09058500 PINEY RIVER BELOW PINEY LAKE NEAR MINTURN, CO

LOCATION.--Lat 39°42'29", long 106°25'34", Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from Dickson Creek, 2.0 mi downstream from Piney Lake, and 8.5 mi north of Minturn.

DRAINAGE AREA.--13.0 mi^2.

PERIOD OF RECORD.--October 1947 to September 1954, October 1963 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09058500

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 9,145.25 ft above NGVD of 1929, levels by U.S. Bureau of Reclamation. Prior to October 1963, water-stage recorder at site 15 ft upstream at present datum.

REMARKS.--Records fair except for the period May 23 to June 12 and estimated daily discharges, which are poor. No diversions upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e7.5	e4.7	e2.4	e2.3	e2.1	e2.9	28	422	88	11	8.8
2	11	e6.2	e4.7	e2.4	e2.3	e2.1	e3.1	25	243	88	10	7.3
3	11	e5.8	e4.5	e2.4	e2.3	e2.1	e3.1	24	169	84	9.7	6.8
4	12	e5.4	e4.4	e2.3	e2.3	e2.1	e3.2	24	140	78	10	6.7
5	12	e6.1	e4.3	e2.3	e2.3	e2.1	e3.1	21	123	70	9.0	6.3
6	11	e5.9	e4.3	e2.2	e2.3	e2.1	e3.0	19	115	65	8.0	8.9
7	13	e5.9	e4.2	e2.2	e2.3	e2.2	e3.1	18	92	59	7.5	14
8	15	e5.7	e4.1	e2.1	e2.3	e2.2	e3.3	18	80	54	8.3	18
9	14	e6.8	e4.0	e2.1	e2.2	e2.2	e4.2	17	91	54	7.5	27
10	12	e6.5	e4.0	e2.1	e2.2	e2.3	e4.6	16	107	50	6.8	28
11	11	e6.9	e3.8	e2.1	e2.2	e2.4	e5.2	15	120	44	6.0	31
12	9.2	e6.1	e3.7	e2.1	e2.2	e2.5	e7.1	e18	132	41	6.4	32
13	8.1	e7.2	e3.6	e2.1	e2.2	e2.6	13	e28	128	40	6.3	43
14	7.4	e6.8	e3.3	e2.1	e2.2	e2.6	26	e39	136	38	5.4	31
15	6.9	e6.5	e3.4	e2.2	e2.1	e2.7	33	e58	143	35	4.7	22
16	6.3	e6.5	e3.4	e2.2	e2.1	e2.7	e28	e86	150	36	5.8	18
17	5.8	e6.9	e3.2	e2.2	e2.1	e2.7	e27	e125	126	34	24	15
18	5.5	e6.2	e3.1	e2.3	e2.1	e2.6	24	e156	135	34	36	13
19	5.3	e6.1	e3.0	e2.3	e2.1	e2.6	20	e180	134	47	25	13
20	5.0	e5.9	e2.9	e2.3	e2.1	e2.6	17	e195	157	37	17	11
21	4.8	e5.7	e2.8	e2.3	e2.1	e2.6	17	e211	130	30	12	10
22	4.6	e5.5	e2.8	e2.3	e2.1	e2.6	20	e223	130	26	10	9.1
23	e4.8	e5.4	e2.7	e2.3	e2.1	e2.7	19	268	129	23	9.9	8.4
24	e4.7	e5.3	e2.5	e2.3	e2.1	e2.8	17	252	116	20	9.1	7.7
25	e4.4	e5.3	e2.5	e2.3	e2.1	e2.8	18	259	97	18	10	7.2
26	e4.6	e5.1	e2.5	e2.3	e2.1	e2.7	22	255	86	19	11	6.8
27	e6.3	e5.0	e2.4	e2.3	e2.1	e2.6	27	250	93	19	8.9	6.4
28	e5.8	e5.0	e2.5	e2.3	e2.1	e2.6	31	311	101	16	8.7	6.1
29	e6.1	e4.9	e2.4	e2.3	---	e2.5	32	320	103	15	7.8	5.9
30	e5.9	e4.8	e2.5	e2.3	---	e2.6	32	299	94	15	8.0	5.6
31	e6.8	---	e2.4	e2.3	---	e2.7	---	345	---	13	10	---
TOTAL	251.3	178.9	104.6	69.7	61.0	76.7	468.9	4,103	4,022	1,290	329.8	434.0
MEAN	8.11	5.96	3.37	2.25	2.18	2.47	15.6	132	134	41.6	10.6	14.5
MAX	15	7.5	4.7	2.4	2.3	2.8	33	345	422	88	36	43
MIN	4.4	4.8	2.4	2.1	2.1	2.1	2.9	15	80	13	4.7	5.6
AC-FT	498	355	207	138	121	152	930	8,140	7,980	2,560	654	861

