PLATTE RIVER BASIN

06614800 MICHIGAN RIVER NEAR CAMERON PASS, CO

LOCATION.--Lat 40°29'46", long 105°51'52", in S½ sec.12, T.6 N., R.76 W., (unsurveyed), Jackson County, Hydrologic Unit 10180001, on right bank 500 ft upstream from Michigan ditch, 2.2 mi southeast of Cameron Pass, 8 mi east of Gould, and 27 mi southeast of Walden.

DRAINAGE AREA.--1.53 mi^2.

PERIOD OF RECORD.--October 1973 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06614800

GAGE.--Water-stage recorder. Elevation of gage is 10,390 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.70	e0.49	e0.43	e0.28	e0.29	0.42	0.42	0.52	e33	14	2.3	1.5
2	0.76	e0.49	e0.43	e0.28	e0.29	0.43	0.42	0.49	e28	14	2.1	1.4
3	0.79	e0.49	e0.42	e0.28	e0.29	0.47	0.39	0.48	e22	13	2.3	1.3
4	0.91	e0.49	e0.41	e0.28	e0.29	0.48	0.39	0.48	17	12	2.7	1.3
5	0.87	e0.49	e0.41	e0.28	e0.29	e0.47	0.39	0.45	13	12	2.3	1.2
6	0.80	e0.49	e0.40	e0.28	e0.30	e0.47	0.38	0.45	10	11	2.0	1.2
7	0.85	e0.49	e0.39	e0.27	e0.30	e0.47	0.36	0.45	7.7	10	1.9	1.3
8	0.84	e0.49	e0.38	e0.27	e0.30	e0.47	0.36	0.44	6.9	9.7	1.8	1.3
9	0.81	e0.49	e0.38	e0.27	e0.30	e0.47	0.36	0.42	7.9	9.5	1.8	1.2
10	0.77	e0.49	e0.37	e0.27	e0.30	0.48	0.37	0.42	13	8.9	1.7	1.3
11	0.72	e0.49	e0.37	e0.27	e0.30	0.48	0.36	0.42	19	8.4	1.6	1.4
12	0.61	e0.49	e0.36	e0.27	e0.30	0.47	0.36	0.42	15	7.8	1.5	1.3
13	0.63	e0.49	e0.35	e0.27	e0.31	0.45	0.37	0.45	15	7.6	1.5	1.3
14	0.57	e0.49	e0.35	e0.27	e0.31	0.45	0.50	e0.57	22	7.2	1.4	1.2
15	0.54	e0.49	e0.34	e0.28	e0.31	0.42	0.50	e2.7	23	6.8	1.3	1.2
16	0.53	e0.49	e0.33	e0.28	e0.32	0.42	0.49	e3.8	20	6.3	1.4	1.1
17	0.53	e0.49	e0.33	e0.28	e0.32	0.41	0.48	e5.6	21	6.6	3.0	1.0
18	0.52	e0.49	e0.33	e0.28	e0.33	0.40	0.45	e9.3	27	6.6	3.2	1.1
19	0.51	e0.50	e0.32	e0.28	e0.34	0.44	0.45	e7.0	27	5.9	2.5	1.2
20	0.49	e0.49	e0.32	e0.28	e0.34	0.45	0.45	e8.7	24	5.8	2.1	1.1
21	0.49	e0.49	e0.31	e0.28	e0.35	0.45	0.45	e8.3	23	5.1	1.8	1.1
22	0.49	e0.49	e0.31	e0.28	e0.36	0.45	0.42	e9.1	22	4.5	1.8	1.0
23	0.48	e0.48	e0.31	e0.28	e0.37	0.43	0.42	e9.7	23	4.3	2.0	0.99
24	0.48	e0.47	e0.30	e0.28	e0.37	0.42	0.45	e11	20	3.8	1.9	0.97
25	0.48	e0.47	e0.30	e0.28	e0.40	0.42	0.48	e12	16	3.6	1.7	0.95
26	0.48	e0.46	e0.29	e0.28	0.44	0.42	0.52	e13	13	3.5	1.7	0.92
27	0.48	e0.46	e0.29	e0.28	0.44	0.42	0.56	e17	14	3.3	1.6	0.89
28	0.48	e0.45	e0.29	e0.29	0.42	0.42	0.56	e24	15	3.1	1.5	0.86
29	0.48	e0.45	e0.29	e0.29	---	0.42	0.55	e23	15	3.1	1.5	0.82
30	0.48	e0.44	e0.29	e0.29	---	0.42	0.53	e21	15	2.8	1.6	0.76
31	e0.48	---	e0.28	e0.29	---	0.42	---	e30	---	2.5	1.8	---
TOTAL	19.05	14.47	10.68	8.64	9.28	13.71	13.19	221.66	547.5	222.7	59.3	34.16
MEAN	0.61	0.48	0.34	0.28	0.33	0.44	0.44	7.15	18.2	7.18	1.91	1.14
MAX	0.91	0.50	0.43	0.29	0.44	0.48	0.56	30	33	14	3.2	1.5
MIN	0.48	0.44	0.28	0.27	0.29	0.40	0.36	0.42	6.9	2.5	1.3	0.76
AC-FT	38	29	21	17	18	27	26	440	1,090	442	118	68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2003, BY WATER YEAR (WY)

MEAN	0.91	0.56	0.42	0.35	0.32	0.33	0.41	4.09	16.3	8.64	2.68	1.42
MAX	2.25	1.11	0.88	0.57	0.55	0.86	0.80	9.50	27.1	24.8	6.83	4.82
(WY)	(1998)	(1996)	(1996)	(1988)	(1986)	(1986)	(1994)	(1974)	(1990)	(1995)	(1983)	(1997)
MIN	0.32	0.20	0.25	0.17	0.16	0.17	0.22	0.70	9.69	1.56	0.79	0.49
(WY)	(1980)	(1979)	(1979)	(1991)	(1977)	(1974)	(1982)	(1995)	(2002)	(2002)	(2002)	(1988)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1974 - 2003	
ANNUAL TOTAL	580.04		1,174.34			
ANNUAL MEAN	1.59		3.22		3.04	
HIGHEST ANNUAL MEAN					4.61	1983
LOWEST ANNUAL MEAN					1.59	2002
HIGHEST DAILY MEAN	e21	May 31	e33	Jun 1	69	Jul 14, 1995
LOWEST DAILY MEAN	0.17	Mar 28	e0.27	Jan 7	0.08	Nov 16, 1989
ANNUAL SEVEN-DAY MINIMUM	0.18	Mar 25	e0.27	Jan 7	0.14	Jan 9, 1979
MAXIMUM PEAK FLOW			unknown		a,b115	Jul 12, 1995
MAXIMUM PEAK STAGE			unknown		b,c3.69	Jul 12, 1995
ANNUAL RUNOFF (AC-FT)	1,150		2,330		2,200	
10 PERCENT EXCEEDS	3.9		12		9.6	
50 PERCENT EXCEEDS	0.49		0.49		0.60	
90 PERCENT EXCEEDS	0.20		0.29		0.26	

e Estimated.
a From rating curve extended above 82 ft^3/s.
b Also occurred Jul 13, 1995.
c Maximum gage height, 3.70 ft, Jun 20, 1997.

06618300 ILLINOIS RIVER BELOW ISH BALDWIN DITCH NEAR WALDEN, CO

LOCATION.--Lat 40°34'32", long 106°14'28", in NW¼SE¼ sec.15, T.7 N., R.79 W., Jackson County, Hydrologic Unit 10180001, on right bank, 200 ft below Ish Baldwin Ditch diversion and 9.7 mi north-northwest of Rand, and 11mi south-southeast of Walden.

DRAINAGE AREA.--181 mi^2.

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=06618300

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8295 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream is affected by numerous upstream diversions and return flow.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 500 ft^3/s, June 2, 2003, gage height 7.21 ft; no flow many days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 500 ft^3/s, June 2, gage height, 7.21 ft; no flow 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	---	---	---	---	---	---	e4.3	19	430	1.5	3.6	5.5
2	---	---	---	---	---	---	e4.5	7.4	482	0.63	2.5	5.2
3	---	---	---	---	---	---	e4.9	4.6	398	0.18	1.9	3.8
4	---	---	---	---	---	---	e5.1	7.8	271	0.01	1.8	2.5
5	---	---	---	---	---	---	e5.5	18	175	0.00	5.2	1.6
6	---	---	---	---	---	---	e5.3	10	117	0.00	3.2	1.5
7	---	---	---	---	---	---	e6.7	2.7	110	0.00	2.2	2.1
8	---	---	---	---	---	---	e7.8	1.2	113	0.00	1.5	3.9
9	---	---	---	---	---	---	e12	0.88	73	0.00	1.5	4.7
10	---	---	---	---	---	---	e12	1.5	55	0.00	1.8	4.7
11	---	---	---	---	---	---	e12	3.7	62	0.00	1.4	3.9
12	---	---	---	---	---	---	e14	5.4	64	0.00	0.70	4.3
13	---	---	---	---	---	---	e20	2.2	59	0.00	0.01	4.6
14	---	---	---	---	---	---	e36	1.0	100	0.00	0.00	4.3
15	---	---	---	---	---	---	e64	0.71	79	0.00	0.00	3.4
16	---	---	---	---	---	---	e52	3.2	57	0.00	0.00	2.7
17	---	---	---	---	---	---	e44	11	55	0.00	0.00	2.4
18	---	---	---	---	---	---	37	25	55	0.00	8.3	1.8
19	---	---	---	---	---	---	16	66	47	0.00	16	1.8
20	---	---	---	---	---	---	11	72	48	1.8	11	2.0
21	---	---	---	---	---	---	8.4	74	52	4.7	5.8	2.4
22	---	---	---	---	---	---	12	81	41	2.9	3.6	2.1
23	---	---	---	---	---	---	18	96	34	1.3	3.6	1.8
24	---	---	---	---	---	---	9.8	116	27	9.4	4.8	1.8
25	---	---	---	---	---	---	8.5	180	26	9.8	4.0	1.8
26	---	---	---	---	---	---	59	241	25	8.6	5.1	3.3
27	---	---	---	---	---	---	96	234	20	8.8	4.9	2.3
28	---	---	---	---	---	---	81	233	15	8.5	4.0	1.9
29	---	---	---	---	---	---	56	347	6.8	7.3	3.4	1.9
30	---	---	---	---	---	---	37	417	3.3	7.3	2.8	1.9
31	---	---	---	---	---	---	---	459	---	5.2	2.9	---
TOTAL	---	---	---	---	---	---	759.8	2,741.29	3,100.1	77.92	107.51	87.9
MEAN	---	---	---	---	---	---	25.3	88.4	103	2.51	3.47	2.93
MAX	---	---	---	---	---	---	96	459	482	9.8	16	5.5
MIN	---	---	---	---	---	---	4.3	0.71	3.3	0.00	0.00	1.5
AC-FT	---	---	---	---	---	---	1,510	5,440	6,150	155	213	174

e Estimated.

06618480 ILLINOIS RIVER BELOW POTTER CREEK NEAR WALDEN, CO

LOCATION.--Lat 40°42'31", long 106°16'47", in SW¼NW¼ sec.32, T.9 N., R.79 W., Jackson County, Hydrologic Unit 10180001, on left bank 500 ft downstream from Potter Creek, and 1.5 mi south of Walden.

DRAINAGE AREA.--257 mi^2, of which about 0.33 mi^2 is probably non-contributing.

PERIOD OF RECORD.--August 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=06618480

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,070 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream is affected by numerous diversions and return flow.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 423 ft^3/s, June 3, 2003, gage height, 7.63 ft; no flow many days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 423 ft^3/s, June 3, gage height, 7.63 ft; no flow 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	---	---	---	---	---	---	e4.9	42	385	18	0.00	0.00
2	---	---	---	---	---	---	e5.2	30	400	13	0.00	0.00
3	---	---	---	---	---	---	e5.4	23	414	9.7	0.00	0.00
4	---	---	---	---	---	---	e5.8	16	404	7.3	0.00	0.00
5	---	---	---	---	---	---	e5.7	13	357	5.3	0.00	0.00
6	---	---	---	---	---	---	e5.9	16	287	3.8	0.00	0.00
7	---	---	---	---	---	---	e6.0	17	229	2.9	0.00	0.00
8	---	---	---	---	---	---	e6.6	12	204	2.4	0.00	0.00
9	---	---	---	---	---	---	e7.3	9.4	182	2.3	0.00	0.00
10	---	---	---	---	---	---	9.4	9.4	130	2.1	0.00	0.00
11	---	---	---	---	---	---	9.0	10	109	2.1	0.00	0.00
12	---	---	---	---	---	---	9.6	14	105	1.8	0.00	0.00
13	---	---	---	---	---	---	11	15	106	0.86	0.00	0.00
14	---	---	---	---	---	---	15	14	105	0.43	0.00	0.00
15	---	---	---	---	---	---	38	11	132	0.67	0.00	0.00
16	---	---	---	---	---	---	50	8.8	135	0.34	0.00	0.00
17	---	---	---	---	---	---	41	6.8	104	0.28	0.00	0.00
18	---	---	---	---	---	---	37	5.9	102	0.46	0.00	0.00
19	---	---	---	---	---	---	36	18	108	1.3	0.00	0.00
20	---	---	---	---	---	---	27	45	99	2.2	0.00	0.00
21	---	---	---	---	---	---	19	53	93	0.80	0.00	0.00
22	---	---	---	---	---	---	16	59	93	0.34	0.00	0.00
23	---	---	---	---	---	---	18	68	78	0.53	0.00	0.00
24	---	---	---	---	---	---	25	73	58	0.24	0.00	0.00
25	---	---	---	---	---	---	25	94	51	0.00	0.00	0.00
26	---	---	---	---	---	---	29	148	47	0.00	0.00	0.00
27	---	---	---	---	---	---	59	215	44	0.00	0.00	0.00
28	---	---	---	---	---	---	88	241	38	0.00	0.00	0.00
29	---	---	---	---	---	---	72	243	31	0.00	0.00	0.00
30	---	---	---	---	---	---	54	283	24	0.00	0.00	0.00
31	---	---	---	---	---	---	---	335	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	740.8	2,148.3	4,654	79.15	0.00	0.00
MEAN	---	---	---	---	---	---	24.7	69.3	155	2.55	0.000	0.000
MAX	---	---	---	---	---	---	88	335	414	18	0.00	0.00
MIN	---	---	---	---	---	---	4.9	5.9	24	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	1,470	4,260	9,230	157	0.00	0.00

e Estimated.

06620000 NORTH PLATTE RIVER NEAR NORTHGATE, CO

LOCATION.--Lat 40°56'15", long 106°20'16", in NE¼ SW¼ SE¼ sec.11, T.11 N., R.80 W., Jackson County, Hydrologic Unit 10180001, on right bank 1,000 ft downstream from bridge on State Highway 125, 0.7 mi upstream from Camp Creek, 4.2 mi northwest of Northgate, and 4.4 mi south of Colorado-Wyoming State line.

DRAINAGE AREA.--1,431 mi^2.

PERIOD OF RECORD.--May to November 1904 (published as "near Pinkhampton"), May 1915 to current year. Monthly discharge only for some periods, published in WSP 1310. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/wy/nwis/inventory/?site_no=06620000

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

GAGE.--Water-stage recorder. Elevation of gage is 7,810.39 ft above NGVD of 1929. See WSP 1730 for history of changes prior to April 8, 1918. April 8, 1918, to August 21, 1961, water-stage recorder at site 0.7 mi downstream at datum 3.36 ft lower. August 22, 1961, to September 18, 1984, at site 650 ft upstream at same datum. U.S. Geological Survey data collection platform with satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 130,000 acres of hay meadows upstream from station. Transbasin diversions upstream from station to Cache la Poudre River basin.

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	34	e51	e101	e57	e63	e67	e306	426	2,590	526	245	97
2	36	e51	e101	e54	e63	e68	e397	370	3,130	475	210	98
3	44	e49	e100	e57	e61	e71	e456	301	3,300	435	188	92
4	64	e52	e98	e57	e60	e73	396	249	2,800	408	176	93
5	70	e55	e95	e56	e53	e72	350	239	2,340	360	180	95
6	59	e64	e93	e54	e48	e78	319	254	1,900	314	172	85
7	57	e74	e91	e54	e45	e79	274	247	1,770	301	146	96
8	53	e75	e87	e56	e48	e85	237	227	1,620	305	129	109
9	52	e70	e84	e51	e54	e91	241	227	1,360	281	128	107
10	50	e68	e84	e45	e60	e105	294	266	1,240	262	131	109
11	56	e65	e89	e44	e63	e105	393	302	1,570	297	114	105
12	53	e62	e86	e45	e67	e120	484	326	2,000	294	107	100
13	50	e71	e89	e46	e70	e141	510	291	2,150	293	113	92
14	49	e69	e91	e49	e70	e183	526	247	1,840	265	110	86
15	49	e66	e94	e49	e68	e205	590	229	1,570	255	99	81
16	48	e67	e89	e49	e67	e219	561	263	1,520	249	88	77
17	48	e77	e86	e47	e67	e212	487	332	1,480	266	103	72
18	47	e84	e85	e47	e66	e202	419	411	1,380	272	155	67
19	47	e87	e77	e52	e66	e198	360	548	1,350	343	188	66
20	45	e98	e68	e55	e67	e195	297	601	1,610	389	185	69
21	47	e101	e67	e53	e69	e205	261	526	1,640	359	131	70
22	47	e104	e64	e50	e67	e232	244	489	1,410	317	112	69
23	50	e106	e57	e51	e63	e290	291	498	1,180	281	107	66
24	53	e101	e57	e54	e61	e266	323	531	1,030	295	101	64
25	56	e98	e53	e53	e62	e275	338	667	1,030	280	117	62
26	57	e96	e52	e55	e64	e295	367	943	1,030	257	117	59
27	60	e90	e52	e60	e67	e280	410	1,120	873	252	117	52
28	61	e98	e54	e57	e66	e228	516	1,250	700	315	102	50
29	61	e102	e57	e55	---	e191	502	1,470	596	279	97	51
30	50	e101	e58	e56	---	e198	455	1,770	556	271	90	53
31	e49	---	e56	e60	---	e220	---	2,090	---	280	90	---
TOTAL	1,602	2,352	2,415	1,628	1,745	5,249	11,604	17,710	48,565	9,776	4,148	2,392
MEAN	51.7	78.4	77.9	52.5	62.3	169	387	571	1,619	315	134	79.7
MAX	70	106	101	60	70	295	590	2,090	3,300	526	245	109
MIN	34	49	52	44	45	67	237	227	556	249	88	50
AC-FT	3,180	4,670	4,790	3,230	3,460	10,410	23,020	35,130	96,330	19,390	8,230	4,740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2003, BY WATER YEAR (WY)

MEAN	159	151	104	83.5	88.9	176	743	1,121	1,459	627	261	147
MAX	538	366	215	177	199	722	2,444	3,649	3,296	2,367	763	712
(WY)	(1962)	(1962)	(1998)	(1984)	(1986)	(1986)	(1962)	(1984)	(1983)	(1957)	(1983)	(1997)
MIN	31.7	54.2	33.9	27.5	35.7	47.8	131	96.1	89.4	26.7	33.3	23.8
(WY)	(1935)	(1935)	(1977)	(1977)	(1933)	(1964)	(1981)	(2002)	(1934)	(1934)	(2002)	(1934)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 CALENDAR YEAR		WATER YEARS 1904 - 2003	
ANNUAL TOTAL	32,273		109,186		--	
ANNUAL MEAN	88.4		299		428	
HIGHEST ANNUAL MEAN	--		--		878	1917
LOWEST ANNUAL MEAN	--		--		91.5	2002
HIGHEST DAILY MEAN	e526	Apr 5	3,300	Jun 3	6,450	Jun 10, 1923
LOWEST DAILY MEAN	15	Sep 6,7	34	Oct 1	15	Sep 6,7 2002
ANNUAL SEVEN-DAY MINIMUM	16	Sep 2	47	Jan 10	16	Sep 2, 2002
MAXIMUM PEAK FLOW	--		3,410	Jun 3	a6,720	Jun 11, 1923
MAXIMUM PEAK STAGE	--		5.91	Jun 3	b9.65	Apr 25, 1980
ANNUAL RUNOFF (AC-FT)	64,010		216,600		310,000	
10 PERCENT EXCEEDS	159		598		1,200	
50 PERCENT EXCEEDS	72		100		160	
90 PERCENT EXCEEDS	33		51		68	

e Estimated.
a Gage height, 6.34 ft, site and datum then in use.
b Backwater from ice, site and datum then in use.

06693800 MOSQUITO CREEK NEAR ALMA, CO

LOCATION.--Lat 39°16'12", long 106°03'02", in SE¼NE¼ sec.13, T.9 S., R.78 W., Park County, Hydrologic Unit 10190001, on left bank 0.1 mi upstream from confluence with Middle Fork South Platte River, and 1.2 mi south of Alma.

DRAINAGE AREA.--16.2 mi^2.

PERIOD OF RECORD.--October 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=06693800

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 10,220 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 minor diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	e6.7	e4.4	e3.3	e3.3	e3.4	e4.9	7.8	114	46	18	16
2	7.8	e6.4	e4.3	e3.3	e3.3	e3.5	e5.1	6.3	87	46	16	15
3	8.4	e6.4	e4.2	e3.3	e3.3	e3.6	e5.2	6.3	78	45	17	15
4	7.2	e6.3	e4.1	e3.3	e3.3	e3.6	e5.2	6.5	71	45	20	14
5	7.5	e6.3	e3.9	e3.3	e3.3	e3.6	e5.2	5.9	65	43	16	13
6	7.2	e6.2	e3.9	e3.3	e3.3	e3.6	e5.2	5.9	53	40	16	17
7	7.3	e6.1	e3.7	e3.3	e3.3	e3.6	e5.2	6.1	49	36	15	23
8	7.1	e6.0	e3.6	e3.3	e3.3	e3.7	e5.7	6.3	44	35	15	21
9	6.7	e5.9	e3.6	e3.3	e3.3	e3.7	e6.0	6.9	51	34	14	26
10	6.5	e5.7	e3.5	e3.2	e3.3	e3.7	e6.3	7.4	64	32	14	26
11	6.6	e5.7	e3.4	e3.2	e3.3	e3.8	e6.7	6.8	68	30	14	24
12	6.3	e5.7	e3.4	e3.2	e3.3	e3.8	e7.2	8.0	67	29	13	22
13	6.4	e5.6	e3.4	e3.2	e3.3	e3.9	e7.8	9.7	63	28	14	21
14	6.1	e5.6	e3.4	e3.2	e3.2	e3.9	e9.3	11	56	27	16	20
15	6.5	e5.4	e3.2	e3.2	e3.2	e4.0	e10	15	62	26	13	18
16	6.4	e5.2	e3.2	e3.2	e3.3	e4.0	11	16	60	27	13	17
17	6.4	e5.1	e3.2	e3.2	e3.3	e4.0	9.7	21	53	28	15	16
18	6.4	e5.0	e3.3	e3.2	e3.3	e4.0	13	25	57	27	16	15
19	6.5	e4.9	e3.3	e3.2	e3.3	e4.0	12	23	64	27	16	14
20	6.3	e4.9	e3.3	e3.2	e3.3	e3.9	11	25	59	27	13	14
21	6.5	e4.8	e3.2	e3.2	e3.3	e3.8	10	29	54	26	12	13
22	6.3	e4.8	e3.2	e3.2	e3.3	e3.8	11	38	54	25	12	12
23	6.6	e4.8	e3.2	e3.2	e3.3	e3.8	16	52	55	24	12	11
24	6.4	e4.8	e3.2	e3.3	e3.3	e3.8	11	61	53	23	15	11
25	6.3	e4.6	e3.2	e3.3	e3.3	e3.9	12	68	49	21	20	10
26	7.1	e4.6	e3.2	e3.3	e3.3	e3.9	9.5	71	45	21	19	9.9
27	6.4	e4.5	e3.2	e3.3	e3.4	e3.9	10	89	45	23	16	9.6
28	7.2	e4.5	e3.2	e3.4	e3.4	e4.0	8.3	108	47	25	15	9.4
29	6.5	e4.5	e3.2	e3.3	---	e4.2	8.8	118	47	22	14	9.3
30	7.6	e4.5	e3.2	e3.3	---	e4.5	8.7	118	47	20	17	9.0
31	7.2	---	e3.2	e3.3	---	e4.8	---	111	---	19	19	---
TOTAL	210.7	161.5	107.5	101.0	92.4	119.7	257.0	1,088.9	1,781	927	475	471.2
MEAN	6.80	5.38	3.47	3.26	3.30	3.86	8.57	35.1	59.4	29.9	15.3	15.7
MAX	8.4	6.7	4.4	3.4	3.4	4.8	16	118	114	46	20	26
MIN	6.1	4.5	3.2	3.2	3.2	3.4	4.9	5.9	44	19	12	9.0
AC-FT	418	320	213	200	183	237	510	2,160	3,530	1,840	942	935

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	8.86	6.85	4.44	3.75	3.69	3.99	6.52	35.5	63.7	35.9	18.3	12.1
MAX	10.0	7.63	5.75	5.03	4.45	4.44	8.57	49.7	116	67.1	33.3	15.8
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(1999)	(2003)	(2001)	(1999)	(1999)	(1999)	(1999)
MIN	6.80	5.38	3.47	3.09	2.98	3.41	5.33	15.3	17.0	6.89	5.31	5.30
(WY)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(1999)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	2,449.5		5,792.9			
ANNUAL MEAN	6.71		15.9		17.0	
HIGHEST ANNUAL MEAN					25.3	1999
LOWEST ANNUAL MEAN					6.99	2002
HIGHEST DAILY MEAN	29	May 31	118	May 29	161	Jun 24, 1999
LOWEST DAILY MEAN	e2.9	Feb 8	e3.2	Dec 15	e2.9	Feb 8, 2002
ANNUAL SEVEN-DAY MINIMUM	e2.9	Feb 8	e3.2	Dec 21	e2.9	Feb 8, 2002
MAXIMUM PEAK FLOW			155	May 30	217	Jun 23, 1999
MAXIMUM PEAK STAGE			5.97	May 30	6.34	Jun 23, 1999
ANNUAL RUNOFF (AC-FT)	4,860		11,490		12,320	
10 PERCENT EXCEEDS	14		46		49	
50 PERCENT EXCEEDS	5.0		6.5		7.2	
90 PERCENT EXCEEDS	3.1		3.3		3.5	

e Estimated.

06696980 TARRYALL CREEK AT UPPER STATION, NEAR COMO, CO

LOCATION.--Lat 39°20'22", long 105°54'40", in NE$^1/_4$SW$^1/_4$ sec.20, T.8 S., R.76 W., Park County, Hydrologic Unit 10190001, on left bank 200 ft upstream from culvert on country road 33, and 1.8 mi northwest of Como.

DRAINAGE AREA.--23.7 mi^2.

PERIOD OF RECORD.--June 1978 to September 1986. May 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=06696980

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,935 ft above NGVD of 1929, from topographic map. Prior to July 15, 1980, at site 250 ft downstream at different datum. July 15, 1980 to Sept. 30, 1986 at current site, different datum.

REMARKS.--No estimated daily discharges. Records good. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined; maximum daily, 170 ft^3/s, June 12, 1980; maximum gage height, 5.39 ft, June 1, 2003; minimum daily, 1.5 ft^3/s, Apr. 5, 1981.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 129 ft^3/s, June 1, gage height, 5.39 ft; minimum daily, 3.7 ft^3/s, Apr. 1-8.

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	4.1	---	---	---	---	---	3.7	8.8	112	35	13	13
2	5.2	---	---	---	---	---	3.7	9.1	91	34	12	12
3	5.8	---	---	---	---	---	3.7	9.3	87	33	13	12
4	5.2	---	---	---	---	---	3.7	9.6	81	32	13	12
5	5.1	---	---	---	---	---	3.7	8.3	78	30	12	11
6	4.9	---	---	---	---	---	3.7	8.2	68	30	12	13
7	4.9	---	---	---	---	---	3.7	8.4	68	29	11	13
8	4.8	---	---	---	---	---	3.7	8.5	59	27	11	12
9	4.6	---	---	---	---	---	3.8	8.5	55	26	10	13
10	4.5	---	---	---	---	---	4.1	8.6	55	25	10	12
11	4.4	---	---	---	---	---	4.3	8.4	56	24	11	12
12	4.3	---	---	---	---	---	4.2	9.3	58	23	11	11
13	4.2	---	---	---	---	---	5.2	11	58	22	11	12
14	4.1	---	---	---	---	---	5.6	13	54	20	9.6	12
15	4.1	---	---	---	---	---	4.9	15	54	20	9.1	11
16	4.1	---	---	---	---	---	4.9	18	53	19	9.2	11
17	4.0	---	---	---	---	---	5.1	22	52	19	9.7	10
18	3.9	---	---	---	---	---	5.2	25	53	19	9.5	9.9
19	3.9	---	---	---	---	---	5.0	28	54	20	9.1	9.7
20	3.9	---	---	---	---	---	5.0	29	54	20	8.2	9.2
21	3.9	---	---	---	---	---	5.3	30	51	19	7.7	9.0
22	3.9	---	---	---	---	---	5.3	38	48	18	8.3	8.6
23	4.3	---	---	---	---	---	5.0	45	47	17	9.9	8.4
24	4.2	---	---	---	---	---	5.2	54	46	16	10	8.3
25	4.0	---	---	---	---	---	6.2	54	44	17	12	8.2
26	4.0	---	---	---	---	---	7.3	55	42	16	11	7.8
27	4.3	---	---	---	---	---	7.8	62	40	16	9.8	7.6
28	4.1	---	---	---	---	---	8.1	66	38	16	9.2	7.5
29	4.0	---	---	---	---	---	8.6	81	37	15	10	7.4
30	3.9	---	---	---	---	---	9.1	111	36	14	19	7.2
31	4.1	---	---	---	---	---	---	112	---	14	15	---
TOTAL	134.7	---	---	---	---	---	154.8	974.0	1,729	685	336.3	310.8
MEAN	4.35	---	---	---	---	---	5.16	31.4	57.6	22.1	10.8	10.4
MAX	5.8	---	---	---	---	---	9.1	112	112	35	19	13
MIN	3.9	---	---	---	---	---	3.7	8.2	36	14	7.7	7.2
AC-FT	267	---	---	---	---	---	307	1,930	3,430	1,360	667	616

06700000 SOUTH PLATTE RIVER ABOVE CHEESMAN LAKE, CO

LOCATION.--Lat 39°09'46", long 105°18'35", in T.10 S., R.71 W., Douglas County, Hydrologic Unit 10190002, on right bank about 200 ft upstream from high water mark of Cheesman Lake, and 8.0 mi south-southwest of Deckers.

DRAINAGE AREA.--1628 mi^2, of which 11.9 mi^2 is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1899 to December 1901, October 1924 to September 1943 (no winter records in water years 1931-33, 1935-39, 1942-43). August 2002 to current year (seasonal records only). Published as South Fork South Platte River at Lake Cheesman, 1899; "below Lake Cheesman", 1900; and South Fork South Platte River at Cheesman, 1901. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06700000

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,845 ft above NGVD of 1929, from topographic map. July 31, 1899 to Dec. 31, 1901, staff gage at site within 4.5 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Boreas Pass ditch, Antero and Elevenmile Canyon Reservoirs, diversions for irrigation of about 40,000 acres, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 4,690 ft^3/s, July 28, 2003, gage height, 11.54 ft; minimum daily, 3 ft^3/s, January 9, 12, 1925, but may have been less during periods of no gage-height record.

EXTREMES FOR 2002 WATER YEAR (seasonal only).--Maximum daily discharge during period August to September, 574 ft^3/s, Aug. 13; minimum daily, 77 ft^3/s, Sept. 16.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 4,690 ft^3/s, July 28, gage height, 11.54 ft; minimum daily, 53 ft^3/s, May 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	e565	175
2	---	---	---	---	---	---	---	---	---	---	e571	175
3	---	---	---	---	---	---	---	---	---	---	e559	179
4	---	---	---	---	---	---	---	---	---	---	e420	293
5	---	---	---	---	---	---	---	---	---	---	e339	364
6	---	---	---	---	---	---	---	---	---	---	e300	365
7	---	---	---	---	---	---	---	---	---	---	e210	360
8	---	---	---	---	---	---	---	---	---	---	e208	361
9	---	---	---	---	---	---	---	---	---	---	386	363
10	---	---	---	---	---	---	---	---	---	---	558	320
11	---	---	---	---	---	---	---	---	---	---	564	153
12	---	---	---	---	---	---	---	---	---	---	572	143
13	---	---	---	---	---	---	---	---	---	---	574	145
14	---	---	---	---	---	---	---	---	---	---	570	98
15	---	---	---	---	---	---	---	---	---	---	569	78
16	---	---	---	---	---	---	---	---	---	---	522	77
17	---	---	---	---	---	---	---	---	---	---	405	155
18	---	---	---	---	---	---	---	---	---	---	400	235
19	---	---	---	---	---	---	---	---	---	---	398	243
20	---	---	---	---	---	---	---	---	---	---	397	244
21	---	---	---	---	---	---	---	---	---	---	398	244
22	---	---	---	---	---	---	---	---	---	---	398	219
23	---	---	---	---	---	---	---	---	---	---	397	222
24	---	---	---	---	---	---	---	---	---	---	396	223
25	---	---	---	---	---	---	---	---	---	---	396	218
26	---	---	---	---	---	---	---	---	---	---	393	222
27	---	---	---	---	---	---	---	---	---	---	382	223
28	---	---	---	---	---	---	---	---	---	---	313	225
29	---	---	---	---	---	---	---	---	---	---	232	221
30	---	---	---	---	---	---	---	---	---	---	177	223
31	---	---	---	---	---	---	---	---	---	---	175	---
TOTAL	---	---	---	---	---	---	---	---	---	---	12,744	6,766
MEAN	---	---	---	---	---	---	---	---	---	---	411	226
MAX	---	---	---	---	---	---	---	---	---	---	574	365
MIN	---	---	---	---	---	---	---	---	---	---	175	77
AC-FT	---	---	---	---	---	---	---	---	---	---	25,280	13,420

e Estimated.

06700000 SOUTH PLATTE RIVER ABOVE CHEESMAN LAKE, CO—Continued

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	---	---	---	---	---	---	128	75	298	135	103	165
2	---	---	---	---	---	---	145	72	315	128	100	149
3	---	---	---	---	---	---	147	71	289	122	104	140
4	---	---	---	---	---	---	137	67	255	113	101	137
5	---	---	---	---	---	---	141	64	264	103	102	126
6	---	---	---	---	---	---	129	62	302	99	105	114
7	---	---	---	---	---	---	110	61	254	94	91	127
8	---	---	---	---	---	---	94	60	235	95	89	140
9	---	---	---	---	---	---	102	57	209	91	88	143
10	---	---	---	---	---	---	104	59	187	82	95	125
11	---	---	---	---	---	---	116	58	181	77	105	119
12	---	---	---	---	---	---	153	57	181	81	105	111
13	---	---	---	---	---	---	139	55	188	81	90	111
14	---	---	---	---	---	---	124	53	210	82	79	116
15	---	---	---	---	---	---	110	63	204	86	74	118
16	---	---	---	---	---	---	102	92	193	90	69	114
17	---	---	---	---	---	---	88	86	202	93	70	99
18	---	---	---	---	---	---	82	83	254	91	73	89
19	---	---	---	---	---	---	86	100	256	101	78	86
20	---	---	---	---	---	---	82	112	240	119	81	84
21	---	---	---	---	---	---	78	113	214	108	74	86
22	---	---	---	---	---	---	77	107	192	101	70	87
23	---	---	---	---	---	---	79	106	165	102	69	86
24	---	---	---	---	---	---	84	119	149	96	98	82
25	---	---	---	---	---	---	87	141	136	90	102	84
26	---	---	---	---	---	---	79	186	130	90	97	79
27	---	---	---	---	---	---	81	199	134	108	97	78
28	---	---	---	---	---	---	83	190	136	350	94	76
29	---	---	---	---	---	---	78	202	137	162	98	74
30	---	---	---	---	---	---	72	214	144	134	124	75
31	---	---	---	---	---	---	---	249	---	114	181	---
TOTAL	---	---	---	---	---	---	3,117	3,233	6,254	3,418	2,906	3,220
MEAN	---	---	---	---	---	---	104	104	208	110	93.7	107
MAX	---	---	---	---	---	---	153	249	315	350	181	165
MIN	---	---	---	---	---	---	72	53	130	77	69	74
AC-FT	---	---	---	---	---	---	6,180	6,410	12,400	6,780	5,760	6,390

06700000 SOUTH PLATTE RIVER ABOVE CHEESMAN LAKE, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 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=06700000

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

REMARKS.--None.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.79 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	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	---	---	0.00	0.00	0.15	0.00
3	---	---	---	---	---	---	---	---	0.00	0.00	0.09	0.03
4	---	---	---	---	---	---	---	---	0.15	0.00	0.02	0.00
5	---	---	---	---	---	---	---	---	0.23	0.00	0.00	0.09
6	---	---	---	---	---	---	---	---	0.11	0.00	0.00	0.00
7	---	---	---	---	---	---	---	---	0.11	0.00	0.00	0.10
8	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	---	---	0.09	0.00	0.24	0.00
10	---	---	---	---	---	---	---	---	0.00	0.00	0.10	0.00
11	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	---	---	0.06	0.00	0.00	0.02
14	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	---	---	0.04	0.02	0.01	0.00
17	---	---	---	---	---	---	---	---	0.01	0.00	0.00	0.00
18	---	---	---	---	---	---	---	---	0.17	0.08	0.00	0.00
19	---	---	---	---	---	---	---	---	0.09	0.22	0.00	0.00
20	---	---	---	---	---	---	---	---	0.00	0.01	0.00	0.00
21	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	---	0.00	0.00	0.01	0.26	0.00
23	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	---	0.03	0.00	0.00	0.05	0.00
25	---	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00
26	---	---	---	---	---	---	---	0.00	0.01	0.15	0.00	0.00
27	---	---	---	---	---	---	---	0.02	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	---	0.00	0.00	0.41	0.01	0.00
29	---	---	---	---	---	---	---	0.03	0.00	0.39	0.07	0.00
30	---	---	---	---	---	---	---	0.24	0.00	0.00	0.79	0.00
31	---	---	---	---	---	---	---	0.24	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	---	1.08	1.29	1.79	0.24
MAX	---	---	---	---	---	---	---	---	0.23	0.41	0.79	0.10
MIN	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00

06701500 SOUTH PLATTE RIVER BELOW CHEESMAN LAKE, CO

LOCATION.--Lat 39°12'33", long 105°16'02", in SE ¼ NW ¼ sec.6, T.10 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 1,400 ft downstream from toe of Cheesman Dam, and 3.8 mi southwest of Deckers.

DRAINAGE AREA.--1,752 mi^2.

PERIOD OF RECORD.--October 1924 to September 1998, October 2001 to current year. Monthly discharge only for some periods, published in WSP 1310. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06701500

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

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume. Datum of gage is 6,609.29 ft above NGVD of 1929. Prior to May 14, 1956, at site 370 ft upstream at datum 0.50 ft higher.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Boreas Pass ditch, Antero and Elevenmile Canyon Reservoirs, diversions for irrigation of about 40,000 acres, and return flow from irrigated areas. Flow completely regulated by Cheesman Lake (station 06701000).

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	297	150	81	115	97	57	50	28	87	45	63	127
2	295	118	83	115	98	57	46	26	70	45	63	227
3	254	68	83	115	99	57	44	26	38	45	63	252
4	188	51	93	115	98	57	44	25	38	45	63	249
5	159	52	99	115	98	80	44	25	38	45	63	293
6	160	53	99	115	98	98	44	25	38	45	63	406
7	160	103	99	115	98	98	44	33	38	45	77	537
8	160	140	100	115	98	98	44	38	38	45	98	568
9	160	128	110	115	98	98	70	39	38	45	98	529
10	179	128	120	115	98	98	104	38	38	45	98	497
11	189	97	120	115	98	98	104	38	38	46	125	493
12	189	78	119	115	97	98	104	37	38	47	147	493
13	189	78	119	115	98	98	74	37	38	47	148	492
14	167	78	119	115	98	84	43	38	38	56	148	490
15	149	79	119	103	98	71	35	36	38	71	148	490
16	150	79	119	91	98	71	35	28	39	71	148	487
17	165	79	119	91	98	71	35	23	39	71	148	487
18	183	79	119	91	98	71	35	23	41	71	148	426
19	183	79	106	91	98	71	36	24	44	72	122	335
20	182	79	94	91	98	61	36	22	44	72	103	335
21	182	81	94	92	98	44	36	23	44	71	103	355
22	181	81	94	92	98	44	36	29	44	71	103	443
23	181	81	124	92	98	44	36	36	44	92	101	500
24	181	81	146	92	98	59	37	36	44	118	126	417
25	166	81	146	65	98	71	34	35	44	124	148	363
26	150	81	146	44	98	72	31	35	44	90	148	363
27	150	81	131	41	98	73	31	35	44	76	175	361
28	150	81	117	41	73	59	31	35	44	71	219	360
29	150	81	118	41	---	50	31	35	44	62	184	329
30	150	81	116	41	---	50	31	36	44	62	172	270
31	150	---	115	70	---	50	---	56	---	63	129	---
TOTAL	5,549	2,606	3,467	2,879	2,718	2,208	1,405	1,000	1,298	1,974	3,742	11,974
MEAN	179	86.9	112	92.9	97.1	71.2	46.8	32.3	43.3	63.7	121	399
MAX	297	150	146	115	99	98	104	56	87	124	219	568
MIN	149	51	81	41	73	44	31	22	38	45	63	127
AC-FT	11,010	5,170	6,880	5,710	5,390	4,380	2,790	1,980	2,570	3,920	7,420	23,750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2003, BY WATER YEAR (WY)

MEAN	131	68.7	52.7	57.4	55.6	56.4	146	279	330	356	341	207
MAX	380	266	184	156	169	208	932	1,716	1,088	1,451	984	517
(WY)	(1985)	(1985)	(1996)	(1998)	(1998)	(1986)	(1942)	(1970)	(1995)	(1995)	(1984)	(1998)
MIN	12.9	6.33	5.26	5.26	2.76	3.11	2.00	11.0	38.5	53.5	66.7	33.5
(WY)	(1965)	(1960)	(1926)	(1926)	(1957)	(1957)	(1957)	(1938)	(1989)	(1967)	(1978)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1925 - 2003	
ANNUAL TOTAL	67,390		40,820			
ANNUAL MEAN	185		112		174	
HIGHEST ANNUAL MEAN					450	1970
LOWEST ANNUAL MEAN					60.1	1978
HIGHEST DAILY MEAN	461	Aug 28	568	Sep 8	4,580	Apr 29, 1970
LOWEST DAILY MEAN	39	Jun 29	22	May 20	a1.6	Apr 8, 1957
ANNUAL SEVEN-DAY MINIMUM	51	Mar 5	25	May 16	1.6	Apr 8, 1957
MAXIMUM PEAK FLOW			571	Sep 7	4,640	Apr 29, 1970
MAXIMUM PEAK STAGE			2.81	Sep 7	13.40	Apr 29, 1970
ANNUAL RUNOFF (AC-FT)	133,700		80,970		126,200	
10 PERCENT EXCEEDS	346		188		427	
50 PERCENT EXCEEDS	154		91		97	
90 PERCENT EXCEEDS	56		36		19	

a Also occurred Apr 9-14, 1957.

06701550 FOURMILE CREEK ABOVE MOUTH NEAR DECKERS, CO

LOCATION.--Lat 39°13'50", long 105°13'29", in SW¼SE¼ sec.28, T.9 S., R.70 W., Douglas County, Hydrologic Unit 10190002, on left bank 1.0 mi upstream of mouth, and 2.0 mi south of Deckers.

DRAINAGE AREA.--7.40 mi^2

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 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=06701550

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,740 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 934 ft^3/s, May 30, gage height, 11.35 ft; minimum daily, 0.27 ft^3/s, Sept. 28.

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	---	---	---	---	---	---	---	e2.4	e2.2	e0.83	e0.70	e1.5
2	---	---	---	---	---	---	---	e2.3	e2.1	e0.83	e0.73	e0.84
3	---	---	---	---	---	---	---	e2.3	e2.0	e0.80	e3.4	e0.72
4	---	---	---	---	---	---	---	e3.1	e1.8	e0.82	e1.0	e0.64
5	---	---	---	---	---	---	---	e2.4	e1.7	e0.81	e0.91	e0.60
6	---	---	---	---	---	---	---	e2.3	e1.5	e0.77	e0.95	e0.59
7	---	---	---	---	---	---	---	e2.4	e1.8	e0.75	12	e0.58
8	---	---	---	---	---	---	---	e2.3	e1.4	e0.73	e1.5	e0.58
9	---	---	---	---	---	---	---	e2.1	e1.3	e0.70	e1.0	e0.56
10	---	---	---	---	---	---	---	e2.9	e1.2	e0.66	e0.81	e0.63
11	---	---	---	---	---	---	---	e2.1	e0.82	e0.63	e1.1	e0.60
12	---	---	---	---	---	---	---	e2.2	e0.79	e0.59	e0.96	e0.62
13	---	---	---	---	---	---	---	e1.9	e0.76	e0.61	e0.91	e0.56
14	---	---	---	---	---	---	---	e1.7	e0.73	e0.56	e0.83	e0.52
15	---	---	---	---	---	---	---	e1.8	e0.73	e0.57	e0.67	e0.52
16	---	---	---	---	---	---	---	e1.9	e0.73	e0.66	e0.79	e0.48
17	---	---	---	---	---	---	---	e2.0	e2.1	e0.61	e0.87	e0.43
18	---	---	---	---	---	---	---	e3.1	12	e0.64	e1.2	e0.44
19	---	---	---	---	---	---	---	e2.2	31	e0.75	e0.90	e0.48
20	---	---	---	---	---	---	---	e2.1	e1.4	e1.0	e0.79	e0.48
21	---	---	---	---	---	---	---	e2.2	e1.1	e0.91	e0.73	e0.50
22	---	---	---	---	---	---	---	e2.1	e0.82	e0.82	e0.68	e0.48
23	---	---	---	---	---	---	---	e2.5	e0.82	e0.77	e0.65	e0.39
24	---	---	---	---	---	---	---	e2.6	e0.75	e0.75	e0.63	e0.39
25	---	---	---	---	---	---	---	e3.3	e0.90	e0.77	e0.63	e0.35
26	---	---	---	---	---	---	---	e3.4	e0.81	e0.73	e0.59	e0.35
27	---	---	---	---	---	---	---	e2.6	e0.72	e0.73	e0.59	e0.31
28	---	---	---	---	---	---	---	e2.2	e0.67	e0.89	e0.59	e0.27
29	---	---	---	---	---	---	---	e2.1	e0.64	e0.84	e0.51	e0.31
30	---	---	---	---	---	---	---	e51	e0.74	e0.82	18	e0.31
31	---	---	---	---	---	---	---	e3.1	---	e0.77	5.5	---
TOTAL	---	---	---	---	---	---	---	122.6	76.03	23.12	61.12	16.03
MEAN	---	---	---	---	---	---	---	3.95	2.53	0.75	1.97	0.53
MAX	---	---	---	---	---	---	---	51	31	1.0	18	1.5
MIN	---	---	---	---	---	---	---	1.7	0.64	0.56	0.51	0.27
AC-FT	---	---	---	---	---	---	---	243	151	46	121	32

e Estimated.

06701550 FOURMILE CREEK ABOVE MOUTH NEAR DECKERS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 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=06701550

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

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.52 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	---	---	---	---	---	---	---	---	0.06	0.00	0.00	0.00
2	---	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00
3	---	---	---	---	---	---	---	0.00	0.00	0.00	0.36	0.01
4	---	---	---	---	---	---	---	0.01	0.10	0.00	0.03	0.00
5	---	---	---	---	---	---	---	0.00	0.23	0.00	0.00	0.00
6	---	---	---	---	---	---	---	0.00	0.12	0.00	0.01	0.00
7	---	---	---	---	---	---	---	0.00	0.13	0.00	0.06	0.02
8	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	---	0.00	0.05	0.00	0.02	0.01
10	---	---	---	---	---	---	---	0.00	0.10	0.00	0.00	0.00
11	---	---	---	---	---	---	---	0.00	0.00	0.00	0.06	0.00
12	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02
14	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00
16	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	---	0.00	0.22	0.00	0.12	0.00
19	---	---	---	---	---	---	---	0.00	0.03	0.26	0.00	0.00
20	---	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00
21	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	---	0.00	0.00	0.00	0.05	0.00
23	---	---	---	---	---	---	---	0.02	0.00	0.05	0.00	0.00
24	---	---	---	---	---	---	---	0.02	0.00	0.00	0.03	0.00
25	---	---	---	---	---	---	---	0.00	0.08	0.00	0.00	0.00
26	---	---	---	---	---	---	---	0.00	0.02	0.01	0.00	0.00
27	---	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00
28	---	---	---	---	---	---	---	0.00	0.01	0.00	0.01	0.00
29	---	---	---	---	---	---	---	0.09	0.01	0.08	0.00	0.00
30	---	---	---	---	---	---	---	0.00	0.03	0.00	0.52	0.00
31	---	---	---	---	---	---	---	0.19	---	0.00	0.01	---
TOTAL	---	---	---	---	---	---	---	---	1.20	0.43	1.29	0.06

06701620 TROUT CREEK BELOW FERN CREEK NEAR WESTCREEK, CO

LOCATION.--Lat 39°10'03", long 105°07'18", in SE¼SE¼ sec.21, T.10 S., R.69 W., Douglas County, Hydrologic Unit 10190002, on right bank about 400 ft downstream from lower Rainbow Falls Lakes, 1.1 mi downstream from Fern Creek, and 2.5 mi east of the community of Westcreek.

DRAINAGE AREA.--106 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to Septermber 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=06701620

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,440 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No diversions upstream from station. Significant contribution of flow from natural spring at Rainbow Falls Park. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge during period May to September, 15 ft^3/s, May 20, gage height, 3.62 ft; minimum daily, 0.79 ft^3/s, Aug. 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	---	---	---	---	---	---	---	---	6.7	3.9	1.3	1.1
2	---	---	---	---	---	---	---	---	6.2	4.2	1.4	1.1
3	---	---	---	---	---	---	---	---	5.9	4.6	1.3	1.1
4	---	---	---	---	---	---	---	---	5.9	4.0	1.3	1.1
5	---	---	---	---	---	---	---	---	8.5	3.4	1.2	1.1
6	---	---	---	---	---	---	---	---	8.9	2.8	1.2	1.1
7	---	---	---	---	---	---	---	---	11	2.5	1.2	1.1
8	---	---	---	---	---	---	---	---	8.6	2.2	1.2	1.2
9	---	---	---	---	---	---	---	12	6.9	1.8	1.2	1.1
10	---	---	---	---	---	---	---	13	6.4	1.8	1.2	1.1
11	---	---	---	---	---	---	---	11	6.1	1.7	1.2	1.1
12	---	---	---	---	---	---	---	10	6.1	1.7	1.1	1.1
13	---	---	---	---	---	---	---	9.7	4.9	1.6	1.1	1.1
14	---	---	---	---	---	---	---	8.9	4.5	1.5	1.1	1.1
15	---	---	---	---	---	---	---	9.1	4.2	1.5	1.0	1.1
16	---	---	---	---	---	---	---	11	4.2	1.6	0.97	1.1
17	---	---	---	---	---	---	---	9.3	3.4	1.6	0.97	0.96
18	---	---	---	---	---	---	---	8.6	4.2	1.5	0.97	1.1
19	---	---	---	---	---	---	---	7.8	4.5	1.6	0.97	1.1
20	---	---	---	---	---	---	---	8.4	5.5	1.6	0.93	1.1
21	---	---	---	---	---	---	---	7.3	6.0	1.5	0.87	1.2
22	---	---	---	---	---	---	---	6.2	5.6	1.4	0.79	1.2
23	---	---	---	---	---	---	---	5.8	5.1	1.4	0.81	1.2
24	---	---	---	---	---	---	---	5.7	3.9	1.4	0.86	1.2
25	---	---	---	---	---	---	---	6.5	3.3	1.5	0.84	1.2
26	---	---	---	---	---	---	---	6.7	3.7	1.5	0.82	1.1
27	---	---	---	---	---	---	---	5.9	3.3	1.5	0.83	1.2
28	---	---	---	---	---	---	---	5.2	3.0	1.6	0.93	1.2
29	---	---	---	---	---	---	---	4.8	3.8	1.6	0.95	1.2
30	---	---	---	---	---	---	---	5.0	5.0	1.5	1.0	1.2
31	---	---	---	---	---	---	---	5.8	---	1.4	1.2	---
TOTAL	---	---	---	---	---	---	---	---	165.3	63.4	32.71	33.86
MEAN	---	---	---	---	---	---	---	---	5.51	2.05	1.06	1.13
MAX	---	---	---	---	---	---	---	---	11	4.6	1.4	1.2
MIN	---	---	---	---	---	---	---	---	3.0	1.4	0.79	0.96
AC-FT	---	---	---	---	---	---	---	---	328	126	65	67

06701620 TROUT CREEK BELOW FERN CREEK NEAR WESTCREEK, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 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=06701620

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

REMARKS.--None.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 0.57 inches, July 27, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.57 inches, July 27.

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	0.00	0.02	0.00
2	---	---	---	---	---	---	---	---	0.00	0.00	0.19	0.00
3	---	---	---	---	---	---	---	---	0.00	0.00	0.08	0.06
4	---	---	---	---	---	---	---	---	0.20	0.00	0.00	0.00
5	---	---	---	---	---	---	---	---	0.36	0.00	0.00	0.11
6	---	---	---	---	---	---	---	---	0.18	0.00	0.00	0.00
7	---	---	---	---	---	---	---	---	0.12	0.00	0.07	0.10
8	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	---	0.00	0.09	0.00	0.00	0.08
10	---	---	---	---	---	---	---	0.20	0.21	0.00	0.00	0.00
11	---	---	---	---	---	---	---	0.00	0.00	0.00	0.13	0.00
12	---	---	---	---	---	---	---	0.00	0.13	0.00	0.00	0.00
13	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03
14	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	---	0.26	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	---	0.02	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	---	0.00	0.02	0.00	0.07	0.00
19	---	---	---	---	---	---	---	0.00	0.10	0.20	0.00	0.00
20	---	---	---	---	---	---	---	0.04	0.17	0.00	0.00	0.00
21	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00
23	---	---	---	---	---	---	---	0.08	0.00	0.02	0.23	0.00
24	---	---	---	---	---	---	---	0.21	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	---	0.00	0.12	0.10	0.00	0.00
26	---	---	---	---	---	---	---	0.00	0.22	0.00	0.00	0.00
27	---	---	---	---	---	---	---	0.00	0.00	0.57	0.00	0.00
28	---	---	---	---	---	---	---	0.00	0.00	0.04	0.07	0.00
29	---	---	---	---	---	---	---	0.04	0.19	0.02	0.00	0.00
30	---	---	---	---	---	---	---	0.04	0.00	0.00	0.44	0.00
31	---	---	---	---	---	---	---	0.25	---	0.00	0.01	---
TOTAL	---	---	---	---	---	---	---	---	2.12	0.95	1.32	0.38

06701700 WEST CREEK ABOVE SHREWSBURY GULCH NEAR WESTCREEK, CO

LOCATION.--Lat 39°08'35", long 105°09'39", in NW¼NW¼ sec.31, T.10 S., R.69 W., Douglas County, Hydrologic Unit 10190002, on left bank of J.O. Hill Lake, and 2,000 ft upstream from Shrewsbury Gulch, in town of Westcreek.

DRAINAGE AREA.--56.3 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 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=06701700

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,520 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Natural flow of the stream affected by a 24 in. pipe diversion through dam, which bypasses spillway and requires further discharges measurements on pipe discharge channel. Several measurements 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, 273 ft^3/s, Aug. 31, 2003, gage height, 6.28 ft; minimum daily, 1.80 ft^3/s, many days in Sept. 2003.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known, 2,020 ft^3/s, May 7, 1973, on basis of slope-area measurement of peak flow made at location about 1.0 mi downstream from present site, caused by failure of two upstream dams.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 273 ft^3/s, Aug. 31, gage height, 6.28 ft; minimum daily, 1.8 ft^3/s, many days in Sept.

