 | 87 | 2,190 | 1,060 | |
| 5 | 37 | --- | e68 | 52 | --- | e41 | 99 | 1,670 | 584 | |
| 6 | 59 | 688 | 190 | 44 | 185 | 22 | 33 | 593 | 55 | |
| 7 | 20 | 148 | 9.6 | 42 | 246 | 29 | 45 | 638 | 96 | |
| 8 | 23 | --- | e11 | 39 | 285 | 30 | 28 | 162 | 12 | |
| 9 | 25 | 163 | 11 | 40 | 258 | 32 | 26 | --- | e24 | |
| 10 | 22 | --- | e7.4 | 56 | --- | e201 | 23 | 320 | 22 | |
| 11 | 20 | 127 | 6.9 | 29 | 437 | 34 | 19 | 155 | 8.2 | |
| 12 | 19 | 144 | 7.5 | 33 | 208 | 18 | 28 | 277 | 44 | |
| 13 | 20 | 113 | 6.0 | 32 | 164 | 14 | 27 | 342 | 30 | |
| 14 | 20 | 108 | 5.9 | 30 | 147 | 12 | 22 | --- | e15 | |
| 15 | 34 | --- | e29 | 40 | 232 | 33 | 16 | 108 | 4.5 | |
| 16 | 49 | 440 | 69 | 45 | 350 | 57 | 16 | 150 | 6.3 | |
| 17 | 36 | 248 | 24 | 28 | 163 | 12 | 266 | 5,070 | 14,100 | |
| 18 | 28 | 199 | 15 | 30 | 129 | 11 | 76 | --- | e296 | |
| 19 | 39 | 242 | 28 | 30 | 152 | 13 | 135 | 1,790 | 2,020 | |
| 20 | 37 | --- | e22 | 33 | --- | e35 | 52 | 1,670 | 443 | |
| 21 | 38 | 292 | 32 | 31 | 443 | 37 | 26 | 811 | 58 | |
| 22 | 111 | 2,720 | 2,330 | 29 | 291 | 22 | 25 | 381 | 26 | |
| 23 | 168 | 2,520 | 1,970 | 45 | 434 | 94 | 29 | 245 | 19 | |
| 24 | 170 | 1,700 | 894 | 33 | 394 | 131 | 28 | --- | e18 | |
| 25 | 67 | 1,200 | 226 | 36 | 508 | 314 | 41 | 480 | 74 | |
| 26 | 55 | 612 | 91 | 26 | 133 | 9.8 | 86 | 1,050 | 535 | |
| 27 | 37 | 476 | 48 | 22 | 78 | 4.7 | 33 | 177 | 16 | |
| 28 | 47 | 545 | 71 | 20 | 70 | 3.9 | 30 | 269 | 22 | |
| 29 | 73 | 788 | 156 | 21 | 207 | 20 | 40 | --- | e39 | |
| 30 | 60 | 567 | 92 | 20 | --- | e19 | 28 | --- | e22 | |
| 31 | --- | --- | --- | 55 | 1,310 | 431 | --- | --- | --- | |
| TOTAL | 1,391 | --- | 6,435.6 | 1,160 | --- | 1,989.4 | 1,489 | --- | 20,593.0 | |
| | | JULY | | | AUGUST | | | SEPTEMBER | | |
| 1 | 16 | --- | e11 | 16 | 248 | 10 | 36 | --- | e17 | |
| 2 | 12 | 246 | 8.1 | 19 | 305 | 40 | 44 | 452 | 139 | |
| 3 | 13 | 165 | 5.5 | 25 | --- | e28 | 76 | --- | e131 | |
| 4 | 16 | --- | e5.2 | 31 | 585 | 102 | 20 | --- | e15 | |
| 5 | 12 | 109 | 3.6 | 12 | 167 | 5.4 | 21 | 232 | 14 | |
| 6 | 14 | 227 | 9.1 | 9.8 | 75 | 2.0 | 31 | 229 | 46 | |
| 7 | 15 | 348 | 14 | 9.1 | 34 | 0.84 | 35 | --- | e31 | |
| 8 | 12 | 282 | 9.1 | 10 | --- | e1.9 | 20 | 104 | 5.7 | |
| 9 | 8.7 | --- | e6.1 | 35 | 1,490 | 465 | 20 | 100 | 5.4 | |
| 10 | 8.5 | --- | e5.9 | 8.8 | 206 | 5.6 | 20 | 119 | 6.5 | |
| 11 | 9.4 | --- | e6.5 | 10 | --- | e3.8 | 20 | 96 | 5.2 | |
| 12 | 15 | --- | e10 | 17 | 165 | 11 | 22 | --- | e4.7 | |
| 13 | 15 | --- | e4.7 | 7.5 | --- | e0.96 | 22 | 82 | 4.9 | |
| 14 | 10 | --- | e3.1 | 7.0 | 31 | 0.59 | 22 | 93 | 5.6 | |
| 15 | 14 | --- | e8.8 | 6.5 | 24 | 0.43 | e20 | --- | e7.1 | |
| 16 | 14 | --- | e3.6 | 6.2 | 26 | 0.44 | e17 | --- | e11 | |
| 17 | 11 | --- | e1.8 | 6.0 | --- | e0.43 | e16 | --- | e9.3 | |
| 18 | 9.7 | --- | e1.6 | 9.3 | --- | e3.5 | e15 | --- | e6.3 | |
| 19 | 20 | --- | e5.2 | 8.7 | 179 | 4.7 | e17 | --- | e7.7 | |
| 20 | 17 | 529 | 101 | 7.1 | 87 | 1.7 | e17 | --- | e6.8 | |
| 21 | 4.0 | --- | e0.11 | 6.4 | 44 | 0.77 | e17 | --- | e7.1 | |
| 22 | 4.1 | 6 | 0.06 | 5.8 | --- | e0.63 | 18 | 105 | 5.2 | |
| 23 | 5.1 | --- | e0.08 | 6.0 | --- | e0.71 | 16 | 74 | 3.2 | |
| 24 | 7.0 | --- | e0.12 | 7.5 | 49 | 1.1 | 16 | 87 | 3.8 | |
| 25 | 5.7 | --- | e0.11 | 17 | 153 | 9.5 | 16 | 106 | 4.6 | |
| 26 | 5.8 | --- | e0.14 | 11 | 75 | 2.1 | 21 | 133 | 7.6 | |
| 27 | 32 | 624 | 115 | 52 | 829 | 346 | 18 | --- | e5.6 | |
| 28 | 43 | 1,240 | 440 | 28 | 267 | 32 | 14 | 93 | 3.4 | |
| 29 | 13 | 216 | 12 | 120 | 1,420 | 1,900 | 14 | 103 | 4.0 | |
| 30 | 9.4 | 82 | 2.1 | 89 | 1,240 | 727 | 16 | 129 | 5.5 | |
| 31 | 14 | 138 | 5.3 | 565 | 2,000 | 8,240 | --- | --- | --- | |
| TOTAL | 405.4 | --- | 845.72 | 1,168.7 | --- | 11,948.10 | 677 | --- | 529.2 | |