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	6.28	4.09	2.83	2.25	2.04	2.59	11.5	68.6	123	55.5	14.5	7.50
MAX	15.1	8.82	6.41	4.00	4.01	5.52	23.0	132	202	146	45.3	14.8
(WY)	(1985)	(1985)	(1999)	(1952)	(1996)	(1995)	(1952)	(2003)	(1952)	(1995)	(1984)	(1984)
MIN	1.71	1.23	1.04	0.79	0.83	0.84	2.12	26.6	40.9	5.82	3.69	2.16
(WY)	(1980)	(1980)	(1980)	(1975)	(1975)	(1975)	(1973)	(1968)	(2002)	(2002)	(1954)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	4,504.7		11,389.9			
ANNUAL MEAN	12.3		31.2		25.1	
HIGHEST ANNUAL MEAN					41.2	1984
LOWEST ANNUAL MEAN					11.8	2002
HIGHEST DAILY MEAN	122	May 31	422	Jun 1	422	Jun 1, 2003
LOWEST DAILY MEAN	1.5	Sep 2	e2.1	Jan 8	0.40	Oct 6, 1975
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 2	e2.1	Jan 8	0.62	Mar 28, 1975
MAXIMUM PEAK FLOW			542	May 31	560	Jun 8, 1985
MAXIMUM PEAK STAGE			5.17	May 31	a5.12	Jun 8, 1985
ANNUAL RUNOFF (AC-FT)	8,940		22,590		18,210	
10 PERCENT EXCEEDS	32		105		85	
50 PERCENT EXCEEDS	5.0		6.7		4.9	
90 PERCENT EXCEEDS	2.2		2.2		1.6	

e Estimated.
a Maximum gage height for period of record, 6.44 ft, Apr 13, 1977.

09058610 DICKSON CREEK NEAR VAIL, CO

LOCATION.--Lat 39°42'14", long 106°27'25", Eagle County, Hydrologic Unit 14010001, on right bank 0.6 mi upstream from Freeman Creek, 1.0 mi upstream from mouth, and 6 mi northwest of Vail.

DRAINAGE AREA.--3.41 mi^2.

PERIOD OF RECORD.--October 1971 to current year. Prior to October 1972, published as "near Minturn." For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09058610