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	---	---	---	---	---	---	---	e4.5	e5.0	e6.0	e4.6	e8.5
2	---	---	---	---	---	---	---	e4.5	e8.1	e3.8	e25	e6.1
3	---	---	---	---	---	---	---	e4.5	e4.9	e3.2	e7.9	e5.7
4	---	---	---	---	---	---	---	e4.4	e3.6	e2.9	e4.5	e5.0
5	---	---	---	---	---	---	---	e4.4	e4.1	e2.4	e4.1	e3.8
6	---	---	---	---	---	---	---	e4.0	e5.1	e2.3	e3.5	e5.4
7	---	---	---	---	---	---	---	e4.3	e5.1	e2.3	e3.4	e10
8	---	---	---	---	---	---	---	e4.3	e5.1	e2.2	e4.5	e5.8
9	---	---	---	---	---	---	---	e4.3	e4.9	e2.2	e4.5	e2.5
10	---	---	---	---	---	---	---	e4.0	e4.4	e2.2	e4.5	e2.3
11	---	---	---	---	---	---	---	e4.2	e4.3	e2.1	e7.4	e2.2
12	---	---	---	---	---	---	---	e4.2	e4.2	e2.0	e5.5	e2.2
13	---	---	---	---	---	---	---	e4.2	e3.6	e2.0	e4.7	e2.1
14	---	---	---	---	---	---	---	e4.2	e3.7	e2.0	e4.1	e2.1
15	---	---	---	---	---	---	---	e4.1	e4.0	e2.0	e2.5	e2.0
16	---	---	---	---	---	---	---	e6.1	e5.0	e2.0	e2.0	e1.9
17	---	---	---	---	---	---	---	e6.1	e10	e2.1	e2.0	e1.9
18	---	---	---	---	---	---	---	e5.2	e24	e2.1	e2.1	e1.9
19	---	---	---	---	---	---	---	e4.5	e11	e2.4	e3.6	e1.9
20	---	---	---	---	---	---	---	e4.1	e8.9	e22	e4.8	e1.9
21	---	---	---	---	---	---	---	e4.0	e4.0	e8.6	e3.0	e1.8
22	---	---	---	---	---	---	---	e3.9	e3.5	e6.1	e2.8	e1.8
23	---	---	---	---	---	---	---	e3.9	e3.0	e5.0	e3.0	e1.8
24	---	---	---	---	---	---	---	e3.9	e2.5	e4.6	e5.9	e1.8
25	---	---	---	---	---	---	---	e3.9	e2.5	e4.2	e4.9	e1.8
26	---	---	---	---	---	---	---	e4.0	e2.1	e3.9	e4.8	e1.8
27	---	---	---	---	---	---	---	e4.1	e2.3	e6.7	e4.9	e1.8
28	---	---	---	---	---	---	---	e4.8	e2.3	e17	e4.6	e1.8
29	---	---	---	---	---	---	---	e3.9	e38	e22	e4.2	e1.8
30	---	---	---	---	---	---	---	e3.2	e13	e11	e11	e1.8
31	---	---	---	---	---	---	---	e3.2	---	e6.8	e44	---
TOTAL	---	---	---	---	---	---	---	132.9	202.2	166.1	198.3	93.2
MEAN	---	---	---	---	---	---	---	4.29	6.74	5.36	6.40	3.11
MAX	---	---	---	---	---	---	---	6.1	38	22	44	10
MIN	---	---	---	---	---	---	---	3.2	2.1	2.0	2.0	1.8
AC-FT	---	---	---	---	---	---	---	264	401	329	393	185

e Estimated.

06701700 WEST CREEK ABOVE SHREWSBURY GULCH NEAR WESTCREEK, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 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=06701700

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

REMARKS.--None.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 0.52 inches, Aug. 30, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.52 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	---	---	---	---	---	---	---	---	0.03	0.00	0.07	0.00
2	---	---	---	---	---	---	---	---	0.00	0.00	0.34	0.00
3	---	---	---	---	---	---	---	---	0.00	0.00	0.04	0.07
4	---	---	---	---	---	---	---	---	0.25	0.00	0.02	0.00
5	---	---	---	---	---	---	---	---	0.33	0.00	0.00	0.00
6	---	---	---	---	---	---	---	---	0.10	0.00	0.00	0.00
7	---	---	---	---	---	---	---	---	0.14	0.00	0.01	0.07
8	---	---	---	---	---	---	---	---	0.00	0.00	0.00	0.01
9	---	---	---	---	---	---	---	---	0.12	0.00	0.12	0.02
10	---	---	---	---	---	---	---	0.08	0.04	0.00	0.18	0.00
11	---	---	---	---	---	---	---	0.00	0.00	0.00	0.06	0.00
12	---	---	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00
13	---	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.03
14	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01
15	---	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00
16	---	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00
17	---	---	---	---	---	---	---	0.00	0.00	0.00	0.02	0.12
18	---	---	---	---	---	---	---	0.00	0.01	0.00	0.03	0.00
19	---	---	---	---	---	---	---	0.00	0.00	0.12	0.00	0.00
20	---	---	---	---	---	---	---	0.00	0.09	0.00	0.00	0.00
21	---	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00
22	---	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.08
23	---	---	---	---	---	---	---	0.08	0.03	0.01	0.12	0.00
24	---	---	---	---	---	---	---	0.21	0.01	0.00	0.00	0.00
25	---	---	---	---	---	---	---	0.07	0.03	0.21	0.00	0.00
26	---	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00
27	---	---	---	---	---	---	---	0.00	0.00	0.49	0.00	0.00
28	---	---	---	---	---	---	---	0.00	0.00	0.03	0.04	0.00
29	---	---	---	---	---	---	---	0.09	0.37	0.00	0.00	0.04
30	---	---	---	---	---	---	---	0.35	0.03	0.00	0.52	0.00
31	---	---	---	---	---	---	---	0.21	---	0.00	0.01	---
TOTAL	---	---	---	---	---	---	---	---	1.63	0.90	1.59	0.45

06701900 SOUTH PLATTE RIVER BELOW BRUSH CREEK NEAR TRUMBULL, CO

LOCATION.--Lat 39°15'36", long 105°13'17", in SE¼SE¼ sec.16, T.9 S., R.70 W., Douglas County, Hydrologic Unit 10190002, on left bank 5 mi downstream from Cheesman Reservoir, and 0.7 mi north-northeast of Deckers.

DRAINAGE AREA.--2021 mi^2, of which 11.9 mi^2 is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 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=06701900

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,380 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 minor diversion from Colorado River basin through Boreas Pass ditch, Antero and Elevenmile Canyon Reservoirs, diversion for irrigation of about 40,000 acres, and return flow from irrigated areas. Flow mostly regulated by Cheesman Reservoir (station 0670100).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 858 ft^3/s, May 30, 2003, gage height, 4.93 ft; minimum daily, 51 ft^3/s, Jan. 28, 30, 2003.

EXTREMES FOR 2002 WATER YEAR.--Maximum discharge during period July to September, 815 ft^3/s, July 21, gage height, 4.84 ft; minimum daily, 115 ft^3/s, Sept. 22-24.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 858 ft^3/s, May 30, gage height, 4.93 ft; minimum daily, 51 ft^3/s, Jan. 28, 30.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	351	309
2	---	---	---	---	---	---	---	---	---	---	352	365
3	---	---	---	---	---	---	---	---	---	---	335	429
4	---	---	---	---	---	---	---	---	---	---	307	436
5	---	---	---	---	---	---	---	---	---	---	259	439
6	---	---	---	---	---	---	---	---	---	---	243	442
7	---	---	---	---	---	---	---	---	---	---	323	447
8	---	---	---	---	---	---	---	---	---	---	285	417
9	---	---	---	---	---	---	---	---	---	---	251	368
10	---	---	---	---	---	---	---	---	---	---	251	314
11	---	---	---	---	---	---	---	---	---	---	252	235
12	---	---	---	---	---	---	---	---	---	---	255	210
13	---	---	---	---	---	---	---	---	---	---	256	184
14	---	---	---	---	---	---	---	---	---	---	263	130
15	---	---	---	---	---	---	---	---	---	---	284	130
16	---	---	---	---	---	---	---	---	---	---	372	164
17	---	---	---	---	---	---	---	---	---	---	423	260
18	---	---	---	---	---	---	---	---	---	---	422	315
19	---	---	---	---	---	---	---	---	---	358	420	315
20	---	---	---	---	---	---	---	---	---	357	421	246
21	---	---	---	---	---	---	---	---	---	375	428	141
22	---	---	---	---	---	---	---	---	---	327	338	115
23	---	---	---	---	---	---	---	---	---	273	255	115
24	---	---	---	---	---	---	---	---	---	143	256	e115
25	---	---	---	---	---	---	---	---	---	221	256	157
26	---	---	---	---	---	---	---	---	---	309	300	219
27	---	---	---	---	---	---	---	---	---	311	411	213
28	---	---	---	---	---	---	---	---	---	312	491	220
29	---	---	---	---	---	---	---	---	---	313	436	219
30	---	---	---	---	---	---	---	---	---	294	383	278
31	---	---	---	---	---	---	---	---	---	303	348	---
TOTAL	---	---	---	---	---	---	---	---	---	---	10,227	7,947
MEAN	---	---	---	---	---	---	---	---	---	---	330	265
MAX	---	---	---	---	---	---	---	---	---	---	491	447
MIN	---	---	---	---	---	---	---	---	---	---	243	115
AC-FT	---	---	---	---	---	---	---	---	---	---	20,290	15,760

e Estimated.

06701900 SOUTH PLATTE RIVER BELOW BRUSH CREEK NEAR TRUMBULL, CO—Continued

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	337	166	e88	125	100	61	90	82	116	63	59	120
2	349	143	e95	124	101	62	97	76	107	60	53	243
3	302	96	e95	124	100	61	101	73	72	59	99	277
4	212	66	105	123	e100	61	98	71	70	57	63	275
5	178	62	114	123	100	78	95	68	77	56	54	315
6	179	62	114	123	100	95	79	65	76	56	53	446
7	179	94	115	121	e100	96	84	66	78	54	66	619
8	180	153	114	120	e100	97	78	70	73	54	91	639
9	180	136	122	119	e99	98	85	67	70	53	93	591
10	199	136	134	e119	e99	98	136	69	68	52	92	548
11	217	113	134	119	99	100	143	66	67	52	116	544
12	219	84	133	119	e100	100	147	65	67	53	150	543
13	213	e85	133	118	101	101	129	64	65	53	149	544
14	192	e87	134	118	102	94	96	63	60	57	147	545
15	163	e89	134	109	101	80	88	64	59	75	146	545
16	166	87	133	98	99	81	86	71	59	76	146	541
17	177	89	132	91	100	80	84	62	60	77	147	539
18	205	88	131	e92	99	89	83	60	80	77	149	482
19	203	87	119	e91	99	85	87	60	101	82	126	349
20	202	86	e110	90	99	80	82	61	79	93	95	348
21	201	86	102	90	98	62	79	62	72	85	94	369
22	201	85	e102	90	98	61	81	60	64	83	96	467
23	202	85	123	90	96	66	85	67	62	98	95	545
24	201	87	153	90	e96	82	89	65	65	131	118	463
25	187	85	153	74	e96	105	87	70	63	146	156	387
26	167	e85	e156	56	96	110	90	67	66	110	154	386
27	171	e85	141	52	96	113	94	67	61	122	176	384
28	170	e85	124	51	82	96	94	66	58	82	242	383
29	168	e85	124	54	---	77	90	63	61	76	207	348
30	162	e85	124	51	---	76	84	115	69	68	214	280
31	164	---	124	67	---	80	---	87	---	62	232	---
TOTAL	6,246	2,862	3,815	3,031	2,756	2,625	2,841	2,132	2,145	2,322	3,878	13,065
MEAN	201	95.4	123	97.8	98.4	84.7	94.7	68.8	71.5	74.9	125	436
MAX	349	166	156	125	102	113	147	115	116	146	242	639
MIN	162	62	88	51	82	61	78	60	58	52	53	120
AC-FT	12,390	5,680	7,570	6,010	5,470	5,210	5,640	4,230	4,250	4,610	7,690	25,910

e Estimated.

06701900 SOUTH PLATTE RIVER BELOW BRUSH CREEK NEAR TRUMBULL, CO—Continued

WATER-QUALITY RECORDS

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=06701900

PERIOD OF DAILY RECORD.--
TURBIDITY: March to September 2003 (seasonal records only).

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

REMARKS.--Turbidity records are rated poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
TURBIDITY (seasonal only): Maximum, not determined, greater than 1,000 NTU on many days; minimum, 5.3 NTu, Mar. 22 and July 14.

EXTREMES FOR CURRENT YEAR.--
TURBIDITY (seasonal only): Maximum during period March to September, not determined, greater than 1,000 NTU on many days; minimum, 5.3 NTU, Mar. 22 and July 14.

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS
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	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

06701900 SOUTH PLATTE RIVER BELOW BRUSH CREEK NEAR TRUMBULL, CO—Continued

TURBIDITY, WATER, UNFILTERED, NEPHELOMETRIC TURBIDITY UNITS—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	---	---	---	---	---	---	100	37	65	41	22	30
2	---	---	---	---	---	---	170	43	94	200	21	38
3	---	---	---	---	---	---	320	71	160	67	29	44
4	---	---	---	---	---	---	290	84	140	37	20	27
5	---	---	---	---	---	---	150	73	96	33	17	25
6	---	---	---	---	---	---	78	44	60	29	17	22
7	---	---	---	---	---	---	80	36	54	24	13	19
8	---	---	---	---	---	---	66	20	41	24	13	18
9	---	---	---	---	---	---	150	17	53	24	12	17
10	---	---	---	---	---	---	90	31	54	24	11	16
11	---	---	---	---	---	---	66	34	52	16	9.1	12
12	---	---	---	---	---	---	130	36	59	16	7.3	11
13	---	---	---	---	---	---	90	51	71	16	8.6	12
14	---	---	---	---	---	---	130	62	90	17	6.9	11
15	---	---	---	---	---	---	90	53	69	24	6.9	12
16	---	---	---	---	---	---	73	36	52	140	20	67
17	---	---	---	---	---	---	61	31	46	58	19	36
18	---	---	---	---	---	---	57	29	40	43	24	34
19	---	---	---	---	---	---	58	29	38	48	23	33
20	---	---	---	---	---	---	38	19	26	45	19	31
21	---	---	---	33	8.5	---	34	15	23	46	19	31
22	---	---	---	36	5.3	17	31	16	23	52	16	30
23	---	---	---	99	12	32	49	15	27	49	21	33
24	---	---	---	98	26	67	53	24	35	40	19	28
25	---	---	---	340	44	99	54	23	33	>300	30	---
26	---	---	---	160	58	96	95	36	55	150	63	96
27	---	---	---	140	60	97	81	46	59	130	51	77
28	---	---	---	67	28	45	72	38	54	64	33	46
29	---	---	---	59	20	37	57	31	42	54	26	38
30	---	---	---	57	19	32	43	25	34	>300	26	---
31	---	---	---	73	18	34	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	320	15	58	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	190	---	120	55	79	350	99	140	280	56	110
2	280	150	210	78	35	53	170	78	110	260	69	130
3	170	96	130	55	26	39	>1,000	88	---	140	76	100
4	130	79	96	55	23	33	1,000	130	---	110	65	88
5	280	89	130	47	19	28	220	110	160	340	51	130
6	110	58	74	230	17	35	190	83	120	700	100	250
7	280	61	99	71	13	25	>1,000	68	---	400	150	230
8	77	44	56	36	11	19	320	94	140	160	81	110
9	200	39	57	24	9.6	16	>1,000	69	---	96	41	64
10	72	36	48	23	8.4	14	690	65	170	54	33	42
11	48	30	37	22	6.1	13	670	68	230	45	31	36
12	>300	25	---	26	7.0	12	230	97	160	42	29	33
13	160	60	84	24	6.6	13	360	77	140	37	25	30
14	73	34	48	62	5.3	17	270	64	95	33	24	28
15	44	22	30	53	16	30	89	55	73	73	23	29
16	35	22	28	35	12	22	84	51	67	32	21	26
17	42	17	23	29	11	19	75	46	62	34	20	25
18	>300	25	---	26	9.5	17	350	43	82	49	18	25
19	>300	190	---	>1,000	15	---	190	15	46	29	15	21
20	>300	---	---	970	54	240	---	---	---	23	14	17
21	270	110	180	84	24	43	---	---	---	27	12	18
22	160	89	120	40	16	26	---	---	---	170	14	32
23	120	68	87	210	12	58	---	---	---	34	19	25
24	140	60	81	230	47	87	---	---	---	26	11	18
25	370	54	98	180	38	93	---	---	---	16	9.9	12
26	>1,000	70	---	51	16	31	---	---	---	16	10	12
27	160	70	100	>1,000	12	---	500	24	120	16	9.1	12
28	88	48	67	>1,000	220	---	300	89	150	15	9.1	12
29	>1,000	43	---	>1,000	320	---	120	34	77	16	10	12
30	>1,000	100	---	>1,000	200	---	>1,000	39	---	22	8.7	13
31	---	---	---	260	120	180	>1,000	130	---	---	---	---
MONTH	---	---	---	1,000	5.3	---	---	---	---	700	8.7	56

> Actual value is known to be greater than the value shown.

06701970 SPRING CREEK ABOVE MOUTH NEAR SOUTH PLATTE, CO

LOCATION.--Lat 39°23'37", long 105°11'01", in SE¼SE¼ sec.35, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on right bank 0.9 mi upstream from mouth and 1.3 mi southwest of the community of South Platte.

DRAINAGE AREA.--9.79 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1997 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=06701970

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,320 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. No diversion or regulation upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 6,380 ft^3/s, Aug. 31, 1997, gage height, 13.45 ft, from slope-area measurement of peak flow; minimum daily, 0.23 ft^3/s, Aug. 14, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 3.8 ft^3/s (estimated) Apr. 4, gage height, 4.51 ft; minimum daily, 0.23 ft^3/s, Aug. 14.

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	0.59	---	---	---	---	---	e1.8	e2.0	e1.0	0.60	0.39	0.41
2	0.67	---	---	---	---	---	e1.7	e1.7	e0.97	0.59	0.39	0.36
3	0.69	---	---	---	---	---	e3.3	e1.7	e0.91	0.53	0.39	0.38
4	0.64	---	---	---	---	---	e3.5	e1.7	e0.93	0.53	0.39	0.38
5	0.61	---	---	---	---	---	e2.7	e1.6	e1.0	0.53	0.34	0.36
6	0.59	---	---	---	---	---	e2.5	e1.6	1.1	0.53	0.32	0.35
7	0.57	---	---	---	---	---	e2.1	e1.6	1.2	0.54	0.32	0.38
8	0.57	---	---	---	---	---	e2.3	e1.6	1.1	0.52	0.34	0.38
9	0.61	---	---	---	---	---	e2.3	e1.6	1.0	0.48	0.35	0.44
10	0.63	---	---	---	---	---	e2.3	e1.6	1.0	0.46	0.35	0.41
11	0.62	---	---	---	---	---	e2.1	e1.5	0.93	0.46	0.34	0.40
12	0.62	---	---	---	---	---	1.9	e1.3	0.92	0.46	0.33	0.38
13	0.63	---	---	---	---	---	2.1	e1.1	0.90	0.40	0.30	0.40
14	0.62	---	---	---	---	---	e2.3	e1.1	0.87	0.38	0.23	0.39
15	0.62	---	---	---	---	---	e2.2	e1.1	0.89	0.38	0.26	0.37
16	0.62	---	---	---	---	---	e2.1	e1.1	0.82	0.38	0.24	0.35
17	e0.62	---	---	---	---	---	e2.0	e1.3	0.76	0.36	0.26	0.34
18	e0.62	---	---	---	---	---	e2.0	e1.3	0.71	0.37	0.37	0.35
19	e0.62	---	---	---	---	---	e2.0	e1.2	0.70	0.63	0.41	0.37
20	e0.62	---	---	---	---	---	e2.1	e1.1	0.66	0.90	0.36	0.39
21	e0.62	---	---	---	---	---	e2.1	e1.1	0.62	0.68	0.35	0.38
22	e0.62	---	---	---	---	---	e2.0	e1.1	0.53	0.58	0.31	0.38
23	e0.62	---	---	---	---	---	e1.9	e1.2	0.52	0.49	0.32	0.37
24	e0.62	---	---	---	---	---	e1.9	e1.4	0.57	0.45	0.31	0.38
25	e0.62	---	---	---	---	---	e2.0	e1.3	0.64	0.46	0.30	0.42
26	e0.62	---	---	---	---	---	e1.9	e1.2	0.63	0.48	0.29	0.41
27	e0.65	---	---	---	---	---	e1.9	e1.2	0.61	0.48	0.27	0.42
28	e0.65	---	---	---	---	---	e2.0	e1.1	0.58	0.45	0.24	0.42
29	e0.65	---	---	---	---	---	e2.0	e1.0	0.62	0.48	0.26	0.43
30	e0.65	---	---	---	---	---	e2.0	e0.99	0.56	0.45	0.37	0.50
31	e0.69	---	---	---	---	---	---	e0.99	---	0.40	0.48	---
TOTAL	19.39	---	---	---	---	---	65.0	41.38	24.25	15.43	10.18	11.70
MEAN	0.63	---	---	---	---	---	2.17	1.33	0.81	0.50	0.33	0.39
MAX	0.69	---	---	---	---	---	3.5	2.0	1.2	0.90	0.48	0.50
MIN	0.57	---	---	---	---	---	1.7	0.99	0.52	0.36	0.23	0.34
AC-FT	38	---	---	---	---	---	129	82	48	31	20	23

e Estimated.

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

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1997 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=06701970

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

REMARKS.--None.

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

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.93 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	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.12
3	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.03	0.00
4	---	---	---	---	---	---	0.00	0.05	0.07	0.00	0.01	0.00
5	---	---	---	---	---	---	0.00	0.00	0.50	0.00	0.00	0.00
6	---	---	---	---	---	---	0.00	0.00	0.11	0.00	0.00	0.00
7	---	---	---	---	---	---	0.00	0.00	0.05	0.00	0.00	0.08
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.00	0.02	0.22	0.00	0.00	0.02
10	---	---	---	---	---	---	0.00	0.00	0.10	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
13	---	---	---	---	---	---	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
15	---	---	---	---	---	---	0.00	0.43	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.22	0.11	0.00
19	---	---	---	---	---	---	0.00	0.07	0.00	0.85	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.04	0.00	0.00	0.00	0.08	0.00
23	---	---	---	---	---	---	0.02	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.03	0.00	0.01	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.02	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.10	0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.93	0.00
31	---	---	---	---	---	---	---	0.06	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.06	0.63	1.24	1.08	1.20	0.22

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

LOCATION.--Lat 39°24'27", long 105°19'07", in NE¼SE¼ sec.27, T.7 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on left bank 500 ft upstream of Elk Creek and in the community of Pine.

DRAINAGE AREA.--310 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 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=06706400

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,720 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Transmountain diversions from Colorado River Basin enter above this station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 779 ft^3/s, June 9, 2001, gage height, 4.95 ft; minimum daily, 5.7 ft^3/s, Sept. 2, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 675 ft^3/s, June 1, gage height, 4.78 ft; minimum daily, 25 ft^3/s, Oct. 5, 6.

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	73	---	---	---	---	---	46	93	586	234	222	246
2	80	---	---	---	---	---	60	92	455	218	257	342
3	36	---	---	---	---	---	69	88	407	209	335	381
4	30	---	---	---	---	---	60	90	371	240	333	488
5	25	---	---	---	---	---	53	82	397	337	312	413
6	25	---	---	---	---	---	49	81	368	332	316	246
7	28	---	---	---	---	---	43	108	360	326	345	212
8	55	---	---	---	---	---	39	130	327	295	345	169
9	93	---	---	---	---	---	43	134	299	264	335	135
10	93	---	---	---	---	---	52	186	308	256	286	128
11	95	---	---	---	---	---	193	185	322	279	279	114
12	96	---	---	---	---	---	93	170	322	342	285	108
13	95	---	---	---	---	---	106	94	331	319	278	105
14	96	---	---	---	---	---	168	104	343	268	268	112
15	96	---	---	---	---	---	110	138	320	307	262	106
16	96	---	---	---	---	---	91	144	316	314	260	95
17	94	---	---	---	---	---	90	204	337	412	280	95
18	92	---	---	---	---	---	97	247	426	459	288	92
19	91	---	---	---	---	---	192	230	442	450	313	89
20	91	---	---	---	---	---	114	241	347	396	299	90
21	92	---	---	---	---	---	85	218	320	388	294	88
22	92	---	---	---	---	---	87	290	298	440	311	84
23	96	---	---	---	---	---	87	434	290	493	345	82
24	97	---	---	---	---	---	78	397	284	310	352	80
25	94	---	---	---	---	---	80	409	273	417	356	79
26	94	---	---	---	---	---	94	395	285	412	381	77
27	102	---	---	---	---	---	112	433	367	367	402	75
28	96	---	---	---	---	---	101	521	438	362	399	74
29	101	---	---	---	---	---	107	533	442	370	372	83
30	92	---	---	---	---	---	107	563	406	327	439	215
31	110	---	---	---	---	---	---	568	---	226	371	---
TOTAL	2,546	---	---	---	---	---	2,706	7,602	10,787	10,369	9,920	4,703
MEAN	82.1	---	---	---	---	---	90.2	245	360	334	320	157
MAX	110	---	---	---	---	---	193	568	586	493	439	488
MIN	25	---	---	---	---	---	39	81	273	209	222	74
AC-FT	5,050	---	---	---	---	---	5,370	15,080	21,400	20,570	19,680	9,330

06706400 NORTH FORK SOUTH PLATTE RIVER ABOVE ELK CREEK AT PINE, 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=06706400

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

REMARKS.--None.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.89 inches, Aug. 28, 2000 (occurred during period not published).

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.90 inches, June 29.

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	0.00	0.02	0.00	0.08	0.00
2	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.07	0.07
3	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.52	0.05
4	---	---	---	---	---	---	0.00	0.00	0.07	0.00	0.00	0.00
5	---	---	---	---	---	---	0.00	0.00	0.20	0.00	0.03	0.00
6	---	---	---	---	---	---	0.00	0.00	0.11	0.00	0.00	0.03
7	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.13
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.00	0.06	0.02	0.00	0.00	0.05
10	---	---	---	---	---	---	0.00	0.06	0.09	0.00	0.08	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.20	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.10	0.00	0.00	0.06
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.03	0.54	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.06	0.09	0.00
17	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.01	0.80	0.80	0.00
19	---	---	---	---	---	---	0.03	0.00	0.33	0.39	0.01	0.00
20	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.15	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.06	0.00
24	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.04	0.01	0.04	0.00
26	---	---	---	---	---	---	0.00	0.06	0.01	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.06	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.10	0.01	0.00
29	---	---	---	---	---	---	0.05	0.00	0.90	0.01	0.04	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.57	0.00
31	---	---	---	---	---	---	---	0.13	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.12	0.85	2.15	1.37	2.61	0.39

06706800 BUFFALO CREEK AT MOUTH AT BUFFALO CREEK, CO

LOCATION.--Lat 39°23'27", long 105°16'15", in SE¼SW¼ sec.31, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 0.2 mi downstream from State Highway 67, 0.5 mi upstream from mouth, and in the community of Buffalo Creek.

DRAINAGE AREA.--47.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 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=06706800

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,630 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is slightly regulated by Wellington Lake 7.2 mi upstream. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 3,400 ft^3/s, July 31, 2001, gage height, 10.80 ft; from high water marks; minimum daily, 0.49 ft^3/s, July 30, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 28 ft^3/s, Aug. 30-31, Oct. 1-2, gage height, 3.80 ft; minimum daily, 2.60 ft^3/s, June 23.

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	---	---	---	---	---	7.8	12	4.7	7.7	e4.7	19
2	25	---	---	---	---	---	9.6	11	4.0	7.1	e4.6	15
3	23	---	---	---	---	---	12	10	3.5	6.7	e7.0	5.2
4	23	---	---	---	---	---	13	10	3.4	7.4	e15	4.6
5	23	---	---	---	---	---	13	9.6	4.7	7.0	e15	4.2
6	23	---	---	---	---	---	12	9.0	4.0	6.3	15	4.0
7	22	---	---	---	---	---	10	8.4	4.3	6.4	15	4.3
8	22	---	---	---	---	---	9.4	8.1	3.5	6.4	15	4.5
9	22	---	---	---	---	---	9.9	7.9	2.7	5.7	15	4.1
10	23	---	---	---	---	---	12	7.4	e4.0	5.6	15	4.1
11	23	---	---	---	---	---	14	6.9	e4.8	5.5	16	3.9
12	23	---	---	---	---	---	16	6.4	4.8	5.3	21	3.8
13	22	---	---	---	---	---	18	5.3	5.2	5.2	20	3.9
14	22	---	---	---	---	---	19	4.7	5.1	5.0	20	4.0
15	22	---	---	---	---	---	19	5.0	4.3	5.1	21	3.7
16	14	---	---	---	---	---	17	7.6	4.7	4.9	21	3.6
17	14	---	---	---	---	---	16	6.1	5.7	4.7	21	3.4
18	14	---	---	---	---	---	15	5.8	13	e4.4	21	3.4
19	16	---	---	---	---	---	15	6.0	14	e4.4	21	3.5
20	17	---	---	---	---	---	13	5.7	6.7	e4.4	19	3.4
21	18	---	---	---	---	---	12	5.4	4.9	e4.5	19	3.3
22	18	---	---	---	---	---	12	4.9	3.5	e4.6	19	3.3
23	20	---	---	---	---	---	13	5.0	2.6	e4.6	20	3.2
24	23	---	---	---	---	---	13	5.1	2.9	e4.6	19	3.2
25	23	---	---	---	---	---	12	4.9	9.7	e5.1	18	3.1
26	5.3	---	---	---	---	---	12	4.6	9.5	e4.5	18	3.0
27	e4.0	---	---	---	---	---	13	4.7	8.9	e4.5	17	2.9
28	e4.0	---	---	---	---	---	13	4.9	8.3	e4.7	17	3.0
29	e3.0	---	---	---	---	---	13	4.9	8.4	e4.6	17	3.1
30	e3.0	---	---	---	---	---	12	4.3	8.3	e4.5	22	3.1
31	e3.0	---	---	---	---	---	---	4.4	---	e4.5	23	---
TOTAL	539.3	---	---	---	---	---	395.7	206.0	174.1	165.9	531.3	136.8
MEAN	17.4	---	---	---	---	---	13.2	6.65	5.80	5.35	17.1	4.56
MAX	25	---	---	---	---	---	19	12	14	7.7	23	19
MIN	3.0	---	---	---	---	---	7.8	4.3	2.6	4.4	4.6	2.9
AC-FT	1,070	---	---	---	---	---	785	409	345	329	1,050	271

e Estimated.

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

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1997 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=06706800

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

REMARKS.--None.

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

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 1.28 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	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.01	0.00
2	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04
3	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.09	0.02
4	---	---	---	---	---	---	0.00	0.06	0.08	0.00	0.00	0.00
5	---	---	---	---	---	---	0.00	0.00	0.34	0.00	0.01	0.00
6	---	---	---	---	---	---	0.00	0.00	0.12	0.00	0.00	0.01
7	---	---	---	---	---	---	0.00	0.00	0.05	0.00	0.02	0.13
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00	0.03
10	---	---	---	---	---	---	0.00	0.00	0.10	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.07	0.00
12	---	---	---	---	---	---	0.00	0.00	0.06	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.03
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.54	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.02	0.74	0.33	0.00
19	---	---	---	---	---	---	0.00	0.06	0.44	0.77	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.09	0.00
23	---	---	---	---	---	---	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
25	---	---	---	---	---	---	0.00	0.00	0.05	0.20	0.00	0.00
26	---	---	---	---	---	---	0.00	0.02	0.01	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.04	0.00	0.00
29	---	---	---	---	---	---	0.02	0.00	0.11	0.01	0.00	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	1.28	0.00
31	---	---	---	---	---	---	---	0.13	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.02	0.85	1.42	1.78	1.91	0.26

06707500 SOUTH PLATTE RIVER AT SOUTH PLATTE, CO

LOCATION.--Lat 39°24'33", long 105°10'10", in SE$^1/_4$ sec.25, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank at South Platte, 200 ft downstream from bridge on State Highway 75, and 400 ft downstream from North Fork South Platte River.

DRAINAGE AREA.--2,579 mi^2.

PERIOD OF RECORD.--July 1887 to September 1891, May to October 1892, October 1895 to September 1897, October 1898 to June 1900, October 1900 to September 1982, October 2001 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at" or "near Deansbury," "at Deansbury and Platte Canyon," "at" or "near Platte Canyon," prior to 1901, and "below North Fork, at South Platte" 1914. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06707500

REVISED RECORDS.--WSP 306: 1910. WSP 1310: 1887-91, 1893, 1896, 1900, 1904, 1915(M), 1922(M), 1936(M). WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,078.43 ft above NGVD of 1929. See WSP 1710 or 1730 for history of changes prior to Mar. 14, 1910.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions through Boreas Pass ditch, Homestake Pipeline, Harold D. Roberts tunnel, and Antero and Elevenmile Canyon Reservoirs, Cheesman Lake, diversions above station for irrigation of about 45,000 acres, and return flow from irrigated areas.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	402	249	247	e256	e205	e215	192	312	714	327	282	352
2	430	274	252	e264	e248	e211	232	295	619	300	303	526
3	363	272	246	e275	e250	e209	269	285	522	285	407	590
4	293	232	246	e255	e256	e198	272	282	478	289	392	712
5	230	234	260	e288	e250	224	254	265	524	399	374	691
6	222	230	257	e268	e226	252	228	250	506	393	366	590
7	221	232	263	e263	e215	255	214	273	488	389	402	691
8	233	318	266	e263	e240	257	202	288	459	366	426	750
9	269	291	267	e254	e246	258	202	278	413	323	428	667
10	278	289	285	e241	e270	261	273	329	413	317	379	605
11	303	283	291	e290	e258	264	409	323	422	322	376	595
12	305	238	296	e266	e248	266	391	312	417	397	427	578
13	306	248	299	e270	e271	268	378	237	422	383	415	572
14	300	253	306	e271	e281	248	439	235	431	318	404	578
15	262	250	304	e255	e257	228	369	263	402	369	399	568
16	257	240	287	e225	e247	229	340	308	395	380	396	551
17	257	240	282	e225	e246	231	335	321	399	457	416	549
18	286	237	276	e227	e251	255	329	362	509	508	423	538
19	286	231	e240	e247	e247	155	409	346	567	524	451	403
20	286	233	e221	e254	e248	159	357	354	478	476	396	399
21	286	236	e221	e251	e255	145	298	334	420	458	386	403
22	285	234	e237	e247	e250	130	300	356	388	483	396	452
23	288	250	e293	e251	e214	141	309	526	374	551	440	546
24	288	249	e231	e248	e257	161	309	481	351	450	447	512
25	286	251	e286	e233	e259	186	306	498	360	477	489	421
26	250	240	e272	e190	e262	199	319	481	360	512	504	412
27	253	250	e290	e170	e256	222	343	508	426	430	529	412
28	250	262	e251	e165	e232	197	337	589	492	462	583	409
29	252	253	e264	e164	---	160	341	600	499	445	568	395
30	243	250	e251	e153	---	160	330	648	505	411	600	419
31	244	---	e271	e238	---	172	---	670	---	304	652	---
TOTAL	8,714	7,549	8,258	7,467	6,945	6,516	9,286	11,609	13,753	12,505	13,456	15,886
MEAN	281	252	266	241	248	210	310	374	458	403	434	530
MAX	430	318	306	290	281	268	439	670	714	551	652	750
MIN	221	230	221	153	205	130	192	235	351	285	282	352
AC-FT	17,280	14,970	16,380	14,810	13,780	12,920	18,420	23,030	27,280	24,800	26,690	31,510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 2003, BY WATER YEAR (WY)

MEAN	250	171	124	116	113	134	335	729	869	683	590	355
MAX	664	407	266	244	248	476	1,955	2,979	3,047	1,855	1,694	1,900
(WY)	(1910)	(1924)	(2003)	(2002)	(2003)	(1910)	(1942)	(1942)	(1921)	(1914)	(1914)	(1909)
MIN	61.5	49.3	45.2	45.6	36.5	52.1	98.2	180	127	85.3	81.0	81.6
(WY)	(1903)	(1905)	(1940)	(1940)	(1933)	(1957)	(1912)	(1902)	(1902)	(1902)	(1902)	(1902)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		(a) WATER YEARS 1896 - 2003	
ANNUAL TOTAL	140,757		121,944			
ANNUAL MEAN	386		334		373	
HIGHEST ANNUAL MEAN					899	1914
LOWEST ANNUAL MEAN					119	1902
HIGHEST DAILY MEAN	748	Jun 1	750	Sep 8	6,140	Jun 7, 1921
LOWEST DAILY MEAN	167	Mar 1	130	Mar 22	b10	Dec 5, 1899
ANNUAL SEVEN-DAY MINIMUM	185	Feb 25	154	Mar 19	28	Feb 6, 1933
MAXIMUM PEAK FLOW			870	Aug 31	c6,320	Jun 8, 1921
MAXIMUM PEAK STAGE			3.82	Aug 31	8.95	Jun 8, 1921
ANNUAL RUNOFF (AC-FT)	279,200		241,900		270,100	
10 PERCENT EXCEEDS	660		512		810	
50 PERCENT EXCEEDS	291		288		223	
90 PERCENT EXCEEDS	214		226		80	

e Estimated.
a Water year 1983 to 2001 data were published by Colorado Division of Water Resources.
b Minimum daily determined.
c From rating curve extended above 3,500 ft^3/s. Flood of Jul 12, 1996 may have been higher; peak data being reviewed.

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

LOCATION.--Lat 39°25'28", long 104°54'27", in SE¼SE¼ sec.20, T.7 S., R.67 W., Douglas County, Hydrologic Unit 10190002, on right bank at the Plum Creek Wastewater Treatment Plant, 0.1 mi southwest of Happy Canyon Road, 3.0 mi south of Sedalia, and 3.6 mi northwest of Castle Rock.

DRAINAGE AREA.--117 mi^2.

PERIOD OF RECORD.--April 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=06708800

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,940 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Diversions upstream from station for irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	2.1	2.2	1.8	1.7	1.7	19	56	10	4.1	e4.5	7.5
2	1.9	2.1	2.1	2.6	1.8	2.2	22	51	7.0	4.4	e4.2	5.2
3	1.2	2.0	2.3	3.0	1.9	2.3	23	49	6.6	4.0	e7.0	4.0
4	1.2	2.0	2.3	2.5	2.3	2.1	23	46	8.8	3.9	e6.5	3.3
5	1.1	2.0	2.2	2.4	2.4	2.1	20	46	21	3.4	e6.0	2.5
6	1.2	1.9	2.3	2.3	2.3	1.8	20	44	11	3.7	e5.5	1.8
7	1.2	1.9	2.4	2.5	2.8	1.6	16	42	17	3.6	e5.5	3.2
8	1.1	1.8	2.5	2.1	2.5	1.8	14	39	11	3.7	e5.0	3.0
9	1.2	1.8	3.2	2.7	2.2	1.7	13	36	10	4.0	e5.0	1.4
10	1.2	1.8	3.3	4.5	2.1	1.6	12	38	9.6	4.2	e5.0	2.2
11	1.2	2.0	2.6	2.3	2.6	1.6	9.9	31	8.9	4.0	e20	1.9
12	1.3	1.8	2.9	3.4	3.4	1.5	11	25	6.7	4.0	e10	1.2
13	1.4	1.8	2.2	2.7	3.2	1.4	13	23	6.1	3.8	e5.0	1.3
14	1.4	1.9	2.4	2.3	3.4	1.5	19	23	5.4	2.5	4.1	1.4
15	1.6	1.9	2.5	2.4	5.3	1.4	26	27	4.9	2.6	2.8	2.5
16	1.6	1.8	2.9	2.7	4.6	1.5	27	27	3.5	2.5	5.1	1.5
17	1.5	1.7	2.3	1.8	4.3	2.1	25	24	9.7	3.1	3.3	1.2
18	1.7	1.7	2.2	2.2	4.5	2.6	25	19	9.3	3.4	5.6	1.3
19	1.9	1.7	2.1	2.3	4.3	1.5	41	18	7.0	46	4.9	1.4
20	1.8	1.7	2.4	2.1	3.7	6.0	28	19	7.7	e60	4.4	1.3
21	1.8	1.8	3.0	2.0	2.9	7.1	24	16	9.4	e10	4.7	0.98
22	2.0	1.8	3.4	1.7	3.1	9.4	24	13	8.5	e6.0	6.4	0.99
23	2.2	1.8	3.4	1.8	3.0	21	40	13	7.0	e5.0	8.2	1.2
24	2.5	1.9	3.2	1.7	5.4	19	72	13	6.2	e4.5	3.3	1.1
25	2.5	2.0	3.4	1.3	4.5	22	50	16	5.5	e4.5	2.3	1.1
26	2.3	2.1	2.7	1.6	2.2	26	48	15	4.9	e4.3	2.4	1.2
27	2.9	2.1	2.7	1.7	1.7	21	54	10	4.7	e4.2	2.4	1.3
28	2.4	2.0	1.9	1.7	1.7	17	61	7.5	5.0	e7.0	2.4	1.6
29	2.9	2.1	1.5	1.9	---	13	61	6.2	5.2	e6.0	2.2	1.5
30	2.3	2.1	1.5	1.9	---	16	59	5.9	4.2	e5.7	38	2.4
31	2.1	---	2.5	1.8	---	17	---	5.8	---	e5.0	38	---
TOTAL	54.0	57.1	78.5	69.7	85.8	228.5	899.9	804.4	241.8	233.1	229.7	62.47
MEAN	1.74	1.90	2.53	2.25	3.06	7.37	30.0	25.9	8.06	7.52	7.41	2.08
MAX	2.9	2.1	3.4	4.5	5.4	26	72	56	21	60	38	7.5
MIN	1.1	1.7	1.5	1.3	1.7	1.4	9.9	5.8	3.5	2.5	2.2	0.98
AC-FT	107	113	156	138	170	453	1,780	1,600	480	462	456	124

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2003, BY WATER YEAR (WY)

MEAN	5.57	5.84	5.83	5.87	6.46	8.43	20.9	37.4	18.5	7.80	9.12	6.28
MAX	11.0	11.5	10.6	10.0	9.04	15.0	31.4	109	61.2	21.6	29.0	14.6
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(1999)	(1999)	(1999)	(1999)	(1999)
MIN	1.74	1.90	2.53	2.25	3.06	4.48	3.17	3.57	4.77	2.51	1.46	2.08
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2001)	(2001)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1999 - 2003	
ANNUAL TOTAL	1,272.13		3,044.97			
ANNUAL MEAN	3.49		8.34		8.22	
HIGHEST ANNUAL MEAN					12.4	2000
LOWEST ANNUAL MEAN					3.93	2002
HIGHEST DAILY MEAN	43	Jun 19	72	Apr 24	410	Apr 30, 1999
LOWEST DAILY MEAN	0.33	Jun 23	0.98	Sep 21	0.33	Jun 23, 2002
ANNUAL SEVEN-DAY MINIMUM	0.64	Jun 22	1.1	Sep 20	0.64	Jun 22, 2002
MAXIMUM PEAK FLOW			561	Aug 30	a901	Jun 19, 2002
MAXIMUM PEAK STAGE			7.28	Aug 30	7.75	Jun 19, 2002
ANNUAL RUNOFF (AC-FT)	2,520		6,040		5,960	
10 PERCENT EXCEEDS	5.8		23		21	
50 PERCENT EXCEEDS	2.9		3.0		5.2	
90 PERCENT EXCEEDS	1.1		1.5		1.5	

e Estimated.
a From rating curve extended above 359 ft^3/s.

06709000 PLUM CREEK NEAR SEDALIA, CO

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

DRAINAGE AREA.--274 mi^2.

PERIOD OF RECORD.--June 1942 to September 1947. August 1990 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06709000.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,720 ft above NGVD of 1929, from topographic map. Aug. 1942 to Sept. 1947, water-stage recorder at site 150 ft upstream at different datum. Prior to Aug. 1942, nonrecording gage at bridge.

REMARKS.--Records poor. Diversions upstream from station for irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	8.1	4.9	6.2	5.6	4.0	55	156	39	12	4.2	13
2	12	9.4	4.7	6.4	5.3	4.5	68	124	32	7.4	2.7	10
3	10	10	4.8	6.6	5.1	4.3	69	102	24	7.0	9.0	6.4
4	12	9.8	5.3	6.3	4.5	3.5	62	91	22	4.4	9.2	8.7
5	8.9	7.1	5.4	6.9	3.8	4.1	65	83	57	4.6	3.1	8.8
6	5.0	7.6	4.7	7.0	3.3	4.6	65	74	42	3.8	2.5	7.0
7	3.4	4.9	5.1	7.3	4.1	4.1	52	64	47	3.5	2.1	7.3
8	4.7	4.3	5.2	6.9	4.7	3.6	48	61	38	3.0	3.6	8.1
9	5.2	6.3	5.1	5.0	4.2	3.8	48	53	34	2.2	3.7	6.9
10	4.3	7.2	3.8	5.8	4.8	3.2	49	62	34	3.8	3.5	6.9
11	4.0	5.4	5.0	5.3	4.1	2.8	54	51	35	2.1	61	4.3
12	3.7	6.8	5.1	5.8	4.8	2.4	69	46	33	2.9	28	3.6
13	5.5	7.6	4.5	6.3	5.7	3.2	89	42	32	2.6	6.6	2.6
14	5.8	7.6	5.8	6.0	6.1	2.7	112	40	30	1.8	4.2	4.6
15	3.9	7.0	6.6	5.5	6.2	2.8	137	43	27	1.6	2.6	5.5
16	5.0	6.7	e6.4	4.0	5.7	3.5	133	48	26	3.2	2.0	4.8
17	5.8	5.3	e6.0	5.2	5.7	3.6	122	43	35	2.6	3.1	3.3
18	4.1	5.8	e5.8	5.8	4.6	5.9	132	39	38	2.0	4.9	3.2
19	5.9	4.9	5.4	6.1	3.6	112	146	36	35	26	4.8	3.7
20	4.5	5.4	6.2	6.6	3.4	56	116	38	39	76	4.7	3.9
21	4.1	5.9	5.6	6.3	3.3	26	100	37	33	11	3.6	3.8
22	4.9	5.4	6.1	4.8	3.5	27	98	36	27	5.0	2.3	4.3
23	5.8	6.6	6.1	5.5	3.1	40	123	34	22	2.1	2.3	3.9
24	4.9	5.8	7.3	6.6	3.1	30	182	33	20	1.9	2.7	2.8
25	4.5	5.3	5.8	6.3	3.3	32	147	42	24	2.8	2.6	3.0
26	4.6	3.6	7.0	6.1	3.8	51	152	40	26	3.4	2.0	2.3
27	6.6	4.0	6.0	6.5	3.5	41	182	37	19	3.8	2.5	2.2
28	7.0	4.3	6.6	5.2	4.1	23	184	34	16	12	2.3	2.3
29	9.6	4.1	7.3	4.6	---	16	182	31	22	6.6	2.6	4.2
30	8.8	4.7	6.6	4.9	---	25	175	30	19	5.8	21	3.9
31	7.3	---	6.4	5.3	---	44	---	30	---	6.2	68	---
TOTAL	186.6	186.9	176.6	183.1	123.0	589.6	3,216	1,680	927	233.1	277.4	155.3
MEAN	6.02	6.23	5.70	5.91	4.39	19.0	107	54.2	30.9	7.52	8.95	5.18
MAX	12	10	7.3	7.3	6.2	112	184	156	57	76	68	13
MIN	3.4	3.6	3.8	4.0	3.1	2.4	48	30	16	1.6	2.0	2.2
AC-FT	370	371	350	363	244	1,170	6,380	3,330	1,840	462	550	308

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

MEAN	9.65	14.9	12.7	12.2	15.0	19.2	54.1	100	37.9	14.9	18.2	7.16
MAX	31.8	30.6	29.1	23.3	27.8	38.5	155	332	134	71.2	147	24.5
(WY)	(1943)	(1943)	(1943)	(2000)	(1944)	(1998)	(1998)	(1944)	(1947)	(1947)	(1945)	(2000)
MIN	1.32	3.34	5.00	4.09	4.39	6.62	12.3	5.06	2.70	1.59	0.020	0.000
(WY)	(1945)	(1945)	(1944)	(1997)	(2003)	(1995)	(2002)	(1946)	(1946)	(1996)	(1996)	(1943)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003	
ANNUAL TOTAL	3,014.53		7,934.6			
ANNUAL MEAN	8.26		21.7		26.4	
HIGHEST ANNUAL MEAN					58.3	1947
LOWEST ANNUAL MEAN					8.69	2002
HIGHEST DAILY MEAN	68	Jun 20	184	Apr 28	915	Aug 8, 1945
LOWEST DAILY MEAN	0.27	Sep 4	1.6	Jul 15	a0.00	Jul 11, 1943
ANNUAL SEVEN-DAY MINIMUM	0.41	Sep 2	2.4	Jul 12	0.00	Aug 29, 1943
MAXIMUM PEAK FLOW			658	Aug 11	b,c7,700	Aug 8, 1945
MAXIMUM PEAK STAGE			2.80	Aug 11	d6.52	Aug 8, 1945
ANNUAL RUNOFF (AC-FT)	5,980		15,740		19,160	
10 PERCENT EXCEEDS	15		61		53	
50 PERCENT EXCEEDS	6.6		6.0		13	
90 PERCENT EXCEEDS	2.1		3.1		2.0	

e Estimated.
a No flow many days, also during most years.
b Site and datum then in use, from rating curve extended above 350 ft^3/s on basis of slope-area determination of peak flow.
c Highest flood of actual record probably occurred Jun 16, 1965. Discharge computed at Plum Creek near Louviers was 154,000 cfs.
d Maximum gage height, 7.07 ft, Jan 15, 1993, backwater from ice.

06709530 PLUM CREEK AT TITAN ROAD NEAR LOUVIERS, CO

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

DRAINAGE AREA.--315 mi^2.

PERIOD OF RECORD.--May 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=06709530

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,520 ft above NGVD of 1929, from topographic map. Prior to July 10, 1996, at same site, but different datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	2.4	4.0	4.8	5.0	4.4	139	37	25	8.8	2.2	1.4
2	0.00	2.3	3.8	5.7	5.2	5.1	147	58	22	8.3	1.7	1.2
3	0.00	2.2	3.3	5.3	5.9	4.8	152	73	16	7.8	0.99	1.0
4	0.00	2.1	3.3	4.5	6.4	4.2	150	105	15	7.1	2.0	0.96
5	0.00	1.9	3.4	4.6	6.8	4.5	166	118	38	6.4	1.9	0.90
6	0.00	1.8	3.9	5.2	6.5	4.3	189	125	29	6.0	1.2	0.79
7	0.00	1.7	4.1	5.2	7.2	4.2	159	115	29	5.3	0.52	0.88
8	0.00	1.4	4.5	4.8	6.8	4.0	134	120	19	4.6	0.03	0.85
9	0.00	1.6	5.1	4.4	7.0	4.7	130	128	17	3.5	0.00	0.73
10	0.00	1.9	4.9	4.7	9.6	4.8	135	144	15	2.9	0.00	0.64
11	0.00	2.0	4.9	5.7	11	4.4	141	126	15	2.3	0.00	0.54
12	0.00	2.1	5.2	5.2	9.8	4.3	189	111	16	1.9	3.5	0.50
13	0.00	2.4	6.1	5.0	9.2	4.4	214	104	15	1.5	2.3	0.22
14	0.00	2.7	6.2	4.8	7.3	4.8	240	93	14	0.93	1.8	0.54
15	0.00	2.8	6.8	4.8	7.0	4.7	280	108	13	0.55	1.2	0.72
16	0.00	2.9	8.2	4.5	6.1	5.5	281	106	13	0.34	0.39	0.58
17	0.00	3.0	8.0	4.8	5.4	7.7	227	98	13	0.28	0.00	0.24
18	0.00	3.1	6.6	4.9	5.2	11	180	91	15	0.22	0.00	0.00
19	0.00	3.2	6.6	5.1	4.9	7.9	197	80	13	0.16	0.00	0.00
20	0.53	3.2	6.9	5.2	4.7	15	155	69	13	7.5	0.00	0.00
21	0.86	3.4	7.9	5.5	4.7	41	114	72	13	4.8	0.00	0.00
22	1.1	3.4	7.8	5.3	4.7	28	97	61	12	4.0	0.00	0.00
23	1.5	3.3	8.6	5.2	4.5	27	120	58	11	3.3	0.00	0.00
24	1.9	3.4	7.0	5.6	4.4	32	251	52	11	2.4	0.00	0.00
25	2.1	3.7	7.2	5.1	4.8	33	124	54	11	1.6	0.00	0.00
26	2.2	3.7	5.6	5.2	5.2	55	57	48	11	0.83	0.00	0.00
27	2.7	4.3	7.2	5.6	4.7	65	41	41	11	0.29	0.00	0.00
28	2.9	4.3	9.6	5.2	4.4	58	26	32	11	2.3	0.00	0.00
29	2.9	3.8	6.8	5.1	---	54	13	26	10	3.1	0.00	0.00
30	3.0	3.8	5.7	4.7	---	65	13	23	9.9	2.9	0.00	0.00
31	2.7	---	6.5	4.9	---	104	---	20	---	2.6	1.8	---
TOTAL	24.39	83.8	185.7	156.6	174.4	676.7	4,461	2,496	475.9	104.50	21.53	12.69
MEAN	0.79	2.79	5.99	5.05	6.23	21.8	149	80.5	15.9	3.37	0.69	0.42
MAX	3.0	4.3	9.6	5.7	11	104	281	144	38	8.8	3.5	1.4
MIN	0.00	1.4	3.3	4.4	4.4	4.0	13	20	9.9	0.16	0.00	0.00
AC-FT	48	166	368	311	346	1,340	8,850	4,950	944	207	43	25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2003, BY WATER YEAR (WY)

MEAN	11.3	16.3	14.1	13.6	16.1	25.5	73.0	155	45.5	15.0	14.9	5.77
MAX	71.8	75.9	44.3	32.1	42.7	62.1	184	779	135	66.5	63.4	31.1
(WY)	(1985)	(1985)	(1985)	(1998)	(1988)	(1988)	(1998)	(1984)	(1984)	(1995)	(1984)	(1984)
MIN	0.000	2.15	4.40	4.86	5.14	6.55	8.76	8.15	3.75	0.002	0.000	0.000
(WY)	(1995)	(1995)	(1996)	(1991)	(1990)	(1995)	(2002)	(2002)	(2002)	(1993)	(1993)	(1990)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1984 - 2003	
ANNUAL TOTAL	2,154.46		8,873.21			
ANNUAL MEAN	5.90		24.3		30.3	
HIGHEST ANNUAL MEAN					73.6	1999
LOWEST ANNUAL MEAN					7.26	2002
HIGHEST DAILY MEAN	33	Jun 20	281	Apr 16	1,770	May 15, 1984
LOWEST DAILY MEAN	0.00	Jun 1	0.00	Oct 1	a0.00	Jul 2, 1989
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 26	0.00	Oct 1	0.00	Jul 2, 1989
MAXIMUM PEAK FLOW			391	Apr 16	b2,900	Apr 30, 1999
MAXIMUM PEAK STAGE			7.89	Apr 16	c8.05	Apr 30, 1999
ANNUAL RUNOFF (AC-FT)	4,270		17,600		21,980	
10 PERCENT EXCEEDS	15		104		65	
50 PERCENT EXCEEDS	4.0		4.8		13	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

a No flow many days, most years.
b From rating curve extended above 450 ft^3/s.
c Maximum gage height, 10.63 ft, Jun 28, 1995, datum then in use.

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

LOCATION.--Lat 39°37'57", long 105°00'52", in SW¼NW¼ sec.9, T.5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on right bank 100 ft downstream from Englewood Water Treatment Plant, 200 ft downstream from Union Avenue bridge in Englewood, and 7.7 mi downstream from Chatfield Dam.

DRAINAGE AREA.--3,043 mi^2.