e Estimated.

07104905 MONUMENT CREEK AT BIJOU STREET AT COLORADO SPRINGS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2003 (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07104905

GAGE.--Tipping-bucket rain gage with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.77 inches, Aug. 30, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation for period April to September, 1.77 inches, Aug. 30.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | --- | --- | --- | --- | --- | --- | --- | 0.01 | 0.16 | 0.00 | 0.00 | 0.00 |
| 2 | --- | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 |
| 3 | --- | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.11 | 0.00 | 0.05 | 0.20 |
| 4 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.44 | 0.00 | 0.13 | 0.01 |
| 5 | --- | --- | --- | --- | --- | --- | 0.19 | 0.01 | 0.47 | 0.00 | 0.01 | 0.03 |
| 6 | --- | --- | --- | --- | --- | --- | 0.26 | 0.00 | 0.11 | 0.00 | 0.00 | 0.05 |
| 7 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 | 0.08 |
| 8 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 9 | --- | --- | --- | --- | --- | --- | 0.00 | 0.14 | 0.34 | 0.00 | 0.04 | 0.00 |
| 10 | --- | --- | --- | --- | --- | --- | 0.00 | 0.22 | 0.02 | 0.00 | 0.00 | 0.00 |
| 11 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 |
| 12 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.05 | 0.01 | 0.00 | 0.00 |
| 13 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.12 |
| 14 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.44 | 0.01 | 0.00 | 0.01 |
| 15 | --- | --- | --- | --- | --- | --- | 0.03 | 0.15 | 0.00 | 0.16 | 0.00 | 0.00 |
| 16 | --- | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.07 | 0.00 | 0.00 |
| 17 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.09 | 0.00 | 0.03 | 0.00 |
| 18 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 |
| 19 | --- | --- | --- | --- | --- | --- | 0.04 | 0.03 | 0.96 | 0.17 | 0.00 | 0.00 |
| 20 | --- | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 21 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | --- | --- | --- | --- | --- | --- | 0.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 23 | --- | --- | --- | --- | --- | --- | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 24 | --- | --- | --- | --- | --- | --- | 0.16 | 1.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| 25 | --- | --- | --- | --- | --- | --- | 0.00 | 0.11 | 0.63 | 0.00 | 0.01 | 0.00 |
| 26 | --- | --- | --- | --- | --- | --- | 0.00 | 0.03 | 0.14 | 0.34 | 0.00 | 0.00 |
| 27 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.08 | 0.51 | 0.00 |
| 28 | --- | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.25 | 0.53 | 0.22 | 0.00 |
| 29 | --- | --- | --- | --- | --- | --- | 0.00 | 0.02 | 0.10 | 0.01 | 0.00 | 0.00 |
| 30 | --- | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.01 | 1.77 | 0.00 |
| 31 | --- | --- | --- | --- | --- | --- | --- | 0.22 | --- | 0.00 | 0.16 | --- |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 1.97 | 4.53 | 1.39 | 3.22 | 0.70 |
| MAX | --- | --- | --- | --- | --- | --- | --- | 1.00 | 0.96 | 0.53 | 1.77 | 0.20 |