GAGE.--Water-stage recorder. Elevation of gage is 9,245 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except Apr. 17 to May 29 and estimated daily discharges, which are poor. Diversion by Willy N. ditch 75 ft upstream for irrigation of hay meadows 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	0.84	0.95	e0.80	e0.78	e0.77	e0.75	e1.0	3.1	40	3.7	1.9	e1.6
2	0.81	0.87	e0.80	e0.77	e0.78	e0.74	e1.1	2.9	36	3.9	1.9	e1.4
3	0.92	0.81	e0.79	e0.77	e0.77	e0.75	e0.95	3.0	29	3.7	1.9	e1.4
4	0.90	0.79	e0.80	e0.77	e0.77	e0.74	e0.94	3.0	25	3.7	1.9	e1.4
5	0.95	0.82	e0.80	e0.77	e0.77	e0.74	e0.90	2.8	22	3.4	1.9	e1.4
6	0.91	0.80	e0.79	e0.77	e0.77	e0.74	e0.88	2.8	20	3.4	1.8	e1.5
7	0.86	0.80	e0.78	e0.77	e0.75	e0.74	e0.88	2.8	18	3.3	1.9	e1.7
8	0.82	0.77	e0.78	e0.77	e0.76	e0.75	e0.94	2.7	15	3.2	2.2	e1.6
9	0.81	0.87	e0.79	e0.77	e0.75	e0.76	e1.0	2.6	15	3.1	1.9	e1.8
10	0.76	0.87	e0.82	e0.77	e0.74	e0.77	e1.2	2.6	15	3.0	1.8	e1.9
11	0.78	0.84	e0.84	e0.77	e0.73	e0.79	e1.4	2.5	15	2.8	1.8	e1.8
12	0.76	0.79	e0.79	e0.76	e0.73	e0.82	e1.5	3.0	14	2.7	1.8	e1.6
13	0.76	0.79	e0.78	e0.76	e0.73	e0.86	e1.7	3.9	13	2.7	1.9	e1.4
14	0.76	0.82	e0.78	e0.76	e0.74	e0.89	e1.9	5.9	12	2.7	1.7	e1.4
15	0.76	e0.82	e0.78	e0.77	e0.73	e0.90	e1.9	8.4	11	2.6	1.7	e1.4
16	0.76	e0.86	e0.78	e0.78	e0.73	e0.90	e1.8	11	10	2.7	2.0	e1.3
17	0.76	e0.83	e0.78	e0.80	e0.74	e0.90	e1.7	14	9.5	2.6	2.6	e1.3
18	0.76	e0.81	e0.78	e0.85	e0.74	e0.87	1.6	17	9.0	2.6	3.4	e1.4
19	0.76	e0.80	e0.78	e0.84	e0.74	e0.86	1.5	18	8.7	2.5	2.3	e1.4
20	0.75	e0.80	e0.78	e0.81	e0.75	e0.87	1.5	17	8.2	2.4	1.9	e1.3
21	0.75	e0.81	e0.78	e0.79	e0.74	e0.87	1.6	17	7.6	2.4	1.8	e1.3
22	0.76	e0.81	e0.78	e0.77	e0.74	e0.88	1.8	18	6.7	2.3	1.9	e1.3
23	0.91	e0.81	e0.77	e0.76	e0.74	e0.91	1.8	19	6.0	2.3	2.2	e1.3
24	0.90	e0.81	e0.77	e0.76	e0.74	e0.92	1.8	18	5.5	2.4	e1.7	e1.3
25	0.85	e0.83	e0.76	e0.76	e0.74	e0.90	1.9	19	5.1	2.5	e1.8	e1.2
26	0.80	e0.87	e0.76	e0.76	e0.74	e0.89	2.9	e22	4.8	2.5	e1.8	e1.2
27	0.87	e0.84	e0.76	e0.77	e0.74	e0.88	3.1	e25	4.5	2.3	e1.5	e1.1
28	0.82	e0.81	e0.77	e0.77	e0.74	e0.85	3.0	e28	4.3	2.1	e1.7	e1.1
29	0.85	e0.81	e0.78	e0.76	---	e0.81	3.0	e27	4.0	2.2	e1.5	e1.1
30	0.80	e0.81	e0.78	e0.76	---	e0.85	3.1	28	4.2	2.1	e1.9	e1.2
31	0.92	---	e0.78	e0.77	---	e0.98	---	29	---	2.0	e1.8	---
TOTAL	25.42	24.72	24.31	24.04	20.91	25.88	50.29	379.0	398.1	85.8	59.8	42.1
MEAN	0.82	0.82	0.78	0.78	0.75	0.83	1.68	12.2	13.3	2.77	1.93	1.40
MAX	0.95	0.95	0.84	0.85	0.78	0.98	3.1	29	40	3.9	3.4	1.9
MIN	0.75	0.77	0.76	0.76	0.73	0.74	0.88	2.5	4.0	2.0	1.5	1.1
AC-FT	50	49	48	48	41	51	100	752	790	170	119	84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2003, BY WATER YEAR (WY)

MEAN	1.19	1.00	0.82	0.74	0.71	0.79	1.58	7.86	10.5	3.32	1.67	1.39
MAX	2.22	1.96	1.60	1.65	1.45	1.23	6.10	20.1	29.1	12.0	3.83	2.81
(WY)	(1996)	(1996)	(1996)	(1996)	(1996)	(1985)	(1979)	(1996)	(1997)	(1995)	(1995)	(1995)
MIN	0.007	0.002	0.000	0.000	0.000	0.000	0.000	1.22	0.91	0.73	0.17	0.042
(WY)	(1984)	(1984)	(1984)	(1984)	(1984)	(1984)	(1984)	(1977)	(1977)	(1977)	(1982)	(1972)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1972 - 2003	
ANNUAL TOTAL	509.08		1,160.37			
ANNUAL MEAN	1.39		3.18		2.63	
HIGHEST ANNUAL MEAN					5.73	1997
LOWEST ANNUAL MEAN					0.58	1977
HIGHEST DAILY MEAN	4.9	May 16	40	Jun 1	48	Jun 2, 1997
LOWEST DAILY MEAN	0.52	Aug 18	e0.73	Feb 11	a0.00	Aug 12, 1972
ANNUAL SEVEN-DAY MINIMUM	0.57	Aug 31	0.73	Feb 10	0.00	Sep 12, 1972
MAXIMUM PEAK FLOW			47	Jun 1	52	Jun 1, 1997
MAXIMUM PEAK STAGE			b3.28	Jun 1	c3.29	Jun 1, 1997
ANNUAL RUNOFF (AC-FT)	1,010		2,300		1,910	
10 PERCENT EXCEEDS	3.3		8.3		6.2	
50 PERCENT EXCEEDS	0.94		0.94		1.1	
90 PERCENT EXCEEDS	0.76		0.76		0.51	

e Estimated.
a No flow at times some years.
b Maximum gage height, 3.41 ft, Sep 27, backwater from beaver dam.
c Maximum gage height, 4.89 ft, May 9, 1984, backwater from ice.