PERIOD OF RECORD.--February 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=06710247

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 5,290 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by Chatfield Reservoir (station 06709600) 7.7 mi upstream. Diversions for municipal use by City of Englewood 100 ft upstream from gage. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	17	6.8	22	7.3	12	163	562	254	107	157	238
2	57	16	7.0	22	8.6	14	147	383	348	242	83	226
3	18	16	6.3	20	18	15	129	358	313	208	47	201
4	17	15	6.5	18	12	11	118	285	205	79	156	228
5	13	13	6.7	19	9.1	14	118	223	148	79	198	237
6	12	14	6.5	18	11	12	133	216	92	134	66	239
7	15	13	5.8	8.8	8.7	11	118	193	185	173	125	144
8	14	11	5.9	9.5	8.1	10	253	171	55	76	111	139
9	16	9.6	6.5	7.1	9.9	10	468	115	68	73	55	184
10	19	11	5.3	6.6	12	11	472	260	242	69	66	260
11	18	11	5.2	8.0	11	9.4	332	259	317	25	149	214
12	17	8.7	4.8	8.8	9.5	10	227	267	289	17	193	120
13	22	8.6	4.8	9.4	13	9.8	226	260	277	16	129	56
14	23	11	4.9	8.2	13	9.7	178	222	238	31	127	54
15	24	9.4	5.8	8.5	26	8.8	178	149	111	112	109	52
16	22	8.6	11	6.9	15	9.4	426	182	218	118	39	48
17	23	9.9	6.4	6.6	12	48	343	230	225	121	38	43
18	22	9.3	6.9	6.6	11	63	249	207	327	129	37	30
19	21	8.0	5.0	7.3	11	39	397	245	206	184	24	24
20	22	7.5	5.5	7.0	10	94	283	279	88	179	37	21
21	22	6.8	6.8	7.0	9.8	126	314	281	251	145	34	22
22	21	7.0	7.4	6.5	10	147	439	215	285	154	25	19
23	21	7.8	8.2	6.1	11	172	400	66	278	171	17	20
24	22	7.7	16	6.5	11	161	435	146	301	141	14	47
25	24	9.3	19	7.2	10	367	363	271	268	44	27	60
26	24	7.2	19	7.9	16	429	365	322	188	47	97	102
27	28	5.9	19	8.2	14	373	351	348	159	112	112	103
28	23	7.1	19	7.0	13	283	405	325	143	186	122	105
29	31	7.2	21	7.4	---	231	563	330	144	359	151	104
30	20	6.5	20	8.3	---	254	675	441	125	363	195	91
31	25	---	20	7.6	---	240	---	358	---	189	166	---
TOTAL	673	300.1	299.0	308.0	331.0	3,204.1	9,268	8,169	6,348	4,083	2,906	3,431
MEAN	21.7	10.0	9.65	9.94	11.8	103	309	264	212	132	93.7	114
MAX	57	17	21	22	26	429	675	562	348	363	198	260
MIN	12	5.9	4.8	6.1	7.3	8.8	118	66	55	16	14	19
AC-FT	1,330	595	593	611	657	6,360	18,380	16,200	12,590	8,100	5,760	6,810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	51.1	43.3	35.1	37.6	45.1	68.8	167	350	373	260	217	70.8
MAX	111	83.5	76.4	73.6	81.7	112	403	932	1,222	550	485	114
(WY)	(1999)	(1998)	(1998)	(1998)	(2001)	(1998)	(1998)	(1998)	(1999)	(1999)	(1999)	(2003)
MIN	20.1	10.0	9.65	9.94	11.8	27.1	23.4	45.0	70.6	22.4	10.8	19.7
(WY)	(2002)	(2003)	(2003)	(2003)	(2003)	(1996)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	10,452.0		39,320.2			
ANNUAL MEAN	28.6		108		151	
HIGHEST ANNUAL MEAN					293	1999
LOWEST ANNUAL MEAN					29.3	2002
HIGHEST DAILY MEAN	169	May 24	675	Apr 30	1,940	Jun 18, 1999
LOWEST DAILY MEAN	4.8	Dec 12	4.8	Dec 12	3.3	Apr 24, 1996
ANNUAL SEVEN-DAY MINIMUM	5.3	Dec 9	5.3	Dec 9	5.3	Dec 9, 2002
MAXIMUM PEAK FLOW			809	Jul 29	2,150	May 28, 1999
MAXIMUM PEAK STAGE			13.00	Jul 29	14.19	May 28, 1999
ANNUAL RUNOFF (AC-FT)	20,730		77,990		109,400	
10 PERCENT EXCEEDS	65		287		378	
50 PERCENT EXCEEDS	19		37		65	
90 PERCENT EXCEEDS	7.2		7.2		13	

06710385 BEAR CREEK ABOVE EVERGREEN, CO

LOCATION.--Lat 39°37'58", long 105°20'10", in SE¼NE¼ sec.9, T.5 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on right bank 0.9 mi upstream from Evergreen Lake dam at Evergreen.

DRAINAGE AREA.--104 mi^2.

PERIOD OF RECORD.--August 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=06710385

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage 7,080 ft above NGVD of 1929, from topographic map. Prior to May 1, 1986, at site 800 ft downstream at different datum. May 1, 1986 to Apr. 2, 2001, at site 600 ft downstream at different datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.8	e10	e5.1	e4.6	e4.6	e4.8	e30	96	163	62	29	34
2	12	e10	e5.1	e4.6	e4.7	e4.8	e94	89	114	59	30	29
3	12	e10	e5.1	e4.6	e4.8	e4.8	e84	85	105	57	28	33
4	12	e10	e5.1	e4.6	e4.7	e4.8	49	82	101	55	37	41
5	10	e10	e5.1	e4.6	e4.6	e4.8	45	72	110	52	28	31
6	10	e11	e5.5	e4.6	e4.8	e5.0	42	68	106	51	26	29
7	9.9	e11	e5.3	e4.6	e4.7	e5.0	37	65	108	49	26	45
8	10	e10	e5.3	e4.6	e4.7	e5.1	43	63	96	47	26	51
9	10	e10	e5.1	e4.6	e4.6	e5.2	46	62	90	43	27	44
10	9.8	e9.1	e5.1	e4.6	e4.6	e5.2	64	65	92	42	27	40
11	9.2	e9.1	e5.3	e4.6	e4.6	e5.3	73	61	89	41	23	35
12	9.0	e8.6	e5.0	e4.7	e4.6	e5.4	81	61	88	39	23	33
13	8.9	e8.6	e5.0	e4.7	e4.7	e5.5	100	67	87	37	e24	33
14	8.9	e8.5	e5.0	e4.7	e4.7	e5.6	120	70	90	35	e20	34
15	8.8	e8.3	e5.0	e4.7	e4.7	e5.6	125	80	83	35	18	33
16	9.0	e8.5	e4.9	e4.7	e4.7	e5.7	113	77	81	34	18	30
17	8.8	e8.0	e4.7	e4.7	e4.6	e6.8	113	96	81	36	22	29
18	9.1	e7.6	e4.7	e4.7	e4.6	e35	110	101	84	34	22	28
19	8.6	e7.1	e4.7	e4.7	e4.6	e60	103	95	92	43	22	28
20	8.6	e6.8	e4.6	e4.7	e4.7	e20	90	88	93	41	18	27
21	8.6	e6.5	e4.6	e4.7	e4.7	e15	82	84	86	39	17	26
22	8.6	e6.3	e4.6	e4.7	e4.7	e15	85	90	80	34	17	25
23	8.8	e6.0	e4.6	e4.7	e4.8	e15	86	98	77	32	21	25
24	10	e6.1	e4.6	e4.7	e4.9	e15	83	112	76	33	22	24
25	9.0	e5.8	e4.7	e4.7	e4.8	e15	81	118	76	31	21	23
26	9.4	e5.6	e4.7	e4.7	e4.9	e17	92	107	72	30	20	22
27	10	e5.6	e4.6	e4.7	e4.8	e20	102	116	68	31	17	21
28	9.1	e5.3	e4.6	e4.6	e4.8	e17	106	138	65	34	19	22
29	10	e5.0	e4.6	e4.6	---	e17	108	137	66	56	18	21
30	e10	e4.8	e4.6	e4.6	---	e18	105	152	69	37	66	21
31	e10	---	e4.6	e4.5	---	e18	---	140	---	32	47	---
TOTAL	297.9	239.2	151.5	144.1	131.7	386.4	2,492	2,835	2,688	1,281	779	917
MEAN	9.61	7.97	4.89	4.65	4.70	12.5	83.1	91.5	89.6	41.3	25.1	30.6
MAX	12	11	5.5	4.7	4.9	60	125	152	163	62	66	51
MIN	8.6	4.8	4.6	4.5	4.6	4.8	30	61	65	30	17	21
AC-FT	591	474	301	286	261	766	4,940	5,620	5,330	2,540	1,550	1,820

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

MEAN	27.4	22.1	15.5	13.0	12.2	15.7	37.6	94.0	98.7	57.1	49.8	33.0
MAX	85.1	56.2	32.8	19.6	18.2	26.7	89.7	238	280	134	129	54.2
(WY)	(1985)	(1985)	(1985)	(1998)	(1996)	(1992)	(1987)	(1998)	(1995)	(1995)	(1999)	(1997)
MIN	9.61	7.97	4.89	4.65	4.70	9.57	13.9	12.2	10.7	5.38	8.24	9.66
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(1995)	(1991)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1984 - 2003	
ANNUAL TOTAL	3,368.1		12,342.8			
ANNUAL MEAN	9.23		33.8		39.8	
HIGHEST ANNUAL MEAN					70.5	1998
LOWEST ANNUAL MEAN					11.0	2002
HIGHEST DAILY MEAN	21	May 26	163	Jun 1	421	Jun 18, 1995
LOWEST DAILY MEAN	2.6	Sep 8	e4.5	Jan 31	2.6	Sep 8, 2002
ANNUAL SEVEN-DAY MINIMUM	3.3	Jul 15	e4.6	Dec 27	3.3	Jul 15, 2002
MAXIMUM PEAK FLOW			216	Jun 1	573	Jun 18, 1995
MAXIMUM PEAK STAGE			5.94	Jun 1	a5.39	Jun 18, 1995
ANNUAL RUNOFF (AC-FT)	6,680		24,480		28,840	
10 PERCENT EXCEEDS	14		92		89	
50 PERCENT EXCEEDS	9.1		18		24	
90 PERCENT EXCEEDS	4.7		4.7		10	

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

06710500 BEAR CREEK AT MORRISON, CO

LOCATION.--Lat 39°39'11", long 105°11'43", in SE¼SW¼ sec.35, T.4 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank at Morrison, 180 ft upstream from bridge on State Highway 8, and 0.2 mi upstream from Mount Vernon Creek.

DRAINAGE AREA.--164 mi^2.

PERIOD OF RECORD.--September 1887 to September 1891, May 1895 to December 1901, February 1902 (gage heights only), October 1919 to current year. No winter records for water years 1888-90, 1896, 1898, 1900. Monthly discharge only for some periods, published in WSP 1310. Published as "near Morrison" 1900-1902, as "at Starbuck" 1919-28, and as "at Idledale" 1929-34. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06710500

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

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 5,780.43 ft above NGVD of 1929. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1934. Oct. 1, 1934 to Oct. 10, 1961, water-stage recorder at site 80 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Small diversions for irrigation of about 1,000 acres upstream from station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	11	e4.6	e9.4	e7.0	92	162	177	62	30	39
2	25	14	12	e4.3	e9.0	e7.8	142	149	133	58	30	31
3	22	14	11	e5.6	e8.7	e8.2	152	137	114	54	28	35
4	19	13	10	e6.7	e7.0	7.9	137	131	110	52	38	44
5	18	14	e7.0	e6.9	e8.5	7.5	116	116	124	50	28	35
6	16	12	e7.2	e7.7	e9.0	8.9	105	108	115	50	24	31
7	15	12	e7.9	e7.2	e7.0	10	92	103	121	49	24	40
8	15	13	e8.1	e7.6	e8.0	13	84	99	103	47	25	57
9	15	15	e6.3	e7.2	e9.0	13	100	98	94	42	25	46
10	15	12	e5.7	e6.2	e10	14	139	107	97	41	26	43
11	14	10	e7.6	e8.0	e8.2	15	183	100	93	39	23	38
12	13	9.8	e7.4	e8.0	e7.0	17	206	95	91	39	22	36
13	13	12	e6.9	e7.5	e8.8	17	234	96	91	38	20	36
14	12	13	e8.8	e7.8	e9.7	18	265	100	93	35	19	38
15	12	12	e8.9	e7.4	e11	19	276	113	84	35	19	36
16	11	11	e8.0	e7.3	e9.7	17	236	131	82	36	18	33
17	11	13	e8.2	e7.8	e9.2	19	225	130	82	38	20	29
18	12	12	e8.6	e5.7	e8.7	14	215	139	86	35	26	31
19	11	10	e6.0	e7.9	e9.0	8.7	215	133	92	44	27	30
20	11	11	e4.0	e7.0	e7.8	15	192	125	97	44	21	30
21	10	12	e4.0	e7.9	e9.1	20	169	116	89	43	17	27
22	11	11	e4.7	e6.5	e8.7	30	167	117	79	38	18	26
23	11	12	e3.0	e7.9	e6.0	32	173	122	77	34	24	26
24	11	11	e2.9	e8.3	e5.0	34	169	137	76	33	28	24
25	12	9.1	e4.8	e8.0	e7.0	31	158	142	77	31	23	23
26	11	7.7	e2.0	e7.7	e7.5	45	161	131	73	30	22	22
27	11	8.7	e2.0	e9.2	e7.5	56	175	134	68	30	20	22
28	12	11	e3.0	e8.7	e6.5	44	177	150	65	35	19	22
29	13	12	e2.8	e8.8	---	35	185	142	65	55	21	22
30	11	12	e2.9	e9.0	---	40	180	161	69	44	66	22
31	9.5	---	e3.7	e8.8	---	55	---	148	---	35	58	---
TOTAL	413.5	351.3	196.4	229.2	232.0	679.0	5,120	3,872	2,817	1,296	809	974
MEAN	13.3	11.7	6.34	7.39	8.29	21.9	171	125	93.9	41.8	26.1	32.5
MAX	25	15	12	9.2	11	56	276	162	177	62	66	57
MIN	9.5	7.7	2.0	4.3	5.0	7.0	84	95	65	30	17	22
AC-FT	820	697	390	455	460	1,350	10,160	7,680	5,590	2,570	1,600	1,930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1900 - 2003, BY WATER YEAR (WY)

MEAN	30.8	23.4	16.9	13.8	14.3	20.2	54.4	146	135	71.0	63.3	43.1
MAX	115	86.7	57.0	34.0	36.0	48.3	296	525	551	249	307	371
(WY)	(1985)	(1924)	(1924)	(1924)	(1924)	(1960)	(1942)	(1973)	(1949)	(1949)	(1923)	(1938)
MIN	9.52	9.59	6.34	5.19	4.00	4.00	13.1	12.4	10.5	3.03	3.96	5.41
(WY)	(1935)	(1957)	(2003)	(1950)	(1933)	(1933)	(1982)	(1963)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1900 - 2003	
ANNUAL TOTAL	3,795.36		16,989.4			
ANNUAL MEAN	10.4		46.5		52.3	
HIGHEST ANNUAL MEAN					125	1942
LOWEST ANNUAL MEAN					12.0	2002
HIGHEST DAILY MEAN	e36	Sep 13	276	Apr 15	1,410	May 7, 1969
LOWEST DAILY MEAN	0.62	Jul 20	e2.0	Dec 26	0.62	Jul 20, 2002
ANNUAL SEVEN-DAY MINIMUM	1.0	Jul 28	e2.9	Dec 24	1.0	Jul 28, 2002
MAXIMUM PEAK FLOW			312	Apr 15	e8,600	Jul 24, 1896
MAXIMUM PEAK STAGE			7.24	Apr 15		
ANNUAL RUNOFF (AC-FT)	7,530		33,700		37,880	
10 PERCENT EXCEEDS	16		133		117	
50 PERCENT EXCEEDS	11		22		25	
90 PERCENT EXCEEDS	2.6		7.2		11	

e Estimated.

06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO

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

DRAINAGE AREA.--176 mi^2.

PERIOD OF RECORD.--May 1986 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06710605

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage 5,645 ft above NGVD of 1929, from topographic map. Prior to Apr. 21, 1989, at datum 3.37 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions to Harriman Canal, and Ward Canal, 0.7 mi upstream from gage. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.0	0.10	e0.14	e0.25	e0.20	38	53	154	45	6.1	18
2	14	1.9	0.26	0.14	0.15	e0.22	109	30	119	27	8.6	12
3	6.2	0.67	0.31	0.11	0.22	e0.20	101	16	79	13	8.0	15
4	1.1	0.44	0.31	0.14	0.17	e0.21	35	9.1	55	11	14	24
5	0.75	1.0	0.20	0.15	e0.14	e0.22	3.8	6.6	69	4.2	6.3	14
6	0.57	1.4	0.17	0.17	e0.15	e0.26	4.4	5.8	65	4.0	5.4	8.6
7	0.76	1.2	0.11	0.13	e0.14	1.1	5.1	3.5	70	2.9	6.4	16
8	3.0	1.0	0.12	e0.18	0.15	2.1	3.9	7.0	54	2.9	8.6	33
9	4.7	0.69	0.16	e0.20	e0.14	1.1	11	10	45	2.6	8.0	22
10	4.3	0.60	0.27	e0.21	e0.13	0.91	41	51	45	4.1	8.3	19
11	3.6	1.1	0.27	e0.17	e0.14	0.76	45	62	40	4.1	6.1	17
12	3.1	1.1	0.24	e0.12	e0.15	1.2	89	34	38	3.9	6.2	14
13	3.0	1.4	0.26	e0.11	0.22	2.3	159	18	36	3.6	7.0	13
14	2.0	0.89	e0.22	e0.14	0.19	0.40	184	21	37	3.1	7.1	15
15	3.7	0.43	e0.18	e0.16	0.17	0.45	206	38	30	8.3	8.1	14
16	3.8	0.34	e0.14	e0.18	0.20	0.37	186	80	48	13	6.8	11
17	4.1	0.50	e0.12	e0.19	0.17	0.59	144	106	56	14	9.2	9.2
18	5.4	0.40	e0.10	0.18	0.19	47	115	125	39	10	15	11
19	5.1	0.35	e0.08	e0.15	e0.19	76	100	92	32	18	13	12
20	4.6	0.45	e0.11	e0.12	e0.19	15	79	71	34	18	6.9	13
21	4.5	0.44	e0.12	e0.12	e0.19	0.85	61	61	25	16	5.6	11
22	4.9	0.40	e0.12	0.16	e0.20	0.61	50	61	14	11	7.4	11
23	5.3	0.38	e0.13	e0.23	e0.18	0.78	47	64	14	8.3	13	11
24	5.4	0.49	e0.13	0.23	e0.20	0.74	51	91	16	10	15	9.4
25	5.8	0.33	e0.14	0.26	e0.19	1.4	47	128	16	10	8.5	9.3
26	5.5	0.28	e0.15	0.16	e0.20	3.5	51	122	39	9.9	8.8	8.4
27	5.5	0.26	e0.14	0.19	e0.19	7.8	58	125	52	10	7.7	8.2
28	5.0	0.17	e0.13	e0.26	e0.20	2.5	61	137	48	13	7.1	8.5
29	5.6	0.12	e0.15	0.20	---	2.3	70	131	49	31	8.0	8.6
30	3.8	0.12	e0.15	0.22	---	2.1	67	145	51	17	51	8.8
31	0.94	---	e0.14	0.29	---	2.3	---	136	---	7.6	39	---
TOTAL	128.22	20.85	5.23	5.41	5.00	175.47	2,222.2	2,040.0	1,469	356.5	336.2	405.0
MEAN	4.14	0.69	0.17	0.17	0.18	5.66	74.1	65.8	49.0	11.5	10.8	13.5
MAX	14	2.0	0.31	0.29	0.25	76	206	145	154	45	51	33
MIN	0.57	0.12	0.08	0.11	0.13	0.20	3.8	3.5	14	2.6	5.4	8.2
AC-FT	254	41	10	11	9.9	348	4,410	4,050	2,910	707	667	803

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2003, BY WATER YEAR (WY)

MEAN	15.8	15.7	16.6	15.2	14.5	17.2	49.0	119	104	41.4	34.2	19.4
MAX	38.8	44.9	33.8	32.3	25.1	47.0	191	382	512	216	127	58.7
(WY)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(1998)	(1995)	(1995)	(1999)	(1997)
MIN	4.14	0.38	0.17	0.17	0.18	1.26	2.83	2.40	1.51	1.21	2.27	1.76
(WY)	(2003)	(1990)	(2003)	(2003)	(2003)	(1995)	(1989)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1986 - 2003	
ANNUAL TOTAL	1,170.09		7,169.08			
ANNUAL MEAN	3.21		19.6		39.0	
HIGHEST ANNUAL MEAN					96.1	1995
LOWEST ANNUAL MEAN					5.14	2002
HIGHEST DAILY MEAN	15	Jun 5	206	Apr 15	684	Jun 18, 1995
LOWEST DAILY MEAN	0.07	Sep 3	e0.08	Dec 19	0.07	Sep 3, 2002
ANNUAL SEVEN-DAY MINIMUM	0.11	Dec 17	e0.11	Dec 17	0.11	Dec 17, 2002
MAXIMUM PEAK FLOW			324	Apr 16	841	Jun 9, 1995
MAXIMUM PEAK STAGE			5.69	Apr 16	6.45	Jun 9, 1995
ANNUAL RUNOFF (AC-FT)	2,320		14,220		28,260	
10 PERCENT EXCEEDS	8.5		61		83	
50 PERCENT EXCEEDS	1.7		5.1		18	
90 PERCENT EXCEEDS	0.26		0.15		2.4	

e Estimated.

06710992 TURKEY CREEK NEAR INDIAN HILLS, CO

LOCATION.--Lat 39°37'03", long 105°13'24", in SE¼NE¼ sec.16, T.5 S., R.70 W. , Jefferson County, Hydrologic Unit 10190002, on left bank 0.5 mi downstream from Parmalee Gulch and 1.0 mi east of Indian Hills.

DRAINAGE AREA.--45.9 mi^2.

PERIOD OF RECORD.--April 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=06710992

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, which are poor.

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	0.78	1.1	e0.36	e0.22	e0.32	e1.5	e43	56	17	3.0	0.62	1.2
2	3.7	1.1	e0.31	e0.22	e0.32	e2.0	e63	43	16	2.5	0.37	0.72
3	3.3	1.1	e0.27	e0.24	e0.32	e1.5	e60	31	15	2.1	0.47	0.85
4	2.1	1.1	e0.25	e0.24	e0.32	e2.0	e51	27	14	1.9	1.7	0.85
5	1.7	e1.2	e0.21	e0.25	e0.32	e2.0	e42	23	18	1.6	1.3	0.58
6	1.5	e1.1	e0.19	e0.26	e0.31	e2.0	e36	e38	16	1.6	0.86	0.42
7	1.3	e0.95	e0.18	e0.26	e0.32	e2.0	e29	e37	18	1.5	0.62	0.53
8	1.3	e0.95	e0.17	e0.27	e0.34	e3.5	e29	e38	14	1.5	0.40	0.79
9	1.3	e0.95	e0.17	e0.29	e0.33	e3.3	e29	e41	12	1.2	0.41	0.67
10	1.2	e0.95	e0.16	e0.31	e0.33	e3.0	e34	e64	12	1.0	0.25	0.47
11	1.1	e1.0	e0.16	e0.32	e0.33	e2.9	e36	e55	10	0.88	0.14	0.34
12	1.0	e1.0	e0.15	e0.32	e0.36	e2.9	e45	e52	8.9	0.79	0.11	0.25
13	0.99	e1.1	e0.15	e0.32	e0.37	e3.2	e48	e52	8.2	0.66	0.11	0.28
14	1.0	e1.0	e0.14	e0.34	e0.41	e3.5	e68	e49	8.2	0.56	0.11	0.38
15	1.1	e0.95	e0.13	e0.32	e0.43	e3.6	e70	e50	7.2	0.48	0.10	0.40
16	1.0	e0.88	e0.13	e0.34	e0.41	e3.9	e62	63	6.9	0.44	0.10	0.29
17	1.0	e0.88	e0.14	e0.35	e0.41	e4.3	e60	41	6.8	0.41	0.10	0.19
18	1.0	e0.81	e0.17	e0.34	e0.42	e9.4	e63	40	6.5	0.32	0.46	0.21
19	0.96	e0.74	e0.19	e0.35	e0.42	e46	76	40	6.1	0.93	0.19	0.21
20	0.95	e0.81	e0.16	e0.34	e0.42	e28	142	40	5.9	0.83	0.10	0.19
21	0.94	e0.74	e0.17	e0.33	e0.44	e11	120	32	5.9	0.61	0.08	0.16
22	0.95	e0.74	e0.18	e0.34	e0.43	e8.3	97	25	4.8	0.37	0.08	0.13
23	1.0	e0.81	e0.17	e0.32	e0.42	e10	90	23	4.3	0.26	0.08	0.11
24	0.95	e0.78	e0.17	e0.32	e0.43	e10	98	22	4.3	0.22	0.08	0.10
25	1.0	e0.72	e0.18	e0.31	e0.44	e12	84	21	4.8	0.20	0.26	0.09
26	1.2	e0.59	e0.18	e0.31	e0.43	e17	79	20	4.3	0.19	0.15	0.06
27	1.1	e0.45	e0.19	e0.31	e1.0	e20	73	19	3.7	0.18	0.08	0.05
28	1.1	e0.41	e0.19	e0.30	e0.89	e17	73	19	3.2	0.79	0.06	0.05
29	1.2	e0.41	e0.20	e0.32	---	e16	74	18	3.1	0.76	0.06	0.06
30	1.1	e0.39	e0.21	e0.31	---	e19	70	17	4.0	1.1	0.98	0.09
31	1.1	---	e0.21	e0.32	---	e27	---	17	---	1.1	2.4	---
TOTAL	39.92	25.71	5.84	9.39	11.69	297.8	1,944	1,113	269.1	29.98	12.83	10.72
MEAN	1.29	0.86	0.19	0.30	0.42	9.61	64.8	35.9	8.97	0.97	0.41	0.36
MAX	3.7	1.2	0.36	0.35	1.0	46	142	64	18	3.0	2.4	1.2
MIN	0.78	0.39	0.13	0.22	0.31	1.5	29	17	3.1	0.18	0.06	0.05
AC-FT	79	51	12	19	23	591	3,860	2,210	534	59	25	21

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

MEAN	0.85	0.84	0.36	0.32	0.51	5.49	33.3	18.4	4.14	0.68	0.65	0.55
MAX	1.29	0.86	0.54	0.33	0.60	9.61	64.8	35.9	8.97	1.07	1.52	0.70
(WY)	(2003)	(2003)	(2002)	(2002)	(2002)	(2003)	(2003)	(2003)	(2003)	(2001)	(2001)	(2002)
MIN	0.42	0.83	0.19	0.30	0.42	1.38	1.90	1.65	0.43	0.000	0.001	0.36
(WY)	(2002)	(2002)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2001 - 2003	
ANNUAL TOTAL	283.34		3,769.98			
ANNUAL MEAN	0.78		10.3		5.53	
HIGHEST ANNUAL MEAN					10.3	2003
LOWEST ANNUAL MEAN					0.73	2002
HIGHEST DAILY MEAN	5.8	May 26	142	Apr 20	142	Apr 20, 2003
LOWEST DAILY MEAN	0.00	Jun 26	0.05	Sep 27	a0.00	Jun 26, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Jun 26	0.07	Sep 24	0.00	Jun 26, 2002
MAXIMUM PEAK FLOW			264	Apr 20	264	Apr 20, 2003
MAXIMUM PEAK STAGE			5.38	Apr 20	5.38	Apr 20, 2003
ANNUAL RUNOFF (AC-FT)	562		7,480		4,010	
10 PERCENT EXCEEDS	2.0		40		16	
50 PERCENT EXCEEDS	0.64		0.95		0.63	
90 PERCENT EXCEEDS	0.00		0.17		0.01	

e Estimated.
a No flow on many days in 2002.

06711500 BEAR CREEK AT MOUTH, AT SHERIDAN, CO

LOCATION.--Lat 39°39'08", long 105°01'57", in NW¼NW¼ sec.5, T.5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on left bank just downstream from bridge on road to Fort Logan Mental Health Center, at Highway Department maintenance building at northwest city limits of Sheridan, 1.3 mi upstream from mouth, and 2.1 mi west of city hall in Englewood.

DRAINAGE AREA.--260 mi^2.

PERIOD OF RECORD.--April to November 1914, March 1927 to current year. Monthly discharge only prior to October 1933, published in WSP 1310. Published as "at Sheridan Junction" 1934-41. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06711500

REVISED RECORDS.--WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,295 ft above NGVD of 1929, from topographic map. See WSP 1710 or 1730 for history of changes prior to Oct. 9, 1953. Oct. 9, 1953 to Aug. 6, 1969, water-stage recorder at present site at datum 1.0 ft higher.

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	8.4	4.6	3.6	4.4	e3.7	35	153	178	49	15	51
2	13	8.7	4.6	3.5	4.1	e4.7	33	146	155	44	13	44
3	3.8	8.8	4.7	3.5	6.0	e3.8	64	144	118	21	12	41
4	3.0	8.5	4.3	3.5	4.0	3.5	104	142	81	19	13	40
5	3.6	8.2	4.1	3.7	3.9	3.2	102	84	91	13	14	40
6	4.3	8.1	4.0	e3.6	3.8	3.2	104	18	96	8.9	11	30
7	4.1	5.0	3.9	3.5	e3.7	3.3	99	16	104	6.8	8.5	28
8	4.3	4.6	3.9	3.6	e3.5	3.3	97	22	83	5.8	8.7	34
9	3.5	4.5	3.9	3.6	3.5	3.2	80	50	69	4.3	10	32
10	3.4	4.8	3.6	3.6	e3.5	3.1	63	94	64	3.5	9.8	27
11	2.5	4.9	3.6	e3.4	3.5	3.2	64	72	52	4.3	9.0	23
12	1.9	5.0	3.7	e3.2	3.5	3.3	78	115	43	4.9	7.4	21
13	2.1	5.3	3.8	3.3	3.5	3.5	142	116	42	5.0	7.4	20
14	2.1	5.4	3.8	3.3	4.2	5.3	269	76	43	3.8	6.7	20
15	2.4	5.4	3.8	3.3	6.2	6.0	296	32	40	3.3	6.8	18
16	2.3	5.3	3.8	3.4	4.0	6.3	308	45	37	6.7	7.2	16
17	2.9	5.1	3.8	3.4	3.9	21	270	125	59	9.9	7.3	13
18	3.0	5.2	3.8	3.4	3.6	19	227	168	59	19	15	13
19	2.5	5.2	3.7	3.4	3.9	17	257	160	46	15	20	15
20	2.8	4.8	3.9	3.3	3.5	24	198	126	49	19	15	15
21	2.7	4.8	3.8	3.5	3.5	31	190	112	41	19	11	15
22	2.9	4.8	3.7	3.6	3.6	30	176	101	31	15	15	14
23	2.7	5.1	3.8	3.6	e3.7	36	166	99	22	13	20	14
24	2.8	5.4	e3.8	3.6	e3.6	30	201	106	22	9.6	27	13
25	3.1	5.3	e3.8	3.5	e3.3	48	164	150	23	10	26	13
26	4.9	4.9	e3.8	3.5	e3.9	52	155	155	28	11	22	11
27	4.8	4.9	3.8	3.6	e3.9	44	151	150	48	11	23	10
28	5.1	4.6	3.8	11	e4.1	36	151	155	49	14	21	10
29	11	4.6	3.8	9.8	---	33	154	151	49	45	24	11
30	6.9	4.6	3.7	13	---	36	161	161	52	43	84	12
31	8.1	---	3.6	12	---	39	---	158	---	24	89	---
TOTAL	130.2	170.2	120.7	139.8	109.8	558.6	4,559	3,402	1,874	480.8	578.8	664
MEAN	4.20	5.67	3.89	4.51	3.92	18.0	152	110	62.5	15.5	18.7	22.1
MAX	13	8.8	4.7	13	6.2	52	308	168	178	49	89	51
MIN	1.9	4.5	3.6	3.2	3.3	3.1	33	16	22	3.3	6.7	10
AC-FT	258	338	239	277	218	1,110	9,040	6,750	3,720	954	1,150	1,320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2003, BY WATER YEAR (WY)

MEAN	23.5	23.2	21.5	19.7	19.1	22.2	54.9	152	103	37.3	38.9	24.9
MAX	151	99.8	61.3	46.3	43.5	94.4	394	859	630	238	255	256
(WY)	(1985)	(1985)	(1985)	(1970)	(1942)	(1960)	(1942)	(1973)	(1949)	(1983)	(1984)	(1938)
MIN	1.52	3.53	3.89	3.85	3.92	5.35	3.33	1.16	1.67	1.77	1.52	1.82
(WY)	(1955)	(1955)	(2003)	(1945)	(2003)	(1935)	(1935)	(1963)	(1966)	(1963)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1927 - 2003	
ANNUAL TOTAL	2,435.45		12,787.9			
ANNUAL MEAN	6.67		35.0		45.5	
HIGHEST ANNUAL MEAN					157	1983
LOWEST ANNUAL MEAN					6.53	1954
HIGHEST DAILY MEAN	55	May 24	308	Apr 16	4,020	May 7, 1969
LOWEST DAILY MEAN	0.12	Aug 2	1.9	Oct 12	0.00	Jul 13, 1954
ANNUAL SEVEN-DAY MINIMUM	0.28	Jul 29	2.3	Oct 11	0.28	Jul 29, 2002
MAXIMUM PEAK FLOW			334	Apr 19	a8,150	May 7, 1969
MAXIMUM PEAK STAGE			3.98	Apr 19	10.50	May 7, 1969
ANNUAL RUNOFF (AC-FT)	4,830		25,360		32,930	
10 PERCENT EXCEEDS	15		117		98	
50 PERCENT EXCEEDS	4.9		9.8		17	
90 PERCENT EXCEEDS	1.2		3.4		5.9	

e Estimated.
a Present datum, from floodmarks, from rating curve extended above 3,400 ft^3/s.

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO

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

DRAINAGE AREA.--3,387 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1983 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06711565.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,250 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	34	18	38	15	23	194	684	434	121	144	257
2	117	34	18	39	16	25	173	476	500	232	78	240
3	34	34	18	35	37	27	181	456	421	190	43	221
4	28	34	19	34	28	22	210	404	271	74	128	233
5	24	32	19	35	18	25	205	293	255	67	184	236
6	23	30	19	37	20	26	234	221	183	103	55	249
7	26	27	17	23	18	20	210	197	340	152	101	159
8	24	23	18	22	16	19	309	184	134	59	96	153
9	25	20	19	20	17	18	454	176	122	56	50	188
10	30	23	17	17	19	18	434	444	290	56	53	265
11	29	23	15	18	20	17	345	340	372	29	118	227
12	26	20	16	21	16	17	276	368	333	22	170	132
13	32	19	15	22	21	17	330	350	317	21	106	74
14	33	29	14	20	23	18	414	283	297	21	104	69
15	33	24	16	19	41	17	432	170	142	90	95	66
16	32	22	23	17	27	19	675	209	254	101	39	62
17	32	22	22	16	23	101	563	333	296	107	37	55
18	31	21	20	14	17	152	437	350	498	142	49	46
19	30	19	17	16	19	121	658	389	295	165	48	42
20	31	18	15	16	18	167	450	380	128	162	43	40
21	32	16	18	16	17	236	463	366	282	128	38	40
22	32	16	20	14	17	260	549	301	305	138	36	38
23	31	19	21	13	20	291	567	154	264	141	36	37
24	32	21	31	13	18	238	762	232	291	123	38	57
25	34	26	34	14	19	435	487	411	257	44	41	66
26	35	22	35	15	27	483	457	464	182	41	96	103
27	45	18	34	16	29	407	449	476	174	98	113	106
28	37	18	34	22	25	302	503	458	162	163	119	111
29	57	19	35	22	---	248	671	459	168	355	158	113
30	39	18	35	26	---	270	815	587	151	384	390	106
31	41	---	35	26	---	276	---	511	---	179	309	---
TOTAL	1,089	701	687	676	601	4,315	12,907	11,126	8,118	3,764	3,115	3,791
MEAN	35.1	23.4	22.2	21.8	21.5	139	430	359	271	121	100	126
MAX	117	34	35	39	41	483	815	684	500	384	390	265
MIN	23	16	14	13	15	17	173	154	122	21	36	37
AC-FT	2,160	1,390	1,360	1,340	1,190	8,560	25,600	22,070	16,100	7,470	6,180	7,520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2003, BY WATER YEAR (WY)

MEAN	141	146	90.2	77.8	82.8	128	356	792	700	503	388	149
MAX	1,050	733	268	216	166	261	1,074	2,576	2,479	2,337	1,574	724
(WY)	(1985)	(1985)	(1985)	(1985)	(1985)	(1983)	(1984)	(1987)	(1995)	(1995)	(1984)	(1984)
MIN	35.1	23.4	22.2	21.8	21.5	51.7	40.5	60.4	73.9	39.2	22.8	36.7
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(1991)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1983 - 2003	
ANNUAL TOTAL	15,895		50,890			
ANNUAL MEAN	43.5		139		275	
HIGHEST ANNUAL MEAN					692	1984
LOWEST ANNUAL MEAN					48.6	2002
HIGHEST DAILY MEAN	344	May 24	815	Apr 30	4,010	Jun 28, 1995
LOWEST DAILY MEAN	12	Aug 15	13	Jan 23	a12	Aug 15, 2002
ANNUAL SEVEN-DAY MINIMUM	13	Aug 13	14	Jan 20	13	Aug 13, 2002
MAXIMUM PEAK FLOW			1,100	Apr 24	b9,710	Jun 4, 1995
MAXIMUM PEAK STAGE			3.12	Apr 24	7.21	Jun 4, 1995
ANNUAL RUNOFF (AC-FT)	31,530		100,900		199,300	
10 PERCENT EXCEEDS	79		409		593	
50 PERCENT EXCEEDS	33		43		123	
90 PERCENT EXCEEDS	18		18		44	

a Also occurred Aug 17-19, 2002.
b From rating curve extended above 3,800 ft^3/s.

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 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=06711565

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

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

REMARKS.--Water temperature record is good. Specific conductance record is fair. pH record is fair. Dissolved oxygen record is fair except for Apr. 21-30, July 17-28, and Sept. 9-11, which is poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2830 microsiemens/cm, Feb. 26, 2003; minimum, 139 microsiemens/cm, Aug. 17, 2000.
pH: Maximum, 10.4 units, Aug. 27, 1997; minimum, 6.4 units, Oct. 18, 1989.
WATER TEMPERATURE: Maximum, 29.0°C, Aug. 17, 1986, July 30, 1987, July 20, 2002; minimum, 0.0°C, freezing point on many days during winter.
DISSOLVED OXYGEN: Maximum, 19.0 mg/L, Feb. 7 and 9, 1995; minimum, 0.2 mg/L, June. 20-22, and July 3, 2002.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2830 microsiemens/cm, Feb. 26; minimum, 140 microsiemens/cm, Aug. 30.
pH: Maximum, 9.4 units, June 15; minimum, 7.3 units, July 25, 26.
WATER TEMPERATURE: Maximum, 28.0°C, July 12; minimum, 0.0°C, several days.
DISSOLVED OXYGEN: Maximum, 16.5 mg/L, Mar. 9; minimum, 1.5 mg/L, July 25.

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
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	---	---	---	---	---	---	11.2	8.6	9.6	12.1	9.7	10.6
2	---	---	---	11.3	9.1	10.1	11.1	8.4	9.5	12.6	10.0	11.1
3	---	---	---	11.0	9.0	9.7	10.7	8.6	9.3	12.5	9.5	10.7
4	---	---	---	11.0	8.8	9.5	10.3	8.7	9.4	12.2	9.4	10.4
5	---	---	---	11.0	8.5	9.1	11.4	9.1	9.9	12.0	9.2	10.1
6	---	---	---	10.8	8.0	9.1	11.1	9.1	9.9	12.5	8.4	10.1
7	---	---	---	10.6	8.0	9.0	11.3	9.2	10	12.3	8.7	10
8	---	---	---	10.6	7.2	8.7	11.3	9.2	10.1	12.3	8.8	10
9	---	---	---	9.6	7.0	8.1	11.3	9.5	10.2	12.6	8.9	10.3
10	---	---	---	10.6	7.4	8.8	11.6	9.2	9.8	12.2	9.3	10.5
11	---	---	---	10.9	8.1	9.2	10.8	9.1	9.7	12.6	9.8	10.8
12	---	---	---	10.9	8.4	9.4	11.2	9.1	9.9	12.4	10.0	10.8
13	---	---	---	10.5	7.5	8.9	11.1	9.1	9.7	12.3	9.6	10.5
14	---	---	---	9.9	7.3	8.2	10.7	9.0	9.7	12.4	9.3	---
15	---	---	---	9.4	6.9	8.1	10.8	9.1	9.7	12.0	---	---
16	---	---	---	10.5	8.1	9.1	10.8	9.2	9.8	---	---	---
17	---	---	---	10.5	8.0	8.9	10.4	8.8	9.6	12.8	---	---
18	---	---	---	10.4	7.7	8.7	10.7	8.8	9.6	12.4	9.7	10.7
19	---	---	---	10.5	7.7	8.7	11.1	9.1	10.0	13.1	9.6	10.8
20	---	---	---	10.5	7.8	8.7	10.9	9.6	10.1	13.2	9.4	10.7
21	---	---	---	10.4	7.7	8.5	11.1	9.4	10.1	12.1	9.3	10.4
22	---	---	---	10.5	7.6	8.8	11.2	9.6	10.2	12.4	9.2	10.5
23	---	---	---	10.8	7.6	8.9	11.5	9.9	10.5	12.6	10.1	11.0
24	---	---	---	9.9	8.1	8.9	11.8	10.2	10.9	12.9	9.4	10.8
25	---	---	---	10.9	8.4	9.6	11.9	10.5	11.0	13.2	9.4	10.8
26	---	---	---	11.1	8.9	9.9	11.9	10.5	11.1	13.4	9.5	10.9
27	---	---	---	11.0	9.2	9.9	11.9	10.3	11.1	14.0	8.7	10.5
28	---	---	---	10.9	8.7	9.6	11.9	9.8	10.7	13.1	8.4	10.4
29	---	---	---	10.9	8.5	9.4	11.5	9.3	10.2	14.0	9.8	11.2
30	---	---	---	11.2	8.5	9.5	11.8	9.2	10.3	14.2	9.5	11.0
31	---	---	---	---	---	---	12.2	9.7	10.6	14.1	9.0	10.8
MONTH	---	---	---	---	---	---	12.2	8.4	10.1	---	---	---

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—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	15.6	8.5	10.9	15.1	9.4	11.5	11.0	8.1	9.5	9.3	8.6	8.9
2	12.8	8.0	9.7	15.5	9.3	11.5	11.5	8.0	9.5	9.8	8.5	9.0
3	12.4	8.9	10.3	15.9	8.7	11.3	12.0	8.0	9.6	9.7	8.1	8.9
4	12.9	9.7	10.9	14.4	8.2	10.9	12.1	8.7	10.1	9.9	8.2	8.9
5	12.9	8.9	10.5	15.3	9.7	11.7	12.5	9.0	10.3	10.2	7.8	9.0
6	12.7	9.5	11.0	15.8	8.9	11.4	12.9	9.2	10.6	10.8	7.6	9.0
7	12.8	7.2	10.5	15.2	7.8	10.6	14.0	9.3	11.0	11.0	7.6	9.0
8	12.7	9.7	11.0	16.1	7.2	10.8	14.9	9.3	11.1	11.4	7.3	9.1
9	13.0	9.6	11.1	16.5	7.2	10.9	11.6	9.1	10.3	9.9	7.2	8.7
10	12.9	9.9	11.1	15.6	7.1	10.4	11.7	9.2	10.3	10.4	9.0	9.7
11	13.4	9.6	11.1	15.1	6.5	10.1	12.0	8.5	10.2	11.0	8.2	9.4
12	13.5	9.6	11.0	14.4	6.1	9.8	12.9	8.6	10.4	10.7	8.0	9.2
13	13.5	9.0	10.7	15.1	6.5	9.9	13.2	8.8	10.5	10.8	8.0	9.1
14	14.0	8.5	10.5	15.0	6.3	9.6	11.6	9.3	10.1	11.0	6.6	9.0
15	11.6	8.5	9.7	14.9	5.8	9.3	10.9	9.1	9.9	11.5	6.6	8.6
16	13.8	8.8	10.7	13.8	6.0	9.2	10.8	9.5	10.0	11.7	6.8	8.7
17	15.0	8.9	11.1	11.0	6.1	---	10.9	9.3	10.0	10.3	7.2	8.4
18	15.3	8.2	10.9	---	---	---	11.4	9.4	10.2	10.1	7.4	8.4
19	15.5	8.5	11.1	---	---	---	10.0	9.3	9.6	9.3	7.6	8.5
20	16.1	8.5	11.4	---	---	---	11.3	9.1	10.2	10.4	7.8	8.9
21	15.7	8.6	11.5	---	---	---	11.4	8.6	9.9	9.9	7.3	8.5
22	15.8	8.4	11.6	10.9	9.9	10.5	10.8	8.6	9.4	10.1	7.3	8.6
23	15.9	9.3	11.8	10.5	9.5	10.1	10.2	8.7	9.3	9.7	6.9	8.1
24	14.8	9.9	12.0	10.2	9.9	10.1	10.6	9.2	10.1	9.4	6.7	7.9
25	15.0	10.2	11.9	10.4	9.0	9.8	10.5	8.6	9.6	9.4	7.7	8.3
26	14.0	9.8	11.3	10.2	9.0	9.7	10.7	8.1	9.4	9.4	7.7	8.3
27	13.7	9.3	10.9	10.4	9.5	10.1	11.0	8.0	9.4	9.4	7.6	8.3
28	14.1	9.0	11.0	10.9	9.6	10.3	11.2	8.2	9.3	9.3	7.4	8.2
29	---	---	---	11.2	9.6	10.3	10.4	8.4	9.1	9.3	7.4	8.1
30	---	---	---	11.1	9.1	10.1	9.1	8.4	8.7	8.8	7.4	8.0
31	---	---	---	11.0	8.6	9.9	---	---	---	8.9	7.3	7.9
MONTH	16.1	7.2	11.0	---	---	---	14.9	8.0	9.9	11.7	6.6	8.7
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.4	7.3	7.8	10.3	5.5	7.5	---	---	---	8.1	6.4	7.2
2	8.9	7.4	8.0	10.1	5.9	7.7	---	---	---	8.2	6.3	7.1
3	9.1	7.2	8.0	10.3	5.2	7.7	---	---	---	8.3	6.3	7.2
4	9.0	7.2	7.9	11.3	4.8	7.6	---	---	---	8.4	6.4	7.3
5	8.7	7.5	8.0	11.4	4.6	7.5	---	---	---	8.5	6.4	7.3
6	9.3	7.1	8.1	11.0	5.0	7.7	---	---	---	7.9	6.4	7.2
7	9.2	7.2	8.1	10.0	5.6	7.6	---	---	---	8.1	6.4	7.1
8	9.4	6.8	8.0	11.9	4.7	7.9	---	---	---	8.7	6.4	7.3
9	9.7	6.3	7.6	12.0	4.3	7.5	---	---	---	8.9	6.5	7.6
10	10.2	6.4	7.9	12.2	4.3	7.7	---	---	---	11.7	7.1	8.1
11	9.9	7.1	8.2	11.6	3.9	7.4	---	---	---	10.4	6.9	8.4
12	10.2	7.2	8.2	11.9	3.7	7.4	---	---	---	9.3	6.5	7.9
13	10.1	7.1	8.3	12.0	3.5	7.2	---	---	---	9.2	6.5	7.9
14	10.3	6.5	8.4	12.0	3.4	7.2	---	---	---	9.8	7.0	8.5
15	11.8	6.3	8.4	9.7	4.3	6.6	---	---	---	9.6	6.5	7.9
16	11.0	6.4	8.3	10.4	5.2	7.0	---	---	---	9.7	6.4	7.7
17	10.7	6.5	7.9	9.9	4.7	7.2	---	---	---	9.7	6.3	7.6
18	9.2	6.8	7.7	9.9	4.7	7.0	11.4	---	---	10.3	6.6	8.2
19	9.7	6.2	7.9	8.1	4.3	5.9	11.2	5.2	7.7	10.5	6.7	8.4
20	10.1	6.1	7.4	8.1	5.1	6.4	11.6	4.7	7.4	10.6	6.7	8.1
21	9.9	6.0	7.7	8.4	5.1	6.4	11.5	4.6	7.2	10.4	6.7	8.0
22	9.5	5.9	7.6	8.8	4.6	6.7	12.1	4.6	7.1	10.7	6.6	8.1
23	10.1	6.2	7.9	8.6	4.7	6.5	11.7	5.1	7.5	11.0	6.4	8.1
24	8.2	6.2	7.1	8.1	1.9	5.8	10.9	5.1	7.3	11.2	6.6	8.3
25	9.7	6.1	7.9	5.5	1.5	3.4	10.4	5.2	7.2	11.3	6.9	8.5
26	10.5	5.7	7.9	5.8	2.2	3.8	9.4	5.3	7.0	10.8	6.9	8.4
27	10.3	5.3	7.6	9.5	3.1	6.8	9.1	5.5	7.0	11.1	6.9	8.6
28	10.7	5.3	7.4	8.5	---	---	9.2	5.7	7.1	11.2	6.9	8.7
29	10.5	5.3	7.5	---	---	---	8.8	6.0	7.1	11.3	7.0	8.8
30	10.8	5.5	7.9	---	---	---	7.9	6.1	7.0	11.6	7.2	9.0
31	---	---	---	---	---	---	7.8	6.7	7.4	---	---	---
MONTH	11.8	5.3	7.9	---	---	---	---	---	---	11.7	6.3	8.0

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

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

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

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

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 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	---	---	---	---	---	---	1,260	1,140	1,200	1,000	812	895
2	---	---	---	---	---	---	1,220	1,120	1,170	1,060	841	965
3	---	---	---	---	---	---	1,210	1,100	1,170	1,000	870	955
4	---	---	---	---	---	---	1,200	1,100	1,160	1,000	870	959
5	---	---	---	1,120	---	---	1,190	1,090	1,160	965	854	929
6	---	---	---	1,140	949	1,060	1,200	1,090	1,160	1,040	879	953
7	---	---	---	1,180	963	1,110	1,200	1,100	1,160	1,070	978	1,050
8	---	---	---	1,180	1,050	1,130	1,200	1,100	1,160	1,080	996	1,060
9	---	---	---	1,220	1,060	1,150	1,200	1,090	1,150	1,120	1,030	1,080
10	---	---	---	1,210	1,090	1,160	1,910	1,050	1,150	1,160	1,040	1,110
11	---	---	---	1,210	1,110	1,160	1,240	1,050	1,130	1,160	1,070	1,140
12	---	---	---	1,230	1,110	1,170	1,780	1,040	1,140	1,180	1,090	1,140
13	---	---	---	1,340	1,110	1,190	1,690	1,040	1,100	1,130	1,060	1,100
14	---	---	---	1,470	1,200	1,350	1,210	1,040	1,140	1,120	1,040	1,100
15	---	---	---	1,370	1,180	1,280	1,210	1,100	1,160	1,130	1,050	1,090
16	---	---	---	1,320	1,150	1,230	1,200	1,070	1,130	1,150	1,050	1,100
17	---	---	---	1,220	1,120	1,180	1,290	1,060	1,150	1,180	1,060	1,140
18	---	---	---	1,220	1,110	1,170	1,130	1,040	1,090	1,190	1,090	1,150
19	---	---	---	1,230	1,120	1,180	1,140	1,080	1,130	1,190	1,090	1,150
20	---	---	---	1,220	1,120	1,180	1,160	1,090	1,130	1,200	1,090	1,160
21	---	---	---	1,230	1,130	1,190	1,170	1,080	1,140	1,790	1,050	1,170
22	---	---	---	1,220	1,130	1,190	1,140	1,070	1,110	1,190	1,050	1,090
23	---	---	---	1,200	1,110	1,160	1,120	1,020	1,080	1,250	1,160	1,190
24	---	---	---	1,600	1,110	1,230	1,040	927	1,000	1,250	1,110	1,180
25	---	---	---	1,860	1,240	1,440	958	849	908	1,210	1,100	1,160
26	---	---	---	1,740	1,440	1,540	929	849	900	1,170	1,090	1,140
27	---	---	---	1,620	1,380	1,500	947	849	901	1,200	1,070	1,130
28	---	---	---	1,600	1,360	1,480	924	828	893	1,200	979	1,100
29	---	---	---	1,440	1,220	1,300	929	835	883	1,020	976	998
30	---	---	---	1,300	1,170	1,230	927	802	875	1,000	941	984
31	---	---	---	---	---	---	929	813	870	1,020	988	1,000
MONTH	---	---	---	---	---	---	1,910	802	1,080	1,790	812	1,080
		FEBRUARY			MARCH			APRIL			MAY	
1	1,110	1,000	1,060	2,100	1,480	1,780	873	749	791	478	448	465
2	1,660	1,110	1,180	2,290	1,480	1,750	884	776	824	485	458	472
3	2,460	1,130	1,570	2,140	1,440	1,680	909	789	845	490	443	470
4	2,140	1,700	1,840	1,860	1,460	1,650	827	737	785	499	452	473
5	1,970	1,430	1,660	2,350	1,380	1,750	805	731	769	556	459	499
6	1,930	1,380	1,600	2,260	1,520	1,940	888	733	786	580	515	553
7	2,290	1,450	1,760	2,400	1,460	1,760	780	687	739	587	539	572
8	2,250	1,540	1,910	1,940	1,320	1,570	788	606	707	635	546	581
9	1,930	1,410	1,670	1,620	1,210	1,360	634	579	604	649	429	603
10	1,740	1,280	1,500	1,440	1,180	1,290	613	571	592	596	405	474
11	1,570	1,240	1,390	1,390	1,170	1,280	776	569	632	573	481	537
12	1,460	1,200	1,310	1,360	1,150	1,250	716	589	637	515	477	497
13	1,390	1,150	1,260	1,330	1,140	1,230	671	568	603	514	476	495
14	1,560	1,090	1,230	1,320	1,100	1,200	612	529	579	848	472	562
15	1,400	1,100	1,230	1,270	1,090	1,180	881	527	581	941	581	698
16	1,350	1,120	1,230	1,220	1,070	1,140	758	498	556	721	531	625
17	1,330	1,070	1,200	1,560	635	1,110	535	485	505	531	452	487
18	1,270	1,040	1,130	---	---	---	664	490	521	497	438	470
19	1,160	1,020	1,080	---	---	---	593	367	489	493	432	463
20	1,290	1,020	1,130	---	---	---	527	484	512	495	446	469
21	1,290	1,080	1,180	---	599	---	535	473	505	524	437	466
22	1,250	1,070	1,150	773	590	671	523	478	499	768	445	498
23	2,160	1,070	1,300	732	493	616	654	438	505	613	514	537
24	1,650	1,160	1,350	844	521	703	557	332	447	630	459	545
25	1,750	1,140	1,290	705	568	636	564	512	545	487	409	440
26	2,830	1,150	1,730	655	552	610	563	531	547	451	410	432
27	2,580	1,660	2,070	725	565	662	544	495	526	457	408	430
28	2,530	1,700	2,030	765	668	708	534	476	508	453	403	425
29	---	---	---	766	683	731	516	469	488	458	396	422
30	---	---	---	833	666	726	511	462	483	433	394	412
31	---	---	---	868	685	731	---	---	---	456	388	412
MONTH	2,830	1,000	1,430	---	---	---	909	332	604	941	388	499

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, 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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	628	369	443	712	435	537	600	459	495	479	445	462
2	444	381	399	447	383	412	607	548	581	484	403	460
3	456	378	404	532	396	431	824	607	724	642	412	500
4	509	413	448	632	511	584	911	421	562	480	435	454
5	738	433	510	683	567	628	565	401	440	496	443	472
6	564	402	479	625	455	557	705	565	665	552	433	469
7	520	375	425	576	405	457	659	464	517	569	460	525
8	624	459	558	679	559	637	581	469	510	559	512	539
9	721	519	620	693	582	644	703	581	669	533	450	504
10	730	420	493	676	598	639	711	586	673	467	439	451
11	622	406	451	886	622	773	605	417	497	535	434	464
12	511	400	433	983	828	905	515	395	446	575	510	534
13	508	414	442	997	912	949	499	442	480	703	575	649
14	521	398	434	1,010	914	966	498	433	477	721	654	692
15	633	443	571	914	468	579	543	436	482	778	655	714
16	467	413	444	599	496	535	690	543	643	748	690	721
17	553	388	433	561	475	520	732	674	703	777	700	734
18	553	323	391	539	185	495	1,190	532	728	889	705	788
19	510	335	410	510	323	473	709	526	657	862	785	809
20	670	510	607	545	460	487	776	679	719	867	798	816
21	698	432	480	548	506	529	705	654	686	848	786	807
22	477	411	443	531	471	498	689	664	676	841	815	826
23	477	415	445	574	463	500	689	652	667	842	809	822
24	485	406	435	540	470	493	723	618	650	851	646	749
25	494	405	442	880	540	660	736	622	645	685	606	665
26	523	453	490	725	667	700	736	480	546	636	515	545
27	538	451	485	834	490	655	507	461	489	577	514	544
28	515	453	489	628	448	472	513	446	490	583	517	548
29	600	459	518	590	331	456	520	330	445	583	516	552
30	516	440	484	494	408	437	512	140	377	637	516	562
31	---	---	---	498	459	481	552	296	461	---	---	---
MONTH	738	323	470	1,010	185	584	1,190	140	574	889	403	613