07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°49'21", long 104°53'17", in NE¹/₄NE¹/₄ 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, 3.4 mi upstream from mouth, and 3.5 mi west of courthouse in Colorado Springs.

DRAINAGE AREA.--6.89 mi².

PERIOD OF RECORD.--May 1992 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105000

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,520 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for July 10 through September 11 and estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| 1 | 0.55 | 0.62 | 0.57 | 0.44 | 0.63 | 0.72 | 1.5 | 2.0 | 1.0 | 0.75 | 0.50 | 1.1 |
| 2 | 0.62 | 0.64 | 0.57 | 0.46 | 0.63 | 0.74 | 1.5 | 1.9 | 1.1 | 0.72 | 0.58 | 0.91 |
| 3 | 0.59 | 0.60 | 0.57 | 0.48 | 0.58 | 0.74 | 1.6 | 1.9 | 1.2 | 0.65 | 0.59 | 0.92 |
| 4 | 0.58 | 0.61 | 0.58 | 0.49 | 0.56 | 0.75 | 1.6 | 1.9 | 1.4 | 0.65 | 0.63 | 0.89 |
| 5 | 0.57 | 0.66 | 0.58 | 0.49 | 0.65 | 0.74 | 1.6 | 1.8 | 1.8 | 0.67 | 0.65 | 0.80 |
| 6 | 0.59 | 0.70 | 0.58 | 0.50 | 0.65 | 0.74 | 1.6 | 1.6 | 1.8 | 0.68 | 0.64 | 0.79 |
| 7 | 0.59 | 0.70 | 0.58 | 0.53 | e0.65 | 0.78 | 1.5 | 1.6 | 1.7 | 0.60 | 0.62 | 0.76 |
| 8 | 0.59 | 0.70 | 0.58 | 0.54 | 0.64 | 0.79 | 1.4 | 1.5 | 1.8 | 0.55 | 0.64 | 0.72 |
| 9 | 0.62 | 0.70 | 0.58 | 0.54 | e0.59 | 0.81 | 1.5 | 1.5 | 1.8 | 0.55 | 0.64 | 0.64 |
| 10 | 0.64 | 0.70 | 0.58 | 0.57 | e0.61 | 0.82 | 1.6 | 1.5 | 1.7 | 0.57 | 0.58 | 0.61 |
| 11 | 0.64 | 0.69 | 0.57 | 0.58 | 0.64 | 0.85 | 1.8 | 1.4 | 1.7 | 0.67 | 0.62 | 0.58 |
| 12 | 0.65 | 0.64 | 0.54 | 0.58 | 0.66 | 0.88 | 1.8 | 1.4 | 1.7 | 0.72 | 0.73 | 0.57 |
| 13 | 0.67 | 0.69 | 0.55 | 0.59 | 0.68 | 0.92 | 1.9 | 1.4 | 1.7 | 0.69 | 0.66 | 0.57 |
| 14 | 0.63 | 0.64 | 0.54 | 0.59 | 0.73 | 0.94 | 2.0 | 1.3 | 1.7 | 0.58 | 0.67 | 0.58 |
| 15 | 0.59 | 0.63 | 0.54 | 0.59 | 0.70 | 0.98 | 2.1 | 1.4 | 1.7 | 0.61 | 0.65 | 0.55 |
| 16 | 0.58 | 0.60 | 0.53 | 0.59 | 0.70 | 0.98 | 2.1 | 1.4 | 1.7 | 0.69 | 0.63 | 0.52 |
| 17 | 0.59 | 0.61 | 0.51 | 0.60 | 0.70 | 0.98 | 2.2 | 1.3 | 1.7 | 0.60 | 0.65 | 0.50 |
| 18 | 0.58 | 0.60 | 0.51 | 0.57 | 0.70 | 0.92 | 2.1 | 1.2 | 1.7 | 0.58 | 0.67 | 0.52 |