09058700 FREEMAN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°41'54", long 106°26'42", Eagle County, Hydrologic Unit 14010001, on right bank 0.8 mi upstream from mouth and 7.5 mi north of Minturn.

DRAINAGE AREA.--2.94 mi^2.

PERIOD OF RECORD.--October 1964 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09058700

GAGE.--Water-stage recorder. Elevation of gage is 9,335 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	e0.08	e0.08	e0.08	e0.08	e0.07	e0.12	e1.4	30	1.1	0.36	0.17
2	0.08	e0.08	e0.08	e0.08	e0.08	e0.07	e0.13	e1.3	20	1.0	0.35	0.17
3	0.09	e0.08	e0.08	e0.08	e0.08	e0.07	e0.13	e1.2	15	0.96	0.28	0.21
4	0.08	e0.08	e0.08	e0.08	e0.08	e0.07	e0.11	e1.2	11	0.87	0.42	0.14
5	0.11	e0.08	e0.08	e0.08	e0.08	e0.07	e0.10	e1.1	9.3	0.85	0.28	0.14
6	0.10	e0.08	e0.08	e0.08	e0.08	e0.07	e0.10	e1.1	7.9	0.82	0.26	0.27
7	0.08	e0.08	e0.08	e0.08	e0.08	e0.07	e0.10	e1.0	7.9	0.79	0.27	0.43
8	0.08	e0.08	e0.08	e0.08	e0.08	e0.07	e0.10	e0.88	6.3	0.75	0.31	0.33
9	0.07	e0.08	e0.08	e0.08	e0.08	e0.07	e0.11	e0.88	6.0	0.75	0.23	0.55
10	0.07	e0.08	e0.08	e0.08	e0.08	e0.07	e0.14	e0.88	6.0	0.71	0.20	0.78
11	0.07	e0.08	e0.08	e0.08	e0.07	e0.08	e0.19	e0.87	5.8	0.69	0.18	0.64
12	0.06	e0.08	e0.08	e0.08	e0.07	e0.08	e0.28	e0.99	5.4	0.63	0.27	0.41
13	0.06	e0.09	e0.08	e0.08	e0.07	e0.08	e0.45	e1.2	5.0	0.65	0.18	0.26
14	0.05	e0.09	e0.08	e0.08	e0.07	e0.09	e0.85	e2.4	4.4	0.59	0.15	0.25
15	0.05	e0.09	e0.08	e0.08	e0.07	e0.10	e0.88	e4.6	4.0	0.61	0.14	0.21
16	0.04	e0.08	e0.08	e0.08	e0.07	e0.10	e0.75	e7.2	3.6	0.50	0.28	0.19
17	0.04	e0.08	e0.08	e0.08	e0.07	e0.10	e0.73	e11	3.3	0.63	0.54	0.17
18	0.04	e0.08	e0.08	e0.08	e0.07	e0.10	e0.70	e14	3.0	0.58	0.84	0.27
19	0.04	e0.08	e0.08	e0.09	e0.07	e0.09	e0.67	e15	4.0	0.54	0.46	0.24
20	0.03	e0.08	e0.08	e0.09	e0.07	e0.09	e0.67	e15	3.3	0.48	0.24	0.23
21	0.03	e0.08	e0.08	e0.08	e0.07	e0.09	e0.67	16	2.6	0.49	0.21	0.18
22	0.03	e0.08	e0.08	e0.08	e0.07	e0.09	e0.76	17	2.2	0.42	0.19	0.20
23	0.06	e0.08	e0.08	e0.08	e0.07	e0.10	e0.88	17	2.0	0.42	0.18	0.18
24	0.08	e0.08	e0.08	e0.08	e0.07	e0.10	e0.76	17	1.8	0.41	0.27	0.21
25	0.08	e0.08	e0.08	e0.08	e0.07	e0.10	e0.76	16	1.7	0.46	0.23	0.17
26	0.07	e0.08	e0.07	e0.08	e0.07	e0.10	e0.84	15	1.5	0.68	0.18	0.20
27	0.08	e0.08	e0.07	e0.08	e0.07	e0.09	e1.0	16	1.4	0.61	0.18	0.19
28	0.08	e0.08	e0.08	e0.08	e0.07	e0.10	e1.3	18	1.3	0.45	0.18	0.17
29	e0.08	e0.08	e0.08	e0.08	---	e0.10	e1.4	19	1.2	0.48	0.17	0.17
30	e0.07	e0.08	e0.08	e0.08	---	e0.09	e1.5	19	1.2	0.43	0.33	0.18
31	e0.08	---	e0.08	e0.08	---	e0.10	---	17	---	0.37	0.29	---
TOTAL	2.06	2.43	2.46	2.50	2.06	2.67	17.18	270.20	178.1	19.72	8.65	7.91
MEAN	0.066	0.081	0.079	0.081	0.074	0.086	0.57	8.72	5.94	0.64	0.28	0.26
MAX	0.11	0.09	0.08	0.09	0.08	0.10	1.5	19	30	1.1	0.84	0.78
MIN	0.03	0.08	0.07	0.08	0.07	0.07	0.10	0.87	1.2	0.37	0.14	0.14
AC-FT	4.1	4.8	4.9	5.0	4.1	5.3	34	536	353	39	17	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)