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, 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	---	---	---	---	---	---	7.2	2.9	5.0	4.8	2.8	3.7
2	---	---	---	6.3	3.2	4.5	7.6	3.6	5.4	4.4	0.9	2.8
3	---	---	---	8.3	4.1	5.7	5.7	4.1	4.8	5.7	2.7	4.2
4	---	---	---	7.0	4.2	5.3	5.3	3.5	4.6	5.3	3.7	4.5
5	---	---	---	8.4	3.9	5.8	6.8	3.1	4.5	5.6	3.6	4.8
6	---	---	---	10.1	4.7	7.1	6.1	2.1	3.9	7.3	4.4	5.7
7	---	---	---	8.5	5.2	6.9	5.3	2.0	3.5	7.2	3.4	5.1
8	---	---	---	10.5	5.3	7.7	4.7	2.1	3.2	7.5	3.0	5.1
9	---	---	---	9.2	6.6	7.9	5.3	1.3	3.1	5.6	2.6	4.0
10	---	---	---	7.4	5.0	6.2	5.3	1.1	3.1	3.5	1.1	2.2
11	---	---	---	7.3	4.1	5.5	4.9	1.6	3.2	3.5	0.8	2.0
12	---	---	---	7.7	2.7	5.1	4.9	1.1	3.1	4.8	0.4	2.5
13	---	---	---	8.3	4.8	6.6	6.1	2.0	3.7	5.7	1.8	3.5
14	---	---	---	9.3	5.9	7.4	5.3	2.3	3.7	6.5	2.5	4.3
15	---	---	---	7.5	4.9	6.5	4.9	2.4	3.6	5.7	2.2	3.9
16	---	---	---	7.5	3.3	5.2	5.3	1.8	3.4	4.7	1.0	2.8
17	---	---	---	8.8	4.3	6.5	4.8	2.3	3.5	5.5	1.8	3.2
18	---	---	---	9.2	5.3	7.1	4.9	2.4	3.6	4.9	0.8	2.6
19	---	---	---	9.0	4.9	6.8	4.3	1.2	2.6	5.9	1.4	3.5
20	---	---	---	9.4	4.9	7.0	3.4	0.4	1.8	5.9	2.1	4.0
21	---	---	---	9.6	5.1	6.9	4.0	1.1	2.3	4.7	2.1	3.5
22	---	---	---	8.8	5.3	7.0	3.9	0.7	2.0	3.7	0.9	2.1
23	---	---	---	8.9	5.7	7.0	3.0	0.8	1.7	4.7	0.3	2.2
24	---	---	---	5.7	3.4	4.3	2.6	0.1	1.2	5.5	2.2	3.5
25	---	---	---	5.4	2.2	3.6	3.0	0.2	1.3	5.8	2.2	3.8
26	---	---	---	4.9	1.0	2.7	2.2	0.0	0.9	7.0	2.1	4.4
27	---	---	---	4.9	1.5	3.0	2.9	0.5	1.7	9.2	4.8	6.7
28	---	---	---	6.8	1.9	4.1	5.2	1.7	3.3	6.7	3.7	5.3
29	---	---	---	7.9	3.3	5.3	6.0	2.7	4.2	6.8	2.1	4.3
30	---	---	---	6.9	3.3	4.9	5.4	2.5	4.0	5.9	3.0	4.5
31	---	---	---	---	---	---	4.5	1.8	3.2	7.2	3.3	5.3
MONTH	---	---	---	---	---	---	7.6	0.0	3.2	9.2	0.3	3.9
		FEBRUARY			MARCH			APRIL			MAY	
1	9.7	4.7	6.9	5.9	1.8	3.7	13.0	7.0	10.3	14.0	10.1	11.7
2	7.3	2.7	5.6	8.7	1.9	4.9	13.3	7.8	10.7	14.2	9.6	11.7
3	5.4	2.1	3.3	10.1	3.7	6.3	13.0	7.6	10.4	15.6	10.2	12.6
4	4.3	0.8	2.5	5.9	2.0	3.6	12.7	6.7	9.5	13.8	10.5	11.8
5	4.0	1.2	2.5	7.5	0.8	3.8	10.0	6.5	8.5	15.0	9.4	12.0
6	2.3	0.1	1.2	9.6	2.9	6.0	10.3	6.0	7.9	16.3	10.4	13.0
7	2.7	0.0	0.8	11.6	4.2	7.6	8.9	6.1	7.5	15.0	10.0	12.5
8	4.3	0.0	1.4	13.2	5.4	8.8	13.1	4.9	8.2	15.4	10.2	12.6
9	4.3	0.8	1.9	13.5	5.9	9.4	13.9	6.5	9.6	13.1	7.2	10.2
10	5.6	0.2	2.5	13.0	6.2	9.5	14.3	7.3	10.2	9.0	5.1	6.9
11	4.1	0.7	2.4	14.5	6.9	10.5	14.0	7.7	10.7	15.8	7.6	11.1
12	6.4	0.7	3.4	13.6	7.7	10.5	15.3	8.1	11.4	17.3	9.1	12.6
13	7.2	3.1	5.0	15.6	7.1	11.1	15.9	8.1	11.2	16.6	10.0	13.0
14	8.5	4.3	6.2	15.4	8.0	11.7	12.6	8.5	10.2	18.7	10.6	14.4
15	5.7	4.3	4.9	16.6	9.5	12.7	11.1	8.4	9.7	16.4	11.8	13.9
16	6.3	2.7	4.5	13.9	9.3	11.6	13.3	8.2	10.2	20.1	12.2	15.8
17	8.8	3.0	5.5	11.4	7.9	9.8	12.9	8.2	10.1	18.2	12.2	15.1
18	7.6	3.9	5.5	---	---	---	12.9	8.6	10.2	16.0	12.4	14.3
19	9.4	3.4	6.0	---	---	---	9.5	8.6	9.0	13.8	11.3	12.0
20	8.2	2.7	5.4	---	---	---	14.3	7.8	10.5	16.8	11.1	13.1
21	8.7	3.5	5.9	5.7	---	---	14.1	8.3	10.7	19.4	11.4	14.7
22	7.2	3.6	5.5	7.8	1.9	4.5	13.3	9.5	10.9	19.6	12.1	15.5
23	6.0	1.3	3.3	9.8	3.3	5.9	11.0	7.0	9.6	20.3	13.5	16.6
24	4.4	0.1	1.6	5.7	4.5	5.0	9.8	6.1	7.7	17.4	14.7	15.9
25	4.4	0.1	1.8	10.8	4.5	7.0	14.7	7.9	10.7	17.3	13.4	15.1
26	5.1	0.5	2.7	10.9	5.0	7.7	15.8	8.7	11.7	18.3	13.2	15.3
27	4.6	2.6	3.4	7.4	4.5	5.8	15.4	9.2	11.7	20.1	13.8	16.3
28	5.0	2.6	3.7	8.2	3.8	5.7	15.7	9.7	11.9	20.4	14.2	16.8
29	---	---	---	9.0	3.3	6.0	14.9	10.3	11.9	20.7	14.1	16.8
30	---	---	---	11.6	3.9	7.5	13.2	10.5	11.4	19.1	15.1	16.8
31	---	---	---	12.8	5.6	8.9	---	---	---	18.8	15.4	16.8
MONTH	9.7	0.0	3.8	---	---	---	15.9	4.9	10.1	20.7	5.1	13.8

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, 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
		JUNE			JULY			AUGUST			SEPTEMBER	
1	18.8	15.0	16.5	24.3	18.5	21.4	25.6	19.8	22.4	24.5	18.0	20.9
2	21.0	14.9	17.4	25.5	17.4	21.2	26.5	19.1	22.7	24.4	18.3	21.0
3	20.6	14.8	17.3	25.2	17.4	21.3	25.7	20.5	23.0	21.6	18.3	19.9
4	16.6	14.4	15.4	25.3	19.1	22.4	27.0	19.9	23.4	24.3	17.7	20.6
5	16.6	13.4	14.7	24.0	19.7	22.4	26.6	20.7	23.4	24.6	17.9	20.8
6	19.5	14.0	16.6	23.0	18.0	20.9	26.3	19.8	23.1	21.2	18.9	19.9
7	19.2	13.4	16.0	22.2	17.7	20.3	24.2	19.9	22.5	19.8	17.8	18.7
8	20.7	13.5	17.1	25.1	18.2	21.8	25.5	19.9	22.4	22.7	16.6	19.6
9	20.3	15.4	17.9	25.2	20.1	22.9	25.7	19.9	23.1	20.4	17.0	18.6
10	21.4	14.8	17.7	25.1	19.8	22.7	27.3	20.7	24.2	21.2	16.8	18.3
11	21.7	15.5	18.2	26.3	19.9	23.0	26.4	20.4	23.7	20.7	16.0	18.0
12	20.3	15.2	17.6	28.0	20.2	23.8	27.8	20.2	23.6	21.0	14.3	17.7
13	19.2	15.8	17.2	27.9	20.4	24.2	27.4	19.4	23.4	18.3	12.9	14.9
14	21.9	15.5	18.6	27.5	20.2	23.7	26.6	18.5	22.7	17.4	11.2	14.3
15	23.7	16.1	19.8	23.7	19.3	21.7	26.3	18.6	22.6	18.9	13.2	16.3
16	22.5	15.8	19.0	23.8	18.9	21.7	26.2	19.5	22.7	19.3	14.8	17.4
17	21.0	16.3	18.5	26.4	18.8	22.7	23.4	19.2	21.5	20.0	15.6	17.4
18	19.8	16.1	17.8	26.5	19.7	23.3	23.2	17.6	20.6	17.7	12.7	15.1
19	20.4	15.9	18.1	26.8	20.0	23.2	23.6	17.1	20.1	18.2	12.1	15.0
20	20.2	16.0	18.3	25.4	19.9	22.7	25.8	19.1	22.1	18.4	13.5	15.6
21	23.3	15.6	19.1	25.6	19.5	22.9	24.8	19.9	22.3	19.2	13.4	16.0
22	23.5	16.2	19.5	27.0	19.6	23.2	25.3	19.4	21.8	19.3	13.4	16.1
23	23.6	16.5	19.7	26.2	20.0	23.3	25.3	18.7	21.6	20.1	13.8	16.6
24	19.3	16.5	17.7	27.8	19.5	23.6	25.3	18.9	21.9	18.5	14.3	16.5
25	21.8	16.0	18.5	25.1	21.6	23.2	24.5	19.8	22.0	18.5	13.4	16.2
26	23.3	15.6	19.4	27.6	20.3	23.6	24.9	19.3	22.4	19.3	13.1	16.6
27	24.1	15.8	20.0	26.3	21.6	23.6	24.7	18.9	22.0	18.7	12.8	16.1
28	22.9	16.4	19.9	25.6	20.2	22.5	24.3	19.9	22.1	18.3	12.4	15.7
29	22.6	16.7	19.6	23.6	19.2	21.3	24.5	18.9	21.6	17.4	12.4	15.3
30	24.8	16.6	20.7	25.8	19.8	22.5	20.9	18.0	19.2	16.0	12.0	13.9
31	---	---	---	25.4	19.4	22.3	21.0	17.0	18.8	---	---	---
MONTH	24.8	13.4	18.1	28.0	17.4	22.6	27.8	17.0	22.2	24.6	11.2	17.3

06712000 CHERRY CREEK NEAR FRANKTOWN, CO

LOCATION.--Lat 39°21'21", long 104°45'46", in NE¼ sec.15, T.8 S., R.66 W., Douglas County, Hydrologic Unit 10190003, on right bank 1.3 mi downstream from Castlewood Dam site, 1.5 mi upstream from Russellville Gulch, and 2.5 mi south of Franktown.

DRAINAGE AREA.--169 mi^2.

PERIOD OF RECORD.--November 1939 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06712000

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,150 ft above NGVD of 1929, from topographic map. See WSP 1730 for history of changes prior to Oct. 1, 1953.

REMARKS.--Records fair except for estimated discharges, which are poor. Many small diversions upstream from station for irrigation of about 800 acres. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.6	2.8	2.5	4.2	4.5	63	11	5.8	3.2	1.3	1.7
2	2.1	2.6	2.9	e2.7	4.5	4.2	90	10	6.9	3.5	1.3	1.8
3	2.0	3.1	3.1	e2.7	4.0	4.5	52	8.9	4.5	2.8	1.3	1.8
4	1.9	3.0	3.3	3.1	e3.4	4.2	36	8.6	4.0	1.9	1.5	1.5
5	1.9	2.7	3.0	3.4	4.0	5.1	25	8.4	8.0	1.7	1.7	1.5
6	1.9	2.7	2.7	3.9	3.5	4.0	19	7.5	6.3	1.7	1.5	1.4
7	1.9	2.7	2.8	3.5	e3.1	4.3	12	7.2	5.7	1.7	1.5	1.8
8	1.8	2.8	2.8	3.5	e2.9	4.5	11	7.0	5.2	1.6	1.9	1.7
9	1.8	2.7	e2.4	3.4	3.1	4.3	11	6.9	4.0	1.7	1.5	1.6
10	1.8	2.6	2.5	e3.2	e2.9	4.8	12	8.5	3.6	1.8	1.4	1.6
11	1.8	2.5	2.9	e2.9	3.2	5.0	11	7.0	4.4	1.7	1.7	1.6
12	1.8	2.6	2.9	3.1	3.6	3.6	9.8	5.9	3.9	1.8	1.6	1.5
13	1.8	2.7	2.7	3.5	4.6	3.6	8.8	4.8	3.1	1.6	1.3	1.5
14	1.8	3.1	2.7	4.1	6.0	3.4	7.2	4.5	2.9	1.6	1.3	1.7
15	1.8	3.2	2.8	3.7	6.3	3.3	9.0	4.6	2.4	1.7	1.3	1.4
16	1.8	3.1	3.2	3.8	5.2	3.2	11	7.4	1.8	1.5	1.3	1.3
17	1.8	2.9	3.2	2.9	5.1	3.5	4.1	4.9	24	1.3	1.1	1.5
18	1.9	3.0	3.3	e2.9	e4.5	10	5.3	4.0	25	1.3	1.2	1.4
19	1.9	3.1	3.5	e3.2	5.3	27	11	3.8	17	1.3	1.3	1.4
20	2.0	3.0	e2.8	3.6	4.6	29	11	4.0	9.7	1.4	1.1	1.4
21	2.0	2.9	2.6	e3.5	3.6	11	9.6	3.7	8.0	1.5	1.0	1.5
22	2.0	3.1	e2.3	3.4	4.0	9.1	8.0	3.3	5.3	1.4	1.0	1.4
23	2.1	3.3	e2.4	e3.3	3.6	11	9.4	2.8	4.6	1.5	1.1	1.4
24	2.3	3.2	e2.5	3.8	3.9	13	27	14	3.9	1.5	1.2	1.4
25	2.3	2.9	e2.5	3.9	e3.5	13	122	11	3.9	1.5	1.2	1.6
26	2.4	2.3	e2.5	3.9	3.7	22	138	5.2	3.8	1.9	1.1	1.4
27	2.7	2.7	e2.5	4.2	4.2	25	49	4.2	3.2	2.3	1.0	1.5
28	2.6	2.6	e2.5	4.1	4.6	17	21	3.4	3.0	1.7	1.0	1.5
29	2.8	2.8	e2.3	3.5	---	12	9.0	3.6	2.9	1.8	1.3	1.5
30	2.6	2.8	2.6	3.8	---	19	12	3.9	2.7	1.5	1.8	1.5
31	2.6	---	2.4	3.8	---	34	---	4.5	---	1.4	2.6	---
TOTAL	63.7	85.3	85.4	106.8	115.1	322.1	824.2	194.5	189.5	54.8	42.4	45.8
MEAN	2.05	2.84	2.75	3.45	4.11	10.4	27.5	6.27	6.32	1.77	1.37	1.53
MAX	2.8	3.3	3.5	4.2	6.3	34	138	14	25	3.5	2.6	1.8
MIN	1.8	2.3	2.3	2.5	2.9	3.2	4.1	2.8	1.8	1.3	1.0	1.3
AC-FT	126	169	169	212	228	639	1,630	386	376	109	84	91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2003, BY WATER YEAR (WY)

MEAN	4.44	5.65	5.17	5.31	8.59	21.7	19.6	15.9	8.65	6.96	8.94	3.62
MAX	29.1	30.7	25.2	17.7	29.3	184	138	138	42.6	43.8	59.9	18.2
(WY)	(1985)	(1985)	(1985)	(1985)	(1948)	(1960)	(1984)	(1973)	(1983)	(1957)	(1945)	(1984)
MIN	0.97	1.32	1.41	1.57	1.99	2.36	1.70	1.43	1.12	0.80	0.76	0.78
(WY)	(1953)	(1955)	(1964)	(1951)	(1956)	(1972)	(1963)	(1963)	(1954)	(1981)	(1962)	(1950)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1940 - 2003	
ANNUAL TOTAL	2,050.51		2,129.6			
ANNUAL MEAN	5.62		5.83		9.55	
HIGHEST ANNUAL MEAN					31.9	1984
LOWEST ANNUAL MEAN					2.89	1954
HIGHEST DAILY MEAN	476	Aug 27	138	Apr 26	1,400	May 6, 1973
LOWEST DAILY MEAN	0.81	Jul 17	1.0	Aug 21	0.20	Jul 13, 1946
ANNUAL SEVEN-DAY MINIMUM	0.83	Jul 14	1.1	Aug 21	0.29	Jul 10, 1946
MAXIMUM PEAK FLOW			350	Apr 25	a9,170	Aug 5, 1945
MAXIMUM PEAK STAGE			5.39	Apr 25	b4.91	Aug 5, 1945
ANNUAL RUNOFF (AC-FT)	4,070		4,220		6,920	
10 PERCENT EXCEEDS	9.1		11		17	
50 PERCENT EXCEEDS	2.6		3.0		4.5	
90 PERCENT EXCEEDS	0.96		1.4		1.3	

e Estimated.
a Site and datum then in use, by float measurement.
b Maximum gage height, 9.33 ft (revised), Aug 27, 2002, current site and datum.

393109104464500 CHERRY CREEK NEAR PARKER, CO

LOCATION.--Lat 39°31'09", long 104°46'45", in SE¼NW¼NE¼ sec.21, T.6 S., R.67 W., Douglas County, Hydrologic Unit 10190003, on right bank 200 ft upstream from Main Street, 1,100 ft downstream from mouth of Sulphur Gulch, and 0.8 mi west of City of Parker.

DRAINAGE AREA.--287 mi^2.

PERIOD OF RECORD.--October 1991 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=393109104464500

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,805 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.7	4.4	5.5	4.6	4.4	10	47	22	12	8.0	3.3	8.8
2	e10	4.5	5.3	4.7	4.5	9.7	62	22	13	5.9	2.7	9.2
3	e8.8	4.8	5.4	4.5	3.8	9.5	64	22	12	5.6	4.0	8.9
4	e7.7	5.0	5.4	4.5	2.0	8.7	42	21	11	7.3	4.5	8.8
5	e6.8	5.0	4.8	4.7	2.7	7.9	29	20	22	7.5	4.9	e8.6
6	e6.0	5.0	4.6	4.5	5.2	8.3	22	20	17	7.6	4.8	e8.2
7	e5.7	5.2	4.7	4.5	5.7	7.8	16	20	20	7.9	4.8	e6.5
8	e5.6	4.1	4.8	4.4	5.9	7.8	13	19	14	7.4	5.0	e5.4
9	e5.3	5.5	4.8	4.5	5.8	7.3	12	18	12	7.6	4.9	e5.5
10	e5.1	6.0	4.5	4.6	5.6	7.2	10	24	24	7.8	5.0	e5.5
11	e5.1	5.9	4.7	4.6	4.9	7.0	11	21	13	7.6	6.4	e5.6
12	e5.0	5.9	4.7	5.0	5.1	6.8	11	19	10	7.6	6.8	e5.7
13	e4.9	5.9	4.6	3.6	6.2	6.2	10	18	9.1	7.5	5.5	e5.8
14	e4.7	5.2	5.0	3.7	6.9	5.8	9.0	17	8.0	6.5	5.6	e5.9
15	e4.7	5.1	5.1	3.6	7.6	4.6	11	17	7.9	e7.0	5.5	e5.9
16	e4.7	5.2	5.1	3.5	8.4	4.6	16	18	7.8	e7.0	5.3	e6.0
17	e4.5	6.2	4.9	4.4	8.7	5.3	11	19	9.3	e7.0	5.3	e6.1
18	e4.5	6.1	4.9	4.4	6.7	6.7	8.5	17	33	e7.0	4.7	e6.1
19	e4.5	5.5	4.9	4.4	7.4	7.9	12	15	47	e7.0	5.0	e6.2
20	e4.4	5.6	4.7	4.4	7.7	6.0	15	16	27	e7.1	5.3	e6.2
21	e4.3	5.2	4.8	4.3	6.7	5.7	14	15	18	e6.9	5.1	e6.1
22	e4.2	5.3	4.6	4.2	9.3	16	13	13	12	6.5	5.0	e6.0
23	e4.2	5.2	4.8	4.3	9.1	24	34	14	11	6.6	4.8	e6.2
24	e4.2	5.4	4.8	4.2	8.6	17	106	29	10	6.5	4.8	e6.3
25	e4.2	5.4	4.6	4.5	8.3	17	66	31	9.4	6.6	4.9	e6.4
26	4.2	5.1	4.7	4.4	8.9	25	120	16	9.0	15	5.0	e6.4
27	4.3	5.4	3.4	4.4	10	31	94	12	8.4	13	5.0	e6.4
28	4.3	5.2	4.4	4.8	10	22	42	11	8.8	8.2	4.1	e6.3
29	4.3	5.2	4.5	4.7	---	16	25	11	14	4.9	4.1	e6.4
30	4.3	5.3	4.6	2.8	---	17	21	10	10	4.2	15	e6.3
31	4.2	---	4.7	3.3	---	29	---	10	---	3.2	29	---
TOTAL	156.4	158.8	148.3	133.0	186.1	364.8	966.5	557	439.7	225.5	186.1	197.7
MEAN	5.05	5.29	4.78	4.29	6.65	11.8	32.2	18.0	14.7	7.27	6.00	6.59
MAX	10	6.2	5.5	5.0	10	31	120	31	47	15	29	9.2
MIN	1.7	4.1	3.4	2.8	2.0	4.6	8.5	10	7.8	3.2	2.7	5.4
AC-FT	310	315	294	264	369	724	1,920	1,100	872	447	369	392

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

MEAN	3.88	5.20	6.04	7.84	11.3	16.8	19.9	20.1	11.7	6.77	7.87	3.80
MAX	9.72	9.85	14.9	21.0	21.4	42.8	47.4	87.9	47.5	18.3	29.1	10.3
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(1992)	(1998)	(1999)	(1999)	(1998)	(1998)	(1999)
MIN	1.26	0.79	0.76	1.51	1.74	3.82	7.90	4.15	1.87	1.04	0.58	0.73
(WY)	(1992)	(1995)	(1995)	(1995)	(1995)	(1995)	(2002)	(1997)	(1994)	(1994)	(1994)	(1994)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	2,330.18		3,719.9			
ANNUAL MEAN	6.38		10.2		10.1	
HIGHEST ANNUAL MEAN					21.8	1999
LOWEST ANNUAL MEAN					5.03	1997
HIGHEST DAILY MEAN	35	Aug 27	120	Apr 26	e348	May 1, 1999
LOWEST DAILY MEAN	0.98	Jul 16	e1.7	Oct 1	0.43	Aug 24, 1994
ANNUAL SEVEN-DAY MINIMUM	1.5	Jul 31	3.4	Jan 30	0.45	Aug 21, 1994
MAXIMUM PEAK FLOW			205	Aug 30	a900	Jul 30, 1998
MAXIMUM PEAK STAGE			6.07	Aug 30	b9.65	Jul 30, 1998
ANNUAL RUNOFF (AC-FT)	4,620		7,380		7,310	
10 PERCENT EXCEEDS	11		20		21	
50 PERCENT EXCEEDS	5.3		6.2		6.2	
90 PERCENT EXCEEDS	2.7		4.4		1.4	

e Estimated.
a From slope-area measurement of peak flow.
b From floodmark.

06713000 CHERRY CREEK BELOW CHERRY CREEK LAKE, CO

LOCATION.--Lat 39°39'13", long 104°51'45", in SW¼SW¼ sec.35, T.4 S., R.67 W., Denver County, Hydrologic Unit 10190003, on left bank 2,300 ft downstream from Cherry Creek Dam, 2.2 mi southeast of Sullivan, 9 mi southeast of Civic Center in Denver, and 11 mi upstream from mouth.

DRAINAGE AREA.--385 mi^2.

PERIOD OF RECORD.--June 1950 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06713000

REVISED RECORDS.--WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,490.51 ft above NGVD of 1929, (Corps of Engineers bench mark).

REMARKS.--Records fair except for discharges below 1 ft^3/s and estimated daily discharges, which are poor. Flow regulated by Cherry Creek Lake (see elsewhere in this report). Diversions upstream from station for irrigation of about 1,800 acres. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known, 34,000 ft^3/s, Aug. 3, 1933, by slope-area measurement near present site (Castlewood Dam failure).

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	21	0.05	0.07	0.00	0.00	e0.00	86	194	4.3	34	13	33
2	20	0.06	0.07	0.00	0.00	e0.00	87	196	3.8	32	13	11
3	20	0.05	0.07	0.00	0.00	e0.00	89	191	3.7	32	14	1.6
4	13	0.04	0.06	0.00	e0.00	e0.00	90	178	8.7	32	13	0.97
5	10	0.05	0.06	0.00	e0.00	e0.00	90	179	10	31	10	1.2
6	10	0.07	0.05	0.00	e0.00	e0.00	91	172	8.9	31	10	1.0
7	6.2	0.06	0.05	0.00	e0.00	e0.00	91	129	5.3	15	10	0.66
8	0.51	0.06	0.04	0.00	e0.00	e0.00	74	48	4.8	2.7	8.4	18
9	2.1	0.07	0.05	0.00	e0.00	e0.00	63	29	4.7	3.0	10	31
10	3.1	0.06	0.07	0.00	e0.00	e0.00	63	24	4.0	2.9	10	31
11	3.2	0.06	0.07	0.00	e0.00	e0.00	43	22	4.7	1.5	11	35
12	3.2	0.10	0.07	0.00	e0.00	e0.00	27	24	4.2	0.20	11	33
13	3.3	0.08	0.07	0.00	e0.00	e0.00	27	16	3.8	0.16	12	35
14	3.2	0.09	0.07	0.00	e0.00	e0.00	28	17	2.9	0.10	11	32
15	3.3	0.11	0.07	0.00	e0.00	e0.00	28	24	4.7	0.42	9.7	32
16	3.3	0.21	0.07	0.00	e0.00	0.00	28	25	8.0	0.29	9.3	31
17	3.2	0.24	0.06	0.00	e0.00	0.00	28	25	15	0.94	10	25
18	3.0	0.47	0.16	0.00	e0.00	0.96	28	20	13	5.5	5.5	23
19	2.5	0.37	0.22	0.00	e0.00	0.25	28	21	18	1.5	0.26	20
20	1.8	0.32	0.15	0.00	e0.00	0.25	28	23	29	0.22	0.54	29
21	1.5	0.06	0.13	0.00	e0.00	0.30	28	22	32	0.33	1.4	33
22	1.5	0.29	3.1	0.00	e0.00	0.44	28	17	30	4.0	1.3	23
23	1.5	0.31	e3.0	0.00	e0.00	0.84	26	8.7	32	10	1.6	8.3
24	1.6	0.19	1.6	0.00	e0.00	10	18	8.1	32	10	2.1	19
25	1.6	0.06	2.2	0.00	e0.00	55	17	6.1	33	11	4.8	18
26	1.5	0.24	1.4	0.00	e0.00	84	17	6.0	37	12	1.8	16
27	1.5	0.14	0.54	0.00	e0.00	85	17	6.2	37	9.0	0.85	18
28	3.8	0.03	0.03	0.00	e0.00	84	106	6.1	38	12	1.0	16
29	7.9	0.03	0.12	0.00	---	84	164	5.6	38	12	1.5	18
30	3.9	0.07	0.00	0.00	---	85	175	5.2	36	12	8.0	14
31	0.07	---	0.00	0.00	---	85	---	4.2	---	12	14	---
TOTAL	162.28	4.04	13.72	0.00	0.00	575.04	1,713	1,652.2	506.5	330.76	230.05	607.73
MEAN	5.23	0.13	0.44	0.000	0.000	18.5	57.1	53.3	16.9	10.7	7.42	20.3
MAX	21	0.47	3.1	0.00	0.00	85	175	196	38	34	14	35
MIN	0.07	0.03	0.00	0.00	0.00	0.00	17	4.2	2.9	0.10	0.26	0.66
AC-FT	322	8.0	27	0.00	0.00	1,140	3,400	3,280	1,000	656	456	1,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 2003, BY WATER YEAR (WY)

MEAN	2.07	2.95	3.95	3.49	8.17	13.7	19.0	15.1	10.0	5.16	11.1	3.11
MAX	29.6	38.5	39.1	42.4	60.3	108	166	124	243	71.3	218	54.2
(WY)	(1985)	(1985)	(1985)	(1985)	(1984)	(1974)	(1984)	(1999)	(1973)	(1983)	(1965)	(1965)
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)	(1958)	(1958)	(1958)	(1958)	(1958)	(1958)	(1958)	(1958)	(1961)	(1964)	(1957)	(1957)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1950 - 2003	
ANNUAL TOTAL	2,251.89		5,795.32			
ANNUAL MEAN	6.17		15.9		8.18	
HIGHEST ANNUAL MEAN					38.8	1984
LOWEST ANNUAL MEAN					0.000	1967
HIGHEST DAILY MEAN	33	Mar 17	196	May 2	721	Aug 1, 1956
LOWEST DAILY MEAN	a0.00	Dec 30	a0.00	Dec 30	a0.00	May 19, 1957
ANNUAL SEVEN-DAY MINIMUM	0.02	Apr 20	a0.00	Dec 30	a0.00	May 19, 1957
MAXIMUM PEAK FLOW			242	Apr 29	1,600	May 26, 1999
MAXIMUM PEAK STAGE			5.22	Apr 29	6.92	May 26, 1999
ANNUAL RUNOFF (AC-FT)	4,470		11,500		5,920	
10 PERCENT EXCEEDS	17		34		18	
50 PERCENT EXCEEDS	0.49		3.0		0.00	
90 PERCENT EXCEEDS	0.02		0.00		0.00	

e Estimated.
a No flow many days.

06713300 CHERRY CREEK AT GLENDALE, CO

LOCATION.--Lat 39°42'22", long 104°56'13", in SW¼NW¼ sec.18, T.4 S., R.67 W., Denver County, Hydrologic Unit 10190003, on left bank 900 ft upstream from Colorado Boulevard, on Cherry Creek South Drive and Ash Court, in the City of Glendale, and 6 mi downstream from Cherry Creek Reservoir.

DRAINAGE AREA.--404 mi^2.

PERIOD OF RECORD.--January 1985 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=06713300

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,320 ft above NGVD of 1929, from topographic map. From Feb. 24 to Aug. 2, 2000, at site 0.5 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Cherry Creek Lake (see station 06712990). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	2.8	1.9	2.5	e1.8	2.2	95	170	37	43	14	e52
2	28	2.7	e2.2	e2.2	e2.0	2.2	92	167	15	45	13	e38
3	6.0	2.7	e2.8	e1.9	5.8	2.1	93	167	14	42	22	e40
4	5.1	2.6	e2.8	e1.6	2.6	2.1	100	169	15	39	e20	e16
5	3.6	2.6	2.3	e1.7	2.3	2.5	93	168	35	38	e14	e15
6	3.5	2.9	2.2	e3.0	2.2	2.3	115	168	36	37	e13	e15
7	3.4	2.4	e2.0	e1.9	2.1	2.1	93	146	44	31	e12	e22
8	2.6	2.3	e2.0	e1.9	2.1	2.1	85	68	15	14	e92	e16
9	2.1	e2.2	e2.0	e1.9	2.1	2.0	69	73	18	12	e48	e27
10	2.1	e2.0	e2.0	e1.8	2.2	2.2	66	189	15	11	e15	e27
11	2.3	e2.0	e2.0	e1.9	2.2	2.1	53	112	13	11	e20	e29
12	2.2	1.9	e2.2	e1.7	2.1	2.0	33	47	13	9.3	e20	e33
13	2.2	1.9	e2.1	e1.9	2.2	2.1	34	37	13	8.9	e14	e34
14	2.2	2.2	e2.1	e2.0	2.1	2.1	30	25	13	8.6	e13	e35
15	2.2	2.3	e2.1	1.8	2.2	2.0	38	37	13	8.4	e13	e36
16	2.3	2.1	e2.1	1.8	2.0	2.0	41	37	14	8.4	e13	e34
17	2.3	2.0	e2.1	e1.8	2.0	25	33	35	72	8.2	e13	e32
18	2.2	2.0	e2.0	1.8	1.9	14	31	37	161	93	e25	e31
19	2.2	2.0	e2.0	1.8	1.9	10	71	36	38	160	e11	26
20	2.0	2.0	e2.2	e1.8	1.8	47	32	35	45	25	e11	34
21	2.1	e2.1	e2.5	e1.8	1.8	70	34	35	38	16	e10	34
22	1.9	e2.0	e2.4	e1.8	1.8	64	35	30	38	14	e10	33
23	1.9	e2.0	e2.4	1.9	2.1	78	143	19	39	15	e9.5	16
24	2.0	2.1	e2.4	1.9	1.7	25	173	20	40	16	e8.4	26
25	2.0	2.5	e2.4	1.9	1.7	87	42	20	40	17	e7.8	25
26	2.0	2.3	e2.4	1.8	3.1	133	22	19	40	33	e8.4	23
27	3.0	2.1	e2.4	e1.8	2.5	116	20	17	41	e53	e7.8	21
28	1.9	2.1	e2.5	e1.8	2.5	92	77	17	47	e17	e7.2	21
29	9.5	2.0	2.4	e1.9	---	89	165	16	43	e16	e12	20
30	4.6	1.9	2.5	e1.9	---	98	171	15	43	e15	e149	20
31	2.8	---	2.7	e1.8	---	e97	---	16	---	14	e111	---
TOTAL	146.2	66.7	70.1	59.0	62.8	1,079.1	2,179	2,147	1,048	878.8	757.1	831
MEAN	4.72	2.22	2.26	1.90	2.24	34.8	72.6	69.3	34.9	28.3	24.4	27.7
MAX	34	2.9	2.8	3.0	5.8	133	173	189	161	160	149	52
MIN	1.9	1.9	1.9	1.6	1.7	2.0	20	15	13	8.2	7.2	15
AC-FT	290	132	139	117	125	2,140	4,320	4,260	2,080	1,740	1,500	1,650

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

MEAN	14.4	13.3	12.5	14.1	18.7	30.8	45.0	48.7	37.2	28.2	28.1	19.8
MAX	38.0	33.8	29.8	45.7	53.2	75.2	104	147	101	55.9	72.0	43.0
(WY)	(1986)	(1998)	(1988)	(1985)	(1988)	(1985)	(1998)	(1999)	(1999)	(1995)	(1998)	(1995)
MIN	4.65	2.22	1.94	1.90	2.24	4.41	9.81	9.69	13.7	5.37	4.30	3.90
(WY)	(1995)	(2003)	(1995)	(2003)	(2003)	(1995)	(1991)	(2002)	(1990)	(2002)	(2002)	(1994)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1985 - 2003	
ANNUAL TOTAL	4,173.97		9,324.8			
ANNUAL MEAN	11.4		25.5		25.4	
HIGHEST ANNUAL MEAN					46.8	1999
LOWEST ANNUAL MEAN					10.9	1994
HIGHEST DAILY MEAN	96	May 24	189	May 10	461	May 17, 1995
LOWEST DAILY MEAN	0.32	Jul 20	e1.6	Jan 4	0.32	Jul 20, 2002
ANNUAL SEVEN-DAY MINIMUM	0.51	Jul 15	1.8	Jan 15	0.51	Jul 15, 2002
MAXIMUM PEAK FLOW			1,850	Jul 18	a2,720	Jul 8, 2001
MAXIMUM PEAK STAGE			8.31	Jul 18	b9.36	Jul 8, 2001
ANNUAL RUNOFF (AC-FT)	8,280		18,500		18,420	
10 PERCENT EXCEEDS	23		75		58	
50 PERCENT EXCEEDS	6.4		11		15	
90 PERCENT EXCEEDS	1.8		1.9		3.9	

e Estimated.
a From rating curve extended above 800 ft^3/s.
b Also occurred Jul 28, 1997.

06713500 CHERRY CREEK AT DENVER, CO

LOCATION.--Lat 39°44'33", long 104°59'58", in SE$^1/_4$ sec.33, T.3 S., R.68 W., Denver County, Hydrologic Unit 10190003, on left bank 100 ft downstream from Champa Street Bridge in Denver, and 1.1 mi upstream from mouth.
DRAINAGE AREA.--409 mi^2.
PERIOD OF RECORD.--August 1942 to September 1969, February 1980 to September 1983, and annual maximums 1984, 1985. April 1986 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06713500
REVISED RECORDS.--WSP 1710: Drainage area. WDR CO-82-1: 1982 (M).
GAGE.--Water-stage recorder. Elevation of gage is 5,180 ft above NGVD of 1929, from topographic map. See WSP 1730 for history of changes prior to July 16, 1951. Prior to Mar. 1, 1995, at site 0.6 mi downstream, on downstream side of Wazee Street Bridge, at different datum. Mar. 1, 1995 to May 11, 1998, at site 0.4 mi downstream, 300 ft upstream from Market Street Bridge, at different datum.
REMARKS.--Records good except for estimated daily discharges, which are poor. Several diversions upstream from station for irrigation of about 1,900 acres. Floodflow regulated by Cherry Creek Reservoir 11 mi upstream, capacity, 95,960 acre-ft. Water-quality data has been collected at this site as part of the South Platte River Basin National Water-Quality Assessment Program and is available at http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06713500. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 26, 1885, reached a discharge of 20,000 ft^3/s, by float measurement. Flood of May 19 and 20, 1864, reached a somewhat higher stage. Flood of Aug. 3, 1933, reached a discharge of about 15,000 ft^3/s, as determined by rise of South Platte River at Denver.

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	43	8.0	5.2	7.3	7.2	7.2	107	168	41	40	18	70
2	67	7.2	5.7	8.2	9.0	6.6	103	166	22	42	18	44
3	25	7.6	7.7	6.9	20	6.9	101	166	19	41	27	49
4	22	6.8	7.4	6.8	10	6.9	115	165	22	38	24	20
5	15	7.2	6.2	7.0	9.0	7.8	100	165	44	38	18	19
6	14	7.7	5.7	9.0	8.1	7.6	128	164	45	37	17	19
7	13	7.3	5.6	7.6	8.3	6.7	102	151	68	32	17	29
8	9.9	7.7	5.8	7.4	8.0	6.2	94	81	20	17	137	20
9	e8.8	6.8	6.1	7.2	7.3	6.1	75	103	24	15	58	32
10	e8.2	6.2	6.0	7.1	8.2	6.6	77	253	23	14	19	32
11	e8.3	6.2	5.8	7.1	7.3	6.6	72	134	19	14	24	36
12	e8.0	6.2	5.8	7.0	7.0	6.4	49	59	19	13	25	38
13	e8.2	6.1	5.6	7.3	7.3	6.4	45	45	19	13	18	38
14	e8.1	6.3	5.7	7.7	7.2	6.5	41	28	18	12	17	38
15	e8.0	6.5	5.6	7.3	8.4	6.2	43	43	17	12	17	40
16	e8.3	6.1	e6.1	6.9	7.1	6.1	57	45	18	11	17	39
17	e8.3	5.8	6.1	7.0	5.9	48	39	40	79	11	16	36
18	7.8	5.8	6.5	6.6	5.2	53	37	42	196	17	34	37
19	7.2	5.6	6.1	6.6	5.6	41	104	43	57	e351	15	e34
20	7.2	6.4	6.3	6.8	6.5	89	42	40	54	e35	14	e41
21	6.8	6.5	6.6	7.5	7.3	129	45	40	40	e25	14	42
22	6.5	6.2	5.9	7.0	7.6	118	43	37	37	e18	14	43
23	6.8	5.8	6.2	7.5	8.8	129	179	25	38	15	13	25
24	6.6	7.2	6.5	7.6	7.7	62	259	24	38	15	12	33
25	6.8	8.2	6.0	7.6	7.3	111	68	24	38	16	12	33
26	6.5	6.8	6.9	7.1	12	158	35	21	37	53	11	31
27	11	5.9	6.8	7.2	9.6	141	31	20	38	59	11	29
28	7.4	5.8	6.2	7.0	8.3	111	74	20	42	22	11	29
29	36	5.5	6.4	7.3	---	e105	168	19	45	20	17	30
30	19	5.4	6.8	7.6	---	115	172	19	42	18	284	29
31	9.2	---	6.8	7.5	---	e110	---	21	---	17	150	---
TOTAL	427.9	196.8	192.1	225.7	231.2	1,626.8	2,605	2,371	1,219	1,081	1,099	1,035
MEAN	13.8	6.56	6.20	7.28	8.26	52.5	86.8	76.5	40.6	34.9	35.5	34.5
MAX	67	8.2	7.7	9.0	20	158	259	253	196	351	284	70
MIN	6.5	5.4	5.2	6.6	5.2	6.1	31	19	17	11	11	19
AC-FT	849	390	381	448	459	3,230	5,170	4,700	2,420	2,140	2,180	2,050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2003, BY WATER YEAR (WY)

MEAN	15.3	13.3	11.4	11.4	16.4	26.2	32.3	41.2	31.6	27.2	38.8	18.7
MAX	37.2	47.1	54.4	37.0	73.8	179	119	156	118	161	236	64.9
(WY)	(1998)	(1998)	(1988)	(2000)	(1948)	(1948)	(1983)	(1999)	(1944)	(1983)	(1945)	(1965)
MIN	3.66	3.61	3.39	3.17	4.18	3.25	3.28	6.10	3.17	3.74	4.05	4.03
(WY)	(1949)	(1955)	(1956)	(1956)	(1952)	(1955)	(1955)	(1966)	(1946)	(1948)	(1948)	(1948)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1942 - 2003	
ANNUAL TOTAL	6,615.5		12,310.5			
ANNUAL MEAN	18.1		33.7		23.7	
HIGHEST ANNUAL MEAN					70.7	1983
LOWEST ANNUAL MEAN					6.00	1954
HIGHEST DAILY MEAN	169	May 24	351	Jul 19	1,350	Aug 8, 1945
LOWEST DAILY MEAN	5.2	Dec 1	5.2	Dec 1	a0.40	Jun 16, 1948
ANNUAL SEVEN-DAY MINIMUM	5.8	Nov 26	5.8	Nov 26	0.93	Jun 14, 1948
MAXIMUM PEAK FLOW			2,220	Jul 19	b3,230	Jul 8, 2001
MAXIMUM PEAK STAGE			d8.57	Jul 19	c9.32	Jul 8, 2001
ANNUAL RUNOFF (AC-FT)	13,120		24,420		17,190	
10 PERCENT EXCEEDS	30		100		47	
50 PERCENT EXCEEDS	14		16		11	
90 PERCENT EXCEEDS	6.4		6.2		4.5	

e Estimated.
a Also occurred Jun 17-18, 1948.
b From rating curve extended above 1,000 ft^3/s.
c Maximum gage height, 11.98 ft, Jun 28, 1997, site and datum then in use.
d From floodmark.

06714000 SOUTH PLATTE RIVER AT DENVER, CO

LOCATION.--Lat 39°45'35", long 105°00'10", in NW¼SE¼ sec.28, T.3 S., R.68 W., Denver County, Hydrologic Unit 10190003, on right bank 90 ft upstream from Nineteenth Street Bridge in Denver, and 0.4 mi downstream from Cherry Creek.

DRAINAGE AREA.--3,861 mi^2.

PERIOD OF RECORD.--May to October 1889, June to October 1890, July 1895 to current year. Monthly discharge only for some periods, published in WSP 1310. Statistical summary computed for 1976 to current year, subsequent to completion of Chatfield Dam. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06714000

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

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,157.64 ft above NGVD of 1929, adjustment of 1960. Prior to Aug. 12, 1909, nonrecording gages, and Aug. 12, 1909 to Aug. 28, 1931, water-stage recorder, at several sites within 0.5 mi of present site at various datums. Aug. 29, 1931 to June 28, 1965, water-stage recorder at site 70 ft downstream at datum 3.66 ft lower. June 29, 1965 to Mar. 18, 1966, water-stage recorder at site 70 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good except for flows above 530 ft^3/s, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 79,000 acres and municipal use, and return flow from irrigated areas.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	119	77	61	77	52	69	354	932	495	216	247	381
2	319	77	61	83	53	72	323	685	564	343	179	379
3	113	82	63	75	101	67	319	669	495	319	134	359
4	96	75	64	72	74	62	389	617	384	177	216	314
5	84	73	63	75	55	61	345	517	394	160	310	297
6	82	76	62	86	55	66	415	420	306	168	133	341
7	84	70	62	68	55	57	352	387	582	256	174	271
8	78	66	65	62	60	58	429	334	249	135	316	239
9	79	59	67	60	60	55	564	422	212	122	183	262
10	84	63	65	59	61	56	544	1,110	346	124	116	351
11	76	65	60	57	60	55	479	565	423	99	179	338
12	72	61	56	60	54	53	352	496	392	83	264	239
13	76	59	55	62	56	53	391	464	364	81	185	177
14	80	67	55	62	61	54	496	405	377	74	180	164
15	82	65	58	60	90	54	476	283	201	133	178	160
16	80	66	60	59	67	57	751	316	307	160	114	146
17	78	63	59	57	62	208	655	429	413	164	98	139
18	77	61	58	57	52	369	521	436	831	197	192	134
19	73	59	55	58	53	214	1,020	488	461	523	139	123
20	78	60	53	59	53	373	566	463	272	250	96	123
21	78	58	57	59	55	543	546	461	363	199	91	120
22	72	58	58	59	55	555	635	415	409	216	91	124
23	75	57	60	58	62	597	868	249	360	202	87	103
24	72	67	65	53	59	412	1,270	283	399	213	87	125
25	74	77	66	54	58	621	627	457	385	127	90	139
26	76	69	66	59	72	708	553	513	302	134	140	175
27	90	63	71	59	77	631	535	522	285	211	168	182
28	82	58	71	51	73	462	598	517	279	257	173	185
29	160	57	72	55	---	390	831	488	291	405	218	188
30	108	60	74	57	---	406	1,020	609	279	543	1,080	189
31	86	---	73	60	---	444	---	584	---	277	593	---
TOTAL	2,883	1,968	1,935	1,932	1,745	7,882	17,224	15,536	11,420	6,568	6,451	6,467
MEAN	93.0	65.6	62.4	62.3	62.3	254	574	501	381	212	208	216
MAX	319	82	74	86	101	708	1,270	1,110	831	543	1,080	381
MIN	72	57	53	51	52	53	319	249	201	74	87	103
AC-FT	5,720	3,900	3,840	3,830	3,460	15,630	34,160	30,820	22,650	13,030	12,800	12,830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)

MEAN	195	186	139	128	142	196	428	880	793	559	464	228
MAX	1,184	809	366	282	273	420	1,377	2,970	2,759	2,546	1,774	911
(WY)	(1985)	(1985)	(1985)	(1985)	(1984)	(1983)	(1984)	(1980)	(1983)	(1995)	(1984)	(1984)
MIN	66.8	65.6	62.4	62.3	62.3	94.9	99.1	141	150	87.5	71.3	76.5
(WY)	(1978)	(2003)	(2003)	(2003)	(2003)	(1978)	(1982)	(2002)	(2002)	(2002)	(2002)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003	
ANNUAL TOTAL	39,644		82,011			
ANNUAL MEAN	109		225		a363	
HIGHEST ANNUAL MEAN					961	1983
LOWEST ANNUAL MEAN					120	2002
HIGHEST DAILY MEAN	851	May 24	1,270	Apr 24	b4,020	May 27, 1987
LOWEST DAILY MEAN	42	Aug 2	51	Jan 28	c42	Aug 2, 2002
ANNUAL SEVEN-DAY MINIMUM	48	Aug 14	54	Mar 9	48	Aug 14, 2002
MAXIMUM PEAK FLOW			2,590	Aug 30	d12,600	Jul 25, 1998
MAXIMUM PEAK STAGE			6.59	Aug 30	10.90	Jul 25, 1998
ANNUAL RUNOFF (AC-FT)	78,630		162,700		262,600	
10 PERCENT EXCEEDS	177		528		722	
50 PERCENT EXCEEDS	90		123		186	
90 PERCENT EXCEEDS	57		57		85	

a Average discharge for 79 years (water years 1896-1974), 344 ft^3/s; 249,200 acre-ft/yr, prior to completion of Chatfield Dam.
b Maximum daily discharge for period of record, 12,000 ft^3/s, Jun 17, 1965.
c Minimum daily discharge for period of record, 8.8 ft^3/s, Mar 25, 1951.
d Maximum discharge and stage for period of record, 40,300 ft^3/s, Jun 17, 1965, gage height, 18.66 ft, from floodmarks, present datum, from rating curve extended above 2,700 ft^3/s, on basis of contracted-opening measurement of peak flow.

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

LOCATION.--Lat 39°48'44", long 104°57'28", in NW¼NW¼ sec.12, T.3 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 300 ft southeast of intersection of York Street and East 64th Avenue, and 1,900 ft upstream from mouth of Sand Creek at northwest corner of Metro Denver Sewage Disposal plant at Commerce City.

DRAINAGE AREA.--3,884 mi^2.

PERIOD OF RECORD.--January 1982 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06714215

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

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 5,105 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage and flood-control reservoirs, power developments, diversions for irrigation and municipal use, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	9.1	11	9.4	64	9.3	10	389	110	87	130	16
2	378	11	12	7.3	63	8.7	10	216	244	226	68	31
3	94	9.9	14	6.5	124	8.3	10	206	174	205	35	50
4	42	8.3	13	6.6	94	8.7	9.9	156	57	56	95	11
5	14	11	12	6.7	69	8.2	10	80	72	32	222	11
6	13	7.5	11	6.6	e69	7.7	12	18	39	33	33	12
7	11	6.8	13	5.9	69	7.9	11	15	326	144	46	10
8	9.6	21	11	5.9	e74	7.6	12	14	16	26	281	11
9	8.7	71	9.9	7.7	73	7.6	52	162	20	15	148	12
10	8.1	77	8.5	6.3	75	8.3	27	1,170	20	14	22	12
11	7.6	79	6.7	6.5	75	7.4	21	573	78	13	126	12
12	8.8	75	7.3	7.1	69	7.5	15	367	42	14	296	13
13	8.8	70	7.9	7.0	69	7.0	14	214	17	12	212	11
14	9.3	80	8.6	7.5	74	7.7	33	98	16	11	203	10
15	8.6	79	8.1	6.9	47	7.6	31	16	16	13	145	9.9
16	6.9	78	8.2	13	13	8.2	314	15	17	35	34	11
17	7.9	76	8.2	25	13	112	220	131	101	38	31	10
18	8.3	75	9.2	24	12	251	51	215	515	57	77	12
19	7.9	72	8.9	23	13	19	574	255	126	573	30	11
20	9.4	73	8.1	18	12	148	137	182	16	140	21	10
21	9.1	71	7.8	13	10	236	72	118	14	82	19	12
22	8.6	71	6.9	11	10	155	160	50	14	98	16	17
23	10	69	8.1	9.1	e11	178	331	14	26	88	15	14
24	6.8	81	7.8	37	e9.6	55	717	16	31	106	14	13
25	7.3	95	7.3	61	9.0	124	96	55	30	37	14	9.3
26	8.5	89	e7.7	67	8.3	194	26	82	22	24	13	8.1
27	9.2	80	7.6	71	8.5	146	19	53	19	103	15	9.6
28	6.0	47	7.7	60	8.4	21	49	22	19	136	20	8.8
29	42	16	7.3	65	---	12	245	18	99	247	19	12
30	52	13	6.8	66	---	12	412	51	159	481	1,240	11
31	9.2	---	7.1	70	---	11	---	104	---	167	458	---
TOTAL	902.6	1,621.6	278.7	737.0	1,245.8	1,801.7	3,700.9	5,075	2,455	3,313	4,098	400.7
MEAN	29.1	54.1	8.99	23.8	44.5	58.1	123	164	81.8	107	132	13.4
MAX	378	95	14	71	124	251	717	1,170	515	573	1,240	50
MIN	6.0	6.8	6.7	5.9	8.3	7.0	9.9	14	14	11	13	8.1
AC-FT	1,790	3,220	553	1,460	2,470	3,570	7,340	10,070	4,870	6,570	8,130	795

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2003, BY WATER YEAR (WY)

MEAN	108	94.2	63.5	88.5	69.2	111	291	676	517	431	357	122
MAX	1,286	927	199	235	325	305	1,335	2,675	2,560	2,130	1,410	755
(WY)	(1985)	(1985)	(1986)	(1984)	(1984)	(1984)	(1984)	(1987)	(1995)	(1995)	(1984)	(1984)
MIN	10.0	9.00	8.79	10.0	8.58	6.81	21.0	33.2	45.1	42.5	35.9	13.4
(WY)	(1989)	(1989)	(1991)	(2002)	(1982)	(1995)	(1991)	(1997)	(2002)	(1994)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1982 - 2003	
ANNUAL TOTAL	16,840.6		25,630.0			
ANNUAL MEAN	46.1		70.2		251	
HIGHEST ANNUAL MEAN					825	1983
LOWEST ANNUAL MEAN					50.5	2002
HIGHEST DAILY MEAN	1,080	May 24	1,240	Aug 30	4,110	May 27, 1987
LOWEST DAILY MEAN	5.2	Feb 5	5.9	Jan 7	2.1	Mar 14, 1995
ANNUAL SEVEN-DAY MINIMUM	7.1	Feb 3	6.5	Jan 2	3.7	Mar 11, 1995
MAXIMUM PEAK FLOW			3,550	Aug 30	14,300	Jun 8, 1987
MAXIMUM PEAK STAGE			5.50	Aug 30	8.09	Jun 8, 1987
ANNUAL RUNOFF (AC-FT)	33,400		50,840		181,900	
10 PERCENT EXCEEDS	89		180		599	
50 PERCENT EXCEEDS	17		18		64	
90 PERCENT EXCEEDS	7.8		7.7		9.3	

e Estimated.

394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO

LOCATION.--Lat 39°48'36", long 104°57'00", in SE¼NW¼NW¼ sec.12, T.3 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 800 ft upstream from mouth and 50 ft upstream from confluence of Burlington Ditch and Sand Creek in northeast corner of Metro Wastewater Plant.

DRAINAGE AREA.--184 mi^2 (revised).

PERIOD OF RECORD.--January 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=394839104570300

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,120 ft above NGVD of 1929, from topographic map. Prior to Mar 1, 2000, at site 400 ft downstream at different datum. Supplementary recorder on Burlington Ditch return flows, 50 ft downstream from gage.