| 19 | 0.58 | 0.60 | 0.52 | 0.62 | 0.70 | 0.81 | 2.1 | 1.3 | 1.8 | 0.58 | 0.64 | 0.53 |
| 20 | 0.60 | 0.60 | 0.54 | 0.58 | 0.68 | 1.00 | 2.0 | 1.3 | 2.0 | 0.59 | 0.61 | 0.50 |
| 21 | 0.59 | 0.61 | 0.58 | 0.58 | 0.69 | 1.1 | 1.9 | 1.1 | 1.6 | 0.55 | 0.60 | 0.51 |
| 22 | 0.59 | 0.62 | 0.55 | 0.58 | 0.70 | 1.0 | 1.9 | 1.1 | 1.4 | 0.50 | 0.62 | 0.55 |
| 23 | 0.64 | 0.60 | 0.53 | 0.59 | 0.71 | 1.1 | 1.9 | 1.1 | 1.2 | 0.52 | 0.64 | 0.52 |
| 24 | 0.60 | 0.59 | 0.53 | 0.58 | e0.70 | 1.6 | 1.9 | 1.2 | 1.1 | 0.48 | 0.69 | 0.51 |
| 25 | 0.59 | 0.58 | 0.53 | 0.58 | 0.77 | 1.8 | 1.9 | 1.2 | 1.1 | 0.48 | 0.67 | 0.54 |
| 26 | 0.61 | 0.47 | 0.50 | 0.59 | 0.74 | 1.8 | 2.1 | 1.1 | 1.3 | 0.50 | 0.67 | 0.52 |
| 27 | 0.72 | 0.50 | 0.50 | 0.61 | 0.68 | 1.8 | 2.2 | 1.0 | 1.1 | 0.52 | 0.73 | 0.52 |
| 28 | 0.70 | 0.63 | 0.52 | 0.61 | 0.70 | 1.5 | 2.2 | 0.95 | 0.92 | 0.46 | 0.81 | 0.53 |
| 29 | 0.68 | 0.58 | 0.47 | 0.62 | --- | 1.4 | 2.2 | 0.95 | 0.99 | 0.55 | 0.81 | 0.53 |
| 30 | 0.61 | 0.55 | 0.41 | 0.63 | --- | 1.4 | 2.1 | 0.96 | 0.90 | 0.71 | 1.1 | 0.54 |
| 31 | 0.62 | --- | 0.46 | 0.63 | --- | 1.4 | --- | 1.0 | --- | 0.50 | 1.3 | --- |
| TOTAL | 19.00 | 18.66 | 16.70 | 17.53 | 18.77 | 32.79 | 55.8 | 42.26 | 44.31 | 18.47 | 21.24 | 18.83 |
| MEAN | 0.61 | 0.62 | 0.54 | 0.57 | 0.67 | 1.06 | 1.86 | 1.36 | 1.48 | 0.60 | 0.69 | 0.63 |
| MAX | 0.72 | 0.70 | 0.58 | 0.63 | 0.77 | 1.8 | 2.2 | 2.0 | 2.0 | 0.75 | 1.3 | 1.1 |
| MIN | 0.55 | 0.47 | 0.41 | 0.44 | 0.56 | 0.72 | 1.4 | 0.95 | 0.90 | 0.46 | 0.50 | 0.50 |
| AC-FT | 38 | 37 | 33 | 35 | 37 | 65 | 111 | 84 | 88 | 37 | 42 | 37 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 1.78 | 1.54 | 1.35 | 1.23 | 1.21 | 1.40 | 2.55 | 7.01 | 4.88 | 2.61 | 2.71 | 1.89 |
| MAX | 3.16 | 2.41 | 2.12 | 1.87 | 1.80 | 2.15 | 6.13 | 22.0 | 17.0 | 7.55 | 6.77 | 4.39 |
| (WY) | (2000) | (2000) | (2000) | (2000) | (2000) | (2000) | (1999) | (1999) | (1997) | (1995) | (1999) | (1997) |
| MIN | 0.37 | 0.14 | 0.17 | 0.30 | 0.36 | 0.52 | 0.31 | 0.80 | 0.47 | 0.30 | 0.43 | 0.30 |
| (WY) | (1993) | (1993) | (1993) | (1993) | (1993) | (1993) | (1993) | (2002) | (1993) | (1993) | (2002) | (1992) |