MEAN	0.27	0.18	0.12	0.10	0.094	0.13	0.66	6.84	6.30	0.94	0.34	0.26
MAX	0.78	0.45	0.26	0.24	0.21	0.29	1.73	18.0	23.2	3.50	1.25	0.70
(WY)	(1985)	(1985)	(1983)	(1983)	(1983)	(1986)	(1971)	(1984)	(1983)	(1995)	(1983)	(1984)
MIN	0.066	0.030	0.000	0.000	0.000	0.000	0.000	1.26	0.30	0.12	0.065	0.079
(WY)	(2003)	(1965)	(1965)	(1965)	(1965)	(1991)	(1991)	(1977)	(1977)	(2002)	(1981)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	155.17		515.94			
ANNUAL MEAN	0.43		1.41		1.36	
HIGHEST ANNUAL MEAN					3.54	1984
LOWEST ANNUAL MEAN					0.31	1977
HIGHEST DAILY MEAN	4.8	Apr 30	30	Jun 1	63	May 25, 1984
LOWEST DAILY MEAN	0.03	Aug 17	0.03	Oct 20	a0.00	Nov 10, 1964
ANNUAL SEVEN-DAY MINIMUM	0.04	Oct 16	0.04	Oct 16	0.00	Nov 10, 1964
MAXIMUM PEAK FLOW			46	Jun 1	82	May 25, 1984
MAXIMUM PEAK STAGE			2.42	Jun 1	b2.21	May 25, 1984
ANNUAL RUNOFF (AC-FT)	308		1,020		983	
10 PERCENT EXCEEDS	1.5		3.1		3.3	
50 PERCENT EXCEEDS	0.13		0.10		0.20	
90 PERCENT EXCEEDS	0.06		0.07		0.06	

e Estimated.
a No flow some days some years.
b Maximum gage height, 3.51 ft, May 18, 1973, backwater from ice.

09058800 EAST MEADOW CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°43'54", long 106°25'34", in T.4 S., R.81 W., Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from mouth, and 10 mi north of Minturn.

DRAINAGE AREA.--3.61 mi^2.

PERIOD OF RECORD.--October 1964 to current year, For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09058800