REMARKS.--Records poor. Records include return flows from Burlington ditch. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	16	13	12	12	e89	48	e38	e179	e137	e102	102
2	99	15	13	12	13	e91	37	27	e200	e123	e97	42
3	44	23	14	12	24	e88	30	24	e113	e127	e80	152
4	24	19	13	12	18	e76	37	21	e94	e129	e102	27
5	17	14	12	12	14	e75	29	21	e106	e126	e99	15
6	16	15	12	12	14	e85	51	20	e46	e126	e94	15
7	15	14	13	12	12	e71	32	21	e210	e129	e94	20
8	15	e24	13	11	12	e70	29	20	e38	e123	e107	17
9	14	e13	13	12	11	e66	26	e68	19	e90	e95	12
10	15	13	12	12	12	e67	23	e441	e57	e104	e80	10
11	15	13	12	11	12	e57	22	e200	e16	e87	e52	10
12	15	13	13	12	12	34	22	e136	13	e62	e64	9.4
13	16	13	13	70	12	26	22	e59	14	e65	e13	9.5
14	17	13	13	73	12	13	92	e71	e26	e52	e9.3	9.5
15	16	13	13	13	31	14	89	e35	17	e94	e41	9.8
16	16	14	13	12	39	16	166	e52	16	e116	e56	10
17	17	14	13	12	12	67	94	e62	e66	e117	e31	13
18	17	14	13	12	12	168	24	e127	e203	e126	e106	9.3
19	16	14	12	12	12	58	92	e135	e80	e385	e123	11
20	17	14	12	12	12	149	40	e43	e55	e170	e49	10
21	17	14	12	12	12	322	36	e29	e38	e139	e41	9.9
22	18	14	12	12	12	410	27	e20	e26	e129	e46	9.5
23	17	14	12	12	13	375	331	19	16	e114	e55	8.6
24	16	14	12	11	e13	212	612	18	14	e114	e60	8.5
25	15	15	e12	12	e11	146	110	e30	14	e82	e63	8.4
26	15	15	e12	12	e21	155	57	e49	14	e66	e108	9.1
27	24	14	e12	11	28	159	44	19	13	e126	e144	11
28	17	14	11	12	50	77	33	17	13	e117	147	9.2
29	92	14	12	11	---	53	e41	e28	e91	e109	160	9.4
30	51	13	12	12	---	41	e74	e157	e138	e112	353	8.8
31	21	---	12	12	---	e45	---	e189	---	e102	377	---
TOTAL	769	442	386	487	468	3,375	2,370	2,196	1,945	3,698	3,048.3	605.9
MEAN	24.8	14.7	12.5	15.7	16.7	109	79.0	70.8	64.8	119	98.3	20.2
MAX	99	24	14	73	50	410	612	441	210	385	377	152
MIN	14	13	11	11	11	13	22	17	13	52	9.3	8.4
AC-FT	1,530	877	766	966	928	6,690	4,700	4,360	3,860	7,330	6,050	1,200

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

MEAN	36.8	24.8	19.6	17.6	28.1	44.8	60.9	79.6	77.2	110	102	58.9
MAX	107	49.0	35.5	27.7	102	124	168	150	137	260	204	162
(WY)	(1998)	(1998)	(1998)	(1997)	(1997)	(1997)	(1999)	(2001)	(1995)	(1997)	(1997)	(1997)
MIN	17.8	14.7	12.5	12.9	14.6	13.6	25.2	46.1	33.9	32.0	30.9	16.9
(WY)	(1993)	(2003)	(2003)	(1995)	(1995)	(1995)	(1996)	(1993)	(1996)	(2002)	(2002)	(1992)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	11,995		19,790.2			
ANNUAL MEAN	32.9		54.2		55.9	
HIGHEST ANNUAL MEAN					99.9	1997
LOWEST ANNUAL MEAN					34.8	2002
HIGHEST DAILY MEAN	275	May 24	612	Apr 24	1,100	Jul 29, 1997
LOWEST DAILY MEAN	11	Aug 1	8.4	Sep 25	4.0	Jul 4, 1996
ANNUAL SEVEN-DAY MINIMUM	12	Dec 22	9.1	Sep 20	7.2	Jun 28, 1996
MAXIMUM PEAK FLOW			1,190	Jul 19	a5,750	Jul 29, 1997
MAXIMUM PEAK STAGE			5.66	Jul 19	b12.12	Jul 29, 1997
ANNUAL RUNOFF (AC-FT)	23,790		39,250		40,480	
10 PERCENT EXCEEDS	69		128		124	
50 PERCENT EXCEEDS	21		20		30	
90 PERCENT EXCEEDS	13		12		13	

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

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO

LOCATION.--Lat 39°41'14", long 105°41'59", in NE¼SW¼ sec.20, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 400 ft upstream from confluence of South Clear Creek, 0.3 mi south of Georgetown Reservoir, and 1.3 mi south of Georgetown.

DRAINAGE AREA.--12.0 mi^2.

PERIOD OF RECORD.--October 1994 to September 2000. October 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=06714800

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,280 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Vidler tunnel (transmountain diversion) imports water from Peru Creek. There is seasonal diversion into Green Lake. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 168 ft^3/s, July 12, 1995, gage height, 4.79 ft; minimum daily, 1.2 ft^3/s, Feb. 12, 1995.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, not determined; minimum daily, 1.8 ft^3/s, Apr. 20.

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	4.0	e2.0	---	---	---	---	e2.9	2.9	e136	46	e12	9.3
2	5.8	e2.0	---	---	---	---	e2.6	2.7	e113	42	e12	8.9
3	5.5	e2.0	---	---	---	---	e2.1	2.9	e99	36	e12	11
4	4.6	e2.0	---	---	---	---	e2.1	3.0	e87	34	e12	11
5	4.7	e2.0	---	---	---	---	e1.9	2.7	e81	31	13	9.7
6	4.8	e2.0	---	---	---	---	e2.0	2.6	77	29	13	12
7	5.3	e2.0	---	---	---	---	e2.0	2.8	78	27	12	14
8	5.4	e2.0	---	---	---	---	e2.0	2.9	79	25	12	12
9	5.3	e2.0	---	---	---	---	e2.0	2.7	76	24	13	16
10	5.0	e2.0	---	---	---	---	e2.1	2.8	75	22	12	13
11	4.7	e2.0	---	---	---	---	e2.1	2.7	73	21	11	12
12	4.4	e2.0	---	---	---	---	e2.2	3.5	68	20	11	11
13	4.0	e2.0	---	---	---	---	e2.5	5.7	68	18	9.9	11
14	4.2	e2.0	---	---	---	---	2.6	7.4	68	17	9.2	11
15	4.2	e2.0	---	---	---	---	2.5	9.1	68	16	8.8	10
16	4.0	e2.0	---	---	---	---	2.2	10	64	16	9.5	9.5
17	3.9	e2.0	---	---	---	---	2.1	15	65	15	10	9.0
18	3.8	e2.0	---	---	---	---	2.1	16	63	14	12	8.7
19	3.9	e2.0	---	---	---	---	1.9	17	62	17	10	8.6
20	3.5	e1.9	---	---	---	---	1.8	18	58	16	8.5	8.3
21	3.6	e1.9	---	---	---	---	1.9	19	56	13	7.8	8.0
22	e3.5	e1.9	---	---	---	---	2.0	25	54	12	7.6	7.7
23	e3.4	e1.9	---	---	---	---	2.0	36	54	11	7.9	7.2
24	e3.2	e1.9	---	---	---	---	1.9	47	53	e11	8.5	6.9
25	e3.0	e1.9	---	---	---	---	2.0	54	51	e12	9.9	6.5
26	e2.9	e2.1	---	---	---	---	2.4	56	49	e12	8.3	6.4
27	e2.7	e2.2	---	---	---	---	2.8	68	49	e12	7.0	6.3
28	e2.5	e2.2	---	---	---	---	2.9	93	48	e12	6.6	6.0
29	e2.2	e2.4	---	---	---	---	3.2	e112	48	e12	6.8	5.9
30	e2.1	e2.4	---	---	---	---	3.3	e123	47	e12	15	5.5
31	e2.1	---	---	---	---	---	---	e137	---	e12	12	---
TOTAL	122.2	60.7	---	---	---	---	68.1	902.4	2,067	617	320.3	282.4
MEAN	3.94	2.02	---	---	---	---	2.27	29.1	68.9	19.9	10.3	9.41
MAX	5.8	2.4	---	---	---	---	3.3	137	136	46	15	16
MIN	2.1	1.9	---	---	---	---	1.8	2.6	47	11	6.6	5.5
AC-FT	242	120	---	---	---	---	135	1,790	4,100	1,220	635	560

e Estimated.

394308105413800 CLEAR CREEK ABOVE GEORGETOWN LAKE NEAR GEORGETOWN, CO

LOCATION.--Lat 39°43'08", long 105°41'38", in SW¼NE¼, sec.8, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 300 ft upstream from Georgetown Lake, and 1.0 mi north of Georgetown.

DRAINAGE AREA.--80.0 mi^2.

PERIOD OF RECORD.--July 1997 to September 1999, October 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=394308105413800

GAGE.--Water-stage recorder. Elevation of gage is 8,460 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 975 ft^3/s, May 31, 2003, gage height 6.49 ft; minimum daily, 9.0 ft^3/s (estimated), Feb. 5, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 975 ft^3/s, May 31, gage height, 6.49 ft; minimum daily, 12 ft^3/s, Oct. 29-31.

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	---	---	---	---	e18	e20	32	802	321	89	73
2	29	---	---	---	---	e19	e20	29	665	309	82	63
3	31	---	---	---	---	e20	e21	29	580	294	81	66
4	25	---	---	---	---	e19	e19	30	514	287	80	65
5	23	---	---	---	---	e20	e17	28	477	270	72	62
6	21	---	---	---	---	e20	e17	26	422	247	69	91
7	28	---	---	---	---	e19	e15	28	382	224	70	96
8	23	---	---	---	---	e19	e14	30	333	224	73	91
9	25	---	---	---	---	e20	e17	26	355	210	68	123
10	21	---	---	---	---	e19	e20	28	403	200	67	104
11	22	---	---	---	---	e20	e25	26	440	192	61	97
12	20	---	---	---	---	e20	e27	e28	442	183	58	91
13	17	---	---	---	---	e20	e29	e39	431	180	60	86
14	18	---	---	---	---	e20	e33	e44	430	164	59	78
15	17	---	---	---	---	e19	e37	e57	455	156	52	75
16	19	---	---	---	---	e19	e32	97	454	155	60	70
17	15	---	---	---	---	e20	e29	121	440	154	83	66
18	18	---	---	---	---	e22	e30	141	455	154	92	64
19	15	---	---	---	---	e22	e29	141	464	172	74	e64
20	14	---	---	---	---	e21	e27	136	454	166	63	e63
21	17	---	---	---	---	e21	e26	144	433	146	58	61
22	17	---	---	---	---	e19	e29	178	425	137	57	58
23	15	---	---	---	---	e20	e30	225	411	133	58	54
24	17	---	---	---	---	e21	17	284	394	125	65	53
25	16	---	---	---	---	e21	19	332	360	123	73	49
26	14	---	---	---	---	e20	27	360	344	118	65	47
27	e14	---	---	---	---	e20	32	439	344	114	58	46
28	15	---	---	---	---	e20	34	550	334	111	56	44
29	12	---	---	---	---	e19	36	661	333	109	52	45
30	e12	---	---	---	---	e20	35	725	323	102	89	46
31	e12	---	---	---	---	e20	---	809	---	96	81	---
TOTAL	584	---	---	---	---	617	763	5,823	13,099	5,576	2,125	2,091
MEAN	18.8	---	---	---	---	19.9	25.4	188	437	180	68.5	69.7
MAX	31	---	---	---	---	22	37	809	802	321	92	123
MIN	12	---	---	---	---	18	14	26	323	96	52	44
AC-FT	1,160	---	---	---	---	1,220	1,510	11,550	25,980	11,060	4,210	4,150

e Estimated.

394359105411901 GEORGETOWN LAKE NEAR GEORGETOWN, CO

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

DRAINAGE AREA.--82.4 mi^2.

PERIOD OF RECORD.--October 2002 to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=394359105411901

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,444.82 ft above NAVD of 1988.

REMARKS.--Reservoir is formed by an earth and rock fill dam with concrete spillway. Gage not in operation during period Nov. 20, 2002 to May 22, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum daily reservoir elevation during period of operation, 8,449.60 ft, May 31; minimum daily, 8,446.05 ft, Oct. 28.

ELEVATION OF RESERVOIR WATER SURFACE ABOVE DATUM, FEET
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	8,446.56	---	---	---	---	---	---	8,449.59	8,448.79	8,448.37	8,448.11
2	---	8,446.73	---	---	---	---	---	---	8,449.39	8,448.77	8,448.37	8,448.06
3	---	8,446.77	---	---	---	---	---	---	8,449.20	8,448.75	8,448.35	8,448.06
4	8,446.81	8,446.76	---	---	---	---	---	---	8,449.08	8,448.73	8,448.35	8,448.07
5	8,446.89	8,446.76	---	---	---	---	---	---	8,449.04	8,448.71	8,448.34	8,448.04
6	8,447.07	8,446.80	---	---	---	---	---	---	8,448.93	8,448.68	8,448.31	8,448.16
7	8,446.99	8,446.88	---	---	---	---	---	---	8,448.88	8,448.61	8,448.31	8,448.17
8	8,447.04	8,447.05	---	---	---	---	---	---	8,448.79	8,448.61	8,448.33	8,448.15
9	8,447.13	8,447.25	---	---	---	---	---	---	8,448.82	8,448.57	8,448.30	8,448.25
10	8,447.02	8,447.45	---	---	---	---	---	---	8,448.90	8,448.57	8,448.24	8,448.20
11	8,447.05	8,447.61	---	---	---	---	---	---	8,448.97	8,448.56	8,448.29	8,448.18
12	8,447.06	8,447.72	---	---	---	---	---	---	8,448.98	8,448.51	8,448.28	8,448.15
13	8,446.98	8,447.81	---	---	---	---	---	---	8,448.96	8,448.51	8,448.28	8,448.13
14	8,446.98	8,447.87	---	---	---	---	---	---	8,448.96	8,448.48	8,448.27	8,448.11
15	8,446.98	8,447.91	---	---	---	---	---	---	8,449.00	8,448.44	8,448.25	8,448.08
16	8,446.90	8,447.94	---	---	---	---	---	---	8,449.00	8,448.44	8,448.25	8,448.08
17	8,446.85	8,447.95	---	---	---	---	---	---	8,448.98	8,448.48	8,448.35	8,448.06
18	8,446.77	8,447.94	---	---	---	---	---	---	8,449.05	8,448.48	8,448.37	8,448.06
19	8,446.79	8,447.93	---	---	---	---	---	---	8,449.09	8,448.57	8,448.31	8,448.12
20	8,447.01	---	---	---	---	---	---	---	8,449.05	8,448.60	8,448.26	8,448.09
21	8,447.11	---	---	---	---	---	---	---	8,448.97	8,448.54	8,448.23	8,448.09
22	8,447.10	---	---	---	---	---	---	---	8,448.96	8,448.51	8,448.05	8,448.07
23	8,446.93	---	---	---	---	---	---	8,448.53	8,448.94	8,448.47	8,448.05	8,448.07
24	8,446.75	---	---	---	---	---	---	8,448.67	8,448.92	8,448.42	8,448.07	8,448.06
25	8,446.52	---	---	---	---	---	---	8,448.81	8,448.87	8,448.43	8,448.10	8,448.14
26	8,446.25	---	---	---	---	---	---	8,448.86	8,448.84	8,448.41	8,448.08	8,448.10
27	8,446.07	---	---	---	---	---	---	8,448.99	8,448.83	8,448.39	8,448.04	8,448.14
28	8,446.05	---	---	---	---	---	---	8,449.16	8,448.82	8,448.43	8,448.02	8,448.14
29	8,446.13	---	---	---	---	---	---	8,449.39	8,448.82	8,448.45	8,447.99	8,448.14
30	8,446.15	---	---	---	---	---	---	8,449.48	8,448.80	8,448.39	8,448.15	8,448.13
31	8,446.33	---	---	---	---	---	---	8,449.60	---	8,448.36	8,448.15	---
MAX	---	---	---	---	---	---	---	---	8,449.59	8,448.79	8,448.37	8,448.25
MIN	---	---	---	---	---	---	---	---	8,448.79	8,448.36	8,447.99	8,448.04

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

LOCATION.--Lat 39°45'07", long 105°39'41", in NE¼NW¼ sec.34, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 1.1 mi west of exit 232 on I-70, 1.3 mi southeast of Empire, and 2.1 mi west of Lawson.

DRAINAGE AREA.--86.1 mi^2.

PERIOD OF RECORD.--October 1994 to September 2000. October 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=06715000

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,280 ft above NGVD of 1929, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1030 ft^3/s, June 17, 1995 and May 31, 2003, gage height, 6.63 ft and 6.53 ft respectively; minimum daily, 6.6 ft^3/s (estimated), March 2-13, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 1030 ft^3/s, May 31, gage height, 6.53 ft; minimum daily, 6.6 ft^3/s (estimated), Mar. 2-13.

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	25	---	---	---	---	e6.9	e16	e35	868	319	91	78
2	35	---	---	---	---	e6.6	e17	e31	700	310	87	70
3	35	---	---	---	---	e6.6	e18	e30	593	298	85	69
4	28	---	---	---	---	e6.6	18	e29	504	290	85	71
5	12	---	---	---	---	e6.6	15	e24	477	278	80	63
6	20	---	---	---	---	e6.6	15	e26	412	258	77	85
7	24	---	---	---	---	e6.6	13	e27	382	233	75	93
8	15	---	---	---	---	e6.6	12	e28	333	233	81	90
9	20	---	---	---	---	e6.6	13	e23	344	218	75	116
10	24	---	---	---	---	e6.6	18	e30	385	210	74	99
11	16	---	---	---	---	e6.6	23	e27	418	201	69	94
12	18	---	---	---	---	e6.6	26	e29	427	192	67	88
13	20	---	---	---	---	e6.6	26	e39	416	190	68	82
14	15	---	---	---	---	e6.9	32	e54	408	175	68	78
15	17	---	---	---	---	e7.2	35	e68	434	164	62	74
16	19	---	---	---	---	e7.5	28	e88	436	161	62	69
17	19	---	---	---	---	e7.6	26	e126	417	161	95	64
18	18	---	---	---	---	e8.3	27	e174	431	158	96	61
19	12	---	---	---	---	e8.6	25	e185	444	176	83	62
20	6.6	---	---	---	---	e9.0	22	e188	439	176	72	61
21	14	---	---	---	---	e9.2	21	e196	408	154	71	59
22	19	---	---	---	---	e9.4	23	e217	402	146	67	57
23	22	---	---	---	---	e9.6	e21	225	391	140	66	53
24	23	---	---	---	---	e9.4	e21	261	380	131	73	51
25	24	---	---	---	---	e9.2	e24	329	353	129	77	48
26	24	---	---	---	---	e9.0	e29	358	334	127	76	44
27	22	---	---	---	---	e9.0	e34	422	338	119	67	45
28	14	---	---	---	---	e9.0	e36	528	329	110	64	44
29	10	---	---	---	---	e10	e36	652	328	111	60	44
30	8.7	---	---	---	---	e11	e39	754	320	107	87	45
31	8.0	---	---	---	---	e13	---	859	---	97	87	---
TOTAL	587.3	---	---	---	---	249.0	709	6,062	12,851	5,772	2,347	2,057
MEAN	18.9	---	---	---	---	8.03	23.6	196	428	186	75.7	68.6
MAX	35	---	---	---	---	13	39	859	868	319	96	116
MIN	6.6	---	---	---	---	6.6	12	23	320	97	60	44
AC-FT	1,160	---	---	---	---	494	1,410	12,020	25,490	11,450	4,660	4,080

e Estimated.

06716100 WEST FORK CLEAR CREEK ABOVE MOUTH NEAR EMPIRE, CO

LOCATION.--Lat 39°45'32", long 105°39'34", in NE¼SW¼ sec.27, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 75 ft (revised) downstream from frontage road bridge and 1.2 mi east of Empire.

DRAINAGE AREA.--57.6 mi^2.

PERIOD OF RECORD.--October 1994 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06716100

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,235 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 transbasin diversions. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	e18	e14	e10	e11	e11	e17	37	642	195	71	49
2	29	e19	e13	e10	e11	e13	e19	34	446	189	68	52
3	30	e18	e13	e10	e11	e14	e20	33	381	188	73	55
4	28	e18	e12	e10	e11	e12	14	33	333	182	68	53
5	26	e19	e11	e10	e11	e13	13	33	294	175	66	59
6	26	e17	e11	e10	e11	e13	13	31	258	170	e57	65
7	25	e17	e12	e10	e11	e12	12	30	240	166	e62	61
8	26	e16	e11	e10	e11	e11	13	29	222	160	65	58
9	25	e16	e11	e10	e11	e12	14	29	221	155	61	e86
10	23	e15	e11	e10	e11	e12	16	29	240	150	57	e73
11	21	e14	e11	e10	e10	e12	18	27	256	140	53	e70
12	21	e14	e11	e10	e10	e12	20	29	268	130	50	61
13	20	e17	e11	e9.9	e9.8	e12	23	35	267	125	46	64
14	21	e18	e10	e9.8	e9.5	e13	27	43	259	119	52	65
15	21	e16	e10	e9.8	e9.0	e13	28	59	261	115	47	60
16	20	e15	e10	e9.8	e8.8	e13	25	74	262	111	46	59
17	21	e17	e10	e9.9	e8.8	e13	24	106	258	111	60	57
18	25	e16	e11	e10	e8.5	e14	24	121	266	106	71	52
19	e18	e15	e11	e10	e8.4	e14	23	129	263	106	56	54
20	e14	e14	e11	e10	e9.0	e14	22	139	255	123	49	53
21	e17	e14	e11	e10	e8.8	e14	22	163	245	110	49	50
22	e20	e14	e10	e10	e8.8	e13	22	197	242	100	49	47
23	e21	e14	e10	e10	e9.1	e14	23	243	244	95	47	46
24	e21	e14	e10	e11	e9.6	e15	24	323	242	91	47	45
25	e21	e14	e10	e11	e10	e15	24	383	229	91	56	42
26	e20	e14	e10	e11	e10	e15	28	385	216	91	56	41
27	e17	e15	e10	e11	e9.7	e15	32	411	209	86	49	40
28	e15	e15	e10	e11	e9.7	e14	32	458	206	85	45	39
29	e14	e15	e10	e11	---	e14	34	482	205	81	47	39
30	e15	e15	e10	e11	---	e14	37	548	201	74	57	38
31	e16	---	e10	e11	---	e14	---	633	---	79	54	---
TOTAL	660	473	336	317.2	277.5	410	663	5,306	8,131	3,899	1,734	1,633
MEAN	21.3	15.8	10.8	10.2	9.91	13.2	22.1	171	271	126	55.9	54.4
MAX	30	19	14	11	11	15	37	633	642	195	73	86
MIN	14	14	10	9.8	8.4	11	12	27	201	74	45	38
AC-FT	1,310	938	666	629	550	813	1,320	10,520	16,130	7,730	3,440	3,240

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	30.3	23.1	18.6	15.8	15.0	15.6	23.4	131	324	189	85.2	44.9
MAX	41.5	30.1	26.1	23.5	20.1	20.0	35.2	199	504	395	199	66.5
(WY)	(2000)	(2001)	(1999)	(1999)	(2000)	(2002)	(2000)	(2000)	(1997)	(1995)	(1999)	(1999)
MIN	21.3	15.8	10.4	9.92	9.91	12.7	15.3	47.2	110	44.5	32.2	20.1
(WY)	(2003)	(2003)	(1995)	(1995)	(2003)	(1998)	(1995)	(1995)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1995 - 2003	
ANNUAL TOTAL	12,000		23,839.7			
ANNUAL MEAN	32.9		65.3		76.6	
HIGHEST ANNUAL MEAN					96.2	1999
LOWEST ANNUAL MEAN					34.2	2002
HIGHEST DAILY MEAN	164	Jun 3	642	Jun 1	720	Jun 18, 1995
LOWEST DAILY MEAN	e10	Dec 14	e8.4	Feb 19	e8.4	Feb 19, 2003
ANNUAL SEVEN-DAY MINIMUM	e10	Dec 22	e8.7	Feb 16	e8.7	Feb 16, 2003
MAXIMUM PEAK FLOW			855	May 31	855	May 31, 2003
MAXIMUM PEAK STAGE			6.58	May 31	a6.58	May 31, 2003
ANNUAL RUNOFF (AC-FT)	23,800		47,290		55,460	
10 PERCENT EXCEEDS	68		207		240	
50 PERCENT EXCEEDS	21		21		28	
90 PERCENT EXCEEDS	14		10		13	

e Estimated.
a Maximum gage height, 6.67 ft, Jun 18, 1995, same site and datum.

06716500 CLEAR CREEK NEAR LAWSON, CO

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

DRAINAGE AREA.--147 mi^2.

PERIOD OF RECORD.--March 1946 to September 1986; October 1994 to current year. Records prior to 1959 include inflow from August P. Gumlick Tunnel (formerly Jones Pass tunnel). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06716500

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,080 ft above NGVD of 1929, from topographic map. Mar. 29, 1946 to Sept. 30, 1967, at site 1.5 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by minor transmountain diversion from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	27	26	e20	18	19	29	67	1,370	488	179	126
2	56	28	25	e20	18	e22	33	63	1,120	470	167	120
3	56	27	25	e20	19	e24	34	64	974	455	171	122
4	51	27	24	20	e19	e22	31	64	852	440	164	124
5	39	29	24	19	e19	e23	29	58	782	421	152	122
6	40	27	24	19	e19	e23	28	59	679	402	140	158
7	44	26	e25	19	e19	22	26	59	619	381	143	166
8	38	25	e25	18	e19	20	26	61	539	370	153	156
9	40	24	e25	19	e19	22	29	57	545	356	137	216
10	43	23	e25	e19	e19	21	33	62	601	344	133	186
11	36	23	e25	e19	e20	21	39	57	654	330	119	174
12	36	23	e25	18	e19	22	43	58	680	317	113	161
13	38	27	e25	17	e19	22	46	72	674	312	108	156
14	33	28	e24	17	e19	23	53	84	658	298	116	152
15	35	27	22	17	19	22	58	108	687	287	105	140
16	35	24	22	e17	19	22	51	128	695	281	103	131
17	34	28	22	e17	20	24	49	192	672	282	165	122
18	37	28	e23	e17	19	25	49	227	700	276	179	109
19	31	26	e23	e18	18	e26	48	231	717	289	144	112
20	24	26	e23	e18	19	e25	46	232	705	305	119	111
21	29	26	e22	e17	18	e25	45	245	663	280	116	102
22	33	25	e21	17	18	24	47	280	650	265	112	97
23	37	25	e21	17	19	26	48	340	639	255	109	96
24	38	25	e20	16	e19	29	49	429	621	243	117	92
25	39	25	e20	17	e19	28	48	520	576	240	133	91
26	39	e26	e20	16	e18	27	57	557	536	237	133	85
27	37	e26	e20	17	18	26	64	658	529	229	112	84
28	31	e27	e20	17	17	26	65	844	514	223	104	83
29	28	e28	e20	17	---	25	69	1,030	510	220	102	80
30	25	27	e20	17	---	25	70	1,170	495	207	147	80
31	26	---	e20	18	---	25	---	1,320	---	200	147	---
TOTAL	1,152	783	706	554	525	736	1,342	9,396	20,656	9,703	4,142	3,754
MEAN	37.2	26.1	22.8	17.9	18.8	23.7	44.7	303	689	313	134	125
MAX	56	29	26	20	20	29	70	1,320	1,370	488	179	216
MIN	24	23	20	16	17	19	26	57	495	200	102	80
AC-FT	2,280	1,550	1,400	1,100	1,040	1,460	2,660	18,640	40,970	19,250	8,220	7,450

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

MEAN	60.6	43.1	33.9	28.9	27.6	28.2	43.3	199	598	396	170	90.2
MAX	132	79.9	52.2	41.0	37.3	39.0	89.1	431	1,000	943	404	193
(WY)	(1962)	(1985)	(2000)	(1971)	(2000)	(2000)	(1962)	(1958)	(1952)	(1957)	(1984)	(1984)
MIN	35.6	26.1	22.8	17.9	16.8	17.6	26.3	83.4	175	70.0	50.8	40.8
(WY)	(1957)	(2003)	(2003)	(2003)	(1955)	(1951)	(1964)	(1995)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1946 - 2003	
ANNUAL TOTAL	20,413		53,449			
ANNUAL MEAN	55.9		146		144	
HIGHEST ANNUAL MEAN					225	1984
LOWEST ANNUAL MEAN					60.0	2002
HIGHEST DAILY MEAN	235	Jun 3	1,370	Jun 1	1,660	Jun 17, 1965
LOWEST DAILY MEAN	e20	Dec 24	16	Jan 24	13	Feb 20, 1955
ANNUAL SEVEN-DAY MINIMUM	e20	Dec 24	e17	Jan 21	15	Feb 18, 1955
MAXIMUM PEAK FLOW			1,540	May 31	6,130	Jun 4, 1956
MAXIMUM PEAK STAGE			7.04	May 31	a7.41	Jun 4, 1956
ANNUAL RUNOFF (AC-FT)	40,490		106,000		104,300	
10 PERCENT EXCEEDS	124		501		414	
50 PERCENT EXCEEDS	38		39		50	
90 PERCENT EXCEEDS	24		19		25	

e Estimated.
a Site and datum then in use.

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

LOCATION.--Lat 39°42'59", long 105°34'15", in NW¼SW¼ sec.9, T.4 S., R.73 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 50 ft upstream from Highway 103 bridge, 5.6 mi upstream from intersection of I-70 and Colorado Highway 103, and 3.2 mi southwest of Idaho Springs.

DRAINAGE AREA.--43.7 mi^2.

PERIOD OF RECORD.--October 1994 to September 1999. October 1999 to current year (seasonal records only). Records for May 14, 1996 (when gage was located 700 ft upstream) to April 10, 1998, may not be equivalent to other records because gage was moved upstream of inflow from Devils Canyon. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06717400

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,040 ft above NGVD of 1929, from topographic map. Prior to May 14, 1996, at site 150 ft downstream at different datum. May 14, 1996 to Apr. 10, 1998, at site 700 ft upstream at different datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge 275 ft^3/s (estimated), June 19, 1995, peak not determined; maximum instantaneous discharge, 183 ft^3/s, May 31, 2003, gage height 5.79 ft; minimum daily, 0.30 ft^3/s (estimated), Nov. 13, 14, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 183 ft^3/s, May 31, gage height, 5.79 ft; minimum daily, 2.9 ft^3/s, Mar. 13 (estimated).

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	7.1	e3.8	---	---	---	---	5.7	23	143	33	11	11
2	8.6	e3.7	---	---	---	---	8.2	21	113	31	10	10
3	8.7	e3.9	---	---	---	---	8.3	21	103	30	11	14
4	7.6	e4.1	---	---	---	---	7.0	21	89	29	12	15
5	7.4	e4.2	---	---	---	---	6.1	19	86	28	10	11
6	7.3	e4.3	---	---	---	---	5.5	18	76	28	9.7	12
7	7.2	e4.7	---	---	---	---	5.3	18	75	27	9.7	28
8	7.4	e4.6	---	---	---	---	5.1	18	64	26	10	24
9	6.4	e4.5	---	---	---	---	6.7	17	62	24	9.5	28
10	6.4	e4.5	---	---	---	---	11	17	65	24	10	22
11	6.1	e4.4	---	---	---	---	13	15	63	23	8.8	21
12	6.2	e4.4	---	---	---	---	15	17	62	22	8.4	20
13	5.7	e4.4	---	---	---	e2.9	19	22	61	21	8.0	20
14	5.7	e4.4	---	---	---	3.1	23	27	60	21	7.3	19
15	5.5	e4.4	---	---	---	3.3	22	34	57	21	7.0	17
16	5.3	e4.2	---	---	---	3.0	19	35	55	18	7.4	15
17	4.3	e4.3	---	---	---	3.0	18	40	55	12	9.3	14
18	4.2	e4.1	---	---	---	---	18	28	57	14	9.6	13
19	4.1	e4.2	---	---	---	---	16	22	56	17	8.3	13
20	4.2	e4.2	---	---	---	---	13	21	54	20	6.9	12
21	4.0	e4.3	---	---	---	---	12	29	53	16	6.6	11
22	4.5	e4.1	---	---	---	---	13	38	51	13	6.7	11
23	4.4	e4.1	---	---	---	---	13	53	50	13	7.3	11
24	4.6	e4.1	---	---	---	---	12	71	48	13	7.9	10
25	4.2	e4.1	---	---	---	---	14	74	39	12	8.7	9.6
26	4.0	e4.1	---	---	---	---	19	78	29	12	7.9	9.2
27	4.7	e4.2	---	---	---	---	23	83	27	14	6.8	9.7
28	4.1	e4.2	---	---	---	---	25	74	27	15	6.7	9.7
29	3.8	e4.1	---	---	---	---	28	101	35	15	6.4	9.6
30	e3.8	e4.2	---	---	---	---	27	127	35	13	23	9.5
31	e3.8	---	---	---	---	3.7	---	136	---	12	16	---
TOTAL	171.3	126.8	---	---	---	---	430.9	1,318	1,850	617	287.9	439.3
MEAN	5.53	4.23	---	---	---	---	14.4	42.5	61.7	19.9	9.29	14.6
MAX	8.7	4.7	---	---	---	---	28	136	143	33	23	28
MIN	3.8	3.7	---	---	---	---	5.1	15	27	12	6.4	9.2
AC-FT	340	252	---	---	---	---	855	2,610	3,670	1,220	571	871

e Estimated.

06718300 CLEAR CREEK ABOVE JOHNSON GULCH NEAR IDAHO SPRINGS, CO

LOCATION.--Lat 39°44'47", long 105°26'08", in NE¼SW¼ sec.34, T.3 S., R.72 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 150 ft downstream from I-70 exit 243 bridge over Clear Creek, and 2 mi east of Idaho Springs.

DRAINAGE AREA.--267 mi^2.

PERIOD OF RECORD.--October 1994 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06718300

GAGE.--Water-stage recorder. Elevation of gage is 7,210 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	45	e33	e28	e26	e26	51	126	1,600	686	223	178
2	83	48	e33	e28	e26	e28	64	119	1,390	667	214	169
3	79	46	e31	e28	e26	e30	68	116	1,270	652	230	195
4	75	46	e31	e28	e26	e29	63	122	1,130	632	230	188
5	66	45	e30	e27	e26	e29	57	109	1,060	606	215	171
6	61	44	e30	e27	e26	e35	55	106	937	580	202	207
7	68	42	e31	e26	e26	e31	49	104	880	541	200	237
8	63	40	e31	e26	e26	e27	48	107	789	524	215	222
9	62	40	e30	e26	e26	e28	54	101	785	502	198	279
10	65	38	e30	e26	e26	e28	65	107	841	480	197	239
11	59	40	e31	e26	e26	e28	75	99	888	458	180	225
12	58	38	e31	e26	e26	e29	83	101	907	435	172	213
13	59	45	e31	e26	e26	e29	91	121	897	427	164	205
14	54	42	e31	e26	e26	e31	107	141	872	406	163	202
15	55	40	e30	e26	e26	e31	113	180	895	387	154	189
16	56	e35	e29	e26	e27	e32	101	199	900	375	146	175
17	54	e39	e29	e26	e27	e36	95	269	881	370	205	170
18	56	e38	e29	e26	e26	e39	96	320	910	359	219	155
19	52	e35	e29	e26	e25	e35	91	329	911	386	193	157
20	44	e36	e29	e26	e25	e38	86	334	897	428	166	158
21	48	e34	e29	e26	e25	e40	82	373	862	385	155	149
22	51	e34	e28	e25	e26	42	85	437	846	349	164	141
23	55	e34	e28	e25	e26	45	88	534	839	334	157	138
24	56	e33	e28	e25	e25	49	88	654	832	311	163	141
25	56	e32	e28	e25	e25	46	89	747	785	307	176	136
26	55	e33	e28	e25	e25	47	106	798	727	312	183	132
27	54	e34	e28	e25	e25	46	119	900	721	296	158	130
28	46	e35	e28	e25	e24	43	123	1,110	708	278	150	129
29	45	e35	e28	e25	---	40	132	1,280	714	274	148	127
30	40	e34	e28	e26	---	41	132	1,440	698	252	230	127
31	44	---	e28	e26	---	43	---	1,540	---	241	210	---
TOTAL	1,786	1,160	918	808	721	1,101	2,556	13,023	27,372	13,240	5,780	5,284
MEAN	57.6	38.7	29.6	26.1	25.8	35.5	85.2	420	912	427	186	176
MAX	83	48	33	28	27	49	132	1,540	1,600	686	230	279
MIN	40	32	28	25	24	26	48	99	698	241	146	127
AC-FT	3,540	2,300	1,820	1,600	1,430	2,180	5,070	25,830	54,290	26,260	11,460	10,480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	100	63.9	48.6	41.3	39.5	44.9	74.5	351	834	540	267	153
MAX	126	83.6	62.6	54.6	54.7	58.8	106	549	1,325	1,398	526	213
(WY)	(1999)	(2000)	(2000)	(1996)	(2000)	(2000)	(2000)	(1996)	(1995)	(1995)	(1999)	(1999)
MIN	57.6	38.7	29.6	26.1	25.8	33.8	49.9	137	215	103	73.9	61.3
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(1995)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1995 - 2003	
ANNUAL TOTAL	26,688		73,749			
ANNUAL MEAN	73.1		202		214	
HIGHEST ANNUAL MEAN					326	1995
LOWEST ANNUAL MEAN					79.2	2002
HIGHEST DAILY MEAN	290	Jun 4	1,600	Jun 1	2,080	Jun 22, 1995
LOWEST DAILY MEAN	e25	Feb 27	e24	Feb 28	e24	Feb 28, 2003
ANNUAL SEVEN-DAY MINIMUM	e28	Jan 11	e25	Jan 22	e25	Jan 22, 2003
MAXIMUM PEAK FLOW			1,810	Jun 1	2,250	Jun 21, 1995
MAXIMUM PEAK STAGE			7.75	Jun 1	a7.46	Jun 21, 1995
ANNUAL RUNOFF (AC-FT)	52,940		146,300		154,800	
10 PERCENT EXCEEDS	165		702		593	
50 PERCENT EXCEEDS	57		64		81	
90 PERCENT EXCEEDS	29		26		36	

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

06718550 NORTH CLEAR CREEK ABOVE MOUTH NEAR BLACKHAWK, CO

LOCATION.--Lat 39°44'56", long 105°23'57", in NE¼SW¼ sec.36, T.3 S., R.72 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 150 ft upstream from intersection of Hwy 6 and Hwy 119 bridge over North Clear Creek, 0.2 mi above mouth, and 6.5 mi southeast of Blackhawk.

DRAINAGE AREA.--60.2 mi^2 (revised).

PERIOD OF RECORD.--October 1994 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06718550

GAGE.--Water-stage recorder. Elevation of gage is 6,910 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	4.2	e3.7	e2.5	e2.4	e2.4	6.7	32	136	20	7.7	6.4
2	8.1	4.2	e3.6	e2.6	e2.4	e2.6	7.4	31	127	17	7.4	5.9
3	5.8	4.0	e3.6	e2.5	e2.4	e2.7	7.9	30	114	16	7.2	9.2
4	5.5	3.4	e3.6	e2.4	e2.4	e2.6	7.5	30	97	15	7.2	6.8
5	5.0	2.7	e3.6	e2.3	e2.4	e2.5	7.2	29	88	13	6.8	5.0
6	4.7	3.3	e3.6	e2.3	e2.4	e2.5	7.0	28	73	11	6.7	5.2
7	4.5	4.9	e3.6	e2.2	e2.4	e2.5	6.7	28	70	12	6.3	7.1
8	4.3	3.5	e3.6	e2.3	e2.3	e2.4	6.3	27	57	11	6.2	5.6
9	4.3	3.7	e3.5	e2.3	e2.3	e2.5	6.8	27	55	11	5.8	7.1
10	4.1	3.7	e3.5	e2.1	e2.3	e2.5	7.9	28	53	10	5.8	5.5
11	4.1	4.6	e3.5	e2.0	e2.3	e2.6	11	26	e51	9.6	5.4	5.0
12	4.1	4.5	e3.5	e1.9	e2.3	e2.6	14	27	e49	9.3	5.1	4.7
13	4.0	3.5	e3.3	e1.9	e2.3	e2.7	19	29	e47	9.2	4.7	4.8
14	3.8	3.2	e3.3	e1.9	e2.3	3.0	26	31	e46	9.0	4.4	5.2
15	3.6	3.5	e3.1	e1.8	e2.3	3.0	28	36	e44	8.8	4.3	4.7
16	3.7	4.4	e3.2	e1.8	e2.4	3.1	26	46	e43	9.5	4.0	4.4
17	3.9	3.4	e3.2	e1.8	e2.5	3.3	26	60	e41	9.2	3.9	4.1
18	4.1	3.4	e3.2	e1.9	e2.4	4.2	26	70	e39	9.1	5.7	4.6
19	4.3	3.8	e3.1	e2.0	e2.4	e8.0	26	75	e37	8.9	4.9	4.5
20	4.1	3.0	e3.1	e2.0	e2.4	e5.5	24	73	e36	7.8	4.0	4.3
21	4.0	3.1	e3.1	e1.9	e2.4	e5.0	23	75	34	7.9	3.6	4.1
22	4.0	e3.2	e2.9	e1.9	e2.4	5.0	24	75	32	8.1	3.7	3.8
23	4.0	e3.2	e2.7	e1.9	e2.3	5.9	26	84	31	7.3	3.8	3.6
24	4.4	e3.2	e2.7	e1.9	e2.3	6.3	26	95	31	7.7	4.0	3.6
25	4.1	e3.3	e2.6	e1.9	e2.3	5.0	27	106	31	7.2	3.8	3.6
26	3.9	e3.4	e2.7	e2.0	e2.2	5.6	29	108	28	9.5	3.7	3.4
27	3.9	e3.5	e2.7	e2.0	e2.2	6.3	32	118	27	8.7	3.4	3.5
28	3.9	e3.8	e2.6	e2.1	e2.2	5.4	33	122	25	20	3.3	3.7
29	4.2	e3.9	e2.6	e2.3	---	5.8	36	128	22	13	3.4	3.6
30	4.6	e3.8	e2.5	e2.3	---	4.7	34	135	21	10	23	3.7
31	4.3	---	e2.5	e2.4	---	5.5	---	139	---	8.4	8.1	---
TOTAL	135.1	109.3	98.0	65.1	65.6	123.7	587.4	1,948	1,585	334.2	177.3	146.7
MEAN	4.36	3.64	3.16	2.10	2.34	3.99	19.6	62.8	52.8	10.8	5.72	4.89
MAX	8.1	4.9	3.7	2.6	2.5	8.0	36	139	136	20	23	9.2
MIN	3.6	2.7	2.5	1.8	2.2	2.4	6.3	26	21	7.2	3.3	3.4
AC-FT	268	217	194	129	130	245	1,170	3,860	3,140	663	352	291

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	5.75	4.43	3.61	3.16	3.16	5.13	14.8	72.6	75.2	19.5	14.6	6.66
MAX	12.3	8.09	6.42	4.92	5.79	8.46	24.5	112	228	49.7	50.8	13.3
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(1998)	(1995)	(1995)	(1995)	(1999)	(1999)
MIN	3.08	2.68	1.68	1.30	1.38	2.21	7.60	11.1	10.8	6.12	3.30	3.62
(WY)	(1995)	(1995)	(1995)	(1995)	(1995)	(1995)	(1995)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1995 - 2003	
ANNUAL TOTAL	1,993.8		5,375.4			
ANNUAL MEAN	5.46		14.7		19.1	
HIGHEST ANNUAL MEAN					35.6	1995
LOWEST ANNUAL MEAN					5.50	2002
HIGHEST DAILY MEAN	25	Jun 4	139	May 31	415	May 31, 1995
LOWEST DAILY MEAN	e2.1	Feb 27	e1.8	Jan 15	e,a0.00	Aug 7, 2000
ANNUAL SEVEN-DAY MINIMUM	2.3	Sep 2	e1.9	Jan 12	0.00	Aug 7, 2000
MAXIMUM PEAK FLOW			252	May 27	b759	Jun 2, 1995
MAXIMUM PEAK STAGE			5.31	May 27	5.87	Jun 2, 1995
ANNUAL RUNOFF (AC-FT)	3,950		10,660		13,840	
10 PERCENT EXCEEDS	11		36		56	
50 PERCENT EXCEEDS	4.0		4.4		5.8	
90 PERCENT EXCEEDS	2.7		2.3		2.5	

e Estimated.
a Also occurred Aug 8-12, 2000.
b From rating curve extended above 300 ft^3/s.

06719505 CLEAR CREEK AT GOLDEN, CO

LOCATION.--Lat 39°45'11", long 105°14'05", in NE¼NW¼ sec.33, T.3 S., R.70 W., Jefferson County, Hydrologic Unit 10190004, on left bank 100 ft downstream from U.S. Highway 6 bridge at west edge of Golden, 0.7 mi downstream from headgate of Church ditch, and 13.3 mi downstream from North Clear Creek.

DRAINAGE AREA.--400 mi^2.

PERIOD OF RECORD.--October 1974 to current year. Records for station at site 0.8 mi upstream (October 1908 to December 1909, June 1911 to September 1974) are not equivalent due to diversions by Church ditch. Water-quality data available, November 1977 to August 1995. Sediment data available, April to September 1981, and April 1993 to August 1995. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06719505

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,695 ft above NGVD of 1929, from topographic map. Prior to Sept. 12, 1980, at site 80 ft downstream. Prior to Jan. 22, 1987, at datum 2.00 ft higher, at both sites.

REMARKS.--Records fair except for period Nov. 1 to Mar. 25, which is poor. Natural flow of stream affected by minor transmountain diversions from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report) and several small reservoirs upstream from station. Diversion by Welch ditch 1.4 mi upstream from station and by Church Ditch 0.7 mi upstream from station for irrigation of about 5,200 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	e40	e28	e30	26	24	76	185	1,530	606	173	136
2	87	e40	e28	e29	25	30	99	171	1,380	578	158	118
3	75	e40	e24	e29	26	26	107	162	1,260	563	173	149
4	74	e40	e23	e29	e13	27	98	165	1,140	540	182	146
5	63	e41	e22	e29	20	28	86	152	1,100	518	156	124
6	49	e42	22	e29	19	24	82	117	971	494	148	148
7	61	e40	21	e29	e13	28	71	104	910	463	153	188
8	60	41	26	e29	14	28	65	104	765	448	162	183
9	55	38	24	26	26	29	68	102	744	430	154	222
10	58	37	21	15	e30	31	86	114	812	419	160	195
11	52	35	24	26	e30	30	108	100	883	397	141	178
12	49	27	22	e30	e30	31	123	100	917	369	136	165
13	51	42	36	e30	e30	32	141	113	898	356	139	152
14	47	45	42	32	e30	33	167	144	850	337	145	156
15	46	42	44	31	e30	35	190	193	871	321	139	143
16	47	35	36	23	30	34	165	214	882	310	125	125
17	47	41	35	23	29	37	153	312	854	306	170	125
18	48	41	28	23	26	e40	152	370	896	298	191	112
19	47	35	15	34	21	e38	150	387	906	314	172	113
20	38	39	e12	36	20	e40	144	382	876	347	142	114
21	37	35	e13	33	25	e50	131	403	831	323	133	108
22	42	35	13	28	25	e40	133	452	805	291	148	110
23	47	36	31	34	18	e54	135	544	789	272	142	107
24	51	37	31	32	19	e58	134	671	787	251	147	113
25	52	e28	34	28	17	60	136	806	734	238	155	109
26	50	e30	26	26	28	66	152	830	665	255	171	105
27	49	e30	e28	27	35	73	177	923	648	239	144	116
28	45	e32	e28	24	32	58	187	1,120	634	246	132	127
29	43	e33	e28	22	---	51	203	1,290	638	249	129	126
30	35	e28	e30	26	---	53	201	1,360	624	210	242	127
31	35	---	e31	25	---	60	---	1,460	---	190	188	---
TOTAL	1,595	1,105	826	867	687	1,248	3,920	13,550	26,600	11,178	4,850	4,140
MEAN	51.5	36.8	26.6	28.0	24.5	40.3	131	437	887	361	156	138
MAX	87	45	44	36	35	73	203	1,460	1,530	606	242	222
MIN	35	27	12	15	13	24	65	100	624	190	125	105
AC-FT	3,160	2,190	1,640	1,720	1,360	2,480	7,780	26,880	52,760	22,170	9,620	8,210

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

MEAN	85.9	63.0	50.4	44.6	42.8	44.4	77.5	323	767	452	210	127
MAX	192	115	89.6	74.3	67.3	64.2	131	655	1,522	1,203	535	231
(WY)	(1985)	(1985)	(2000)	(2000)	(2000)	(2000)	(2003)	(1984)	(1995)	(1995)	(1999)	(1984)
MIN	51.5	36.8	26.6	28.0	24.5	31.2	39.0	123	195	86.7	59.3	48.2
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(1976)	(1982)	(1981)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	25,506		70,566			
ANNUAL MEAN	69.9		193		191	
HIGHEST ANNUAL MEAN					321	1995
LOWEST ANNUAL MEAN					78.9	2002
HIGHEST DAILY MEAN	267	Jun 4	1,530	Jun 1	2,300	Jun 17, 1995
LOWEST DAILY MEAN	e12	Dec 20	e12	Dec 20	e12	Dec 20, 2002
ANNUAL SEVEN-DAY MINIMUM	20	Dec 18	19	Feb 2	19	Feb 2, 2003
MAXIMUM PEAK FLOW			1,680	Jun 1	2,370	Jul 10, 1983
MAXIMUM PEAK STAGE			7.63	Jun 1	a6.44	Jul 10, 1983
ANNUAL RUNOFF (AC-FT)	50,590		140,000		138,400	
10 PERCENT EXCEEDS	163		636		537	
50 PERCENT EXCEEDS	49		74		79	
90 PERCENT EXCEEDS	32		26		37	

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

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO

LOCATION.--Lat 39°55'19", long 104°52'04", in SE¼NE¼ sec.34, T.1 S., R.67 W., Adams County, Hydrologic Unit 10190003, on right bank 500 ft upstream from bridge on State Highway 22, and 0.2 mi northwest of Henderson.

DRAINAGE AREA.--4,768 mi^2 (revised).

PERIOD OF RECORD.--May 1926 to current year. Prior to October 1933, monthly discharge only, published in WSP 1310. Statistical summary computed for 1976 to current year, subsequent to completion of Chatfield Dam. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06720500

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

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4999.12 ft above NGVD of 1929. See WSP 1710 or 1730 for history of changes prior to June 1, 1960. June 1, 1960, to May 10, 1969, water-stage recorder at site 1,200 ft upstream at datum 5.00 ft higher. May 11 to Oct. 2, 1969, nonrecording gage at site 500 ft downstream at datum 3.00 ft higher. Oct. 3, 1969 to Jan. 15, 1986, at present site, at datum 3.00 ft higher.

REMARKS.--Records good except for flows above 2,990 ft^3/s, which are fair, and estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals, diversions for irrigation of about 253,000 acres, and return flow from irrigated areas.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	216	179	160	290	319	335	675	1,930	703	e221	523
2	644	239	186	163	284	320	344	472	2,010	798	e225	348
3	307	286	176	165	358	331	277	457	1,660	836	e186	494
4	237	287	177	160	374	306	229	389	1,410	629	e187	301
5	177	266	175	163	301	320	221	305	1,410	539	e227	265
6	164	266	177	168	301	323	268	223	1,170	530	247	249
7	164	272	168	167	300	303	261	200	1,660	611	246	255
8	157	275	169	160	309	299	262	216	902	509	261	303
9	154	331	176	164	311	286	256	250	784	368	552	209
10	151	326	170	161	313	286	232	2,840	864	369	252	188
11	150	342	166	165	309	277	217	1,430	956	426	285	159
12	149	337	163	162	306	285	206	925	993	387	509	155
13	154	288	168	184	316	263	194	654	958	375	396	141
14	158	247	174	273	318	219	257	513	935	368	350	155
15	155	256	170	243	319	214	283	371	927	366	334	162
16	152	256	176	240	312	220	616	437	927	376	253	143
17	157	249	171	255	274	272	519	448	949	355	203	126
18	154	255	170	255	271	880	268	596	1,950	341	231	136
19	149	252	166	254	263	416	999	698	1,200	1,080	432	142
20	151	242	167	254	249	651	544	520	1,060	434	228	134
21	156	252	173	250	247	1,030	357	442	995	391	199	128
22	154	241	173	242	258	1,100	455	300	889	382	194	141
23	157	239	170	240	263	1,100	862	255	824	381	189	133
24	158	249	186	252	274	876	2,350	254	738	369	181	132
25	159	271	153	284	266	636	690	395	679	296	194	131
26	155	261	151	292	270	734	430	479	607	236	203	120
27	169	256	164	292	290	750	364	452	539	374	240	113
28	179	238	166	289	272	474	326	597	476	394	252	112
29	277	174	164	287	---	418	502	685	543	426	255	120
30	321	181	169	289	---	363	696	1,220	720	e724	880	109
31	222	---	169	294	---	351	---	1,840	---	e341	2,240	---
TOTAL	5,994	7,850	5,282	6,927	8,218	14,622	13,820	19,538	31,665	14,714	10,852	5,827
MEAN	193	262	170	223	294	472	461	630	1,056	475	350	194
MAX	644	342	186	294	374	1,100	2,350	2,840	2,010	1,080	2,240	523
MIN	149	174	151	160	247	214	194	200	476	236	181	109
AC-FT	11,890	15,570	10,480	13,740	16,300	29,000	27,410	38,750	62,810	29,190	21,520	11,560

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)

MEAN	352	334	299	324	321	364	525	1,076	1,225	792	631	374
MAX	1,835	1,268	554	592	642	842	1,732	3,923	4,796	3,204	2,074	1,141
(WY)	(1985)	(1985)	(1984)	(1984)	(1984)	(1983)	(1983)	(1980)	(1995)	(1995)	(1984)	(1984)
MIN	144	173	170	155	156	118	140	316	249	197	163	157
(WY)	(1978)	(1978)	(2003)	(1977)	(1977)	(1982)	(1982)	(2002)	(2002)	(2002)	(2002)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003	
ANNUAL TOTAL	88,281		145,309			
ANNUAL MEAN	242		398		a552	
HIGHEST ANNUAL MEAN					1,379	1983
LOWEST ANNUAL MEAN					252	1981
HIGHEST DAILY MEAN	2,160	May 24	2,840	May 10	b6,500	Jun 9, 1995
LOWEST DAILY MEAN	108	Apr 3	109	Sep 30	c27	Apr 7, 1977
ANNUAL SEVEN-DAY MINIMUM	118	Aug 15	120	Sep 24	69	Mar 13, 1982
MAXIMUM PEAK FLOW			5,130	May 10	d12,300	Jun 27, 1983
MAXIMUM PEAK STAGE			7.57	May 10	f7.58	Jun 27, 1983
ANNUAL RUNOFF (AC-FT)	175,100		288,200		400,200	
10 PERCENT EXCEEDS	362		863		1,040	
50 PERCENT EXCEEDS	215		272		337	
90 PERCENT EXCEEDS	142		158		179	

e Estimated.
a Average discharge for 48 years (water years 1927-74), 366 ft^3/s; 265,200 acre-ft/yr, prior to completion of Chatfield Dam.
b Maximum daily discharge for period of record, 13,200 ft^3/s, May 7, 1973.
c Minimum daily discharge for period of record, 4.4 ft^3/s, Apr 1, 1950.
d Maximum discharge and stage for period of record, 33,000 ft^3/s, May 6, 1973, gage height, 11.67 ft, from rating curve extended above 7,200 ft^3/s, partly on basis of flow-over-road measurement of peak flow; maximum gage height, 12.93 ft, Jun 17, 1965, site and datum then in use.
f Maximum gage height for statistical period, 9.91 ft, May 17, 1995.

06720820 BIG DRY CREEK AT WESTMINSTER, CO

LOCATION.--Lat 39°54'20", long 105°02'04", in NE¼SE¼ sec.6, T.2 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 0.75 mi upstream from bridge on 120th Ave., and 5.2 mi downstream from outlet of Standley Lake.

DRAINAGE AREA.--43.8 mi^2.