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1992 - 2003

| | | | |
|--------------------------|-------------|-------------|--------------------|
| ANNUAL TOTAL | 242.59 | 324.36 | |
| ANNUAL MEAN | 0.66 | 0.89 | 2.59 |
| HIGHEST ANNUAL MEAN | | | 5.30 1999 |
| LOWEST ANNUAL MEAN | | | 0.41 1993 |
| HIGHEST DAILY MEAN | 1.6 Apr 14 | 2.2 Apr 17 | 89 Apr 30, 1999 |
| LOWEST DAILY MEAN | 0.24 Jul 1 | 0.41 Dec 30 | 0.02 Sep 18, 1992 |
| ANNUAL SEVEN-DAY MINIMUM | 0.31 Jun 25 | 0.46 Dec 29 | 0.05 Nov 7, 1992 |
| MAXIMUM PEAK FLOW | | 3.4 Jun 19 | a185 Apr 30, 1999 |
| MAXIMUM PEAK STAGE | | 1.19 Jun 19 | b2.80 Apr 30, 1999 |
| ANNUAL RUNOFF (AC-FT) | 481 | 643 | 1,870 |
| 10 PERCENT EXCEEDS | 0.96 | 1.7 | 5.0 |
| 50 PERCENT EXCEEDS | 0.63 | 0.65 | 1.6 |
| 90 PERCENT EXCEEDS | 0.39 | 0.53 | 0.50 |

e Estimated.

a From rating curve extended above 122 ft³/s.

b From floodmarks.

07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105000

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC 0.7u MF col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|--|-----------------------------------|---|---|---|---|---|---|---|
| JUN 25... | 1655 | 1.1 | 9.0 | 7.4 | 92 | 11.5 | <0.015 | E.03 | <0.02 | <0.04 | E2 | E1 | 3 |

WATER-QUALITY DATA, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 25... | 0.01 |

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Date | Time | Instantaneous discharge, cfs (00061) | Specific conductance, wat unfiltered uS/cm 25 degC (00095) | Temperature, water, deg C (00010) |
|-----------|------|--------------------------------------|--|-----------------------------------|-----------|------|--------------------------------------|--|-----------------------------------|
| OCT 09... | 1550 | 0.65 | 112 | 10.0 | APR 28... | 1550 | 2.0 | 86 | 9.0 |
| NOV 19... | 1600 | 0.66 | 99 | 3.0 | MAY 23... | 1505 | 1.1 | 95 | 10.5 |
| DEC 17... | 1405 | 0.51 | 96 | 2.5 | JUL 15... | 1540 | 0.59 | 114 | 15.0 |
| FEB 12... | 1610 | 0.68 | 118 | 1.0 | AUG 07... | 1110 | 0.64 | 108 | 14.5 |
| FEB 13... | 1110 | 0.65 | 93 | 2.0 | SEP 11... | 1815 | 0.58 | 110 | 11.0 |
| MAR 26... | 1400 | 1.8 | 107 | 5.0 | | | | | |

384909104504401 BEAR CREEK ABOVE 8th STREET AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°49'09", long 104°50'44", in SW¹/₄NW¹/₄ sec.24, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, in Bear Creek Regional Park, on left bank 150 ft upstream from small right-bank tributary, 500 ft west of 8th Street at Colorado Springs, 0.3 mi southeast of Penrose Stadium, 0.6 mi west of Interstate 25, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--June to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=384909104504401

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Time | Instantaneous discharge, cfs (00061) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | E coli, modif. m-TEC, water, col/100 mL (90902) | Fecal coliform, M-FC col/100 mL (31625) | Suspended sediment concentration mg/L (80154) |
|-----------|------|--------------------------------------|--------------------------------|---|---|-----------------------------------|---|--|---|---|---|---|---|
| JUN 25... | 1810 | 1.0 | 7.8 | 7.9 | 415 | 15.5 | <0.015 | 0.41 | <0.02 | E.03 | 140 | 170 | 4 |

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

| Date | Suspended sediment load, tons/d (80155) |
|-----------|---|
| JUN 25... | 0.01 |

< -- Actual value is known to be less than the value shown.
 E -- Estimated laboratory analysis value.

07105490 CHEYENNE CREEK AT EVANS AVENUE AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°47'26", Long 104°51'49", in SW¼NW¼ sec.35, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank 23 ft upstream from Evans Avenue at Colorado Springs, 30 ft downstream from the confluence of North and South Cheyenne Creeks, and 3.1 mi upstream from the mouth.