GAGE.--Water-stage recorder. Elevation of gage is 9,455 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, and discharges above 25 cfs, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.98	e0.69	e0.64	e0.64	e0.67	e0.62	e1.1	e4.9	52	10	2.2	1.5
2	0.94	e0.68	e0.64	e0.63	e0.68	e0.62	e1.3	e4.4	37	9.6	2.0	1.2
3	1.00	e0.67	e0.61	e0.62	e0.67	e0.62	e1.3	e4.4	33	9.0	1.9	1.1
4	0.97	e0.67	e0.61	e0.62	e0.67	e0.62	e1.1	e4.2	27	8.3	2.2	0.98
5	1.0	e0.67	e0.63	e0.63	e0.66	e0.62	e1.0	e3.9	25	7.9	1.9	0.87
6	1.1	e0.69	e0.62	e0.64	e0.66	e0.62	e0.98	e3.7	22	7.3	1.7	1.7
7	1.2	e0.67	e0.60	e0.63	e0.66	e0.62	e0.95	e3.5	22	6.7	1.8	3.0
8	1.2	e0.64	e0.61	e0.63	e0.66	e0.62	e0.97	e3.5	22	6.0	2.2	2.2
9	1.1	e0.63	e0.61	e0.64	e0.65	e0.62	e1.2	e3.4	23	5.5	1.7	3.4
10	1.0	e0.64	e0.61	e0.63	e0.64	e0.64	1.4	e3.4	26	5.2	1.4	3.2
11	0.97	e0.63	e0.61	e0.63	e0.63	e0.68	1.5	e3.5	28	4.9	1.4	3.9
12	0.91	e0.66	e0.61	e0.63	e0.62	e0.69	1.9	e4.4	28	4.6	1.5	4.9
13	e0.87	e0.66	e0.61	e0.62	e0.62	e0.75	2.3	e5.9	29	4.3	1.5	3.9
14	e0.84	e0.63	e0.62	e0.64	e0.62	e0.87	e2.9	e8.5	27	3.9	1.2	2.9
15	e0.85	e0.62	e0.62	e0.67	e0.62	e0.92	2.7	e12	27	3.9	1.1	2.4
16	e0.84	e0.63	e0.61	e0.68	e0.62	e0.92	2.0	e17	26	4.5	3.4	2.1
17	e0.81	e0.64	e0.62	e0.67	e0.62	e0.91	1.8	e23	25	5.4	5.7	1.9
18	e0.80	e0.62	e0.62	e0.70	e0.62	e0.87	1.6	e26	24	5.3	7.4	2.1
19	e0.79	e0.61	e0.62	e0.70	e0.62	e0.83	e1.5	e26	24	4.3	4.0	1.9
20	e0.81	e0.61	e0.62	e0.69	e0.61	e0.83	e1.7	e26	23	3.8	2.7	1.6
21	0.79	e0.60	e0.61	e0.68	e0.62	e0.88	e1.7	e26	21	3.4	2.1	1.5
22	0.79	e0.61	e0.61	e0.67	e0.62	e0.84	e2.2	e27	20	3.1	1.9	1.4
23	0.89	e0.61	e0.61	e0.66	e0.62	e0.90	e2.2	e29	20	2.9	1.9	1.2
24	0.77	e0.66	e0.59	e0.65	e0.62	e0.97	e2.2	e28	18	2.7	1.9	1.1
25	0.73	e0.66	e0.61	e0.66	e0.62	e0.91	e2.9	e28	17	2.8	2.1	1.0
26	0.65	e0.66	e0.59	e0.65	e0.62	e0.88	e4.2	e31	15	3.0	2.1	1.0
27	e0.68	e0.65	e0.58	e0.67	e0.62	e0.88	e4.7	e37	14	3.0	2.0	0.92
28	e0.65	e0.65	e0.61	e0.67	e0.62	e0.82	e4.7	e42	13	2.6	1.8	0.88
29	e0.64	e0.65	e0.63	e0.66	---	e0.82	e4.9	e37	12	2.9	1.4	0.83
30	e0.64	e0.65	e0.64	e0.66	---	e0.74	e5.2	34	11	2.7	2.2	0.79
31	e0.69	---	e0.62	e0.67	---	e0.86	---	38	---	2.4	2.1	---
TOTAL	26.90	19.36	19.04	20.24	17.78	23.99	66.10	548.6	711	151.9	70.4	57.37
MEAN	0.87	0.65	0.61	0.65	0.64	0.77	2.20	17.7	23.7	4.90	2.27	1.91
MAX	1.2	0.69	0.64	0.70	0.68	0.97	5.2	42	52	10	7.4	4.9
MIN	0.64	0.60	0.58	0.62	0.61	0.62	0.95	3.4	11	2.4	1.1	0.79
AC-FT	53	38	38	40	35	48	131	1,090	1,410	301	140	114

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)

MEAN	1.28	0.96	0.78	0.68	0.66	0.75	1.63	11.6	22.3	7.89	2.17	1.38
MAX	2.78	2.00	1.50	1.20	1.30	1.43	3.75	26.3	45.7	28.8	5.85	3.09
(WY)	(1966)	(1966)	(1966)	(1999)	(1999)	(1999)	(1987)	(1986)	(1983)	(1983)	(1965)	(1984)
MIN	0.73	0.55	0.44	0.35	0.40	0.40	0.66	2.97	4.76	0.90	0.58	0.75
(WY)	(1978)	(1979)	(1979)	(1979)	(1965)	(1965)	(1975)	(1975)	(2002)	(2002)	(2002)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	660.80		1,732.68			
ANNUAL MEAN	1.81		4.75		4.35	
HIGHEST ANNUAL MEAN					8.05	1983
LOWEST ANNUAL MEAN					1.83	1977
HIGHEST DAILY MEAN	14	May 31	52	Jun 1	81	Jun 20, 1983
LOWEST DAILY MEAN	0.33	Sep 2	e0.58	Dec 27	0.32	Jan 7, 1979
ANNUAL SEVEN-DAY MINIMUM	0.34	Aug 31	e0.60	Dec 21	0.33	Jan 6, 1979
MAXIMUM PEAK FLOW			69	Jun 1	107	Jun 17, 1995
MAXIMUM PEAK STAGE			1.81	Jun 1	a1.86	Jun 17, 1995
ANNUAL RUNOFF (AC-FT)	1,310		3,440		3,150	
10 PERCENT EXCEEDS	6.0		20		15	
50 PERCENT EXCEEDS	0.67		0.98		1.1	
90 PERCENT EXCEEDS	0.47		0.62		0.58	

e Estimated.
a Maximum gage height, 2.22 ft, May 12, 1970, backwater from ice.