PERIOD OF RECORD.--July 1987 to September 1995, November 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=06720820

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

GAGE.--Water-stage recorder and concrete and steel v-notched control. Elevation of gage is 5,215 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	4.0	1.2	1.6	1.6	2.4	14	14	48	2.0	5.0	38
2	22	3.5	1.2	1.6	1.7	2.4	10	11	62	1.7	4.1	38
3	3.4	5.6	3.1	1.5	4.0	2.6	13	e10	92	2.9	6.0	37
4	2.0	3.4	1.9	1.6	3.0	1.9	14	e8.0	85	0.82	7.0	34
5	1.4	2.1	1.6	1.5	2.1	1.7	8.6	e7.0	68	0.86	6.8	34
6	1.3	1.6	1.5	1.4	1.9	1.8	29	e6.0	64	1.2	7.9	36
7	1.1	1.7	1.2	1.4	1.5	1.6	13	e5.0	69	1.3	8.1	40
8	0.89	1.4	1.1	1.6	1.6	1.5	16	e4.0	32	1.4	11	39
9	0.85	1.5	1.1	1.5	1.8	1.5	15	e6.0	29	1.5	18	34
10	0.75	1.2	1.0	1.5	1.8	1.5	10	e12	31	9.2	9.3	33
11	0.70	1.1	1.3	1.5	1.8	1.4	3.7	e10	40	4.6	8.4	22
12	0.67	1.4	1.1	1.4	1.8	1.4	2.3	e9.0	44	6.7	8.9	3.0
13	0.78	1.8	1.7	1.3	1.7	1.4	1.9	e8.5	44	7.1	13	2.4
14	0.77	1.5	1.6	1.3	1.9	1.4	1.7	e7.5	44	6.2	13	2.5
15	0.70	2.0	1.1	1.3	5.5	1.4	21	e8.0	45	6.0	14	2.7
16	0.70	2.2	1.1	1.3	5.2	1.3	8.7	9.9	48	2.0	14	2.5
17	0.75	1.3	1.0	1.2	4.3	12	3.2	7.3	49	1.6	14	2.4
18	0.79	1.6	1.0	1.3	4.4	29	3.6	5.2	89	1.3	20	2.6
19	0.74	1.5	1.1	1.3	4.3	17	54	6.3	51	2.3	27	3.4
20	0.85	1.6	1.2	1.3	4.4	38	20	7.2	45	1.6	21	3.6
21	0.80	1.4	1.3	1.4	4.2	53	8.6	9.0	73	0.87	18	3.2
22	0.67	1.1	1.3	1.4	3.2	52	11	6.8	49	0.96	16	3.0
23	0.60	1.2	1.4	1.4	2.4	71	36	4.7	51	1.9	16	3.1
24	1.00	1.7	1.3	1.5	1.9	52	62	3.1	51	1.7	16	3.3
25	0.93	2.7	1.1	1.5	1.9	61	27	3.8	52	5.4	16	2.9
26	1.8	1.9	1.0	1.5	1.8	69	15	2.1	50	5.8	16	2.3
27	2.8	1.4	1.3	1.4	2.0	59	11	11	50	8.7	19	2.0
28	2.7	1.3	1.5	1.4	2.4	23	11	28	50	6.9	43	2.0
29	9.6	1.4	1.8	1.4	---	16	8.7	54	54	7.3	46	2.1
30	5.4	1.3	1.7	1.4	---	13	11	54	51	5.5	94	2.4
31	3.5	---	1.6	1.6	---	17	---	58	---	4.4	48	---
TOTAL	72.54	57.4	42.4	44.3	76.1	609.2	464.0	396.4	1,610	111.71	584.5	436.4
MEAN	2.34	1.91	1.37	1.43	2.72	19.7	15.5	12.8	53.7	3.60	18.9	14.5
MAX	22	5.6	3.1	1.6	5.5	71	62	58	92	9.2	94	40
MIN	0.60	1.1	1.0	1.2	1.5	1.3	1.7	2.1	29	0.82	4.1	2.0
AC-FT	144	114	84	88	151	1,210	920	786	3,190	222	1,160	866

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2003, BY WATER YEAR (WY)

MEAN	4.68	2.84	1.81	1.66	2.00	5.75	10.8	28.1	48.8	34.1	31.2	18.7
MAX	12.0	4.80	3.71	3.16	3.85	19.7	34.8	66.4	82.4	79.8	49.6	47.9
(WY)	(2000)	(2001)	(1998)	(1994)	(1993)	(2003)	(1998)	(2000)	(1999)	(1995)	(1999)	(1999)
MIN	1.55	1.33	0.88	0.76	1.00	1.30	1.52	9.98	5.32	3.60	5.17	2.64
(WY)	(1989)	(1989)	(1999)	(1995)	(1988)	(1989)	(1989)	(1989)	(2002)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1987 - 2003	
ANNUAL TOTAL	1,328.51		4,504.95			
ANNUAL MEAN	3.64		12.3		15.7	
HIGHEST ANNUAL MEAN					25.2	1999
LOWEST ANNUAL MEAN					3.79	2002
HIGHEST DAILY MEAN	141	May 24	94	Aug 30	232	May 5, 2001
LOWEST DAILY MEAN	0.18	Aug 27	0.60	Oct 23	0.16	Jan 12, 1995
ANNUAL SEVEN-DAY MINIMUM	0.50	Sep 2	0.72	Oct 10	0.37	Jan 6, 1995
MAXIMUM PEAK FLOW			176	Jun 18	674	Jul 13, 2001
MAXIMUM PEAK STAGE			3.21	Jun 18	a5.65	Jul 13, 2001
ANNUAL RUNOFF (AC-FT)	2,640		8,940		11,370	
10 PERCENT EXCEEDS	9.5		45		48	
50 PERCENT EXCEEDS	1.5		3.0		3.3	
90 PERCENT EXCEEDS	0.75		1.2		1.1	

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

06720990 BIG DRY CREEK AT MOUTH NEAR FORT LUPTON, CO

LOCATION.--Lat 40°04'09", long 104°49'52", in NE¼SE¼ sec.12, T.1 N., R.67 W., Weld County, Hydrologic Unit 10190003, on right bank 1.0 mi west of State Highway 85, 1.1 mi south of State Highway 52, and 1.2 mi southwest of Ft. Lupton.

DRAINAGE AREA.--107 mi^2.

PERIOD OF RECORD.--October 1991 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06720990

GAGE.--Water-stage recorder. Elevation of gage is 4,900 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 storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	42	26	9.9	25	23	e59	e50	19	37	26	25
2	56	42	26	11	26	23	e58	e44	20	33	26	12
3	62	38	26	9.8	28	22	e57	e42	19	31	21	35
4	46	36	28	9.2	31	21	e56	e40	27	25	17	36
5	33	29	26	12	29	22	48	e38	38	22	19	47
6	30	28	e26	19	29	20	54	e37	31	115	21	49
7	32	28	e27	21	28	19	68	e34	44	112	19	47
8	33	28	e27	20	26	22	39	e32	43	92	18	50
9	34	29	e28	20	28	22	36	e30	30	49	23	45
10	35	28	e27	e21	29	17	68	170	22	43	16	43
11	34	28	e28	e21	25	14	61	285	e16	76	9.4	38
12	31	25	e29	e20	20	15	44	146	12	76	9.8	48
13	32	24	e30	19	15	23	41	92	12	71	13	44
14	36	28	e29	17	14	25	35	75	21	63	12	42
15	37	28	e30	15	15	35	33	97	22	60	13	41
16	34	28	e31	16	19	37	27	123	20	59	13	41
17	33	30	29	18	19	37	26	69	18	55	11	40
18	33	33	28	20	18	74	22	42	88	55	11	40
19	32	31	29	20	18	96	40	31	116	62	17	40
20	33	31	29	20	18	104	79	35	66	34	13	40
21	34	30	28	27	16	138	46	32	58	43	9.5	38
22	36	29	23	26	15	162	33	27	34	45	16	34
23	42	28	22	25	16	157	57	24	29	38	27	34
24	46	33	21	27	e16	188	272	21	42	35	43	31
25	44	33	e19	27	e16	135	193	e18	37	37	42	30
26	42	29	e20	28	e16	154	119	e17	33	32	30	30
27	40	27	e19	28	e13	157	93	e16	35	29	29	29
28	40	27	21	25	20	102	75	e17	32	26	34	28
29	38	28	22	17	---	73	e59	25	33	27	36	27
30	56	27	22	26	---	67	e54	20	37	29	74	26
31	50	---	13	26	---	63	---	17	---	27	93	---
TOTAL	1,196	905	789	620.9	588	2,067	1,952	1,746	1,054	1,538	761.7	1,110
MEAN	38.6	30.2	25.5	20.0	21.0	66.7	65.1	56.3	35.1	49.6	24.6	37.0
MAX	62	42	31	28	31	188	272	285	116	115	93	50
MIN	30	24	13	9.2	13	14	22	16	12	22	9.4	12
AC-FT	2,370	1,800	1,560	1,230	1,170	4,100	3,870	3,460	2,090	3,050	1,510	2,200

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

MEAN	38.2	28.5	23.5	24.6	23.0	34.1	54.9	57.3	51.9	49.4	41.3	44.2
MAX	64.3	39.1	35.2	46.0	34.6	66.7	79.1	93.8	117	111	75.1	67.0
(WY)	(1995)	(2001)	(1998)	(2001)	(2001)	(2003)	(1999)	(2001)	(1995)	(1995)	(1997)	(1993)
MIN	20.3	15.5	19.6	14.0	12.0	18.4	27.8	26.4	27.2	20.6	10.5	21.2
(WY)	(2002)	(2002)	(1994)	(1995)	(1995)	(1993)	(2002)	(1993)	(2002)	(2002)	(2002)	(2000)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	9,801.6		14,327.6			
ANNUAL MEAN	26.9		39.3		39.3	
HIGHEST ANNUAL MEAN					53.2	1995
LOWEST ANNUAL MEAN					24.1	2002
HIGHEST DAILY MEAN	140	May 25	285	May 11	454	Jul 31, 1997
LOWEST DAILY MEAN	2.1	Aug 15	9.2	Jan 4	0.32	Apr 18, 1994
ANNUAL SEVEN-DAY MINIMUM	6.4	Aug 9	12	Aug 11	3.6	Sep 3, 1992
MAXIMUM PEAK FLOW			324	Apr 24	541	Aug 6, 1997
MAXIMUM PEAK STAGE			7.70	Apr 24	9.04	Aug 6, 1997
ANNUAL RUNOFF (AC-FT)	19,440		28,420		28,480	
10 PERCENT EXCEEDS	41		68		70	
50 PERCENT EXCEEDS	26		30		29	
90 PERCENT EXCEEDS	13		16		16	

e Estimated.

06721000 SOUTH PLATTE RIVER AT FORT LUPTON, CO

LOCATION.--Lat 40°06'58", long 104°49'05", in SW¼SE¼ sec.19, T.2 N., R.66 W., Weld County, Hydrologic Unit 10190003, on right bank 2 ft downstream from county road 18 bridge, 3.0 mi downstream from Big Dry Creek, and 2.5 mi north of Fort Lupton.

DRAINAGE AREA.--5,044 mi^2 (revised). Area at 1957 gage location is 5,007 mi^2 (revised).

PERIOD OF RECORD.--May to September 1906, April 1929 to September 1957, April to September 2003 (seasonal records only). Prior to October 1933 monthly discharge only, published in WSP 1310. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06721000

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,860 ft above NGVD of 1929, from topographic map. Oct. 3, 1947 to Sept. 30, 1957, water-stage recorder at site 3.9 mi upstream at different datum. See WSP 1730 for history of changes prior to Oct. 3, 1947.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,000 ft^3/s, April 26, 1942, from rating curve extended above 6,700 ft^3/s; maximum gage height, 7.57 ft, May 9, 1957, site and datum then in use; minimum daily, 4.4 ft^3/s, October 29, 1956.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge during period April to September, 3,210 ft^3/s, May 11, gage height, 7.52 ft; minimum daily, 101 ft^3/s, Aug. 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	---	---	---	---	---	---	---	681	1,610	530	229	638
2	---	---	---	---	---	---	---	545	1,750	518	242	398
3	---	---	---	---	---	---	---	465	1,590	584	191	449
4	---	---	---	---	---	---	---	416	1,420	460	183	300
5	---	---	---	---	---	---	---	330	1,360	312	267	226
6	---	---	---	---	---	---	---	237	1,290	348	267	213
7	---	---	---	---	---	---	---	197	1,570	405	162	212
8	---	---	---	---	---	---	---	191	1,120	405	166	260
9	---	---	---	---	---	---	---	209	853	242	474	212
10	---	---	---	---	---	---	---	1,520	812	182	199	186
11	---	---	---	---	---	---	---	2,000	859	262	158	164
12	---	---	---	---	---	---	---	1,220	906	266	341	184
13	---	---	---	---	---	---	---	884	887	242	328	175
14	---	---	---	---	---	---	---	705	855	235	265	173
15	---	---	---	---	---	---	---	524	836	225	263	178
16	---	---	---	---	---	---	---	561	866	246	198	174
17	---	---	---	---	---	---	---	429	846	247	147	164
18	---	---	---	---	---	---	---	517	1,560	222	147	172
19	---	---	---	---	---	---	---	634	1,290	753	306	174
20	---	---	---	---	---	---	---	560	1,080	361	187	181
21	---	---	---	---	---	---	---	464	1,000	288	127	178
22	---	---	---	---	---	---	---	365	e845	287	101	179
23	---	---	---	---	---	---	---	280	754	283	104	177
24	---	---	---	---	---	---	---	260	714	260	124	170
25	---	---	---	---	---	---	---	311	685	235	141	165
26	---	---	---	---	---	---	---	445	606	157	129	163
27	---	---	---	---	---	---	---	443	494	230	171	161
28	---	---	---	---	---	---	---	495	384	270	185	165
29	---	---	---	---	---	---	457	606	356	304	193	171
30	---	---	---	---	---	---	653	881	518	567	772	169
31	---	---	---	---	---	---	---	1,440	---	332	2,110	---
TOTAL	---	---	---	---	---	---	---	18,815	29,716	10,258	8,877	6,531
MEAN	---	---	---	---	---	---	---	607	991	331	286	218
MAX	---	---	---	---	---	---	---	2,000	1,750	753	2,110	638
MIN	---	---	---	---	---	---	---	191	356	157	101	161
AC-FT	---	---	---	---	---	---	---	37,320	58,940	20,350	17,610	12,950

e Estimated.

06725450 ST. VRAIN CREEK BELOW LONGMONT, CO

LOCATION.--Lat 40°09'30", long 105°00'48", in NW¼NW¼ sec.9, T.2 N., R.68 W., Weld County, Hydrologic Unit 10190005, on right bank 1,750 ft upstream from mouth of Boulder Creek, 1.8 mi downstream from Spring Gulch, and 4.7 mi southeast of Longmont.

DRAINAGE AREA.--424 mi^2.

PERIOD OF RECORD.--October 1976 to September 1982, August 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=06725450

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,852 ft, above NGVD of 1929, from topographic map. Prior to Aug. 15, 1984, at site 150 ft downstream at same datum. Aug. 15, 1984 to Oct. 1, 1997 at site 70 ft downstream at same datum. Oct. 2, 1997 to Apr. 18, 2000 at site 100 ft upstream at same datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	43	32	27	27	28	57	63	971	144	81	127
2	75	39	32	28	27	28	65	59	637	117	72	112
3	60	39	32	28	29	29	58	58	441	69	68	115
4	57	36	33	28	28	28	52	59	326	58	66	108
5	53	36	32	28	26	27	44	62	286	67	69	96
6	50	36	32	29	28	28	48	59	244	78	61	89
7	47	36	31	29	31	27	44	56	257	58	75	93
8	46	34	31	28	31	27	51	64	138	47	93	104
9	43	32	32	28	28	26	43	73	88	39	70	99
10	42	32	32	28	27	29	40	252	120	41	57	89
11	40	31	32	28	28	43	42	151	263	48	53	84
12	39	31	31	28	26	44	44	96	343	51	51	82
13	40	31	31	28	27	27	44	85	344	48	52	79
14	40	31	31	29	25	26	46	86	317	51	47	79
15	41	32	30	29	27	26	78	116	358	53	39	75
16	43	32	31	28	27	25	63	263	349	58	37	73
17	49	33	31	28	26	38	48	166	278	66	37	79
18	44	34	31	28	27	89	56	152	354	66	97	96
19	41	36	31	28	26	89	57	147	282	79	81	76
20	42	35	31	28	26	84	50	143	292	80	54	67
21	42	35	31	26	27	76	44	117	279	87	50	63
22	43	36	31	28	26	69	47	106	294	76	48	69
23	41	34	30	28	26	59	69	91	295	75	46	76
24	38	36	30	29	26	63	82	99	291	79	50	63
25	39	37	30	30	27	56	65	93	306	71	51	60
26	37	34	32	28	29	51	63	95	265	83	53	60
27	36	34	30	29	29	47	68	152	161	96	52	61
28	37	35	29	30	30	52	73	333	134	107	60	65
29	46	34	28	28	---	52	71	496	147	90	74	69
30	43	33	28	29	---	46	68	407	149	85	292	78
31	42	---	28	26	---	e50	---	912	---	84	170	---
TOTAL	1,388	1,037	956	874	767	1,389	1,680	5,111	9,009	2,251	2,206	2,486
MEAN	44.8	34.6	30.8	28.2	27.4	44.8	56.0	165	300	72.6	71.2	82.9
MAX	75	43	33	30	31	89	82	912	971	144	292	127
MIN	36	31	28	26	25	25	40	56	88	39	37	60
AC-FT	2,750	2,060	1,900	1,730	1,520	2,760	3,330	10,140	17,870	4,460	4,380	4,930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2003, BY WATER YEAR (WY)

MEAN	69.0	57.6	49.2	44.3	43.4	48.2	84.8	235	356	169	142	99.6
MAX	159	126	91.5	92.8	94.0	111	275	1,155	1,227	485	246	152
(WY)	(1985)	(1985)	(1985)	(1980)	(1980)	(1980)	(1998)	(1980)	(1995)	(1995)	(1999)	(1982)
MIN	44.8	34.5	30.8	25.7	27.4	28.9	27.5	35.8	63.3	71.0	57.9	53.7
(WY)	(2003)	(1979)	(1979)	(1978)	(2003)	(1982)	(1982)	(1977)	(1981)	(2002)	(2002)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1977 - 2003	
ANNUAL TOTAL	17,542		29,154			
ANNUAL MEAN	48.1		79.9		117	
HIGHEST ANNUAL MEAN					257	1995
LOWEST ANNUAL MEAN					51.3	2002
HIGHEST DAILY MEAN	119	May 24	971	Jun 1	2,580	May 30, 1995
LOWEST DAILY MEAN	28	Dec 29	25	Feb 14	20	Dec 28, 1990
ANNUAL SEVEN-DAY MINIMUM	29	Dec 25	26	Feb 14	22	Dec 26, 1990
MAXIMUM PEAK FLOW			1,070	Jun 1	3,600	Apr 30, 1999
MAXIMUM PEAK STAGE			5.47	Jun 1	6.87	Apr 30, 1999
ANNUAL RUNOFF (AC-FT)	34,790		57,830		84,430	
10 PERCENT EXCEEDS	70		150		200	
50 PERCENT EXCEEDS	41		48		64	
90 PERCENT EXCEEDS	32		28		35	

e Estimated.

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

LOCATION.--Lat 40°03'06", long 105°10'42", in SE¼NW¼ sec.13, T.1 N., R.70 W., Boulder County, Hydrologic Unit 10190005, on left bank, 50 ft downstream (revised) from bridge on North 75th Street, 0.2 mi downstream from Boulder feeder ditch, and 6 mi northeast of Boulder.

DRAINAGE AREA.--304 mi^2.

PERIOD OF RECORD.--October 1986 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06730200

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 5,106 ft above NGVD of 1929, from topographic map. Prior to Apr. 14, 2003 gage located at site 100 ft upstream at same datum.

REMARKS.--Records poor. Flow is partially regulated by Barker Reservoir, and affected by Boulder feeder ditch, Boulder sewage treatment plant, and Public Service power plant. Starting about Feb. 2003, Boulder Sewage Treatment Plant moved its wastewater discharge (point) to site about 300 ft downstream from current gage location and City of Lafayette began diversions for municipal supply upstream from gage. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	55	e25	e26	e28	e10	e21	31	1,300	131	59	60
2	116	43	e25	e26	e20	e14	e69	20	945	120	40	57
3	81	45	e25	e27	e18	e16	e77	25	681	106	39	67
4	70	39	e28	e28	e16	e10	e74	20	468	84	47	51
5	62	34	e28	e29	e13	e5.9	e68	24	354	71	71	35
6	54	34	e27	e27	e14	e3.1	e62	17	215	57	72	28
7	55	32	e26	e27	e17	e2.6	e50	24	204	52	70	37
8	53	32	e25	e26	e16	e5.9	e43	36	126	35	70	45
9	53	28	e25	e28	e15	e11	e32	38	93	27	80	48
10	57	27	e27	e34	e17	e12	e35	213	130	26	84	49
11	56	27	e26	e36	e20	e13	e38	140	182	25	80	38
12	50	25	e24	e36	e24	e15	e48	107	219	26	92	39
13	50	26	e23	e36	e25	e13	e69	84	211	e29	95	24
14	50	23	e23	e34	e27	e14	e106	86	216	e32	97	21
15	50	20	e23	e31	e24	e16	127	123	249	e36	96	25
16	49	21	e23	e30	e21	e14	102	278	260	e40	97	18
17	47	20	e24	e30	e19	e14	101	169	221	46	95	15
18	46	21	e25	e30	e17	e27	106	147	359	50	135	14
19	57	20	e27	e30	e16	e45	146	148	387	66	120	8.8
20	58	19	e28	e30	e16	e61	102	200	332	62	107	9.8
21	59	19	e29	e30	e15	e75	81	185	259	65	95	7.3
22	59	19	e25	e30	e13	e78	83	165	219	55	96	6.9
23	63	17	e28	e32	e12	e58	94	176	243	43	101	8.6
24	59	18	e34	e33	e13	e92	119	252	232	32	93	12
25	53	20	e40	e27	e12	e61	85	259	246	49	79	12
26	48	20	e43	e25	e8.6	e65	79	266	176	72	86	16
27	49	e29	e39	e24	e6.5	e33	82	353	132	66	92	18
28	49	e27	e33	e25	e8.0	e13	79	735	108	64	81	14
29	67	e26	e27	e25	---	e4.8	78	1,060	108	73	65	9.4
30	80	e25	e26	e27	---	e6.0	54	1,700	125	72	161	12
31	67	---	e26	e30	---	e8.3	---	1,600	---	70	92	---
TOTAL	1,834	811	857	909	471.1	816.6	2,310	8,681	9,000	1,782	2,687	805.8
MEAN	59.2	27.0	27.6	29.3	16.8	26.3	77.0	280	300	57.5	86.7	26.9
MAX	116	55	43	36	28	92	146	1,700	1,300	131	161	67
MIN	46	17	23	24	6.5	2.6	21	17	93	25	39	6.9
AC-FT	3,640	1,610	1,700	1,800	934	1,620	4,580	17,220	17,850	3,530	5,330	1,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2003, BY WATER YEAR (WY)

MEAN	49.5	53.2	49.7	46.1	43.7	48.8	85.0	190	287	201	139	73.2
MAX	77.8	81.7	74.9	68.3	61.3	90.6	236	465	868	492	235	111
(WY)	(1997)	(1998)	(1989)	(1987)	(1996)	(1998)	(1998)	(1995)	(1995)	(1995)	(1999)	(1995)
MIN	31.5	27.0	27.6	28.8	16.8	26.3	37.4	97.3	86.0	57.5	86.7	26.9
(WY)	(1987)	(2003)	(2003)	(2002)	(2003)	(2003)	(1989)	(2002)	(2002)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1987 - 2003	
ANNUAL TOTAL	21,900		30,964.5			
ANNUAL MEAN	60.0		c84.8		106	
HIGHEST ANNUAL MEAN					198	1995
LOWEST ANNUAL MEAN					61.0	2002
HIGHEST DAILY MEAN	208	May 24	1,700	May 30	1,700	May 30, 2003
LOWEST DAILY MEAN	17	Nov 23	e2.6	Mar 7	e2.6	Mar 7, 2003
ANNUAL SEVEN-DAY MINIMUM	19	Nov 19	e7.2	Mar 4	e7.2	Mar 4, 2003
MAXIMUM PEAK FLOW			a2,050	May 30	a2,050	May 30, 2003
MAXIMUM PEAK STAGE			4.97	May 30	b4.97	May 30, 2003
ANNUAL RUNOFF (AC-FT)	43,440		c61,420		76,660	
10 PERCENT EXCEEDS	124		172		215	
50 PERCENT EXCEEDS	51		39		62	
90 PERCENT EXCEEDS	26		14		33	

e Estimated.
a From rating curve extended above 500 ft^3/s.
b Maximum gage height, 7.85 ft, May 17, 1995, site and datum then in use.
c Significantly affected by changes in water operations by Cities of Boulder and Lafayette that began about Feb. 2003.

06730400 COAL CREEK NEAR LOUISVILLE, CO

LOCATION.--Lat 39°58'34", long 105°07'00", in NW¼SE¼ sec.9, T.1 S., R.69 W., Boulder County, Hydrologic Unit 10190005, on left bank on upstream side of County road 62 bridge, and 1.1 mi northeast of Louisville.

DRAINAGE AREA.--32.0 mi^2 (revised).

PERIOD OF RECORD.--July 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=06730400

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,280 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 diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	0.29	0.21	0.02	0.11	0.03	11	8.2	5.8	6.3	0.89	0.06
2	5.4	0.31	0.24	0.03	0.08	0.10	10	6.8	4.6	6.0	0.78	0.03
3	1.5	0.36	0.20	0.05	0.09	0.11	9.9	4.4	4.1	5.8	0.70	0.03
4	1.4	0.29	0.17	0.07	0.05	0.03	6.1	4.6	4.0	4.8	0.55	0.04
5	1.3	0.33	0.15	0.09	0.07	0.05	5.0	4.8	3.8	2.6	0.49	0.05
6	1.3	0.38	0.12	0.11	0.05	0.03	8.7	4.2	3.6	1.6	0.54	0.05
7	1.3	0.32	0.09	0.07	0.03	0.11	5.2	4.1	4.7	1.4	0.62	0.08
8	1.4	0.59	0.10	0.08	0.03	0.13	5.0	3.5	2.7	1.4	1.0	0.11
9	1.6	0.84	0.08	0.05	0.03	0.10	6.6	4.5	2.2	1.8	1.7	0.11
10	1.5	0.73	0.05	0.03	0.02	0.16	5.4	14	2.6	1.9	0.84	0.09
11	1.4	0.61	0.04	0.03	0.02	0.21	4.7	4.9	2.3	1.8	0.91	0.07
12	1.3	0.45	0.04	0.03	0.04	0.27	4.2	4.1	2.6	2.1	0.85	0.07
13	1.1	0.51	0.04	0.04	0.04	0.34	5.5	4.0	2.9	2.1	0.70	0.06
14	1.0	0.67	0.04	0.07	0.07	0.37	12	3.9	3.0	1.9	0.53	0.08
15	0.96	0.66	0.04	0.05	0.06	0.44	8.6	3.9	3.4	1.8	0.59	0.10
16	0.87	0.52	0.07	0.03	0.06	0.34	6.3	4.7	3.6	1.8	0.50	0.14
17	0.82	0.55	0.08	0.04	0.06	1.1	4.8	4.8	8.9	1.7	0.26	0.88
18	0.82	0.44	0.07	0.03	0.06	3.0	4.4	3.7	15	1.9	2.0	0.86
19	0.80	0.44	0.04	0.06	0.09	2.7	19	2.9	12	4.3	1.3	0.31
20	0.81	0.50	0.06	0.06	0.07	4.5	13	2.7	6.9	1.8	0.92	0.27
21	0.84	0.53	0.03	0.06	0.08	6.5	7.4	2.9	7.0	1.6	0.86	0.32
22	0.70	0.42	0.03	0.04	0.07	6.0	5.6	3.2	6.4	1.7	0.97	0.34
23	0.53	0.43	0.02	0.07	0.03	6.8	9.3	4.1	7.0	1.7	0.87	0.69
24	0.49	0.32	0.03	0.10	0.03	5.7	18	3.7	7.5	1.7	0.95	1.4
25	0.56	0.29	0.04	0.10	0.02	5.0	8.1	3.3	6.6	1.6	0.95	1.7
26	0.63	0.14	0.08	0.11	0.04	10	7.6	5.5	6.0	1.6	0.66	1.7
27	0.65	0.11	0.03	0.17	0.05	14	8.3	9.1	5.9	1.5	0.72	1.7
28	0.56	0.13	0.02	0.12	0.06	7.6	8.1	8.0	6.0	1.5	0.76	1.6
29	0.86	0.24	0.02	0.10	---	5.4	8.1	16	6.1	1.4	2.0	1.5
30	0.38	0.22	0.02	0.09	---	5.7	12	13	6.4	1.1	9.0	1.6
31	0.30	---	0.02	0.11	---	e10	---	9.0	---	1.3	0.19	---
TOTAL	35.58	12.62	2.27	2.11	1.51	96.82	247.9	176.5	163.6	71.5	34.60	16.04
MEAN	1.15	0.42	0.073	0.068	0.054	3.12	8.26	5.69	5.45	2.31	1.12	0.53
MAX	5.4	0.84	0.24	0.17	0.11	14	19	16	15	6.3	9.0	1.7
MIN	0.30	0.11	0.02	0.02	0.02	0.03	4.2	2.7	2.2	1.1	0.19	0.03
AC-FT	71	25	4.5	4.2	3.0	192	492	350	325	142	69	32

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

MEAN	2.58	2.17	1.86	1.51	1.43	2.83	12.3	13.1	7.02	2.76	4.14	2.10
MAX	3.85	3.42	3.23	2.45	2.44	6.17	36.1	34.9	13.2	4.25	14.5	3.10
(WY)	(1998)	(2000)	(2000)	(2000)	(2000)	(1998)	(1998)	(1999)	(1999)	(1999)	(1999)	(2000)
MIN	1.15	0.42	0.073	0.068	0.054	1.28	1.08	2.03	1.11	0.69	0.32	0.53
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2001)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1997 - 2003	
ANNUAL TOTAL	378.55		861.05			
ANNUAL MEAN	1.04		2.36		4.45	
HIGHEST ANNUAL MEAN					8.48	1999
LOWEST ANNUAL MEAN					1.48	2002
HIGHEST DAILY MEAN	16	May 24	19	Apr 19	277	Apr 30, 1999
LOWEST DAILY MEAN	0.01	Jul 31	0.02	Dec 23	a0.01	Jul 31, 2002
ANNUAL SEVEN-DAY MINIMUM	0.01	Aug 7	0.02	Dec 27	0.01	Aug 7, 2002
MAXIMUM PEAK FLOW			123	Jun 18	b643	Apr 30, 1999
MAXIMUM PEAK STAGE			2.23	Jun 18	3.42	Apr 30, 1999
ANNUAL RUNOFF (AC-FT)	751		1,710		3,220	
10 PERCENT EXCEEDS	1.7		6.8		9.0	
50 PERCENT EXCEEDS	1.1		0.82		2.2	
90 PERCENT EXCEEDS	0.07		0.04		0.51	

e Estimated.
a Also occurred Aug 1, 7, 10-13, 22-23, 2002.
b From rating curve extended above 150 ft^3/s.

06730500 BOULDER CREEK AT MOUTH NEAR LONGMONT, CO

LOCATION.--Lat 40°09'08", long 105°00'52", in NW ¼ SW ¼ sec.9, T.2 N., R.68 W., Weld County, Hydrologic Unit 10190005, on left bank 0.6 mi upstream from mouth, 1.0 mi downstream from State Highway 254, and 4.8 mi southeast of Longmont.

DRAINAGE AREA.--439 mi^2.

PERIOD OF RECORD.--March 1927 to September 1949, May 1951 to September 1955, October 1978 to September 1990, October 1991 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06730500

GAGE.--Water-stage recorder. Elevation of gage is 4,860 ft above NGVD of 1929, from topographic map. Prior to June 10, 1939, at site 0.8 mi upstream at different datum. June 10, 1939 to Sept. 30, 1949, at site 1.0 mi upstream, at different datum. May 1, 1951 to Sept. 30, 1955, at site 1.4 mi upstream, at different datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	28	22	22	33	22	74	42	972	116	17	35
2	5.7	26	22	23	26	27	112	38	818	96	12	26
3	5.4	26	22	22	28	28	118	32	619	56	8.6	21
4	4.9	23	22	22	27	27	127	26	410	35	7.9	20
5	5.3	18	22	23	27	26	110	26	326	21	8.0	13
6	4.5	24	21	24	27	25	116	22	233	14	8.1	9.7
7	4.4	24	21	23	29	25	105	17	241	14	9.1	9.3
8	4.4	25	21	23	30	23	99	11	184	17	9.8	9.0
9	4.4	23	23	23	26	22	83	13	127	12	9.7	8.9
10	4.6	21	23	27	27	23	81	223	139	11	11	10
11	4.7	21	21	e26	25	23	82	320	174	9.8	12	8.5
12	4.5	17	21	e25	25	25	123	167	199	9.8	11	7.8
13	4.5	18	20	e25	25	24	148	94	196	9.6	11	7.3
14	4.6	19	20	25	25	24	165	66	207	9.3	10	6.9
15	4.6	20	20	26	26	23	158	63	230	9.2	11	6.6
16	4.4	19	e21	26	25	23	135	278	264	9.0	11	6.4
17	4.3	20	e21	24	25	25	111	204	205	8.6	11	5.8
18	e4.9	20	e22	26	25	68	117	196	388	8.8	13	6.6
19	e4.1	21	e22	27	25	82	168	177	421	19	44	6.3
20	e4.5	21	e22	24	24	96	172	226	337	20	13	5.6
21	e4.6	22	e22	25	23	114	105	199	271	19	12	5.6
22	e5.4	21	e22	24	23	117	80	151	213	13	12	4.8
23	e5.4	20	e22	e24	23	107	92	149	245	9.3	12	4.7
24	e4.9	21	e22	e24	26	133	171	187	244	9.5	12	4.9
25	e4.9	23	e22	24	26	108	145	214	259	10	13	4.8
26	e4.6	23	e22	24	20	110	100	185	218	16	13	4.4
27	e4.6	26	e22	26	16	133	88	276	153	13	13	5.0
28	5.5	23	e22	26	17	93	73	470	114	11	12	4.9
29	6.1	22	21	26	---	65	61	864	99	14	12	4.6
30	16	22	21	33	---	58	52	1,070	100	22	120	4.5
31	30	---	22	34	---	64	---	1,170	---	15	141	---
TOTAL	186.0	657	669	776	704	1,763	3,371	7,176	8,606	656.9	620.2	277.9
MEAN	6.00	21.9	21.6	25.0	25.1	56.9	112	231	287	21.2	20.0	9.26
MAX	30	28	23	34	33	133	172	1,170	972	116	141	35
MIN	4.1	17	20	22	16	22	52	11	99	8.6	7.9	4.4
AC-FT	369	1,300	1,330	1,540	1,400	3,500	6,690	14,230	17,070	1,300	1,230	551

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2003, BY WATER YEAR (WY)

MEAN	34.3	43.9	49.1	50.8	50.0	52.4	94.3	172	189	44.0	23.5	23.6
MAX	127	109	93.8	104	120	148	581	1,101	976	367	164	440
(WY)	(1985)	(1998)	(1939)	(1980)	(1980)	(1983)	(1942)	(1942)	(1947)	(1983)	(1999)	(1938)
MIN	0.70	0.48	1.16	2.94	2.75	2.58	1.15	1.06	1.22	1.09	0.55	0.54
(WY)	(1955)	(1955)	(1940)	(1935)	(1935)	(1935)	(1954)	(1955)	(1954)	(1954)	(1954)	(1954)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1927 - 2003	
ANNUAL TOTAL	6,734.8		25,463.0			
ANNUAL MEAN	18.5		69.8		69.1	
HIGHEST ANNUAL MEAN					220	1983
LOWEST ANNUAL MEAN					3.93	1954
HIGHEST DAILY MEAN	106	May 24	1,170	May 31	2,300	Sep 3, 1938
LOWEST DAILY MEAN	1.0	Apr 29	e4.1	Oct 19	a0.00	Dec 9, 1934
ANNUAL SEVEN-DAY MINIMUM	1.1	Apr 26	4.5	Oct 13	0.00	Apr 11, 1935
MAXIMUM PEAK FLOW			1,240	May 31	b4,410	Sep 3, 1938
MAXIMUM PEAK STAGE			4.34	May 31	6.94	Sep 3, 1938
ANNUAL RUNOFF (AC-FT)	13,360		50,510		50,060	
10 PERCENT EXCEEDS	51		186		127	
50 PERCENT EXCEEDS	5.2		23		35	
90 PERCENT EXCEEDS	1.5		5.6		2.0	

e Estimated.
a No flow at times many years.
b Site and datum then in use, from rating curve extended above 340 ft^3/s, on basis of slope-area measurement of peak flow.

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

LOCATION.--Lat 40°21'14", long 105°35'01", in SE¼SW¼ sec.33, T.5 N., R.73 W., Larimer County, Hydrologic Unit 10190006, on left upstream wingwall of bridge at lower Moraine Park parking lot, in Rocky Mountain National Park, and 4.0 mi southwest of Estes Park.

DRAINAGE AREA.--39.8 mi^2.

PERIOD OF RECORD.--October 1995 to September 1997, April 2001 to current year. Hydrologic Benchmark Network water-quality site. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=402114105350101.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,005 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good, except for estimated daily discharges, which are poor. No diversion or regulation upstream from gage. Water-quality data has been collected at this site as part of the South Platte River Basin National Water-Quality Assessment Program and is available at http://waterdata.usgs.gov/co/nwis/inventory/?site_no=402114105350101.

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	12	e9.9	e6.5	e3.7	e2.8	e2.5	e12	32	658	189	57	46
2	14	e9.9	e6.5	e3.5	e2.8	e2.5	e13	27	504	176	56	39
3	17	e9.9	e6.5	e3.4	e2.8	e2.5	e15	25	425	175	54	44
4	15	e9.8	e6.6	e3.3	e2.8	e2.6	e15	29	346	165	63	46
5	16	e9.9	e6.4	e3.2	e2.7	e2.6	e14	27	272	158	57	38
6	15	e9.7	e6.1	e3.2	e2.7	e2.6	e14	24	229	147	51	36
7	14	e9.5	e5.9	e3.2	e2.7	e2.6	e14	23	197	137	48	39
8	17	e9.5	e5.8	e3.1	e2.7	e2.7	e15	24	176	139	48	45
9	17	e9.5	e5.8	e3.1	e2.7	e2.7	e15	25	196	142	49	44
10	16	e9.4	e5.7	e3.1	e2.7	e2.7	e22	26	259	127	45	39
11	15	e9.3	e5.7	e3.1	e2.7	e2.7	e24	27	305	118	49	36
12	13	e9.2	e5.6	e3.0	e2.7	e2.8	25	25	276	117	44	32
13	12	e9.0	e5.7	e3.0	e2.6	e2.8	29	29	279	117	40	30
14	12	e8.9	e5.7	e3.0	e2.6	e2.8	35	33	300	109	41	28
15	11	e8.4	e5.7	e3.0	e2.6	e2.9	35	51	328	110	43	24
16	11	e8.0	e5.5	e3.0	e2.6	e2.9	30	75	301	108	40	22
17	10	e7.8	e5.4	e3.0	e2.6	e3.0	28	122	273	108	55	21
18	10	e7.6	e5.4	e2.9	e2.6	e3.6	27	157	328	108	71	22
19	9.7	e7.5	e5.3	e2.9	e2.6	e4.6	23	135	313	112	67	21
20	9.7	e7.5	e5.3	e2.9	e2.6	e4.8	20	115	279	114	50	19
21	9.1	e7.4	e5.2	e2.9	e2.6	e5.6	20	113	270	101	42	18
22	9.2	e7.4	e5.0	e2.9	e2.6	e5.2	21	141	237	92	38	17
23	9.7	e7.4	e4.9	e2.9	e2.5	e5.2	23	189	235	90	38	15
24	12	e7.4	e4.8	e2.9	e2.5	e5.1	23	244	239	84	42	14
25	11	e7.3	e4.6	e2.8	e2.5	e5.1	24	271	212	84	44	14
26	10	e7.0	e4.4	e2.8	e2.5	e5.1	29	307	165	89	44	12
27	11	e6.8	e4.2	e2.8	e2.5	e5.8	35	370	162	85	38	12
28	10	e6.8	e4.1	e2.8	e2.5	e6.4	38	481	176	75	36	12
29	9.8	e6.8	e4.0	e2.8	---	e7.2	42	589	185	78	37	12
30	e9.9	e6.6	e3.9	e2.8	---	e11	39	663	195	69	56	12
31	e9.9	---	e3.8	e2.8	---	e12	---	630	---	60	66	---
TOTAL	378.0	251.1	166.0	93.8	73.8	132.6	719	5,029	8,320	3,583	1,509	809
MEAN	12.2	8.37	5.35	3.03	2.64	4.28	24.0	162	277	116	48.7	27.0
MAX	17	9.9	6.6	3.7	2.8	12	42	663	658	189	71	46
MIN	9.1	6.6	3.8	2.8	2.5	2.5	12	23	162	60	36	12
AC-FT	750	498	329	186	146	263	1,430	9,980	16,500	7,110	2,990	1,600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2003, BY WATER YEAR (WY)

MEAN	14.9	9.60	5.76	3.58	3.36	4.31	16.2	127	243	95.3	55.1	30.0
MAX	20.9	12.1	6.82	4.68	4.36	6.51	24.0	162	399	133	111	61.8
(WY)	(1997)	(1997)	(1997)	(1997)	(1996)	(1997)	(2003)	(2003)	(1997)	(1997)	(1997)	(1997)
MIN	11.8	8.31	4.21	2.56	2.46	2.26	8.06	53.2	95.8	37.9	18.8	12.6
(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 1996 - 2003	
ANNUAL TOTAL	7,914.3		21,064.3			
ANNUAL MEAN	21.7		57.7		53.4	
HIGHEST ANNUAL MEAN					77.0	1997
LOWEST ANNUAL MEAN					21.5	2002
HIGHEST DAILY MEAN	197	May 31	663	May 30	663	May 30, 2003
LOWEST DAILY MEAN	e2.0	Mar 3	e2.5	Feb 23	e2.0	Mar 3, 2002
ANNUAL SEVEN-DAY MINIMUM	e2.1	Mar 2	e2.5	Feb 23	e2.1	Mar 2, 2002
MAXIMUM PEAK FLOW			828	May 31	828	May 31, 2003
MAXIMUM PEAK STAGE			6.86	May 31	6.86	May 31, 2003
ANNUAL RUNOFF (AC-FT)	15,700		41,780		38,700	
10 PERCENT EXCEEDS	59		180		161	
50 PERCENT EXCEEDS	9.9		14		13	
90 PERCENT EXCEEDS	2.3		2.8		2.9	

e Estimated.

402231105291900 LAKE ESTES NEAR DAM NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°22'31", long 105°29'19", in SE¼ NW¼ sec.29, T.5 N., R.72 W., Larimer County, Hydrologic Unit 14010001, 1 mi southeast of Estes Park.

PERIOD OF RECORD.--May 1998 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=402231105291900

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

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

Date	Time	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduct-ance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)
NOV						
07...	1103	0.50	9.2	6.9	52	3.5
07...	1104	5.00	9.1	6.9	52	3.4
07...	1105	10.0	9.1	6.9	52	3.4
07...	1106	15.0	9.1	6.9	51	3.4
07...	1107	20.0	9.0	6.9	51	3.4
07...	1108	25.0	9.0	6.9	51	3.4
MAY						
16...	0927	0.50	8.8	7.2	68	9.9
16...	0928	5.00	8.7	7.2	68	9.9
16...	0929	10.0	8.6	7.2	68	9.8
16...	0930	15.0	8.6	7.2	68	9.8
16...	0931	20.0	8.5	7.2	67	9.6
16...	0932	25.0	8.2	7.0	71	8.4
16...	0933	30.0	7.9	6.9	72	8.0
AUG						
28...	0930	0.50	7.0	6.8	44	16.8
28...	0931	5.00	6.7	6.8	39	16.5
28...	0932	10.0	6.6	6.8	38	16.4
28...	0933	15.0	6.6	6.8	37	16.4
28...	0934	20.0	6.3	6.8	36	16.2
28...	0935	25.0	6.2	6.8	36	16.2
28...	0936	30.0	4.1	6.8	30	14.6

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

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, inches (00077)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduct-ance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)
NOV													
07...	1115	0.10	84.0	9.2	6.9	52	3.5	21	6.44	1.26	0.61	0.2	2.53
07...	1120	22.0	--	9.0	6.9	51	3.4	21	6.44	1.26	0.64	0.2	2.54
MAY													
16...	0945	0.10	61.0	8.8	7.2	68	9.9	25	7.18	1.78	0.84	0.4	4.11
16...	1000	30.0	--	7.9	6.9	72	8.0	26	7.55	1.83	0.93	0.4	4.40
AUG													
28...	0950	0.10	76.0	7.0	6.8	44	16.8		--	--	--		--
28...	1000	30.0	--	4.1	6.8	30	14.6		--	--	--		--

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

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of consti-tuents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	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)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)
NOV													
07...	23	1.37	<0.17	3.84	2.8	33	0.04	28	0.26	0.034	0.088	0.003	<0.007
07...	23	1.43	<0.17	3.88	2.8	33	0.05	34	0.25	0.034	0.090	E.002	<0.007
MAY													
16...	18	7.24	0.2	7.06	5.2	46	0.08	62	0.42	<0.015	0.173	0.005	<0.007
16...	19	7.23	0.2	7.11	5.4	47	0.08	58	0.35	0.018	0.186	0.005	<0.007
AUG													
28...	19	0.88	<0.2	--	3.2	--	--	33	0.22	<0.015	E.018	<0.002	<0.007
28...	16	0.87	<0.2	--	2.8	--	--	31	0.33	0.072	0.043	E.002	<0.007

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

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

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Chlorophyll b phytoplankton, fluoro, ug/L (70954)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
NOV													
07...	E.004	0.013	2.5	E14	2.2	<0.1	6.7	<0.5	<13	<0.2	<0.8	0.038	0.9
07...	0.006	0.013	2.7	--	--	--	6.8	<0.5	<13	<0.2	<0.8	0.035	1.1
MAY													
16...	0.010	0.029	6.3	E7	2.6	<0.1	6.7	<0.5	<13	<0.2	<0.8	0.051	1.2
16...	0.007	0.023	6.1	--	--	--	7.2	<0.5	<13	<0.2	<0.8	0.052	1.2
AUG													
28...	E.004	0.015	3.6	E15	2.6	<0.1	--	<0.4	E5.4	<0.2	<0.8	--	--
28...	<0.004	0.033	2.9	--	--	--	--	<0.4	E5.4	<0.2	<0.8	--	--

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

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
NOV										
07...	61	E.05	1.2	7.2	0.4	0.27	<0.3	35.0	0.3	2
07...	68	E.05	1.2	7.4	0.4	0.26	<0.3	35.3	0.3	1
MAY										
16...	121	0.11	1.7	1.1	0.5	0.52	<0.3	38.2	0.3	7
16...	130	E.05	1.7	1.9	0.5	0.53	<0.3	39.9	0.2	2
AUG										
28...	--	<0.08	--	0.6	--	--	<0.3	--	--	1
28...	--	E.05	--	15.3	--	--	<0.3	--	--	M

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.
M -- Presence of material verified but not quantified.

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO

LOCATION.--Lat 40°36'00", long 105°10'06", in NW¼SW¼, sec.6, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on right bank near abutment of Horsetooth Dam on tributaries to Cache la Poudre River, 4.8 mi west of city hall in Fort Collins.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--April 1951 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06737500

GAGE.--Nonrecording gage read at irregular intervals from 1 to 10 days. Datum of gage is 5,430.00 ft above NGVD of 1929, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above NGVD of 1929.

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

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 148,400 acre-ft, June 26-27, 1995, elevation, 5,429.36 ft; minimum observed, 0 acre-ft, several times in 2001, 2002, and 2003 water years at various elevations during repairs to dam and outlet structure, minimum elevation, 5,286.77 ft, Oct. 6, 2001; minimum contents observed under normal operating conditions, 9 acre-ft, Nov. 16-30, 1977, elevation, 5,270.25 ft; no storage prior to Apr. 18, 1951.

EXTREMES (AT 0800) FOR CURRENT YEAR.--Maximum contents observed, 46,830 acre-ft, Sept. 24, elevation, 5,365.83 ft; minimum observed, 0 acre-ft, Oct. 20, elevation, 5,302.22 ft during repairs to dam and outlet structure when reservoir was drawn down below dead storage.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	5,312.59	3,930	-
Oct. 31	5,308.42	2,070	-1,860
Nov. 30	5,320.74	8,110	+6,030
Dec. 31	5,326.80	11,710	+3,610
CAL YR 2002	-	-	+2,530
Jan. 31	5,332.86	15,750	+4,040
Feb. 28	5,340.31	21,320	+5,570
Mar. 31	5,350.32	30,110	+8,790
Apr. 30	5,351.05	30,820	+710
May 31	5,354.08	33,840	+3,030
June 30	5,355.89	35,720	+1,880
July 31	5,356.96	36,840	+1,130
Aug. 31	5,359.64	39,740	+2,900
Sept. 30	5,365.01	45,860	+6,110
WTR YR 2003	-	-	+41,930

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06737500

REMARKS.--Samples collected near the north end of reservoir near Soldier Canyon Dam. Note that the bottom sample for the August 27 sample is listed first in the table.

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

Date	Time	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
MAY						
15...	1024	0.50	8.6	7.4	74	12.5
15...	1025	5.00	8.7	7.5	73	11.6
15...	1026	10.0	8.5	7.4	72	11.3
15...	1027	15.0	8.4	7.4	72	11.2
15...	1028	20.0	8.5	7.3	72	11.0
15...	1029	25.0	8.2	7.3	72	10.8
15...	1030	30.0	8.3	7.3	72	10.2
15...	1031	35.0	8.3	7.2	72	10.1
15...	1032	40.0	8.3	7.2	71	9.6
15...	1033	45.0	8.2	7.2	71	9.2
15...	1034	50.0	7.9	7.1	71	9.0
15...	1035	55.0	8.1	7.1	71	8.7
15...	1036	60.0	8.0	7.1	71	8.6
15...	1037	65.0	7.8	7.1	71	8.5
15...	1038	70.0	7.8	7.0	71	8.4
15...	1039	75.0	7.6	7.0	72	8.4
15...	1040	80.0	7.4	7.0	71	8.4
15...	1041	85.0	7.7	7.0	72	8.3
AUG						
27...	0950	0.50	7.1	7.5	54	22.0
27...	0951	5.00	7.1	7.5	54	21.8
27...	0952	10.0	7.1	7.5	54	21.8
27...	0953	15.0	6.8	7.5	54	21.7
27...	0954	20.0	5.3	7.4	53	21.1
27...	0955	25.0	4.8	7.3	47	20.8
27...	0956	30.0	4.4	7.2	43	20.2
27...	0957	35.0	4.4	7.2	41	20.0
27...	0958	40.0	4.4	7.2	40	19.6
27...	0959	45.0	4.4	7.1	39	19.2
27...	1000	50.0	4.2	7.1	39	19.0
27...	1001	55.0	4.2	7.0	40	18.6
27...	1002	60.0	4.0	7.0	40	18.2
27...	1003	65.0	3.6	6.9	44	17.4
27...	1004	70.0	3.4	6.9	45	17.0
27...	1005	75.0	3.2	6.9	48	16.4
27...	1006	80.0	2.9	6.8	52	15.8
27...	1007	85.0	2.6	6.8	55	15.2
27...	1008	90.0	2.4	6.8	57	14.8

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

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, inches (00077)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
MAY													
15...	1045	0.10	53.0	8.6	7.4	74	12.5	33	10.2	1.73	0.89	0.2	2.64
15...	1100	85.0	--	7.7	7.0	72	8.3	32	10.1	1.73	0.84	0.2	2.56
AUG													
27...	1030	90.0	--	2.4	6.8	57	14.8	30	9.11	1.66	0.80	0.2	2.49
27...	1045	0.10	77.0	7.1	7.5	54	22.0	28	8.54	1.49	0.79	0.2	2.34

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO—Continued

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

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	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)
MAY													
15...	33	1.14	<0.2	3.51	4.2	45	0.07	53	0.27	E.008	0.074	0.003	<0.007
15...	33	1.05	<0.2	3.61	4.2	44	0.07	52	0.27	0.044	0.084	0.003	E.005
AUG													
27...	26	1.74	0.2	5.09	3.5			57	0.23	<0.015	0.219	<0.002	0.016
27...	26	1.61	<0.2	3.23	3.4	37	0.05	38	0.20	<0.015	<0.022	<0.002	<0.007

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

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Chlorophyll b phytoplankton, fluoro, ug/L (70954)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
MAY													
15...	E.004	0.018	3.3	--	E1.4	<0.1	18.7	<0.5	<13	<0.2	<0.8	0.043	2.6
15...	0.008	0.021	2.8	--	--	--	18.2	<0.5	<13	<0.2	<0.8	0.031	2.5
AUG													
27...	0.021	0.017	3.1	--	--	--	15.7	<0.4	E6.1	<0.2	<0.8	0.042	3.0
27...	0.008	0.015	3.2	E2	E4.2	>.1	19.2	<0.4	E6.5	<0.2	<0.8	0.043	2.7

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

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
MAY											
15...	E10	<0.08	1.1	2.2	5.1	0.5	0.58	<0.3	50.1	0.3	6
15...	E7	<0.08	1.0	0.5	7.2	0.5	0.55	<0.3	49.8	0.3	2
AUG											
27...	17	<0.08	1.1	--	--	0.5	0.43	<0.3	35.8	0.4	M
27...	11	<0.08	1.0	0.3	3.1	0.5	0.38	<0.3	31.3	0.6	<1

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

403147105083800 HORSETOOTH RESERVOIR NEAR SPRING CANYON DAM NEAR FORT COLLINS, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1983 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=403147105083800

REMARKS.--Samples collected near the south end of reservoir near Spring Canyon Dam.

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

Date	Time	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduct-ance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)
MAY						
15...	1117	0.50	8.1	7.3	82	12.8
15...	1118	5.00	8.1	7.3	81	11.9
15...	1119	10.0	8.1	7.2	80	11.2
15...	1120	15.0	8.0	7.2	78	10.8
15...	1121	20.0	8.0	7.2	77	10.5
15...	1122	25.0	7.9	7.1	77	10.2
15...	1123	30.0	7.8	7.1	76	9.9
15...	1124	35.0	7.6	7.1	76	9.7
15...	1125	40.0	7.5	7.1	75	9.3
15...	1126	45.0	7.6	7.0	74	8.9
15...	1127	50.0	7.4	6.9	73	8.6
15...	1128	55.0	7.4	6.9	71	8.1
15...	1129	60.0	7.3	6.9	71	7.7
15...	1130	65.0	7.1	6.9	70	7.5
15...	1131	70.0	7.0	6.9	71	7.5
15...	1132	75.0	6.7	6.8	71	7.4
AUG						
27...	1055	0.50	7.7	7.8	44	21.8
27...	1056	5.00	7.6	7.8	44	21.2
27...	1057	10.0	6.6	7.7	42	20.6
27...	1058	15.0	6.8	7.5	39	19.5
27...	1059	20.0	6.7	7.4	38	18.9
27...	1100	25.0	6.7	7.4	38	18.6
27...	1101	30.0	6.8	7.3	38	18.4
27...	1102	35.0	6.5	7.3	39	17.7
27...	1103	40.0	2.6	7.2	59	12.3
27...	1104	45.0	2.3	7.0	64	10.6
27...	1105	50.0	1.7	7.0	67	9.7
27...	1106	55.0	1.3	6.9	68	9.3
27...	1107	60.0	1.4	6.9	69	9.1
27...	1108	65.0	0.7	6.9	70	9.0
27...	1109	70.0	0.4	6.8	71	8.8
27...	1110	75.0	0.2	6.8	73	8.6
27...	1111	80.0	0.1	6.8	73	8.6
27...	1112	85.0	0.1	6.8	74	8.6

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

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, inches (00077)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduct-ance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Hard-ness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium adsorp-tion ratio (00931)	Sodium, water, fltrd, mg/L (00930)
MAY													
15...	1140	0.10	84.0	8.1	7.3	82	12.8	34	10.4	1.95	0.99	0.3	3.60
15...	1150	75.0	--	6.7	6.8	71	7.4	31	9.78	1.68	0.86	0.2	2.85
AUG													
27...	1115	0.10	48.0	7.7	7.8	44	21.8	23	7.08	1.25	0.68	0.2	1.99
27...	1130	85.0	--	0.1	6.8	74	8.6	37	11.3	2.06	0.96	0.2	3.10

403147105083800 HORSETOOTH RESERVOIR NEAR SPRING CANYON DAM NEAR FORT COLLINS, CO—Continued

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

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	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)
MAY													
15...	31	4.20	<0.2	4.02	4.8	49	0.08	59	0.30	0.040	0.092	0.003	<0.007
15...	32	1.72	<0.2	3.92	3.8	44	0.07	48	0.32	0.102	0.045	0.003	0.007
AUG													
27...	21	1.27	0.1	2.72	3.0	31	0.05	38	0.26	<0.015	<0.013	<0.002	<0.007
27...	34	2.39	0.2	5.88	4.1	52	0.08	58	0.17	<0.015	0.316	<0.002	0.026

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

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Chlorophyll b phytoplankton, fluoro, ug/L (70954)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
MAY													
15...	0.007	0.016	3.7	--	E1.0	<0.1	18.3	<0.5	<13	<0.2	<0.8	0.059	4.3
15...	0.011	0.021	3.0	--	--	--	15.1	<0.5	<13	<0.2	<0.8	0.040	3.3
AUG													
27...	E.004	0.024	3.2	E1	E5.3	<0.1	15.0	<0.4	E5.7	<0.2	<0.8	0.034	2.9
27...	0.033	0.054	3.1	--	--	--	16.4	<0.4	E6.3	<0.2	<0.8	0.061	3.0

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

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
MAY											
15...	16	<0.08	1.7	10.9	11.2	0.5	0.57	<0.3	54.1	0.3	2
15...	E8	<0.08	1.3	29.8	42.8	0.5	0.56	<0.3	52.3	0.2	2
AUG											
27...	23	<0.08	0.9	0.3	<0.6	0.5	0.33	<0.3	26.4	0.5	<1
27...	23	<0.08	1.3	62.7	168	0.5	0.53	<0.3	49.1	0.2	1

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

06738000 BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE, CO

LOCATION.--Lat 40°25'18", long 105°13'34", in SW¼SW¼ sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, on right bank at mouth of canyon, 400 ft upstream from Handy Ditch diversion dam, and 6.0 mi east of Drake.