DRAINAGE AREA.--21.7 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1992 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105490

REVISED RECORDS.--WDR CO-93-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,280 ft above NGVD of 1929, from topographic map. Prior to June 13, 2000, at datum 1.00 ft higher.

REMARKS.--Records good except for July 8-9 and estimated daily discharges, which are poor. Natural flow of stream affected by several small reservoirs and diversions. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

**DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES**

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| 1 | 0.48 | 0.49 | 0.51 | 0.42 | 0.41 | 0.43 | 2.1 | 5.0 | 5.1 | 4.9 | 1.0 | 1.5 |
| 2 | 0.46 | 0.51 | 0.52 | 0.44 | 0.41 | 0.45 | 3.2 | 7.0 | 3.7 | 4.4 | 1.0 | 0.82 |
| 3 | 0.47 | 0.50 | 0.54 | 0.45 | 0.42 | 0.44 | 4.1 | 7.1 | 3.7 | 4.3 | 1.1 | 1.2 |
| 4 | 0.45 | 0.52 | 0.54 | 0.45 | 0.41 | 0.45 | 2.5 | 7.2 | 2.1 | 6.5 | 1.1 | 1.4 |
| 5 | 0.44 | 0.54 | 0.54 | 0.45 | 0.41 | 0.45 | 1.7 | 6.7 | 4.9 | 10 | 1.1 | 1.1 |
| 6 | 0.45 | 0.54 | 0.55 | 0.45 | 0.40 | 0.46 | 1.6 | 6.8 | 6.1 | 10 | 1.2 | 1.1 |
| 7 | 0.47 | 0.51 | 0.54 | 0.45 | e0.40 | 0.47 | 1.4 | 7.5 | 6.0 | 9.7 | 1.2 | 1.5 |
| 8 | 0.49 | 0.51 | 0.54 | 0.45 | 0.40 | 0.47 | 1.3 | 8.2 | 7.8 | 8.0 | 1.2 | 1.5 |
| 9 | 0.48 | 0.48 | 0.54 | 0.44 | 0.41 | 0.47 | 1.4 | 8.0 | 8.8 | 0.69 | 1.1 | 1.2 |
| 10 | 0.45 | 0.49 | 0.51 | 0.44 | 0.41 | 0.47 | 1.3 | 8.4 | 9.0 | 1.5 | 1.1 | 1.0 |
| 11 | 0.45 | 0.49 | 0.49 | 0.42 | 0.41 | 0.48 | 1.3 | 8.0 | 8.7 | 1.7 | 1.8 | 0.93 |
| 12 | 0.48 | 0.50 | 0.50 | 0.43 | 0.40 | 0.50 | 1.6 | 7.8 | 6.6 | 1.7 | 1.3 | 0.79 |
| 13 | 0.49 | 0.52 | 0.49 | 0.42 | 0.41 | 0.49 | 2.9 | 7.7 | 2.5 | 1.9 | 0.88 | 0.78 |
| 14 | 0.49 | 0.49 | 0.47 | 0.41 | 0.41 | 0.49 | 3.3 | 7.8 | 2.8 | 1.7 | 0.86 | 0.81 |
| 15 | 0.50 | 0.50 | 0.46 | 0.41 | 0.41 | 0.49 | 3.1 | 8.1 | 2.7 | 4.1 | 0.88 | 0.77 |