09059500 PINEY RIVER NEAR STATE BRIDGE, CO

LOCATION.--Lat 39°48'00", long 106°35'00", in SW¼NE¼ sec.16, T.3 S., R.82 W., Eagle County, Hydrologic Unit 14010001, on left bank at old bridge crossing, 1.2 mi downstream from Rock Creek, and 6.0 mi southeast of State Bridge.

DRAINAGE AREA.--86.2 mi^2.

PERIOD OF RECORD.--May 1944 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09059500

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 7,272.35 ft above NGVD of 1929. Prior to July 29, 1944, nonrecording gage, and July 29, 1944 to Oct. 24, 1947, water-stage recorder, at datum 2.38 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 400 acres of hay meadows upstream and 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	21	e20	e15	e10	e10	e12	16	133	e1,280	145	28	25
2	19	e20	e15	e10	e10	e12	18	119	e828	143	26	22
3	21	e20	e14	e10	e10	e13	18	121	e593	134	25	21
4	23	e20	e14	e10	e10	e12	17	131	e505	123	26	20
5	24	e21	e14	e9.8	e10	e12	17	113	e444	111	25	19
6	24	e19	e13	e9.8	e10	e12	16	100	e409	100	23	23
7	24	e19	e12	e9.8	e10	e12	18	97	e341	88	23	32
8	26	e18	e12	e10	e10	14	18	100	e304	75	28	37
9	25	e20	e12	e10	e11	14	18	95	e326	72	24	45
10	23	e19	e12	e10	e11	15	22	95	e349	66	22	52
11	21	e21	e12	e10	e11	16	31	87	395	65	20	54
12	19	e18	e12	e10	e11	17	40	105	385	61	21	51
13	17	e21	e12	e9.9	e11	18	48	158	356	58	21	58
14	16	e21	e11	e9.8	e11	20	80	211	347	55	19	48
15	16	e20	e12	e9.8	e11	20	98	307	334	52	17	39
16	15	e20	e12	e9.6	e11	21	83	397	343	52	19	33
17	14	e21	e11	e9.9	e11	20	78	495	309	53	48	31
18	14	e19	e11	e10	e11	21	74	572	306	56	63	29
19	13	e19	e11	e10	e11	19	66	572	298	64	51	28
20	13	e18	e11	e10	e12	20	60	579	306	56	36	27
21	12	e18	e11	e10	e12	20	65	578	275	49	30	24
22	13	e17	e11	e10	e11	20	78	584	254	44	27	23
23	16	e16	e11	e10	e11	21	84	618	247	41	27	21
24	17	e16	e11	e10	e11	22	76	568	226	39	28	20
25	17	e16	e11	e10	e12	22	74	e599	201	38	26	19
26	15	e16	e11	e10	e12	21	106	e596	176	37	28	19
27	17	e16	e11	e10	e12	21	141	e595	173	38	26	18
28	16	e16	e11	e10	e12	21	156	e928	173	35	25	18
29	17	e15	e11	e10	---	25	159	e981	165	35	23	18
30	e17	e15	e10	e10	---	20	155	e975	153	34	25	17
31	e18	---	e11	e10	---	16	---	e1,110	---	31	29	---
TOTAL	563	555	368	308.4	306	549	1,930	12,719	10,801	2,050	859	891
MEAN	18.2	18.5	11.9	9.95	10.9	17.7	64.3	410	360	66.1	27.7	29.7
MAX	26	21	15	10	12	25	159	1,110	1,280	145	63	58
MIN	12	15	10	9.6	10	12	16	87	153	31	17	17
AC-FT	1,120	1,100	730	612	607	1,090	3,830	25,230	21,420	4,070	1,700	1,770