DRAINAGE AREA.--305 mi^2.

PERIOD OF RECORD.--August 1887 to September 1892, May 1895 to September 1903, October 1926 to September 1933 (no winter records prior to October 1932, except water years 1927-28), April 1938 to September 1949, March 1951 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as Big Thompson Creek at Arkins 1887-92, Big Thompson Creek near Arkins 1901-3, and as Thompson River at mouth of canyon, near Drake 1927-30, 1938-47. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06738000

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

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 5,305.47 ft above NGVD of 1929 (levels by U.S. Bureau of Reclamation). Oct. 1, 1949 to Sept. 18, 1977, at present site, datum 8.00 ft lower, Sept. 19, 1977 to July 27, 1980, at present site, datum 7.37 ft lower. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1949.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation. Diversions from Colorado River basin to Big Thompson River basin upstream from station through Alva B. Adams tunnel began Aug. 10, 1947; since Apr. 15, 1953, this imported water has been diverted from Lake Estes through Olympus tunnel bypassing this station. Part of the natural flow of the Big Thompson River has also been diverted through Olympus tunnel since May 17, 1955, and Dille tunnel since Apr. 20, 1959, and may be returned to the river just downstream from this station.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,190 ft^3/s, May 31, gage height, 4.45 ft; minimum daily, 23 ft^3/s, Oct. 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	48	28	e31	e28	e27	e27	53	54	984	95	68	66
2	59	35	e31	e28	e27	e26	63	52	947	96	66	41
3	68	35	e31	e28	e27	e26	71	48	788	79	66	39
4	60	33	e31	e27	e28	e26	68	87	696	73	70	42
5	49	33	e31	e27	e28	e27	61	117	564	70	69	40
6	47	e32	e31	e29	e28	e27	58	125	361	69	68	40
7	44	e31	e30	e28	e25	e27	54	117	245	67	67	42
8	41	e31	e32	e29	e25	e27	51	108	187	67	68	45
9	41	e30	e31	e27	e25	e26	51	109	138	70	70	42
10	39	e30	e31	e28	e25	e28	53	134	131	62	69	41
11	37	e31	e31	e27	e24	e28	55	140	245	62	64	41
12	35	e30	e31	e27	e24	e28	56	152	338	62	64	40
13	33	e32	e30	e27	e25	e27	60	168	311	63	62	40
14	32	e30	e29	e27	e26	e29	67	95	235	61	62	40
15	31	e31	e29	e28	e26	e31	85	77	198	58	53	40
16	26	e32	e29	e29	e26	e31	91	94	196	57	53	43
17	29	e30	e29	e27	e26	e32	88	63	216	55	88	43
18	28	e30	e28	e27	e27	e35	86	46	234	62	106	43
19	24	e29	e29	e27	e28	e34	82	76	248	63	79	42
20	24	e29	e28	e27	e27	e35	81	69	224	66	68	42
21	24	e29	e27	e27	e27	e37	77	59	215	109	70	42
22	32	e30	e27	e27	e27	39	77	56	201	120	65	46
23	28	e30	e27	e28	e27	51	85	59	202	118	67	47
24	23	e28	e27	e28	e26	71	89	97	206	115	70	46
25	26	e30	e37	e27	e24	62	92	171	206	82	72	58
26	29	e29	e37	e27	e24	62	100	201	191	75	70	98
27	30	e31	e26	e27	e25	74	113	e356	135	101	70	78
28	31	e30	e26	e27	e25	60	112	e514	103	80	67	58
29	28	e31	e26	e27	---	51	79	567	93	128	76	58
30	29	e31	e27	e27	---	49	55	e744	88	110	94	59
31	26	---	e27	e27	---	48	---	994	---	72	85	---
TOTAL	1,101	921	917	851	729	1,181	2,213	5,749	9,126	2,467	2,186	1,442
MEAN	35.5	30.7	29.6	27.5	26.0	38.1	73.8	185	304	79.6	70.5	48.1
MAX	68	35	37	29	28	74	113	994	984	128	106	98
MIN	23	28	26	27	24	26	51	46	88	55	53	39
AC-FT	2,180	1,830	1,820	1,690	1,450	2,340	4,390	11,400	18,100	4,890	4,340	2,860

CAL YR	2002	TOTAL	17,360	MEAN	47.6	MAX	215	MIN	23	AC-FT 34,430
WTR YR	2003	TOTAL	28,883	MEAN	79.1	MAX	994	MIN	23	AC-FT 57,290

e Estimated.

06741510 BIG THOMPSON RIVER AT LOVELAND, CO

LOCATION.--Lat 40°22'43", long 105°03'38", in SE¼SE¼ sec.24, T.5 N., R.69 W., Larimer County, Hydrologic Unit 10190006, on right bank 690 ft downstream from county road bridge C-13, 1.7 mi south of sugar refinery in Loveland, and 1.9 mi downstream from Farmers Ditch diversion.

DRAINAGE AREA.--535 mi^2.

PERIOD OF RECORD.--July 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=06741510

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,906 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, storage reservoirs, power developments, diversions for irrigation, and return flow from irrigated areas. Water-quality data for this site is included in the "Big Thompson Project" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	6.1	4.2	3.3	e3.2	2.5	4.2	4.4	128	101	68	47
2	37	10	4.0	3.3	e3.1	2.6	2.4	4.3	105	96	99	36
3	34	8.5	3.9	3.3	e3.1	2.5	4.7	4.3	129	95	93	33
4	32	7.6	3.9	3.3	e3.1	2.6	4.6	4.1	127	85	77	36
5	29	4.7	3.9	3.3	e3.1	2.7	4.9	4.1	111	81	67	35
6	21	4.1	3.7	3.3	e2.9	2.5	11	3.9	80	91	68	29
7	20	3.1	3.6	3.3	e2.6	2.5	7.3	4.1	87	84	65	21
8	16	3.1	3.6	3.3	e2.3	2.5	5.0	4.4	76	73	70	26
9	18	5.7	3.6	3.3	e2.2	2.5	4.6	6.4	75	54	72	21
10	18	9.4	3.6	3.3	e2.4	2.6	3.4	35	77	50	71	18
11	17	9.7	3.5	3.3	2.5	2.4	3.6	9.5	74	56	61	19
12	21	4.3	3.3	3.3	2.5	2.4	3.7	9.8	79	60	68	15
13	20	3.6	3.5	3.2	2.5	2.5	4.3	12	79	64	67	15
14	24	5.2	3.4	3.3	2.5	2.7	4.3	12	88	78	69	13
15	19	4.3	3.3	3.2	2.7	2.8	5.5	12	76	73	69	6.5
16	16	3.9	3.2	3.2	2.5	2.8	5.9	11	81	75	57	50
17	10	3.9	3.3	3.2	2.5	5.1	3.9	5.8	131	73	50	112
18	9.6	3.8	3.6	3.2	2.5	16	4.2	4.9	326	75	52	72
19	5.5	3.6	3.4	3.2	2.5	12	3.9	4.6	180	67	51	20
20	4.5	4.0	3.3	3.2	2.5	10	3.9	0.93	82	70	68	29
21	3.6	4.3	3.3	3.0	2.5	9.2	3.8	0.48	81	70	55	26
22	1.3	4.2	3.3	3.0	2.5	7.4	4.9	4.6	77	64	45	4.5
23	1.6	4.2	3.3	3.3	2.5	6.1	14	4.7	80	67	39	10
24	1.9	4.8	3.3	3.3	2.7	7.8	19	3.9	99	66	38	8.1
25	2.0	4.8	3.3	3.3	2.6	5.8	8.3	8.0	88	55	43	9.9
26	2.0	4.3	3.4	3.3	2.5	5.1	5.9	17	82	60	42	12
27	1.1	3.9	3.2	3.3	2.5	5.6	4.9	29	83	94	42	18
28	1.5	3.9	3.3	3.3	2.5	5.2	4.2	56	83	99	37	18
29	2.4	3.9	3.3	3.3	---	5.1	4.3	63	104	130	58	10
30	1.5	3.9	3.3	e3.3	---	5.0	4.7	100	108	86	101	11
31	2.4	---	3.3	e3.3	---	e4.8	---	131	---	34	61	---
TOTAL	422.9	150.8	108.1	101.0	73.5	151.3	169.3	575.21	3,076	2,326	1,923	781.0
MEAN	13.6	5.03	3.49	3.26	2.62	4.88	5.64	18.6	103	75.0	62.0	26.0
MAX	37	10	4.2	3.3	3.2	16	19	131	326	130	101	112
MIN	1.1	3.1	3.2	3.0	2.2	2.4	2.4	0.48	74	34	37	4.5
AC-FT	839	299	214	200	146	300	336	1,140	6,100	4,610	3,810	1,550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2003, BY WATER YEAR (WY)

MEAN	30.1	20.5	12.7	16.6	16.3	12.7	42.1	212	280	114	74.9	36.9
MAX	111	95.8	51.9	95.5	129	61.4	292	2,078	1,493	418	153	83.9
(WY)	(1998)	(1985)	(1998)	(1998)	(1998)	(1998)	(1980)	(1980)	(1983)	(1995)	(1981)	(1982)
MIN	6.15	3.10	2.86	2.55	2.42	2.19	3.49	4.07	25.0	29.9	29.0	16.6
(WY)	(1988)	(2001)	(1993)	(1994)	(1993)	(1996)	(2001)	(1981)	(1982)	(1987)	(1997)	(1990)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1979 - 2003	
ANNUAL TOTAL	12,191.8		9,858.11			
ANNUAL MEAN	33.4		27.0		72.5	
HIGHEST ANNUAL MEAN					321	1980
LOWEST ANNUAL MEAN					27.0	2003
HIGHEST DAILY MEAN	122	May 24	326	Jun 18	4,240	May 1, 1980
LOWEST DAILY MEAN	1.1	Oct 27	0.48	May 21	0.48	May 21, 2003
ANNUAL SEVEN-DAY MINIMUM	1.6	Oct 22	1.6	Oct 22	0.89	May 10, 1981
MAXIMUM PEAK FLOW			679	Jun 18	6,970	Apr 30, 1980
MAXIMUM PEAK STAGE			3.92	Jun 18	a,b10.10	Apr 30, 1980
ANNUAL RUNOFF (AC-FT)	24,180		19,550		52,550	
10 PERCENT EXCEEDS	78		81		125	
50 PERCENT EXCEEDS	16		5.1		18	
90 PERCENT EXCEEDS	3.6		2.5		3.3	

e Estimated.
a From high-water mark.
b Maximum gage height, 10.48 ft, Apr 30, 1999.

06742500 CARTER LAKE NEAR BERTHOUD, CO

LOCATION.--Lat 40°19'28", long 105°12'41", in SE¼, sec.10, T.4 N., R.70 W., Larimer County, Hydrologic Unit 10190006, in hoist house 293 ft from right abutment of Carter Lake Dam on Dry Creek, 7.0 mi west of Berthoud, and 8.9 mi upstream from mouth. Water-quality sampling site near center of reservoir.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--March 1954 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06742500

GAGE.--Nonrecording gage read at irregular intervals from 1 to 13 days. Datum of gage is 5,763.00 ft above NGVD of 1929, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above NGVD of 1929.

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

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

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

EXTREMES (AT 0800) FOR CURRENT YEAR.--Maximum contents, 101,600 acre-ft, Feb. 18, elevation, 5,752.53 ft; minimum contents, 47,370 acre-ft, Nov. 11, elevation, 5,698.25 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	5,705.54	53,830	-
Oct. 31	5,699.06	48,080	-5,760
Nov. 30	5,712.22	59,990	+11,910
Dec. 31	5,731.65	79,180	+19,190
CAL YR 2002	-	-	+19,580
Jan. 31	5,747.72	96,280	+17,100
Feb. 28	5,752.04	101,100	+4,780
Mar. 31	5,750.72	95,590	-1,470
Apr. 30	5,747.76	96,330	-3,270
May 31	5,743.39	91,570	-4,760
June 30	5,738.72	86,570	-4,990
July 31	5,728.39	75,840	-10,730
Aug. 31	5,709.72	57,650	-18,190
Sept. 30	5,700.42	49,260	-8,390
WTR YR 2003	-	-	-4,570

06742500 CARTER LAKE NEAR BERTHOUD, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1970 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06742500

REMARKS.--Samples collected near the southeast end of reservoir.

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

Date	Time	Sampling depth, feet (00003)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
NOV						
07...	0853	0.50	8.1	7.2	71	8.9
07...	0854	5.00	8.1	7.2	70	8.9
07...	0855	10.0	7.9	7.2	68	8.9
07...	0856	15.0	7.9	7.2	68	8.9
07...	0857	20.0	7.9	7.2	68	8.9
07...	0858	25.0	7.8	7.2	67	8.8
07...	0859	30.0	7.8	7.2	67	8.8
07...	0900	35.0	7.8	7.2	67	8.8
07...	0901	40.0	7.7	7.2	67	8.8
07...	0902	45.0	7.7	7.2	67	8.8
07...	0903	50.0	7.7	7.2	66	8.8
07...	0904	55.0	7.6	7.2	66	8.8
07...	0905	60.0	7.5	7.2	66	8.8
07...	0906	65.0	7.6	7.2	66	8.8
07...	0907	70.0	7.6	7.2	66	8.8
07...	0908	75.0	7.6	7.2	66	8.7
07...	0909	80.0	7.6	7.2	66	8.7
07...	0910	85.0	7.7	7.2	66	8.7
07...	0911	90.0	7.7	7.2	66	8.7
MAY						
16...	1111	0.50	8.5	7.3	59	12.9
16...	1112	5.00	8.6	7.4	59	12.6
16...	1113	10.0	8.6	7.5	59	12.3
16...	1114	15.0	8.5	7.6	59	12.3
16...	1115	20.0	8.7	7.6	59	11.4
16...	1116	25.0	9.2	7.6	58	8.6
16...	1117	30.0	9.2	7.4	58	6.6
16...	1118	35.0	9.2	7.3	58	6.3
16...	1119	40.0	9.0	7.2	58	6.2
16...	1120	45.0	8.9	7.2	58	6.1
16...	1121	50.0	8.8	7.2	58	6.0
16...	1122	55.0	8.7	7.1	58	5.8
16...	1123	60.0	8.8	7.1	58	5.8
16...	1124	65.0	8.7	7.0	58	5.6
16...	1125	70.0	8.6	7.0	58	5.6
16...	1126	75.0	8.5	7.0	58	5.5
16...	1127	80.0	8.5	7.0	58	5.4
16...	1128	85.0	8.4	7.0	58	5.3
16...	1129	90.0	8.3	7.0	58	5.2
16...	1130	100	8.2	7.0	58	5.2
16...	1131	110	8.3	7.0	58	5.2
16...	1132	120	8.3	7.0	58	5.1

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

Date	Time	Sampling depth, feet (00003)	Transparency Secchi disc, inches (00077)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)
NOV													
07...	0915	0.10	108	8.1	7.2	71	8.9	30	9.80	1.38	0.60	0.2	2.07
07...	0920	90.0	--	7.7	7.2	66	8.7	30	9.89	1.39	0.64	0.2	2.07
MAY													
16...	1140	0.10	162	8.5	7.3	59	12.9	28	8.84	1.32	0.69	0.2	2.03
16...	1150	120	--	8.3	7.0	58	5.1	29	9.22	1.37	0.74	0.2	2.15

06742500 CARTER LAKE NEAR BERTHOUD, CO—Continued

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

Date	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	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)
NOV													
07...	32	0.33	<0.17	2.44	2.9	39	0.05	39	0.17	<0.015	E.015	<0.002	<0.007
07...	32	0.29	<0.17	2.49	2.9	39	0.05	37	0.16	<0.015	E.016	<0.002	<0.007
MAY													
16...	30	0.75	<0.2	1.89	2.9	37	0.06	45	0.25	<0.015	<0.022	<0.002	<0.007
16...	30	0.80	<0.2	2.59	2.9	38	0.06	45	0.21	0.028	E.017	<0.002	<0.007

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

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, unfltrd mg/L (00680)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Chlorophyll a phytoplankton, fluoro, ug/L (70953)	Chlorophyll b phytoplankton, fluoro, ug/L (70954)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)
NOV													
07...	E.003	0.010	3.2	<1	1.6	<0.1	20.9	<0.5	<13	<0.2	<0.8	0.026	1.8
07...	0.004	0.007	2.8	--	--	--	21.4	<0.5	<13	<0.2	<0.8	0.029	2.1
MAY													
16...	E.003	0.006	3.0	<1	E1.0	<0.1	15.2	<0.5	<13	<0.2	<0.8	0.026	1.8
16...	E.003	0.006	2.9	--	--	--	15.7	<0.5	<13	<0.2	<0.8	0.029	1.8

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

Date	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
NOV											
07...	E8	<0.08	1.2	0.5	13.2	0.4	0.39	<0.3	41.3	0.4	1
07...	<10	<0.08	1.1	0.5	14.3	0.4	0.38	<0.3	41.3	0.4	1
MAY											
16...	<10	<0.08	0.9	0.4	E4.4	0.4	0.47	<0.3	44.1	0.1	M
16...	<10	<0.08	0.9	0.5	E3.9	0.4	0.46	<0.3	45.1	0.1	M

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.
M -- Presence of material verified but not quantified.

06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR, CO

LOCATION.--Lat 40°32'24", long 105°52'56", in SE¼SE¼ sec.26, T.7 N., R.76 W., Larimer County, Hydrologic Unit 10190007, on left bank 150 ft downstream from unnamed tributary and Colorado Highway 14 culvert crossing, 1.5 mi northeast of Cameron Pass, 1.5 mi southwest of Joe Wright Dam, and 8 mi east of Gould.

DRAINAGE AREA.--3.01 mi^2.

PERIOD OF RECORD.--October 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=06746095

GAGE.--Water-stage recorder. Elevation of gage is 9,990 ft above NGVD of 1929, from topographic map. Prior to Aug. 7, 1989, at datum 3.40 ft higher.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.65	e1.3	e1.3	e1.00	e0.71	e0.63	e0.72	e1.0	134	79	e14	e7.6
2	0.78	e1.3	e1.2	e0.92	e0.71	e0.63	e0.72	e1.1	121	75	e13	e7.6
3	0.85	e1.3	e1.2	e0.92	e0.71	e0.63	e0.72	e1.1	101	71	e12	e7.3
4	1.1	e1.3	e1.2	e0.91	e0.71	e0.62	e0.72	e1.1	86	65	e12	e6.9
5	0.91	e1.3	e1.2	e0.91	e0.71	e0.62	e0.76	e1.1	75	62	e13	e6.7
6	0.85	e1.3	e1.2	e0.91	e0.71	e0.62	e0.76	e1.1	64	57	e12	e6.5
7	1.0	e1.3	e1.2	e0.91	e0.71	e0.65	e0.76	e1.1	55	51	e12	e6.2
8	1.0	e1.3	e1.2	e0.91	e0.71	e0.65	e0.77	e1.1	53	48	e11	e6.0
9	1.0	e1.3	e1.2	e0.91	e0.68	e0.65	e0.77	e1.1	59	46	e11	e5.7
10	0.92	e1.3	e1.2	e0.85	e0.66	e0.65	e0.82	e1.1	79	43	e11	e5.5
11	0.88	e1.3	e1.2	e0.85	e0.66	e0.65	e0.79	e1.2	104	39	e10	e5.4
12	0.97	e1.3	e1.2	e0.85	e0.66	e0.65	e0.83	e1.3	99	36	e10	e5.4
13	0.96	e1.3	e1.2	e0.85	e0.66	e0.65	e0.86	e1.4	90	34	e9.9	e5.3
14	0.99	e1.3	e1.2	e0.82	e0.66	e0.65	e0.89	e1.4	100	32	e9.5	e5.2
15	0.76	e1.3	e1.2	e0.82	e0.66	e0.65	e0.89	e4.9	112	30	e9.1	e5.2
16	0.74	e1.3	e1.1	e0.82	e0.66	e0.68	e0.90	e9.5	111	28	e9.1	e5.2
17	0.69	e1.3	e1.1	e0.82	e0.66	e0.68	e0.92	e21	112	28	e10	e5.0
18	e0.74	e1.3	e1.1	e0.82	e0.66	e0.68	e0.94	e22	121	28	e11	e4.9
19	e0.76	e1.3	e1.1	e0.82	e0.66	e0.68	e0.94	e21	119	26	e11	e4.8
20	0.82	e1.3	e1.1	e0.82	e0.66	e0.69	e0.95	e22	112	26	e9.9	e4.7
21	0.78	e1.3	e1.1	e0.82	e0.66	e0.69	e0.95	e26	103	25	e8.0	e4.5
22	0.85	e1.3	e1.1	e0.77	e0.66	e0.69	e0.95	e32	98	23	e8.3	e4.5
23	e0.88	e1.3	e1.1	e0.77	e0.66	e0.69	e0.95	e38	97	22	e8.1	e4.3
24	e0.88	e1.3	e1.00	e0.77	e0.65	e0.69	e0.96	e44	94	21	e8.2	e4.2
25	e1.3	e1.3	e1.00	e0.77	e0.65	e0.69	e0.96	e53	86	20	e8.3	e4.2
26	e1.3	e1.3	e1.00	e0.76	e0.65	e0.69	e0.97	e60	74	19	e8.0	e3.9
27	e1.3	e1.3	e1.00	e0.74	e0.63	e0.72	e0.98	e72	76	18	e8.1	e3.8
28	e1.3	e1.3	e1.00	e0.74	e0.63	e0.72	e0.99	e105	78	17	e7.8	e3.6
29	e1.3	e1.3	e1.00	e0.72	---	e0.72	e1.0	e97	82	17	e7.7	e3.6
30	e1.3	e1.3	e1.00	e0.72	---	e0.72	e1.0	94	82	15	e7.9	e3.6
31	e1.3	---	e1.00	e0.72	---	e0.72	---	131	---	e15	e8.1	---
TOTAL	29.86	39.0	34.90	25.74	18.81	20.75	26.14	868.6	2,777	1,116	309.0	157.3
MEAN	0.96	1.30	1.13	0.83	0.67	0.67	0.87	28.0	92.6	36.0	9.97	5.24
MAX	1.3	1.3	1.3	1.0	0.71	0.72	1.0	131	134	79	14	7.6
MIN	0.65	1.3	1.0	0.72	0.63	0.62	0.72	1.0	53	15	7.7	3.6
AC-FT	59	77	69	51	37	41	52	1,720	5,510	2,210	613	312

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2003, BY WATER YEAR (WY)

MEAN	2.93	1.51	1.05	0.86	0.74	0.72	1.12	14.7	53.5	26.6	8.35	4.40
MAX	10.5	3.51	2.50	2.39	1.79	1.50	3.39	34.6	92.6	90.8	21.5	17.3
(WY)	(1998)	(1998)	(1998)	(1998)	(1998)	(1994)	(1994)	(1994)	(2003)	(1995)	(1995)	(1997)
MIN	0.54	0.36	0.28	0.25	0.20	0.20	0.39	3.58	25.5	2.35	0.82	0.59
(WY)	(1981)	(1979)	(1981)	(1981)	(1979)	(1979)	(1979)	(1982)	(1989)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1979 - 2003	
ANNUAL TOTAL	1,498.18		5,423.10			
ANNUAL MEAN	4.10		14.9		9.72	
HIGHEST ANNUAL MEAN					16.9	1995
LOWEST ANNUAL MEAN					4.42	2002
HIGHEST DAILY MEAN	59	Jun 2	134	Jun 1	150	Jul 11, 1995
LOWEST DAILY MEAN	0.38	Sep 2	e0.62	Mar 4	a,e0.20	Jan 30, 1979
ANNUAL SEVEN-DAY MINIMUM	0.38	Sep 2	e0.63	Feb 28	e0.20	Jan 30, 1979
MAXIMUM PEAK FLOW			165	May 31	238	Jul 7, 1983
MAXIMUM PEAK STAGE			b5.66	May 31	c5.60	Jul 7, 1983
ANNUAL RUNOFF (AC-FT)	2,970		10,760		7,040	
10 PERCENT EXCEEDS	13		63		30	
50 PERCENT EXCEEDS	1.1		1.2		1.6	
90 PERCENT EXCEEDS	0.65		0.68		0.50	

e Estimated.
a Also occurred Jan 31 to Apr 4, 1979, and Feb 9 to Apr 9, 1981.
b Maximum gage height, 9.82 ft, May 18, backwater from ice.
c Maximum gage height, 10.64 ft, May 15, 1993, present datum, backwater from ice.

06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR, CO

LOCATION.--Lat 40°33'43", long 105°51'48", in SE¼NE¼ sec.24, T.7 N., R.76 W., Larimer County, Hydrologic Unit 10190007, on left bank 500 ft downstream from unnamed tributary, 2,000 ft downstream from Joe Wright Dam, and 3 mi southwest of Chambers Lake.

DRAINAGE AREA.--6.90 mi^2.

PERIOD OF RECORD.--June 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=06746110

GAGE.--Water-stage recorder. Elevation of gage is 9,710 ft above NGVD of 1929, from topographic map. Prior to Aug. 7, 1989, at datum 0.50 ft higher.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	e1.2	e1.3	e1.2	e1.1	e1.3	e1.4	1.5	27	82	3.7	5.7
2	1.6	e1.2	e1.3	e1.2	e1.1	e1.3	e1.4	1.5	38	81	3.9	4.7
3	1.6	e1.1	e1.3	e1.2	e1.1	e1.3	e1.4	1.6	38	82	4.0	2.4
4	1.7	e1.1	e1.3	e1.2	e1.1	e1.3	e1.4	1.7	65	80	6.2	2.1
5	1.6	e1.1	e1.3	e1.1	e1.2	e1.2	e1.4	1.6	84	71	12	2.1
6	1.5	e1.1	e1.3	e1.1	e1.2	e1.2	e1.4	1.5	84	66	12	2.1
7	1.5	e1.1	e1.3	e1.1	e1.2	e1.2	e1.4	1.5	86	57	33	2.1
8	1.4	e1.1	e1.3	e1.1	e1.2	e1.2	e1.4	1.5	86	53	67	2.1
9	1.4	e1.1	e1.3	e1.1	e1.2	e1.2	e1.4	1.5	87	53	65	2.1
10	1.4	e1.2	e1.3	e1.1	e1.2	e1.2	1.4	1.5	89	48	56	2.2
11	1.4	e1.2	e1.3	e1.1	e1.2	e1.2	1.5	1.5	90	42	50	2.3
12	1.4	e1.2	e1.3	e1.1	e1.2	e1.2	1.5	1.6	90	42	48	2.1
13	1.3	e1.2	e1.3	e1.1	e1.2	e1.3	1.6	1.7	89	42	43	2.1
14	1.2	e1.2	e1.2	e1.1	e1.2	e1.4	1.7	1.9	90	43	47	2.1
15	1.2	e1.2	e1.2	e1.1	e1.2	e1.4	1.6	2.2	91	44	49	2.1
16	1.2	e1.2	e1.2	e1.1	e1.2	e1.4	1.6	2.6	91	44	50	2.1
17	1.2	e1.2	e1.2	e1.1	e1.2	e1.4	1.5	3.4	92	42	50	2.1
18	1.2	e1.2	e1.2	e1.1	e1.2	e1.4	1.5	3.9	92	32	52	2.1
19	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.4	3.8	103	28	57	2.1
20	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.4	4.0	128	43	42	2.1
21	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.4	4.3	128	80	2.6	2.1
22	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.4	4.7	128	80	2.6	2.1
23	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.4	5.5	128	81	3.2	2.1
24	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.5	6.4	127	81	4.6	2.1
25	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.5	8.4	180	79	4.8	2.1
26	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.6	9.5	144	75	5.5	2.1
27	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.7	12	107	71	5.7	2.1
28	1.2	e1.3	e1.2	e1.1	e1.2	e1.4	1.7	14	97	71	5.7	2.1
29	e1.2	e1.3	e1.2	e1.1	---	e1.4	1.7	15	81	71	5.7	2.1
30	e1.2	e1.3	e1.2	e1.1	---	e1.4	1.7	16	82	50	5.8	2.1
31	e1.2	---	e1.2	e1.1	---	e1.4	---	16	---	3.9	5.7	---
TOTAL	41.0	36.5	38.5	34.5	33.2	41.3	44.9	153.8	2,842	1,817.9	802.7	69.8
MEAN	1.32	1.22	1.24	1.11	1.19	1.33	1.50	4.96	94.7	58.6	25.9	2.33
MAX	1.7	1.3	1.3	1.2	1.2	1.4	1.7	16	180	82	67	5.7
MIN	1.2	1.1	1.2	1.1	1.1	1.2	1.4	1.5	27	3.9	2.6	2.1
AC-FT	81	72	76	68	66	82	89	305	5,640	3,610	1,590	138

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2003, BY WATER YEAR (WY)

MEAN	4.16	2.75	1.04	0.92	0.89	0.92	1.09	12.5	60.6	36.8	30.0	30.4
MAX	20.8	37.8	2.91	2.60	2.66	2.65	3.14	48.0	100	90.8	84.7	61.8
(WY)	(1995)	(2001)	(2001)	(2002)	(2002)	(2002)	(2001)	(1998)	(1996)	(1993)	(1991)	(1995)
MIN	0.54	0.34	0.21	0.24	0.22	0.23	0.29	1.21	8.67	2.49	6.44	1.13
(WY)	(1989)	(1995)	(1993)	(1993)	(1995)	(1995)	(1991)	(1980)	(2002)	(1989)	(1981)	(1991)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1979 - 2003	
ANNUAL TOTAL	2,550.5		5,956.1			
ANNUAL MEAN	6.99		16.3		15.2	
HIGHEST ANNUAL MEAN					24.4	1997
LOWEST ANNUAL MEAN					3.69	1980
HIGHEST DAILY MEAN	61	Aug 28	180	Jun 25	245	Jul 1, 1993
LOWEST DAILY MEAN	e1.1	Nov 3	e1.1	Nov 3	0.17	Apr 3, 1991
ANNUAL SEVEN-DAY MINIMUM	e1.1	Nov 3	e1.1	Nov 3	0.18	Mar 31, 1991
MAXIMUM PEAK FLOW			233	Jun 25	284	Aug 18, 1991
MAXIMUM PEAK STAGE			2.64	Jun 25	a2.71	Aug 18, 1991
ANNUAL RUNOFF (AC-FT)	5,060		11,810		11,010	
10 PERCENT EXCEEDS	19		73		56	
50 PERCENT EXCEEDS	2.6		1.4		2.0	
90 PERCENT EXCEEDS	1.2		1.1		0.35	

e Estimated.
a Maximum gage height, 2.78 ft, Jul 10, 1997.

06751150 NORTH FORK CACHE LA POUDRE RIVER BELOW HALLIGAN RESERVOIR NEAR VIRGINIA DALE, CO

LOCATION.--Lat 40°52'42", long 105°20'15", in NE¼SW¼ sec.34, T.11 N., R.71 W., Larimer County, Hydrologic Unit 10190007, on left bank 500 ft downstream from Halligan Dam, 4.0 mi west of Highway 287, and 5.0 mi south of Virginia Dale.

DRAINAGE AREA.--355 mi^2.

PERIOD OF RECORD.--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=06751150

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,310 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.3	1.7	3.7	1.5	2.1	2.2	1.5	261	534	103	107	96
2	5.6	1.5	3.7	4.5	1.9	2.2	1.5	239	502	92	106	56
3	4.7	1.4	3.7	5.5	2.4	2.2	1.5	220	470	81	106	54
4	4.7	1.4	3.7	4.7	2.4	3.0	1.2	211	455	73	105	65
5	4.7	1.4	3.7	4.7	2.4	3.5	1.1	207	455	67	104	68
6	4.7	1.9	3.7	4.6	2.4	3.3	1.1	195	410	70	107	67
7	4.9	2.5	3.6	4.5	2.4	3.1	1.2	187	401	75	108	66
8	4.9	2.7	3.5	4.1	2.4	3.2	1.1	186	381	68	107	66
9	4.9	2.7	2.9	3.8	2.4	3.2	1.1	188	318	62	106	66
10	4.6	2.7	2.4	3.3	2.4	3.7	1.1	215	299	66	106	66
11	4.5	2.7	2.4	2.7	2.4	3.5	1.2	210	299	73	105	58
12	4.7	2.7	2.7	2.8	2.3	1.6	1.2	254	307	78	104	48
13	4.7	2.7	2.7	2.8	2.2	0.15	36	298	292	81	103	47
14	4.7	2.8	2.3	2.5	2.3	2.2	79	299	285	81	103	47
15	4.7	e2.8	1.8	2.5	2.5	3.7	80	319	261	90	102	47
16	4.7	e3.2	1.6	2.3	2.5	3.7	101	358	242	96	102	46
17	4.9	e3.2	1.4	2.1	2.5	2.9	124	401	232	99	102	35
18	4.9	3.2	3.3	2.1	2.3	2.4	133	425	218	99	103	28
19	4.8	3.2	4.1	2.0	2.5	2.4	137	422	207	98	102	28
20	4.7	3.1	3.5	2.2	2.6	1.9	137	390	203	96	102	28
21	4.6	3.1	2.9	2.4	2.7	1.9	141	371	201	96	102	28
22	4.5	3.2	2.7	2.4	2.7	2.0	143	362	185	95	100	28
23	4.5	3.2	2.6	2.4	2.7	2.0	142	366	173	94	99	28
24	4.5	3.5	2.2	2.2	2.7	2.0	143	380	164	94	105	28
25	4.4	3.4	1.9	1.8	2.6	2.0	143	387	127	94	106	28
26	3.9	3.5	2.1	1.8	2.5	2.0	146	386	138	93	107	28
27	3.8	3.6	2.3	1.3	2.5	1.7	232	378	140	93	106	28
28	4.4	3.7	2.4	1.9	2.4	1.6	272	401	123	107	106	28
29	4.5	3.7	2.4	1.9	---	1.6	282	472	116	110	105	28
30	3.8	3.7	2.2	1.9	---	1.6	280	537	112	110	104	28
31	2.6	---	1.8	2.3	---	1.6	---	566	---	108	103	---
TOTAL	145.8	84.1	85.9	87.5	68.1	74.05	2,765.8	10,091	8,250	2,742	3,233	1,362
MEAN	4.70	2.80	2.77	2.82	2.43	2.39	92.2	326	275	88.5	104	45.4
MAX	9.3	3.7	4.1	5.5	2.7	3.7	282	566	534	110	108	96
MIN	2.6	1.4	1.4	1.3	1.9	0.15	1.1	186	112	62	99	28
AC-FT	289	167	170	174	135	147	5,490	20,020	16,360	5,440	6,410	2,700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2003, BY WATER YEAR (WY)

MEAN	7.83	3.89	7.43	16.1	26.3	48.1	72.4	264	181	84.7	77.1	52.4
MAX	22.1	5.71	17.9	37.2	46.3	80.7	131	641	369	129	120	105
(WY)	(2000)	(2000)	(1999)	(2000)	(1999)	(1999)	(1998)	(1999)	(1999)	(1999)	(1999)	(1999)
MIN	3.69	2.80	2.77	2.82	2.43	2.39	2.67	35.9	45.3	34.5	21.2	14.6
(WY)	(1999)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1998 - 2003	
ANNUAL TOTAL	6,756.5		28,989.25			
ANNUAL MEAN	18.5		79.4		67.9	
HIGHEST ANNUAL MEAN					135	1999
LOWEST ANNUAL MEAN					18.6	2002
HIGHEST DAILY MEAN	99	Sep 1	566	May 31	1,500	May 1, 1999
LOWEST DAILY MEAN	1.2	Apr 16	0.15	Mar 13	0.15	Mar 13, 2003
ANNUAL SEVEN-DAY MINIMUM	1.3	Apr 10	1.1	Apr 4	1.1	Apr 4, 2003
MAXIMUM PEAK FLOW			592	May 31	1,840	Apr 30, 1999
MAXIMUM PEAK STAGE			4.66	May 31	6.47	Apr 30, 1999
ANNUAL RUNOFF (AC-FT)	13,400		57,500		49,190	
10 PERCENT EXCEEDS	73		265		139	
50 PERCENT EXCEEDS	3.7		4.7		34	
90 PERCENT EXCEEDS	2.3		1.9		2.8	

e Estimated.

06751490 NORTH FORK CACHE LA POUDRE RIVER AT LIVERMORE, CO

LOCATION.--Lat 40°47'15", long 105°15'06", in SW¼SE¼ sec.32, T.10 N., R.70 W., Larimer County, Hydrologic Unit 10190007, on left bank 30 ft downstream from bridge on Colorado State Highway 200, 2.0 mi west of Livermore, and 2.9 mi downstream from Stonewall Creek.

DRAINAGE AREA.--539 mi^2.

PERIOD OF RECORD.--October 1986 to current year. May 1929 to September 1931, May 1947 to September 1965 (published as "near Livermore", station 06751500); records are not considered equivalent. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06751490

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,715 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	5.6	5.5	3.6	4.1	e4.2	e99	243	433	119	5.3	5.2
2	8.9	4.8	5.4	3.6	4.5	e4.3	136	209	399	108	5.4	3.4
3	6.9	3.9	5.1	e3.7	4.4	e4.4	147	174	368	95	4.6	3.2
4	5.6	3.4	5.1	e4.0	e4.3	e4.6	133	145	358	86	4.7	5.6
5	4.8	3.0	5.3	e5.0	e4.3	e4.8	114	132	374	74	4.0	5.2
6	4.5	2.8	5.3	e6.0	e4.4	e5.2	101	113	327	63	4.2	5.3
7	4.8	2.5	5.2	6.6	e4.4	7.6	87	101	308	31	5.4	6.9
8	4.6	2.5	5.1	6.0	e4.6	6.3	76	103	281	23	5.9	7.0
9	4.7	3.2	5.1	5.6	e4.7	5.6	79	102	220	13	5.6	6.7
10	4.8	3.6	5.1	4.3	e4.8	5.5	97	164	183	8.7	5.2	6.4
11	4.4	3.5	4.6	4.3	e4.4	6.0	115	181	187	7.3	4.8	6.3
12	4.1	3.4	4.3	4.3	e4.4	5.9	139	251	189	6.5	4.9	7.0
13	4.2	3.4	4.1	4.7	4.4	5.8	166	327	186	6.3	4.4	9.7
14	4.3	3.6	4.3	5.0	4.2	5.5	194	309	183	7.7	4.2	9.9
15	4.3	3.4	4.2	4.8	4.4	4.8	161	300	163	7.1	3.8	9.9
16	4.4	3.6	3.8	4.8	4.6	4.7	176	309	137	7.3	4.6	6.3
17	4.5	3.4	3.3	5.1	e4.4	8.3	155	344	123	4.9	4.7	5.3
18	4.6	4.0	3.3	5.0	4.3	12	140	369	152	5.6	5.7	6.2
19	4.6	4.5	3.2	5.0	4.3	16	122	350	185	5.6	5.9	6.1
20	4.8	4.4	3.3	4.8	4.2	9.6	112	313	190	6.0	4.8	5.8
21	4.9	4.5	3.4	4.8	4.3	11	101	286	196	4.9	4.6	5.7
22	5.0	4.4	3.4	4.7	4.4	11	96	265	174	3.9	5.1	5.6
23	5.3	4.3	3.4	4.8	e4.3	14	114	260	184	5.2	4.6	5.7
24	5.6	4.6	3.4	5.3	e4.2	38	166	266	191	5.5	5.1	5.5
25	5.4	4.7	3.4	5.3	e4.0	44	187	276	168	6.0	5.9	6.0
26	5.8	4.6	3.4	4.7	e4.0	82	209	276	154	6.2	6.2	5.4
27	5.1	4.9	3.4	4.4	e4.3	120	232	265	164	6.0	5.0	5.7
28	4.6	5.2	3.4	4.1	e4.1	86	286	272	142	6.0	4.1	6.4
29	5.5	5.6	3.4	3.7	---	65	283	338	132	6.1	3.9	6.9
30	5.7	5.0	3.6	3.7	---	58	272	415	126	6.0	6.4	6.9
31	5.6	---	3.6	3.8	---	e71	---	452	---	5.6	5.8	---
TOTAL	163.3	120.3	128.4	145.5	121.7	731.1	4,495	7,910	6,577	746.4	154.8	187.2
MEAN	5.27	4.01	4.14	4.69	4.35	23.6	150	255	219	24.1	4.99	6.24
MAX	11	5.6	5.5	6.6	4.8	120	286	452	433	119	6.4	9.9
MIN	4.1	2.5	3.2	3.6	4.0	4.2	76	101	123	3.9	3.8	3.2
AC-FT	324	239	255	289	241	1,450	8,920	15,690	13,050	1,480	307	371

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2003, BY WATER YEAR (WY)

MEAN	11.6	15.7	11.0	13.0	16.1	20.2	65.8	179	192	26.8	15.9	9.57
MAX	41.0	98.8	34.3	46.2	48.2	55.5	244	904	857	133	52.5	23.6
(WY)	(1998)	(1998)	(1998)	(1999)	(1996)	(1990)	(1990)	(1999)	(1995)	(1995)	(1991)	(1997)
MIN	4.85	4.01	3.58	3.60	4.35	6.35	4.57	5.66	4.97	2.16	2.45	3.92
(WY)	(1989)	(2003)	(1988)	(1988)	(2003)	(1995)	(1995)	(2002)	(2002)	(2002)	(2002)	(2001)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1987 - 2003	
ANNUAL TOTAL	1,971.1		21,480.7			
ANNUAL MEAN	5.40		58.9		48.0	
HIGHEST ANNUAL MEAN					141	1999
LOWEST ANNUAL MEAN					6.24	2002
HIGHEST DAILY MEAN	21	Sep 2	452	May 31	2,760	May 1, 1999
LOWEST DAILY MEAN	1.3	Jul 20	2.5	Nov 7	a1.3	Jul 20, 2002
ANNUAL SEVEN-DAY MINIMUM	1.6	Jul 14	3.0	Nov 4	1.6	Jul 14, 2002
MAXIMUM PEAK FLOW			480	May 31	5,430	Jun 1, 1991
MAXIMUM PEAK STAGE			9.71	May 31	17.53	Jun 1, 1991
ANNUAL RUNOFF (AC-FT)	3,910		42,610		34,780	
10 PERCENT EXCEEDS	8.1		201		102	
50 PERCENT EXCEEDS	5.1		5.5		10	
90 PERCENT EXCEEDS	2.3		3.8		4.7	

e Estimated.
a Also occurred Sep 5, 2002.

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

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

DRAINAGE AREA.--1,056 mi^2.

PERIOD OF RECORD.--June to August 1881, May to July 1883, October 1883 to current year. Monthly discharge only for some periods, published in WSP 1310. Records for March 23 to April 30 and July 4 to August 20, 1883, published in WSP 9, have been found to be unreliable and should not be used. Prior to 1902, published as Cache la Poudre Creek or River at or near Fort Collins. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06752000

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,220 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin and transmountain diversions (see elsewhere in this report), diversions upstream from station for irrigation of about 50,000 acres, most of which is downstream from station, and diversions for municipal use.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	37	11	32	e21	e21	e21	49	303	3,010	1,080	383	142
2	45	18	29	e24	e22	e18	74	249	2,620	1,050	366	116
3	42	42	21	e22	e20	e16	73	183	2,300	1,030	404	107
4	47	28	23	e22	e13	e19	83	142	2,050	976	431	121
5	45	29	e19	e23	e12	e15	59	124	1,800	885	334	97
6	44	28	e25	e20	e8.8	e21	42	92	1,580	858	306	86
7	44	24	e22	e23	e17	e20	36	70	1,480	782	283	104
8	44	30	e18	e15	e1.6	e25	35	59	1,330	678	239	150
9	46	28	e26	e15	e30	e24	34	62	1,270	649	244	143
10	38	22	e18	e14	e50	e26	37	142	1,420	663	271	133
11	40	15	e25	e5.0	e32	e26	62	122	1,840	651	256	129
12	37	16	e28	e22	e30	31	85	174	1,640	622	277	126
13	36	18	35	e39	e20	30	85	260	1,300	607	293	132
14	24	30	36	e34	e22	32	136	275	1,340	580	266	145
15	14	23	31	e28	e20	36	290	234	1,390	503	201	141
16	25	14	31	e20	e18	35	367	302	1,430	462	185	135
17	25	14	22	e19	e14	38	344	394	1,470	500	216	128
18	21	31	29	e22	e22	45	316	532	1,570	572	264	123
19	19	21	e18	e21	e25	26	283	595	1,650	622	241	113
20	14	19	e26	e21	e18	4.1	256	503	1,580	650	216	95
21	10	29	e19	e21	e19	43	235	490	1,530	576	203	85
22	12	26	e23	e20	e24	57	238	508	1,480	603	153	77
23	16	26	e25	e20	e23	53	283	635	1,480	575	129	80
24	15	28	e21	e26	e15	53	350	920	1,580	551	127	80
25	22	27	e23	e21	e8.6	44	377	1,040	1,580	486	128	78
26	25	35	e21	e23	e47	47	415	1,260	1,440	517	123	75
27	23	e36	e25	e27	e22	62	438	1,270	1,310	611	118	53
28	19	e35	e23	e35	e26	44	514	1,740	1,070	559	113	48
29	21	35	e23	e17	---	35	529	1,980	1,080	511	101	48
30	14	33	e21	e19	---	33	489	2,680	1,110	508	132	47
31	9.3	---	e22	e23	---	48	---	2,720	---	474	141	---
TOTAL	873.3	771	760	682.0	601.0	1,027.1	6,614	20,060	47,730	20,391	7,144	3,137
MEAN	28.2	25.7	24.5	22.0	21.5	33.1	220	647	1,591	658	230	105
MAX	47	42	36	39	50	62	529	2,720	3,010	1,080	431	150
MIN	9.3	11	18	5.0	1.6	4.1	34	59	1,070	462	101	47
AC-FT	1,730	1,530	1,510	1,350	1,190	2,040	13,120	39,790	94,670	40,450	14,170	6,220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1881 - 2003, BY WATER YEAR (WY)

MEAN	89.5	61.1	44.5	40.9	43.3	53.2	149	918	1,811	777	326	162
MAX	270	177	125	158	138	149	743	2,807	4,812	2,225	792	443
(WY)	(1943)	(1998)	(1984)	(1984)	(1984)	(1980)	(1900)	(1900)	(1884)	(1983)	(1884)	(1938)
MIN	21.7	8.14	12.6	9.00	10.2	10.6	19.5	160	401	137	61.2	27.3
(WY)	(1995)	(1939)	(1965)	(1930)	(1967)	(1939)	(1991)	(2002)	(2002)	(2002)	(1954)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1881 - 2003	
ANNUAL TOTAL	31,552.3		109,790.4			
ANNUAL MEAN	86.4		301			
HIGHEST ANNUAL MEAN					891	1983
LOWEST ANNUAL MEAN					89.5	2002
HIGHEST DAILY MEAN	685	Jun 10	3,010	Jun 1	7,550	Jun 16, 1923
LOWEST DAILY MEAN	9.3	Oct 31	e1.6	Feb 8	a1.6	Nov 20, 1948
ANNUAL SEVEN-DAY MINIMUM	15	Oct 18	e13	Feb 2	3.9	Nov 7, 1938
MAXIMUM PEAK FLOW			3,770	Jun 1	b21,000	Jun 9, 1891
MAXIMUM PEAK STAGE			5.86	Jun 1		
ANNUAL RUNOFF (AC-FT)	62,580		217,800			
10 PERCENT EXCEEDS	218		1,070		1,170	
50 PERCENT EXCEEDS	34		48		88	
90 PERCENT EXCEEDS	19		18		24	

e Estimated.
a Also occurred Nov 28, 1948, caused by diversion of Poudre Valley Canal, 0.5 mi upstream, and Feb 8, 2003 (flow estimated), due to diversions.
b Maximum discharge determined, caused by failure of Chambers Lake Dam, from reports of State Engineers Office. A greater discharge, but not determined, occurred May 20, 1904.

06752258 CACHE LA POUDRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°36'11", long 105°05'43", in NE¼SE¼ sec.3, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, at Shields Street bridge, 0.8 mi downstream from Larimer-Weld Canal, and 1.0 mi northwest of Fort Collins.

DRAINAGE AREA.--1,119 mi^2.

PERIOD OF RECORD.--October 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=06752258

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 unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)
OCT													
17...	0845	4.5	10.3	8.4	446	8.5	210	59.1	15.0	--	--	E151	--
NOV													
15...	1025	1.1	8.4	7.5	463	6.0	230	61.6	18.2	--	--	172	--
DEC													
17...	0845	20	11.2	8.6	428	2.0	210	60.9	13.9	--	--	E146	--
JAN													
29...	1320	8.7	12.1	8.6	453	4.0	220	62.9	14.5	0.3	9.74	144	3.53
FEB													
27...	0845	7.2	11.4	8.4	456	1.0	220	65.0	14.7	--	--	E163	--
APR													
03...	1100	2.9	8.7	7.7	534	10.5	250	67.6	19.1	--	--	145	--
29...	0930	7.5	9.1	8.3	262	12.5	110	29.1	8.86	--	--	88	--
MAY													
20...	1220	178	10.2	8.5	128	9.0	51	15.0	3.33	--	--	45	--
JUL													
02...	0915	462	8.3	7.8	65	16.0	26	7.58	1.74	--	--	25	--
15...	1345	22	7.9	8.6	126	20.5	50	14.1	3.68	0.3	4.10	46	1.88
AUG													
05...	1315	49	8.1	8.3	105	21.5	47	14.0	2.98	--	--	38	--
SEP													
17...	1450	29	9.8	8.5	204	17.0	87	25.6	5.69	--	--	71	--

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

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	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)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)
OCT													
17...	--	--	--	--	<0.04	<0.022	<0.008	<0.02	<0.04	--	--	--	--
NOV													
15...	--	--	--	--	<0.04	<0.022	<0.008	<0.02	<0.04	--	--	--	--
DEC													
17...	--	--	--	--	<0.04	0.185	<0.008	<0.02	<0.04	--	--	--	--
JAN													
29...	0.43	5.5	88.6	288	<0.04	0.068	<0.008	<0.02	<0.04	2	<2	<0.2	<0.8
FEB													
27...	--	--	--	--	<0.04	0.189	<0.008	<0.02	<0.04	--	--	--	--
APR													
03...	--	--	--	--	<0.04	0.453	E.005	<0.02	<0.04	--	--	--	--
29...	--	--	--	--	<0.04	0.227	<0.008	<0.02	<0.04	--	--	--	--
MAY													
20...	--	--	--	--	<0.04	0.203	<0.008	<0.02	<0.04	--	--	--	--
JUL													
02...	--	--	--	--	<0.04	0.052	<0.008	<0.02	<0.04	--	--	--	--
15...	0.2	7.34	12.3	82	<0.04	0.071	<0.008	<0.02	<0.04	13	<2	<0.04	<0.8
AUG													
05...	--	--	--	--	<0.015	0.085	<0.008	<0.007	<0.04	--	--	--	--
SEP													
17...	--	--	--	--	<0.015	0.022	<0.008	<0.007	<0.04	--	--	--	--

06752258 CACHE LA POUDRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO—Continued

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

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT										
17...	1.2	26	130	--	--	--	--	--	<0.3	--
NOV										
15...	0.9	14	120	--	--	--	--	--	<0.3	--
DEC										
17...	1.1	24	80	--	--	--	--	--	<0.3	--
JAN										
29...	1.1	22	160	<1	27	<0.02	<4.0	0.6	<0.3	M
FEB										
27...	1.2	24	150	--	--	--	--	--	<0.3	--
APR										
03...	1.7	39	170	--	--	--	--	--	<0.3	--
29...	1.6	27	290	--	--	--	--	--	<0.3	--
MAY										
20...	1.2	60	1,340	--	--	--	--	--	<0.3	--
JUL										
02...	0.7	56	200	--	--	--	--	--	<0.3	--
15...	1.0	37	130	<0.08	18	<0.02	0.65	<0.5	<0.20	M
AUG										
05...	1.2	29	200	--	--	--	--	--	<0.20	--
SEP										
17...	0.8	35	80	--	--	--	--	--	<0.20	--

< -- Actual value is known to be less than the value shown.
E -- Estimated laboratory analysis value.
M -- Presence of material verified but not quantified.

06752260 CACHE LA POUDRE RIVER AT FORT COLLINS, CO

LOCATION.--Lat 40°35'21", long 105°04'09", in SE¼NW¼ sec.12, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on left bank 100 ft upstream from Lincoln Street Bridge in Fort Collins.

DRAINAGE AREA.--1,127 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1975 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06752260

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,940 ft above NGVD of 1929, from topographic map. Prior to May 22, 1987, at site 300 ft downstream, at different datum. May 22, 1987 to Nov. 10, 1988 at site 4,300 ft upstream, at different datum. Nov. 10, 1988 to Oct. 16, 1996, at site 100 ft upstream, at same datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.3	4.6	9.9	11	11	e5.0	6.2	52	1,310	352	49	73
2	8.3	2.3	18	10	11	3.2	7.1	66	1,050	296	60	29
3	9.4	2.3	17	10	13	2.5	6.0	14	851	286	56	20
4	6.9	2.4	14	10	e11	2.4	6.0	7.5	683	237	91	23
5	7.8	3.3	15	9.3	e9.0	2.3	5.8	4.8	484	147	71	21
6	6.3	2.1	18	9.5	e8.6	2.3	8.3	3.2	263	26	39	21
7	7.5	2.3	16	9.4	8.4	2.3	4.7	2.3	356	16	37	20
8	3.9	3.3	15	11	6.8	2.2	2.3	2.0	329	23	30	28
9	2.2	2.1	12	11	4.7	2.0	1.1	6.2	266	23	65	31
10	2.4	1.8	12	14	4.0	1.6	1.0	114	285	41	73	26
11	2.0	2.1	12	22	5.0	e1.0	1.2	155	550	70	27	20
12	1.5	0.59	11	16	8.1	e1.0	1.9	141	413	72	28	63
13	2.0	0.72	12	12	8.9	e1.0	2.6	171	70	76	23	39
14	2.5	0.87	12	13	9.2	e1.0	2.4	163	76	75	22	61
15	2.0	0.75	13	11	9.7	e1.0	5.1	55	148	33	36	56
16	2.0	0.91	12	9.8	9.6	e1.0	3.9	112	176	51	48	44
17	2.4	1.4	15	11	8.7	e6.0	79	133	247	105	54	34
18	2.2	1.6	12	11	8.2	6.9	148	114	288	119	60	35
19	2.4	1.9	11	10	8.2	19	108	177	397	108	53	25
20	5.3	2.0	16	10	8.0	4.3	105	154	334	136	29	20
21	4.2	2.0	12	10	7.9	9.9	107	214	286	31	20	15
22	7.4	3.0	13	9.5	7.8	8.1	103	221	211	91	53	13
23	4.3	2.4	10	18	7.2	8.1	74	277	223	78	63	12
24	3.8	2.5	11	9.8	7.1	9.0	36	399	314	67	62	10
25	3.6	2.6	15	9.6	e6.0	7.6	18	386	347	60	27	10
26	5.3	2.5	14	9.4	e5.5	11	15	609	260	101	29	8.7
27	2.9	2.4	12	9.3	e5.5	15	14	535	221	153	28	7.8
28	2.3	2.4	8.5	9.6	e5.3	8.8	14	668	314	65	35	7.4
29	2.8	2.3	8.9	9.0	---	6.2	9.2	689	431	24	69	7.4
30	3.4	2.3	12	10	---	5.3	9.9	1,160	376	41	107	7.2
31	3.7	---	12	9.2	---	5.3	---	1,120	---	62	100	---
TOTAL	129.0	63.74	401.3	344.4	223.4	162.3	905.7	7,925.0	11,559	3,065	1,544	787.5
MEAN	4.16	2.12	12.9	11.1	7.98	5.24	30.2	256	385	98.9	49.8	26.2
MAX	9.4	4.6	18	22	13	19	148	1,160	1,310	352	107	73
MIN	1.5	0.59	8.5	9.0	4.0	1.0	1.0	2.0	70	16	20	7.2
AC-FT	256	126	796	683	443	322	1,800	15,720	22,930	6,080	3,060	1,560

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

MEAN	25.7	28.6	24.8	31.0	32.5	32.9	99.3	437	872	228	72.1	34.7
MAX	182	183	97.3	123	135	136	652	2,720	4,771	1,450	301	207
(WY)	(1998)	(1998)	(1985)	(1984)	(1984)	(1980)	(1983)	(1980)	(1983)	(1983)	(1997)	(1997)
MIN	1.76	1.79	1.91	2.29	1.30	1.91	0.37	14.9	158	34.9	12.8	4.79
(WY)	(2002)	(1978)	(1978)	(1978)	(1987)	(1988)	(1988)	(1976)	(1989)	(2002)	(1988)	(1987)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1975 - 2003	
ANNUAL TOTAL	12,192.94		27,110.34			
ANNUAL MEAN	33.4		74.3		162	
HIGHEST ANNUAL MEAN					779	1983
LOWEST ANNUAL MEAN					33.3	2002
HIGHEST DAILY MEAN	416	Jun 3	1,310	Jun 1	6,080	Jun 21, 1983
LOWEST DAILY MEAN	0.59	Nov 12	0.59	Nov 12	a0.00	Aug 18, 1987
ANNUAL SEVEN-DAY MINIMUM	0.98	Nov 12	0.98	Nov 12	0.00	Mar 24, 1988
MAXIMUM PEAK FLOW			2,100	May 30	7,710	Apr 30, 1999
MAXIMUM PEAK STAGE			6.42	May 30	10.46	Apr 30, 1999
ANNUAL RUNOFF (AC-FT)	24,180		53,770		117,000	
10 PERCENT EXCEEDS	74		229		329	
50 PERCENT EXCEEDS	14		12		25	
90 PERCENT EXCEEDS	1.9		2.3		2.8	

e Estimated.
a Also occurred Aug 19, Sep 4, 18-19, 1987, and many days in 1988.