| 16 | 0.50 | 0.54 | 0.46 | 0.41 | 0.41 | 0.43 | 4.1 | 8.6 | 2.8 | 1.0 | 0.90 | 0.80 |
| 17 | 0.51 | 0.54 | 0.46 | 0.42 | 0.45 | 0.36 | 6.7 | 8.9 | 4.2 | 0.53 | 0.87 | 0.82 |
| 18 | 0.51 | 0.50 | 0.45 | 0.41 | 0.45 | 0.38 | 6.9 | 7.4 | 3.0 | 0.74 | 0.91 | 0.82 |
| 19 | 0.51 | 0.50 | 0.45 | 0.42 | 0.45 | 0.40 | 6.9 | 6.7 | e5.0 | 0.76 | 0.82 | 0.82 |
| 20 | 0.52 | 0.51 | 0.45 | 0.42 | 0.46 | 0.42 | 6.3 | 6.9 | e9.0 | 0.81 | 0.76 | 0.83 |
| 21 | 0.53 | 0.53 | 0.45 | 0.41 | 0.45 | 0.42 | 5.9 | 6.5 | 5.9 | 0.76 | 0.69 | 0.78 |
| 22 | 0.55 | 0.54 | 0.45 | 0.41 | 0.45 | 0.44 | 4.7 | 6.4 | 2.3 | 0.88 | 0.68 | 0.81 |
| 23 | 0.58 | 0.54 | 0.45 | 0.41 | 0.45 | 0.45 | 2.9 | 6.1 | 5.5 | 0.81 | 0.74 | 0.78 |
| 24 | 0.56 | 0.54 | 0.45 | 0.41 | e0.44 | 0.56 | 1.7 | 5.5 | 11 | 0.92 | 0.67 | 0.77 |
| 25 | 0.52 | 0.54 | 0.45 | 0.41 | e0.42 | 1.3 | 1.4 | 5.8 | 13 | 1.2 | 0.65 | 0.74 |
| 26 | 0.46 | 0.53 | 0.45 | 0.42 | 0.41 | 3.1 | 1.4 | 6.0 | 10 | 1.3 | 0.67 | 0.70 |
| 27 | 0.54 | 0.51 | 0.44 | 0.42 | 0.41 | 5.2 | 1.3 | 5.2 | 7.5 | 2.0 | 0.68 | 0.70 |
| 28 | 0.51 | 0.50 | 0.45 | 0.43 | 0.41 | 4.4 | 2.1 | 4.4 | 5.1 | 1.2 | 0.73 | 0.82 |
| 29 | 0.47 | 0.50 | 0.45 | 0.41 | --- | 3.7 | 1.9 | 1.8 | 5.1 | 1.2 | 0.70 | 0.95 |
| 30 | 0.47 | 0.49 | 0.45 | 0.41 | --- | 3.4 | 1.7 | 2.8 | 6.4 | 1.5 | 0.76 | 0.60 |
| 31 | 0.46 | --- | 0.44 | 0.41 | --- | 2.8 | --- | 2.8 | --- | 0.97 | 1.1 | --- |
| TOTAL | 15.25 | 15.40 | 14.94 | 13.16 | 11.78 | 34.77 | 88.7 | 203.1 | 176.3 | 87.67 | 29.15 | 28.14 |
| MEAN | 0.49 | 0.51 | 0.48 | 0.42 | 0.42 | 1.12 | 2.96 | 6.55 | 5.88 | 2.83 | 0.94 | 0.94 |
| MAX | 0.58 | 0.54 | 0.55 | 0.45 | 0.46 | 5.2 | 6.9 | 8.9 | 13 | 10 | 1.8 | 1.5 |
| MIN | 0.44 | 0.48 | 0.44 | 0.41 | 0.40 | 0.36 | 1.3 | 1.8 | 2.1 | 0.53 | 0.65 | 0.60 |
| AC-FT | 30 | 31 | 30 | 26 | 23 | 69 | 176 | 403 | 350 | 174 | 58 | 56 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2003, BY WATER YEAR (WY)

| | (1992) | (1993) | (1994) | (1995) | (1996) | (1997) | (1998) | (1999) | (2000) | (2001) | (2002) | (2003) |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 3.61 | 3.15 | 2.45 | 2.32 | 2.17 | 2.59 | 8.80 | 31.2 | 23.8 | 7.66 | 10.9 | 4.39 |
| MAX | 7.31 | 5.56 | 5.15 | 4.54 | 5.20 | 7.34 | 25.5 | 86.4 | 93.1 | 30.5 | 39.7 | 11.2 |
| (WY) | (1997) | (1998) | (1998) | (1996) | (1998) | (1998) | (1999) | (1994) | (1995) | (1995) | (1999) | (1997) |
| MIN | 0.49 | 0.51 | 0.46 | 0.42 | 0.42 | 0.53 | 0.81 | 0.47 | 0.37 | 0.59 | 0.40 | 0.51 |
| (WY) | (2003) | (2003) | (1993) | (2003) | (2003) | (1993) | (2002) | (2002) | (2002) | (2001) | (2002) | (2002) |

SUMMARY STATISTICS

| | FOR 2002 CALENDAR YEAR | FOR 2003 WATER YEAR | WATER YEARS 1992 - 2003 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 239.15 | 718.36 | |
| ANNUAL MEAN | 0.66 | 1.97 | 8.89 |
| HIGHEST ANNUAL MEAN | | | 21.8 1995 |
| LOWEST ANNUAL MEAN | | | 0.72 2002 |
| HIGHEST DAILY MEAN | 15 Jul 2 | 13 Jun 25 | 453 Apr 30, 1999 |
| LOWEST DAILY MEAN | 0.28 Jul 20 | 0.36 Mar 17 | 0.10 Apr 8, 1993 |
| ANNUAL SEVEN-DAY MINIMUM | 0.31 Jun 7 | 0.40 Feb 6 | 0.23 Mar 6, 1993 |
| MAXIMUM PEAK FLOW | | 57 Jul 15 | a595 Jun 10, 1997 |
| MAXIMUM PEAK STAGE | | 2.14 Jul 15 | b3.51 Jun 10, 1997 |
| ANNUAL RUNOFF (AC-FT) | 474 | 1,420 | 6,440 |
| 10 PERCENT EXCEEDS | 1.0 | 6.5 | 18 |
| 50 PERCENT EXCEEDS | 0.50 | 0.69 | 3.1 |
| 90 PERCENT EXCEEDS | 0.37 | 0.42 | 0.51 |

e Estimated.
a From rating curve extended above 437 ft³/s.
b Datum then in use.

07105490 CHEYENNE CREEK AT EVANS AVENUE AT COLORADO SPRINGS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2002 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105490

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records for June 19 are less accurate than the rest of the published records.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.02 inches, July 2, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.76 inch, Aug. 30.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY SUM VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1 | 0.29 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.27 | 0.02 | 0.01 | 0.00 |
| 2 | 0.05 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.03 | 0.03 |
| 3 | 0.03 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.01 | 0.00 | 0.06 | 0.16 |
| 4 | 0.12 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.52 | 0.00 | 0.04 | 0.00 |
| 5 | 0.00 | --- | --- | --- | --- | --- | 0.09 | 0.00 | 0.49 | 0.00 | 0.03 | 0.03 |
| 6 | 0.32 | --- | --- | --- | --- | --- | 0.32 | 0.00 | 0.10 | 0.00 | 0.02 | 0.08 |
| 7 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.00 | 0.09 | 0.00 | 0.00 | 0.06 |
| 8 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 |
| 9 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.09 | 0.06 | 0.00 | 0.02 | 0.01 |
| 10 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.21 | 0.11 | 0.00 | 0.00 | 0.00 |
| 11 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.47 | 0.00 |
| 12 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 |
| 13 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.09 |
| 14 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.23 | 0.00 | 0.00 | 0.00 |
| 15 | 0.00 | --- | --- | --- | --- | --- | 0.03 | 0.19 | 0.00 | 0.61 | 0.00 | 0.00 |
| 16 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.17 | 0.09 | 0.00 | 0.00 |
| 17 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.10 | 0.00 | 0.01 | 0.00 |
| 18 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.01 | 0.00 | 0.02 | 0.00 |
| 19 | 0.00 | --- | --- | --- | --- | --- | 0.05 | 0.10 | 0.58 | 0.19 | 0.01 | 0.00 |
| 20 | 0.00 | --- | --- | --- | --- | --- | 0.01 | 0.01 | 0.05 | 0.00 | 0.00 | 0.00 |
| 21 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22 | 0.00 | --- | --- | --- | --- | --- | 0.37 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| 23 | 0.00 | --- | --- | --- | --- | --- | 0.09 | 0.06 | 0.00 | 0.01 | 0.37 | 0.00 |
| 24 | 0.00 | --- | --- | --- | --- | --- | 0.18 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25 | 0.31 | --- | --- | --- | --- | --- | 0.00 | 0.08 | 0.44 | 0.00 | 0.01 | 0.00 |
| 26 | 0.44 | --- | --- | --- | --- | --- | 0.00 | 0.01 | 0.02 | 0.55 | 0.08 | 0.00 |
| 27 | 0.37 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.00 | 0.11 | 0.06 | 0.00 |
| 28 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.43 | 0.07 | 0.32 | 0.00 |
| 29 | 0.03 | --- | --- | --- | --- | --- | 0.00 | 0.00 | 0.10 | 0.03 | 0.01 | 0.00 |
| 30 | 0.00 | --- | --- | --- | --- | --- | 0.00 | 0.04 | 0.00 | 0.00 | 0.76 | 0.00 |
| 31 | 0.00 | --- | --- | --- | --- | --- | --- | 0.15 | --- | 0.00 | 0.10 | --- |
| TOTAL | 1.96 | --- | --- | --- | --- | --- | 1.15 | 0.98 | 3.88 | 1.69 | 2.49 | 0.46 |
| MAX | 0.44 | --- | --- | --- | --- | --- | 0.37 | 0.21 | 0.58 | 0.61 | 0.76 | 0.16 |