06752260 CACHE LA POUDRE RIVER AT FORT COLLINS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1975 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06752260

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 unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)
OCT													
17...	1030	1.9	10.5	8.3	529	8.5	240	65.8	17.9	--	--	E151	--
NOV													
15...	1210	0.87	10.2	8.2	681	7.5	310	86.5	23.2	--	--	242	--
DEC													
17...	1020	16	11.3	8.5	468	2.5	230	67.5	15.8	--	--	E155	--
JAN													
29...	1155	8.6	12.7	8.6	497	4.5	240	68.2	15.9	0.4	12.9	156	6.78
FEB													
27...	1000	8.6	11.6	8.4	521	1.5	250	70.5	17.2	--	--	E178	--
APR													
03...	1245	6.2	13.0	8.3	984	12.5	440	114	37.3	--	--	201	--
29...	1030	9.1	10.7	8.1	582	14.5	250	65.1	20.5	--	--	136	--
MAY													
20...	1340	163	9.3	8.2	146	9.5	59	17.3	3.90	--	--	49	--
JUL													
02...	1115	313	8.5	8.2	70	17.5	28	8.08	1.89	--	--	26	--
15...	1145	31	8.4	8.3	145	20.5	58	16.2	4.27	0.3	5.25	50	3.47
AUG													
05...	1200	55	8.4	8.2	117	20.0	51	15.1	3.34	--	--	42	--
SEP													
17...	1300	32	9.5	8.3	231	17.5	99	28.7	6.68	--	--	79	--

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

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	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)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)
OCT													
17...	--	--	--	--	<0.04	0.224	E.005	<0.02	<0.04	--	--	--	--
NOV													
15...	--	--	--	--	<0.04	0.299	0.011	<0.02	<0.04	--	--	--	--
DEC													
17...	--	--	--	--	<0.04	0.155	E.004	<0.02	<0.04	--	--	--	--
JAN													
29...	0.44	5.4	94.3	311	<0.04	0.064	<0.008	<0.02	<0.04	E1	<2	<0.2	<0.8
FEB													
27...	--	--	--	--	<0.04	0.188	<0.008	<0.02	<0.04	--	--	--	--
APR													
03...	--	--	--	--	E.03	0.351	0.008	E.01	E.03	--	--	--	--
29...	--	--	--	--	<0.04	0.211	E.005	<0.02	<0.04	--	--	--	--
MAY													
20...	--	--	--	--	<0.04	0.216	<0.008	<0.02	<0.04	--	--	--	--
JUL													
02...	--	--	--	--	<0.04	0.054	<0.008	<0.02	<0.04	--	--	--	--
15...	0.2	7.67	14.8	85	<0.04	0.095	<0.008	<0.02	<0.04	10	<2	<0.04	<0.8
AUG													
05...	--	--	--	--	<0.015	0.099	<0.008	<0.007	<0.04	--	--	--	--
SEP													
17...	--	--	--	--	<0.015	0.036	<0.008	<0.007	<0.04	--	--	--	--

06752260 CACHE LA POUDRE RIVER AT FORT COLLINS, CO—Continued

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

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT										
17...	1.3	19	140	--	--	--	--	--	<0.3	--
NOV										
15...	1.4	23	160	--	--	--	--	--	<0.3	--
DEC										
17...	1.1	25	120	--	--	--	--	--	<0.3	--
JAN										
29...	1.2	37	140	<1	32	<0.02	<2.0	0.6	<0.3	1
FEB										
27...	1.3	32	170	--	--	--	--	--	<0.3	--
APR										
03...	2.2	51	320	--	--	--	--	--	<0.3	--
29...	2.6	31	300	--	--	--	--	--	<0.3	--
MAY										
20...	1.2	58	1,830	--	--	--	--	--	<0.3	--
JUL										
02...	0.7	54	190	--	--	--	--	--	<0.3	--
15...	0.9	43	170	<0.08	24	<0.02	0.70	<0.5	<0.20	1
AUG										
05...	1.1	31	200	--	--	--	--	--	<0.20	--
SEP										
17...	0.8	46	100	--	--	--	--	--	<0.20	--

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

06752270 CACHE LA POUDRE RIVER BELOW FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°34'01", long 105°01'36", in NW¼NE¼ sec.20, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, 1.4 mi west of Interstate 25 on Prospect Street in Fort Collins.

DRAINAGE AREA.--1,240 mi^2.

PERIOD OF RECORD.--January 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=06752270

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 unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)
OCT													
17...	1235	9.0	11.5	8.7	803	10.0	350	95.1	26.8	--	--	E200	--
NOV													
15...	1410	3.1	14.4	8.6	1,230	8.0	590	159	47.7	--	--	233	--
DEC													
17...	1200	3.5	13.4	8.2	1,120	3.5	550	149	42.3	--	--	E191	--
JAN													
29...	1035	3.3	11.4	8.5	1,110	4.0	550	150	41.5	0.8	45.5	261	23.1
FEB													
27...	1100	3.2	12.2	8.5	1,210	3.5	570	152	46.4	--	--	E225	--
APR													
03...	1405	6.7	13.4	8.1	1,180	13.0	550	148	44.0	--	--	220	--
29...	1120	6.4	12.8	8.4	1,190	15.5	560	151	44.0	--	--	228	--
MAY													
20...	1035	41	9.5	8.5	484	10.5	200	56.1	15.4	--	--	103	--
JUL													
02...	1310	336	8.5	8.2	130	18.0	51	14.5	3.50	--	--	36	--
15...	1545	42	8.7	8.6	355	22.5	150	39.8	11.2	0.5	14.2	87	8.71
AUG													
05...	1045	83	9.0	8.5	205	20.5	88	25.1	6.15	--	--	56	--
SEP													
17...	1100	44	12.3	8.8	399	16.6	36	10.5	2.25	--	--	105	--

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

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	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)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)
OCT													
17...	--	--	--	--	<0.04	2.99	0.026	0.68	0.67	--	--	--	--
NOV													
15...	--	--	--	--	<0.04	1.06	0.014	0.02	0.04	--	--	--	--
DEC													
17...	--	--	--	--	E.03	1.28	0.012	E.01	<0.04	--	--	--	--
JAN													
29...	0.77	9.3	322	824	<0.04	1.35	0.013	<0.02	<0.04	<2	<2	<0.2	<0.8
FEB													
27...	--	--	--	--	<0.04	1.11	E.005	<0.02	<0.04	--	--	--	--
APR													
03...	--	--	--	--	<0.04	1.12	0.015	<0.02	<0.04	--	--	--	--
29...	--	--	--	--	<0.04	0.984	0.020	<0.02	<0.04	--	--	--	--
MAY													
20...	--	--	--	--	<0.04	0.514	E.006	E.01	E.02	--	--	--	--
JUL													
02...	--	--	--	--	<0.04	0.165	<0.008	E.01	E.02	--	--	--	--
15...	0.3	8.29	74.2	223	<0.04	0.539	E.005	0.06	0.07	11	<2	<0.04	<0.8
AUG													
05...	--	--	--	--	E.010	0.299	E.005	0.038	0.04	--	--	--	--
SEP													
17...	--	--	--	--	<0.015	0.704	E.006	0.215	0.23	--	--	--	--

06752270 CACHE LA POUDRE RIVER BELOW FORT COLLINS, CO—Continued

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

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT										
17...	3.3	35	120	--	--	--	--	--	<0.3	--
NOV										
15...	1.5	24	130	--	--	--	--	--	<0.3	--
DEC										
17...	2.0	14	140	--	--	--	--	--	<0.5	--
JAN										
29...	1.8	15	160	<1	50	<0.02	8.3	4.4	<0.3	2
FEB										
27...	2.5	15	140	--	--	--	--	--	<0.3	--
APR										
03...	1.9	14	360	--	--	--	--	--	<0.3	--
29...	3.3	17	270	--	--	--	--	--	<0.3	--
MAY										
20...	2.1	50	390	--	--	--	--	--	<0.3	--
JUL										
02...	0.8	52	250	--	--	--	--	--	<0.3	--
15...	1.2	31	160	E.05	21	<0.02	1.53	1.0	<0.20	2
AUG										
05...	1.2	26	280	--	--	--	--	--	<0.20	--
SEP										
17...	0.4	--	160	--	--	--	--	--	<0.20	--

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

06752280 CACHE LA POUDRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO

LOCATION.--Lat 40 33'07", long 105 00'39", in NE¼NW¼ sec.28, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, on left bank 4,000 ft upstream from Boxelder Creek, 2.0 mi upstream from Interstate Highway 25 bridge, and 3.8 mi southeast of intersection of College Avenue and Prospect Street in Fort Collins.

DRAINAGE AREA.--1,245 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 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=06752280

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,860 ft above NGVD of 1929, from topographic map. Prior to March 24, 1994, at site 1,900 ft downstream at different datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	2.0	1.8	1.8	2.3	2.3	5.4	4.8	870	313	17	65
2	1.8	1.6	2.1	1.8	2.7	2.0	5.0	4.6	729	273	23	11
3	2.1	1.4	2.2	1.8	2.7	2.2	4.6	4.3	573	257	21	2.4
4	2.7	1.3	2.3	1.9	2.3	2.3	4.5	3.8	462	199	31	e1.6
5	1.5	1.1	2.2	1.8	2.3	2.2	4.5	3.5	338	123	30	e2.1
6	1.3	1.2	2.3	1.9	2.1	2.1	4.6	2.4	241	24	e1.9	e1.2
7	1.3	1.6	2.1	1.8	1.9	2.3	4.6	2.3	301	9.2	e0.61	e1.3
8	1.5	1.7	2.3	2.1	1.9	2.3	4.1	2.2	291	2.6	e0.59	e4.4
9	1.3	1.6	2.3	2.3	2.1	2.3	3.9	2.4	228	0.70	10	11
10	1.3	1.9	2.3	2.3	2.0	2.4	3.9	35	233	3.0	16	7.7
11	1.5	1.6	2.3	2.3	1.8	2.8	4.1	22	426	23	e4.3	2.1
12	1.7	1.7	2.3	2.6	1.9	3.0	4.0	9.9	354	30	e0.74	32
13	1.8	1.8	2.2	2.6	1.8	2.9	3.7	8.2	49	36	e0.74	17
14	1.9	1.8	2.3	2.6	1.9	2.9	3.9	25	42	41	e0.74	38
15	2.0	1.8	2.3	2.9	1.9	2.9	3.9	3.5	108	18	e3.3	41
16	2.2	1.8	2.3	2.6	2.3	3.2	3.9	3.5	115	14	9.9	25
17	2.1	1.7	2.3	2.8	2.1	3.7	11	10	211	50	12	14
18	2.3	1.7	2.2	2.7	2.2	8.1	50	9.6	238	80	28	18
19	2.2	2.0	2.1	2.7	2.3	7.5	20	37	338	68	16	8.8
20	2.4	2.0	2.3	2.6	2.2	4.9	18	27	293	104	e2.1	4.4
21	2.4	2.1	2.3	2.6	2.2	9.3	15	44	256	27	e0.92	e1.5
22	2.1	1.8	2.3	2.6	2.3	11	10	69	169	47	e11	e1.4
23	2.2	2.0	2.1	2.5	2.2	10	29	107	180	42	20	e1.3
24	2.3	2.0	1.9	2.6	2.2	11	29	201	259	31	14	e1.2
25	2.4	2.0	1.9	2.6	2.1	8.1	8.5	177	296	25	e8.4	e1.1
26	2.3	1.7	1.7	2.5	2.2	8.7	6.4	366	236	47	e1.1	e1.0
27	2.1	1.6	1.8	2.6	2.2	9.3	5.6	306	192	98	e0.92	e1.0
28	1.8	1.8	1.8	2.5	2.1	6.8	5.4	423	231	38	e0.93	e1.0
29	2.4	1.7	1.7	2.6	---	6.1	5.1	431	342	16	23	e1.0
30	2.1	1.8	1.8	2.7	---	5.6	4.8	736	332	7.4	136	e1.0
31	2.5	---	1.8	2.4	---	5.5	---	788	---	18	136	---
TOTAL	60.7	51.8	65.6	74.1	60.2	155.7	286.4	3,869.0	8,933	2,064.90	581.19	319.5
MEAN	1.96	1.73	2.12	2.39	2.15	5.02	9.55	125	298	66.6	18.7	10.7
MAX	2.7	2.1	2.3	2.9	2.7	11	50	788	870	313	136	65
MIN	1.2	1.1	1.7	1.8	1.8	2.0	3.7	2.2	42	0.70	0.59	1.0
AC-FT	120	103	130	147	119	309	568	7,670	17,720	4,100	1,150	634

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2003, BY WATER YEAR (WY)

MEAN	21.0	30.9	25.9	26.7	26.0	28.6	102	416	830	191	48.3	28.9
MAX	162	179	114	139	156	159	633	2,729	4,430	1,288	278	182
(WY)	(1998)	(1998)	(1998)	(1984)	(1984)	(1980)	(1980)	(1980)	(1983)	(1983)	(1997)	(1997)
MIN	1.96	1.73	2.02	2.39	2.15	2.59	1.93	8.66	85.8	5.94	4.27	1.99
(WY)	(2003)	(2003)	(2002)	(2003)	(2003)	(2002)	(2002)	(1982)	(1989)	(1987)	(1987)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1980 - 2003	
ANNUAL TOTAL	5,680.92		16,522.09			
ANNUAL MEAN	15.6		45.3			
HIGHEST ANNUAL MEAN					700	1983
LOWEST ANNUAL MEAN					15.8	2002
HIGHEST DAILY MEAN	326	Jun 4	870	Jun 1	5,750	May 1, 1999
LOWEST DAILY MEAN	0.03	Aug 12	e0.59	Aug 8	0.03	Aug 12, 2002
ANNUAL SEVEN-DAY MINIMUM	0.34	Aug 15	e1.0	Sep 24	0.34	Aug 15, 2002
MAXIMUM PEAK FLOW			1,190	May 30	a7,200	May 1, 1999
MAXIMUM PEAK STAGE			7.38	May 30	b11.13	May 1, 1999
ANNUAL RUNOFF (AC-FT)	11,270		32,770			
10 PERCENT EXCEEDS	20		178		267	
50 PERCENT EXCEEDS	2.3		2.6		10	
90 PERCENT EXCEEDS	1.3		1.6		3.5	

e Estimated.
a From slope-area measurement of peak flow.
b From highwater marks.

06752280 CACHE LA POUDRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 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=06752280

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 unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)
OCT													
17...	1415	2.0	11.0	8.3	1,780	11.5	880	227	76.8	--	--	E154	--
NOV													
15...	1545	1.9	11.8	8.3	1,830	6.0	990	258	84.5	--	--	222	--
DEC													
17...	1245	2.4	11.8	8.4	1,770	3.0	950	250	79.5	--	--	E187	--
JAN													
29...	0920	2.6	10.8	8.3	1,570	1.5	800	212	65.0	1	71.6	226	24.3
FEB													
27...	1225	2.0	12.2	8.4	1,690	2.5	870	227	73.8	--	--	E224	--
APR													
03...	0920	4.5	8.8	7.7	1,860	9.5	920	231	84.2	--	--	209	--
29...	1235	4.9	11.2	8.2	1,810	17.5	880	227	76.9	--	--	204	--
MAY													
20...	0900	6.9	8.0	8.3	760	10.0	330	90.2	26.2	--	--	112	--
JUL													
02...	1445	293	8.1	8.3	149	20.0	60	16.8	4.25	--	--	39	--
15...	0915	18	--	8.5	457	20.5	200	52.2	15.9	0.6	20.0	85	8.58
AUG													
05...	0845	33	7.7	8.2	293	20.0	120	34.0	9.10	--	--	63	--
SEP													
17...	0915	12	--	8.2	575	15.0	240	63.9	19.6	--	--	117	--

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

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	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)	Aluminum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)
OCT													
17...	--	--	--	--	<0.04	0.582	0.015	<0.02	<0.04	--	--	--	--
NOV													
15...	--	--	--	--	<0.04	1.10	0.021	<0.02	<0.04	--	--	--	--
DEC													
17...	--	--	--	--	0.04	1.37	0.018	<0.02	<0.04	--	--	--	--
JAN													
29...	0.95	8.1	662	1,310	E.03	1.24	0.016	<0.02	<0.04	<2	<2	<0.2	<0.8
FEB													
27...	--	--	--	--	0.06	1.29	0.010	<0.02	E.03	--	--	--	--
APR													
03...	--	--	--	--	E.03	0.804	0.017	<0.02	<0.04	--	--	--	--
29...	--	--	--	--	0.05	0.576	0.019	<0.02	E.02	--	--	--	--
MAY													
20...	--	--	--	--	0.07	0.403	0.010	E.01	<0.04	--	--	--	--
JUL													
02...	--	--	--	--	<0.04	0.156	<0.008	E.01	E.03	--	--	--	--
15...	0.4	8.79	115	288	<0.04	0.309	0.010	0.04	0.06	8	<2	<0.04	<0.8
AUG													
05...	--	--	--	--	0.015	0.321	0.009	0.041	0.04	--	--	--	--
SEP													
17...	--	--	--	--	<0.015	0.587	0.009	0.114	0.12	--	--	--	--

06752280 CACHE LA POUDRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO—Continued

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

Date	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT										
17...	4.2	21	110	--	--	--	--	--	<0.3	--
NOV										
15...	2.7	26	80	--	--	--	--	--	<0.3	--
DEC										
17...	3.4	14	90	--	--	--	--	--	<0.3	--
JAN										
29...	2.6	E9	90	<1	37	<0.02	<2.0	7.1	<0.3	2
FEB										
27...	4.6	14	140	--	--	--	--	--	<0.3	--
APR										
03...	5.1	45	290	--	--	--	--	--	<0.5	--
29...	5.8	42	390	--	--	--	--	--	<0.3	--
MAY										
20...	3.3	49	360	--	--	--	--	--	<0.3	--
JUL										
02...	0.8	56	310	--	--	--	--	--	<0.3	--
15...	1.1	32	460	<0.08	49	<0.02	2.02	1.2	<0.20	1
AUG										
05...	1.2	26	380	--	--	--	--	--	<0.20	--
SEP										
17...	1.2	41	220	--	--	--	--	--	<0.20	--

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

06753990 LONETREE CREEK NEAR GREELEY, CO

LOCATION.--Lat 40°26'33", long 104°35'18", in NE¼NW¼ sec.31, T.6 N., R.64 W., Weld County, Hydrologic Unit 10190008, on right bank 50 ft downstream from bridge on Weld County Road 62 ½, 5.5 mi east of Greeley.

DRAINAGE AREA.--567 mi^2.

PERIOD OF RECORD.--March 1993 to September 1995, April 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=06753990

REVISED RECORDS.--WDR CO-95-1: 1994.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,630 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Natural flow effected by diversions upstream to New Poudre Irrigation Company. Water-quality data has been collected at this site as part of the South Platte River Basin National Water-Quality Assessment Program and is available at http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06753990

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	10	2.5	1.9	6.9
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26	2.5	1.6	4.7
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	37	2.3	1.3	4.1
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	33	3.1	1.0	3.2
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	30	3.2	1.8	2.6
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11	3.1	2.2	2.5
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21	3.1	2.3	2.5
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	2.8	2.3	2.5
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12	2.8	2.4	2.2
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.9	13	3.1	2.6	1.9
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.45	10	2.8	2.5	1.7
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.5	2.1	2.9	1.8
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.8	2.2	3.2	1.6
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.8	2.0	3.3	1.6
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.6	1.5	2.9	1.7
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.4	1.2	2.8	1.5
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	23	1.3	2.5	1.5
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56	1.1	2.3	1.2
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	46	1.3	2.3	0.98
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15	45	1.5	2.2	0.88
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15	41	1.3	2.0	0.73
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.7	29	1.8	2.1	0.66
23	0.00	0.00	0.00	0.00	0.00	0.00	0.46	2.1	26	2.5	1.9	0.57
24	0.00	0.00	0.00	0.00	0.00	0.00	10	6.0	18	2.9	e1.3	0.46
25	0.00	0.00	0.00	0.00	0.00	0.00	0.01	8.0	25	2.5	e1.0	0.82
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.8	28	2.1	e1.0	0.87
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.5	10	2.0	e1.0	0.71
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.8	6.5	1.6	e0.95	0.70
29	0.00	0.00	0.00	0.00	---	0.00	0.00	5.1	4.8	1.7	e1.7	0.67
30	0.00	0.00	0.00	0.00	---	0.00	0.00	2.9	4.3	1.9	14	0.36
31	0.00	---	0.00	0.00	---	0.00	---	5.3	---	2.0	11	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	10.47	85.55	619.7	67.8	84.25	54.11
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	0.35	2.76	20.7	2.19	2.72	1.80
MAX	0.00	0.00	0.00	0.00	0.00	0.00	10	15	56	3.2	14	6.9
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.3	1.1	0.95	0.36
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	21	170	1,230	134	167	107

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

MEAN	4.89	5.15	3.99	3.44	3.03	3.10	3.02	15.0	23.5	19.9	5.50	9.88
MAX	11.8	9.97	8.10	6.79	6.52	7.27	5.63	35.0	52.2	70.7	12.7	28.7
(WY)	(1994)	(1994)	(1994)	(1994)	(1994)	(1994)	(1993)	(1993)	(1995)	(1995)	(1995)	(1995)
MIN	0.000	0.000	0.000	0.000	0.000	0.000	0.35	0.30	3.44	2.19	0.099	0.000
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2003)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1993 - 2003	
ANNUAL TOTAL	450.79		921.88			
ANNUAL MEAN	1.24		2.53		7.96	
HIGHEST ANNUAL MEAN					17.9	1995
LOWEST ANNUAL MEAN					1.81	2002
HIGHEST DAILY MEAN	e167	Jul 6	56	Jun 18	250	May 29, 1993
LOWEST DAILY MEAN	e,a0.00	May 8	0.00	Oct 1	a0.00	May 8, 2002
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 30	0.00	Oct 1	0.00	Aug 30, 2002
MAXIMUM PEAK FLOW			152	Jun 17	b429	May 28, 1993
MAXIMUM PEAK STAGE			7.54	Jun 17	10.85	May 28, 1993
ANNUAL RUNOFF (AC-FT)	894		1,830		5,770	
10 PERCENT EXCEEDS	1.6		6.6		14	
50 PERCENT EXCEEDS	0.25		0.00		3.6	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

e Estimated.
a No flow many days in 2002, 2003.
b On basis of indirect measurement of peak flow.

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO

LOCATION (REVISED).--Lat 40°24'42", long 104°33'42", in NW¼SW¼ sec.9, T.5 N., R.64W., Weld County, Hydrologic Unit 10190003, on downstream side of bridge on State Highway 37, 1.9 mi north of railroad in Kersey, and 2.5 mi downstream from Cache la Poudre River.

DRAINAGE AREA.--9,659 mi^2 (revised).

PERIOD OF RECORD.--May 1901 to December 1903, March 1905 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at Kersey" 1901-03. Statistical summary computed for 1976 to current year, subsequent to completion of Chatfield Dam. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06754000

REVISED RECORDS.--WSP 1310: 1902, 1906, 1935(M). WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,575.77 ft above NGVD of 1929. See WSP 1710 or 1730 for history of changes prior to July 3, 1935.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 888,000 acres, and return flow from irrigated areas. Water-quality data has been collected at this site as part of the South Platte River Basin National Water-Quality Assessment Program and is available at http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06754000

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	187	574	482	502	598	586	580	782	4,040	392	224	2,350
2	190	563	476	477	585	604	551	748	4,330	389	199	1,160
3	346	558	476	465	589	624	534	581	3,790	359	194	873
4	492	567	464	477	628	634	502	500	3,050	341	189	808
5	455	583	464	466	674	614	463	429	2,730	268	178	678
6	369	572	450	465	634	618	414	354	2,470	201	173	571
7	322	569	442	466	595	603	392	274	2,200	194	160	509
8	321	566	436	467	593	581	378	218	2,480	221	166	488
9	300	558	437	454	614	546	345	204	1,730	209	161	501
10	293	559	435	444	599	527	337	671	1,190	158	243	469
11	285	561	423	433	604	515	376	e2,880	1,090	159	195	443
12	265	563	430	437	601	507	390	2,440	1,240	159	171	424
13	265	562	444	456	593	499	412	1,620	1,310	160	184	427
14	271	556	440	470	603	481	378	1,150	1,240	155	169	425
15	279	540	440	514	606	449	288	943	1,210	141	156	429
16	297	535	449	510	610	434	366	869	1,210	145	147	422
17	307	537	455	522	620	442	485	1,030	1,200	149	142	411
18	326	535	468	526	582	553	518	845	1,490	144	141	457
19	300	530	454	531	574	e760	486	815	2,520	173	163	470
20	286	526	449	541	563	e820	636	850	2,070	336	195	444
21	280	518	459	539	548	916	600	789	1,730	229	161	439
22	290	515	455	540	536	926	481	678	1,460	184	154	435
23	311	516	456	521	538	1,040	703	538	1,200	171	141	432
24	329	505	449	549	530	e1,440	e1,240	442	1,030	174	137	413
25	346	518	430	552	542	e1,370	e2,400	505	916	163	132	382
26	362	535	410	554	582	e1,090	e1,290	513	871	155	144	357
27	416	552	453	566	587	e1,080	871	587	687	167	142	341
28	391	546	510	583	592	e1,150	711	645	485	184	137	325
29	451	551	513	595	---	e980	602	1,080	370	217	157	301
30	510	515	503	583	---	e820	649	1,660	352	205	307	279
31	596	---	508	591	---	e680	---	2,830	---	290	1,840	---
TOTAL	10,438	16,385	14,160	15,796	16,520	22,889	18,378	28,470	51,691	6,592	7,002	16,463
MEAN	337	546	457	510	590	738	613	918	1,723	213	226	549
MAX	596	583	513	595	674	1,440	2,400	2,880	4,330	392	1,840	2,350
MIN	187	505	410	433	530	434	288	204	352	141	132	279
AC-FT	20,700	32,500	28,090	31,330	32,770	45,400	36,450	56,470	102,500	13,080	13,890	32,650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)

MEAN	862	930	842	824	840	913	1,046	2,348	3,101	977	795	776
MAX	3,388	2,585	1,337	1,434	1,641	1,852	3,894	13,060	14,520	5,784	2,783	2,079
(WY)	(1985)	(1985)	(1985)	(1984)	(1984)	(1983)	(1983)	(1980)	(1983)	(1983)	(1984)	(1984)
MIN	337	488	457	503	540	473	144	199	113	115	85.5	156
(WY)	(2003)	(1978)	(2003)	(1982)	(1978)	(1982)	(1982)	(2002)	(1977)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003	
ANNUAL TOTAL	124,608		224,784			
ANNUAL MEAN	341		616		a1,187	
HIGHEST ANNUAL MEAN					3,631	1983
LOWEST ANNUAL MEAN					395	2002
HIGHEST DAILY MEAN	1,530	May 25	4,330	Jun 2	b21,500	May 31, 1995
LOWEST DAILY MEAN	57	May 5	132	Aug 25	c57	May 5, 2002
ANNUAL SEVEN-DAY MINIMUM	66	May 3	141	Aug 22	63	Apr 25, 1982
MAXIMUM PEAK FLOW			4,690	Jun 2	d22,900	May 31, 1995
MAXIMUM PEAK STAGE			7.14	Jun 2	f11.00	May 31, 1995
ANNUAL RUNOFF (AC-FT)	247,200		445,900		860,300	
10 PERCENT EXCEEDS	622		1,150		1,950	
50 PERCENT EXCEEDS	300		501		751	
90 PERCENT EXCEEDS	77		182		285	

e Estimated.
a Average discharge for 71 years (water years 1902-03, 1906-74), 777 ft^3/s; 562,900 acre-ft/yr, prior to completion of Chatfield Dam.
b Maximum daily discharge for period of record, 31,000 ft^3/s, Jun 7, 1921.
c Minimum daily discharge for period of record, 28 ft^3/s, Apr 30, 1955.
d Maximum discharge and stage for period of record, 31,500 ft^3/s, May 8, 1973, gage height, 11.73 ft.
f Maximum gage height for statistical period, 11.50 ft, May 1, 1999.

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO

LOCATION.--Lat 40°19'19", long 103°55'17", in SW¼SW¼ sec.7, T.4 N., R.58 W., Morgan County, Hydrologic Unit 10190003, on left bank 500 ft downstream from bridge on State Highway 144, 2.8 mi southeast of Weldona, and 4.2 mi upstream from Bijou Creek.

DRAINAGE AREA.--13,190 mi^2 (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year. Statistical summary computed for 1976 to current year, subsequent to completion of Chatfield Dam. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06758500

REVISED RECORDS.--WSP 1710: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,307.80 ft above NGVD of 1929. Prior to May 2, 1991, gage located 100 ft upstream, at same datum.

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

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	163	614	133	152	214	226	523	404	1,220	183	189	1,110
2	198	321	123	148	216	220	530	537	2,060	235	176	1,440
3	208	194	114	146	216	217	526	509	2,220	320	142	446
4	202	124	108	142	216	223	506	373	1,810	281	176	464
5	314	131	99	147	219	217	494	247	1,460	265	233	417
6	337	210	99	146	216	220	443	188	1,480	220	244	383
7	282	138	96	146	214	218	364	154	1,230	163	220	408
8	248	106	89	147	229	217	299	177	930	145	273	408
9	232	105	84	147	244	217	217	220	1,060	190	262	420
10	238	93	81	144	216	216	218	301	785	191	252	457
11	256	91	78	152	211	218	227	880	590	162	282	439
12	254	114	72	146	213	228	227	1,880	676	148	297	409
13	240	113	68	142	226	237	222	1,270	846	170	297	366
14	242	101	68	143	227	e258	219	998	881	221	292	319
15	249	96	68	142	223	253	202	960	818	243	274	333
16	269	90	68	143	222	249	166	944	789	221	258	338
17	284	90	68	146	218	244	212	924	802	215	252	331
18	296	90	68	146	216	200	324	1,020	930	206	244	318
19	318	115	67	147	216	191	391	868	1,000	205	253	322
20	330	148	73	145	215	345	367	861	1,010	198	287	291
21	345	142	68	140	213	401	427	924	1,030	244	292	278
22	374	136	67	175	214	314	420	829	807	233	291	271
23	383	131	66	239	216	464	302	564	676	265	211	255
24	408	133	75	213	207	753	502	479	690	301	170	224
25	419	138	76	205	254	852	1,080	392	766	297	154	210
26	430	142	123	205	280	733	1,230	361	768	285	158	194
27	476	141	188	209	296	524	745	380	648	270	154	172
28	467	142	149	213	241	500	414	366	369	244	161	158
29	520	143	80	213	---	504	357	388	168	213	165	153
30	556	141	57	214	---	483	348	638	194	255	175	156
31	573	---	138	213	---	444	---	912	---	193	258	---
TOTAL	10,111	4,473	2,811	5,156	6,308	10,586	12,502	19,948	28,713	6,982	7,092	11,490
MEAN	326	149	90.7	166	225	341	417	643	957	225	229	383
MAX	573	614	188	239	296	852	1,230	1,880	2,220	320	297	1,440
MIN	163	90	57	140	207	191	166	154	168	145	142	153
AC-FT	20,060	8,870	5,580	10,230	12,510	21,000	24,800	39,570	56,950	13,850	14,070	22,790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2003, BY WATER YEAR (WY)

MEAN	541	499	575	711	662	521	753	1,726	2,288	744	620	651
MAX	3,119	2,298	1,266	1,443	1,562	1,494	3,226	10,130	12,310	5,121	2,208	2,118
(WY)	(1985)	(1985)	(1986)	(1984)	(1984)	(1983)	(1983)	(1980)	(1983)	(1995)	(1984)	(1984)
MIN	134	100	90.7	166	225	132	119	183	101	173	77.5	107
(WY)	(1977)	(1977)	(2003)	(2003)	(2003)	(1978)	(1982)	(1981)	(1977)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1976 - 2003	
ANNUAL TOTAL	73,959		126,172			
ANNUAL MEAN	203		346		a857	
HIGHEST ANNUAL MEAN					2,995	1983
LOWEST ANNUAL MEAN					229	2002
HIGHEST DAILY MEAN	1,040	May 26	2,220	Jun 3	e,b16,300	Jun 11, 1995
LOWEST DAILY MEAN	28	Apr 14	57	Dec 30	c28	Apr 7, 1999
ANNUAL SEVEN-DAY MINIMUM	48	Apr 11	68	Dec 13	30	Apr 3, 1999
MAXIMUM PEAK FLOW			2,330	Jun 3	d18,400	May 3, 1999
MAXIMUM PEAK STAGE			4.75	Jun 3	10.42	May 3, 1999
ANNUAL RUNOFF (AC-FT)	146,700		250,300		620,800	
10 PERCENT EXCEEDS	446		794		1,500	
50 PERCENT EXCEEDS	153		232		456	
90 PERCENT EXCEEDS	70		115		150	

e Estimated.
a Average discharge for 22 years (water years 1953-74), 572 ft^3/s; 414,400 acre-ft/yr, prior to completion of Chatfield Dam.
b Maximum daily discharge for period of record, 20,800 ft^3/s, May 9, 1973.
c Also occurred Apr 14, 2002.
d Maximum discharge and stage for period of record, 26,800 ft^3/s, May 8, 1973, gage height, 11.68 ft, from rating curve extended above 16,000 ft^3/s.

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1967 to September 1968, October 1971 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06758500

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 unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, unfltrd mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, lab, mg/L as CaCO3 (90410)
DEC													
16...	1045	52	14.4	8.6	1,660	4.0	620	155	55.9	7.17	3	151	E248
APR													
04...	1020	507	11.7	8.4	1,460	10.0	470	113	44.6	7.47	2	121	218
SEP													
05...	0940	335	7.9	8.2	1,360	18.5	460	114	42.0	8.29	2	119	218

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

Date	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)	Residue on evap. at 180degC wat flt mg/L (70300)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	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)
DEC													
16...	81.9	1.03	14.0	534	--	--	--	1,230	0.40	E.012	4.24	0.037	0.104
APR													
04...	90.7	1.02	11.0	401	948	1.39	1,400	1,020	0.84	0.024	5.41	0.015	0.450
SEP													
05...	75.3	1.0	13.1	378	901	1.32	875	967	0.86	E.014	3.79	0.015	0.293

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

Date	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Barium, water, fltrd, ug/L (01005)	Beryllium, water, fltrd, ug/L (01010)	Boron, water, fltrd, ug/L (01020)	Cadmium water, fltrd, ug/L (01025)	Chromium, water, fltrd, ug/L (01030)	Cobalt water, fltrd, ug/L (01035)	Copper, water, fltrd, ug/L (01040)	Iron, water, fltrd, ug/L (01046)	Lead, water, fltrd, ug/L (01049)	Lithium water, fltrd, ug/L (01130)
DEC													
16...	0.113	0.137	E6	43.4	<0.5	293	<0.2	<0.8	0.975	3.0	<10	0.21	37.9
APR													
04...	0.47	0.62	E8	36.3	<0.5	246	E.2	<0.8	1.01	3.8	<10	0.25	31.8
SEP													
05...	0.33	0.41	>320	41.9	<0.4	242	<0.2	<0.8	0.889	5.6	--	0.28	31.9

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

Date	Manganese, water, fltrd, ug/L (01056)	Molybdenum, water, fltrd, ug/L (01060)	Nickel, water, fltrd, ug/L (01065)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Strontium, water, fltrd, ug/L (01080)	Vanadium, water, fltrd, ug/L (01085)	Zinc, water, fltrd, ug/L (01090)
DEC								
16...	36.4	4.9	5.83	4	<0.2	1,610	1.6	5
APR								
04...	14.5	7.6	3.56	3	<0.2	1,330	2.8	8
SEP								
05...	40.1	8.4	3.85	3	<0.2	1,290	3.3	7

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

06759500 SOUTH PLATTE RIVER AT FORT MORGAN, CO

LOCATION.--Lat 40°16'07"(revised), long 103°47'56", in SW ¼ NE ¼ sec.31, T.4 N., R.57 W., Morgan County, Hydrologic Unit 10190012, on right bank 0.1 mi downstream from bridge on State Highway 52, 0.3 mi north of Interstate Highway 76, and 0.7 mi north of Fort Morgan.

DRAINAGE AREA.--14,627 mi^2 (revised).

PERIOD OF RECORD.--November 1943 to September 1958, December 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=06759500

REVISED RECORDS.--WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,260 ft above NGVD of 1929, from topographic map. Prior to Dec. 7, 2001, at site 0.1 mi upstream at different datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known, 84,300 ft^3/s, May 31, 1935, by slope-area determination of peak flow 1 mi upstream; flood came principally from Bijou Creek.

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	75	851	186	215	266	274	531	232	860	148	149	600
2	126	601	172	216	268	265	560	369	1,920	192	135	1,720
3	156	350	156	219	256	256	569	581	2,380	249	108	471
4	159	214	146	218	249	240	544	487	1,980	229	119	373
5	234	185	140	217	248	241	531	339	1,540	210	167	337
6	326	295	139	216	245	244	490	263	1,520	172	163	313
7	259	258	139	215	236	263	399	84	1,310	134	137	334
8	202	163	135	217	244	260	335	64	905	131	173	345
9	177	160	131	219	281	257	303	96	1,040	141	174	352
10	180	141	129	201	263	255	288	218	801	121	171	370
11	213	131	128	195	248	255	286	617	571	107	191	369
12	212	144	124	207	251	287	261	1,850	574	103	207	347
13	222	150	119	219	267	292	255	1,300	704	106	208	308
14	239	139	121	222	270	304	236	910	777	138	206	271
15	252	134	120	224	274	296	191	789	708	161	202	271
16	266	127	118	197	283	301	195	827	740	146	207	288
17	294	125	120	218	266	287	193	754	742	134	201	293
18	311	127	119	218	270	279	247	909	828	129	191	269
19	344	132	117	219	286	253	322	713	897	122	196	286
20	365	180	107	216	286	329	311	725	972	117	215	265
21	376	173	119	214	276	482	337	804	980	150	199	242
22	514	171	120	217	282	356	366	768	781	150	207	238
23	565	170	113	246	254	454	353	479	611	186	176	213
24	534	173	110	255	235	740	418	333	540	210	164	165
25	510	179	105	260	270	843	989	264	601	209	148	127
26	499	173	126	259	316	897	1,440	216	579	199	128	111
27	525	182	219	262	355	664	874	209	490	233	123	111
28	543	192	218	263	296	578	379	199	286	196	122	100
29	661	196	163	259	---	571	290	211	140	170	127	100
30	723	193	129	257	---	502	235	319	144	200	139	105
31	770	---	174	259	---	462	---	565	---	181	161	---
TOTAL	10,832	6,409	4,262	7,039	7,541	11,987	12,728	16,494	26,921	5,074	5,214	9,694
MEAN	349	214	137	227	269	387	424	532	897	164	168	323
MAX	770	851	219	263	355	897	1,440	1,850	2,380	249	215	1,720
MIN	75	125	105	195	235	240	191	64	140	103	108	100
AC-FT	21,490	12,710	8,450	13,960	14,960	23,780	25,250	32,720	53,400	10,060	10,340	19,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2003, BY WATER YEAR (WY)

MEAN	226	233	275	339	320	370	369	968	1,302	329	292	212
MAX	527	521	770	686	829	1,319	969	5,082	7,615	1,351	874	362
(WY)	(1948)	(1946)	(1958)	(1946)	(1948)	(1948)	(1958)	(1958)	(1949)	(1947)	(1951)	(1957)
MIN	91.3	136	124	183	160	166	150	110	108	129	82.5	71.8
(WY)	(1951)	(1955)	(1951)	(1956)	(1956)	(1957)	(2002)	(1954)	(2002)	(1954)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1944 - 2003	
ANNUAL TOTAL	72,641		124,195			
ANNUAL MEAN	199		340		451	
HIGHEST ANNUAL MEAN					956	1958
LOWEST ANNUAL MEAN					151	1954
HIGHEST DAILY MEAN	851	Nov 1	2,380	Jun 3	16,600	Jun 16, 1949
LOWEST DAILY MEAN	35	Jun 19	64	May 8	25	Oct 7, 1956
ANNUAL SEVEN-DAY MINIMUM	47	Jun 18	113	Dec 19	28	Oct 4, 1956
MAXIMUM PEAK FLOW			2,520	Jun 3	a33,800	Aug 3, 1951
MAXIMUM PEAK STAGE			12.47	Jun 3	b12.90	Aug 3, 1951
ANNUAL RUNOFF (AC-FT)	144,100		246,300		326,500	
10 PERCENT EXCEEDS	452		731		740	
50 PERCENT EXCEEDS	143		244		220	
90 PERCENT EXCEEDS	58		127		118	

a From rating curve extended above 15,000 ft^3/s.
b Site and datum then in use.

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

LOCATION.--Lat 40°58'46", long 102°15'15", in NW¼NE¼ and NE¼SE¼ (three channels) sec.33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel no. 4 (left channel) 215 ft downstream from bridge, on right bank of channel no. 2, 5 ft downstream from bridge on U.S. Highway 385, and on left bank of channel no. 1, 5 ft upstream from bridge on U.S. Highway 385, 0.9 mi southeast of Julesburg, 3.0 mi upstream from Colorado-Nebraska State line, and 8 mi downstream from Lodgepole Creek.

DRAINAGE AREA.--22,821 mi^2 (revised).

PERIOD OF RECORD.--April 1902 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Julesburg" 1903-8, 1915-16, and as "at Ovid" 1922-24. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=06764000

REVISED RECORDS.--WSP 1310: 1902, 1906-7, 1948(P). WSP 1440: 1903-4. WDR CO-86-1: Drainage area.

GAGE.--Three water-stage recorders with satellite telemetry. Datum of channel no. 4 gage is 3,446.76 ft above NGVD of 1929. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1956. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956 to Sept. 22, 1965, at site 300 ft downstream at present datum. Channel no. 4: Oct. 1, 1956 to Dec. 10, 1958, at site 135 ft downstream at present datum. Since May 11, 1973, supplementary water-stage recorder on channel no. 2 at bridge 800 ft upstream at same datum. Since Aug. 16, 1996, water-stage recorder on channel no. 1; satellite telemetry installed Oct. 24, 1996.

REMARKS.--Records good except for periods Nov. 26 to Mar. 10, and July 15 to Aug. 12, which are fair, and estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 1,200,000 acres upstream from station, and return flow from irrigated areas.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	16	14	21	64	e84	44	138	31	27	20	17
2	27	20	14	27	57	e112	55	152	33	25	24	18
3	24	17	14	36	53	116	61	157	32	25	24	16
4	28	16	14	54	51	104	71	149	33	24	24	e17
5	31	16	14	33	50	86	84	140	32	25	24	15
6	29	16	17	35	47	81	110	134	34	21	26	15
7	26	e16	15	27	44	72	138	127	47	26	26	17
8	26	e16	13	27	46	42	149	141	61	38	26	19
9	26	e16	15	25	47	34	116	146	104	26	25	35
10	27	e15	17	27	44	32	150	147	103	21	23	34
11	27	e16	20	e29	44	30	141	120	108	e20	22	38
12	26	e16	16	e37	44	29	137	114	132	e20	21	42
13	26	16	17	38	44	26	114	84	107	e18	20	44
14	26	16	17	39	44	25	93	78	98	e18	19	51
15	26	16	17	44	43	24	89	69	78	17	18	56
16	29	15	19	e38	42	24	98	69	61	16	18	62
17	19	15	21	e39	43	25	94	69	55	16	18	68
18	18	14	20	e40	44	30	96	67	56	15	e18	79
19	17	15	19	51	49	33	94	67	56	16	19	93
20	16	14	21	56	46	29	92	65	50	17	19	101
21	17	14	20	66	43	27	89	57	42	16	16	107
22	16	14	22	e63	46	27	90	47	38	15	15	108
23	17	15	e29	e64	e39	28	92	43	38	15	15	107
24	16	15	e38	e65	e60	29	101	40	38	21	14	105
25	19	15	e38	e65	e59	29	103	36	36	22	14	111
26	18	15	e49	67	61	27	124	37	34	19	12	116
27	20	15	e48	87	63	27	139	34	31	24	12	114
28	16	14	e48	96	67	26	115	33	31	30	e16	103
29	26	14	e37	91	---	49	104	31	34	25	15	95
30	20	14	35	76	---	44	115	32	30	22	14	91
31	16	---	26	75	---	40	---	30	---	20	14	---
TOTAL	696	462	724	1,538	1,384	1,391	3,098	2,653	1,663	660	591	1,894
MEAN	22.5	15.4	23.4	49.6	49.4	44.9	103	85.6	55.4	21.3	19.1	63.1
MAX	31	20	49	96	67	116	150	157	132	38	26	116
MIN	16	14	13	21	39	24	44	30	30	15	12	15
AC-FT	1,380	916	1,440	3,050	2,750	2,760	6,140	5,260	3,300	1,310	1,170	3,760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 2003, BY WATER YEAR (WY)

MEAN	313	353	415	530	610	550	545	1,054	1,474	303	186	247
MAX	2,427	2,358	1,371	1,571	1,864	2,200	2,808	9,922	12,200	5,059	1,882	1,964
(WY)	(1985)	(1985)	(1985)	(1998)	(1930)	(1939)	(1983)	(1980)	(1983)	(1983)	(1997)	(1984)
MIN	5.85	15.4	18.8	49.6	49.4	44.9	17.3	24.1	8.33	2.15	2.52	5.60
(WY)	(1904)	(2003)	(1912)	(2003)	(2003)	(2003)	(1904)	(1911)	(1910)	(1903)	(1902)	(1903)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1902 - 2003	
ANNUAL TOTAL	33,705		16,754			
ANNUAL MEAN	92.3		45.9		551	
HIGHEST ANNUAL MEAN					2,882	1983
LOWEST ANNUAL MEAN					45.9	2003
HIGHEST DAILY MEAN	550	Feb 5	157	May 3	30,800	Jun 16, 1921
LOWEST DAILY MEAN	13	Dec 8	12	Aug 26	a0.00	Aug 18, 1902
ANNUAL SEVEN-DAY MINIMUM	14	Nov 28	14	Aug 24	0.00	Jul 25, 1903
MAXIMUM PEAK FLOW			174	May 2	37,600	Jun 20, 1965
MAXIMUM PEAK STAGE			b3.46	May 2	c10.44	Jun 20, 1965
ANNUAL RUNOFF (AC-FT)	66,850		33,230		399,500	
10 PERCENT EXCEEDS	279		104		1,170	
50 PERCENT EXCEEDS	26		31		227	
90 PERCENT EXCEEDS	16		15		28	

e Estimated.
a Also occurred Aug 19-20, 1902, and Jul 25 to Aug 7, 1903.
b Gage height recorded for channel #1.
c From floodmarks in gage well.

06821360 ARIKAREE RIVER ABOVE SPRING CANYON NEAR IDALIA, CO

LOCATION.--Lat 39°45'07", long 102°24'42", in NW¼SE¼ sec.33, T.3 S., R.45 W., Yuma County, Hydrologic Unit 10250002, on right bank 1.2 mi upstream from Spring Canyon, 2.7 mi east of Rd U, 6.0 mi north of U.S. Hwy 36, and 5.0 mi northwest of Idalia.

DRAINAGE AREA.--1,111 mi^2.

PERIOD OF RECORD.--August 2002 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=06821360

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,820 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow may be affected by irrigation well pumping throughout the basin upstream of the gage. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	0.03
2	---	---	---	---	---	---	---	---	---	---	---	0.03
3	---	---	---	---	---	---	---	---	---	---	---	0.02
4	---	---	---	---	---	---	---	---	---	---	---	0.02
5	---	---	---	---	---	---	---	---	---	---	---	0.01
6	---	---	---	---	---	---	---	---	---	---	---	0.01
7	---	---	---	---	---	---	---	---	---	---	---	0.01
8	---	---	---	---	---	---	---	---	---	---	---	0.00
9	---	---	---	---	---	---	---	---	---	---	---	0.02
10	---	---	---	---	---	---	---	---	---	---	---	0.05
11	---	---	---	---	---	---	---	---	---	---	---	0.05
12	---	---	---	---	---	---	---	---	---	---	---	0.06
13	---	---	---	---	---	---	---	---	---	---	---	e0.06
14	---	---	---	---	---	---	---	---	---	---	---	e0.07
15	---	---	---	---	---	---	---	---	---	---	---	e0.09
16	---	---	---	---	---	---	---	---	---	---	---	e0.10
17	---	---	---	---	---	---	---	---	---	---	---	e0.12
18	---	---	---	---	---	---	---	---	---	---	---	e0.15
19	---	---	---	---	---	---	---	---	---	---	---	e0.15
20	---	---	---	---	---	---	---	---	---	---	---	e0.15
21	---	---	---	---	---	---	---	---	---	---	---	e0.16
22	---	---	---	---	---	---	---	---	---	---	0.00	e0.18
23	---	---	---	---	---	---	---	---	---	---	0.00	e0.18
24	---	---	---	---	---	---	---	---	---	---	0.00	e0.19
25	---	---	---	---	---	---	---	---	---	---	0.00	e0.19
26	---	---	---	---	---	---	---	---	---	---	0.00	e0.19
27	---	---	---	---	---	---	---	---	---	---	0.01	e0.19
28	---	---	---	---	---	---	---	---	---	---	0.04	e0.18
29	---	---	---	---	---	---	---	---	---	---	0.11	e0.18
30	---	---	---	---	---	---	---	---	---	---	0.06	e0.18
31	---	---	---	---	---	---	---	---	---	---	0.04	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	3.02
MEAN	---	---	---	---	---	---	---	---	---	---	---	0.10
MAX	---	---	---	---	---	---	---	---	---	---	---	0.19
MIN	---	---	---	---	---	---	---	---	---	---	---	0.00
AC-FT	---	---	---	---	---	---	---	---	---	---	---	6.0

e Estimated.

06821360 ARIKAREE RIVER ABOVE SPRING CANYON NEAR IDALIA, CO—Continued

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	e0.17	0.51	1.4	2.4	3.1	3.3	4.2	4.1	3.1	0.35	0.01	0.00
2	e0.17	0.57	1.4	2.5	3.1	3.4	4.1	3.9	2.8	0.28	0.01	0.00
3	e0.16	0.55	1.4	2.6	3.2	3.5	4.0	3.8	2.6	0.21	0.01	0.00
4	e0.16	0.64	1.5	2.8	3.1	3.5	3.9	3.7	2.8	0.18	0.00	0.00
5	e0.16	0.67	1.5	2.9	3.2	3.4	4.0	3.5	3.1	0.14	0.00	0.00
6	e0.16	0.69	1.5	3.0	3.1	3.6	4.4	3.4	2.9	0.11	0.00	0.00
7	e0.16	0.70	1.6	3.1	3.0	3.5	4.7	3.4	3.5	0.10	0.00	0.00
8	e0.16	0.73	1.7	3.1	3.0	3.5	4.9	3.4	3.3	0.09	0.00	0.00
9	e0.16	0.77	1.7	3.0	3.0	3.3	5.1	3.5	2.8	0.07	0.00	0.00
10	e0.16	0.81	1.7	2.9	3.1	3.3	4.8	5.2	2.3	0.07	0.00	0.00
11	e0.16	0.79	1.8	2.7	3.1	3.5	4.6	6.4	2.7	0.06	0.00	0.00
12	e0.17	0.81	1.8	2.8	3.2	3.5	4.4	5.1	2.8	0.06	0.00	0.00
13	e0.17	0.79	1.9	2.8	3.2	3.3	4.3	4.3	3.0	0.05	0.00	0.00
14	e0.17	0.76	1.9	2.9	3.3	3.3	4.2	3.8	2.7	0.03	0.00	0.00
15	e0.17	0.81	2.0	2.9	3.2	3.3	4.2	3.8	2.2	0.03	0.00	0.00
16	e0.18	0.85	2.0	e2.8	3.2	3.4	4.3	7.4	1.9	0.03	0.00	0.00
17	0.18	0.89	2.0	2.7	3.2	3.4	4.2	6.6	1.7	0.02	0.00	0.00
18	0.20	0.88	2.0	2.7	3.2	4.3	4.2	5.1	2.5	0.02	0.00	0.00
19	0.22	0.91	2.0	2.9	3.1	7.8	4.2	4.6	3.1	0.02	0.00	0.00
20	0.23	0.98	2.0	2.9	3.2	6.6	4.2	4.3	3.1	0.02	0.00	0.00
21	0.24	1.0	2.1	2.9	3.2	4.9	4.1	4.0	2.4	0.02	0.00	0.00
22	0.25	1.1	2.0	2.7	3.2	4.3	4.0	3.7	1.9	0.02	0.00	0.00
23	0.35	1.1	2.0	2.7	3.2	4.1	4.0	3.6	1.6	0.01	0.00	0.00
24	0.36	1.1	2.1	2.9	3.1	3.9	4.7	3.4	1.3	0.01	0.00	0.00
25	0.39	1.1	2.1	3.0	3.3	3.9	4.6	3.8	1.1	0.01	0.00	0.00
26	0.42	1.2	e2.0	3.0	3.2	3.9	4.3	5.8	0.89	0.01	0.00	0.00
27	0.45	e1.2	2.0	3.1	3.3	4.0	4.1	4.6	0.71	0.01	0.00	0.00
28	0.49	e1.2	2.1	3.1	3.3	4.0	3.9	3.7	0.57	0.01	0.00	0.00
29	0.64	e1.3	2.3	3.1	---	4.0	3.9	3.1	0.55	0.01	0.00	0.00
30	0.49	e1.3	2.3	3.1	---	4.1	4.2	2.7	0.44	0.01	0.00	0.00
31	0.50	---	2.4	3.0	---	4.1	---	2.8	---	0.01	0.00	---
TOTAL	8.05	26.71	58.2	89.0	88.6	121.9	128.7	130.5	66.36	2.07	0.03	0.00
MEAN	0.26	0.89	1.88	2.87	3.16	3.93	4.29	4.21	2.21	0.067	0.001	0.000
MAX	0.64	1.3	2.4	3.1	3.3	7.8	5.1	7.4	3.5	0.35	0.01	0.00
MIN	0.16	0.51	1.4	2.4	3.0	3.3	3.9	2.7	0.44	0.01	0.00	0.00
AC-FT	16	53	115	177	176	242	255	259	132	4.1	0.06	0.00

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

MEAN	0.26	0.89	1.88	2.87	3.16	3.93	4.29	4.21	2.21	0.067	0.001	0.000
MAX	0.26	0.89	1.88	2.87	3.16	3.93	4.29	4.21	2.21	0.067	0.001	0.000
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	0.26	0.89	1.88	2.87	3.16	3.93	4.29	4.21	2.21	0.067	0.001	0.000
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 WATER YEAR
ANNUAL TOTAL	720.12
ANNUAL MEAN	1.97
HIGHEST DAILY MEAN	7.8 Mar 19
LOWEST DAILY MEAN	a.00 Aug 4
ANNUAL SEVEN-DAY MINIMUM	a.00 Aug 4
MAXIMUM PEAK FLOW	8.7 May 16
MAXIMUM PEAK STAGE	b6.61 May 16
ANNUAL RUNOFF (AC-FT)	1430
10 PERCENT EXCEEDS	4.1
50 PERCENT EXCEEDS	2.0
90 PERCENT EXCEEDS	0.00

e Estimated.
a No flow many days each year.
b Maximum gage height, 6.62 ft, Mar 19, 2003.