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

MEAN	19.9	17.8	15.0	13.5	13.2	15.7	54.7	264	339	108	31.6	18.4
MAX	62.9	34.1	24.6	20.0	24.5	35.3	167	495	656	379	94.9	46.1
(WY)	(1962)	(1985)	(1985)	(1966)	(1986)	(1986)	(1962)	(1958)	(1957)	(1983)	(1983)	(1984)
MIN	6.72	8.68	7.19	7.44	7.86	9.18	16.8	99.0	74.1	14.8	6.22	4.00
(WY)	(1978)	(1980)	(1980)	(1980)	(1980)	(1980)	(1961)	(1977)	(1954)	(1977)	(1954)	(1944)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1944 - 2003	
ANNUAL TOTAL	12,970.4		31,899.4			
ANNUAL MEAN	35.5		87.4		76.0	
HIGHEST ANNUAL MEAN					127	1984
LOWEST ANNUAL MEAN					27.2	1977
HIGHEST DAILY MEAN	229	May 31	e1,280	Jun 1	e1,300	May 25, 1984
LOWEST DAILY MEAN	5.8	Sep 3	e9.6	Jan 16	1.9	Sep 1, 1954
ANNUAL SEVEN-DAY MINIMUM	6.1	Aug 31	e9.9	Jan 11	2.3	Sep 17, 1954
MAXIMUM PEAK FLOW			1,400	Jun 1	1,400	Jun 1, 2003
MAXIMUM PEAK STAGE			a5.66	Jun 1	a,b5.66	Jun 1, 2003
ANNUAL RUNOFF (AC-FT)	25,730		63,270		55,070	
10 PERCENT EXCEEDS	110		300		251	
50 PERCENT EXCEEDS	15		21		19	
90 PERCENT EXCEEDS	9.7		10		11	

e Estimated.
a From crest-stage gage.
b Maximum gage height, 5.82 ft, Jun 27, 1983, from peak stage indicator, but may have been higher May 25, 1984.

09061600 EAST FORK EAGLE RIVER NEAR CLIMAX, CO

LOCATION.--Lat 39°24'37", long 106°14'57", in NW¼SW¼ sec.29, T.7 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.9 mi upstream from Sheep Gulch, and 4.5 mi northwest of Climax.

DRAINAGE AREA.--7.78 mi^2.

PERIOD OF RECORD.--June 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=09061600

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 10,000 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for discharges above 45 ft^3/s, which are fair, and estimated daily discharges and the period June 13-27, which are poor. Transbasin diversion upstream from station from Robinson Reservoir, (capacity 2,520 acre-ft) to Tenmile Creek for mining development. 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	0.94	1.1	e0.52	e0.47	e3.9	e0.47	e0.37	2.5	48	8.9	1.9	1.1
2	1.1	e0.99	e0.52	e0.47	e4.0	e0.47	e0.38	2.3	44	8.2	1.8	0.96
3	1.5	e0.96	e0.51	e2.6	e3.7	e0.99	e0.38	2.4	50	7.6	1.9	0.95
4	1.2	0.95	e0.50	e3.9	e3.7	e0.94	e0.38	2.7	47	7.1	2.0	0.94
5	1.2	0.95	e0.49	e4.8	e3.4	e0.67	e0.38	2.5	45	6.6	1.8	0.93
6	1.2	0.93	e0.49	e3.7	e3.6	e2.5	e0.37	2.5	39	6.1	1.6	1.4
7	1.2	e0.86	e0.49	e4.1	e3.8	e0.91	e0.36	2.5	42	5.6	1.5	1.7
8	1.0	e0.72	e0.49	e4.1	e3.9	e0.79	e0.36	2.6	31	5.1	1.9	1.5
9	2.3	e0.69	e0.47	e3.8	e3.7	e0.76	0.75	2.6	27	4.6	2.0	2.2
10	4.7	e0.71	e0.47	e3.5	e4.1	e1.2	0.98	2.6	29	4.2	1.8	2.1
11	1.7	e0.68	e0.47	e0.97	e3.8	e1.3	1.2	2.7	31	3.9	1.6	1.9
12	1.5	e0.60	e0.48	e0.48	e3.7	e0.43	1.2	3.2	30	3.6	1.7	1.5
13	1.2	e0.61	e0.48	e0.48	e3.7	e0.41	1.4	4.4	33	3.4	1.6	1.3
14	1.2	e0.59	e0.48	e0.47	e3.6	e0.41	1.8	5.4	32	3.2	1.4	1.1
15	1.1	e0.59	e0.75	e0.47	e3.8	e0.41	1.8	6.7	26	3.7	1.3	1.0
16	1.1	e0.59	e2.8	e0.47	e3.7	e0.39	1.5	9.1	22	3.8	1.4	0.94
17	1.0	e0.59	e3.6	e0.47	e2.8	e0.39	1.4	12	21	3.4	1.9	0.88
18	0.96	e0.58	e0.77	e0.47	e1.9	e0.40	1.4	13	21	3.3	2.7	0.97
19	0.90	e0.57	e0.48	e0.47	e0.47	e0.39	1.3	13	19	3.1	1.9	0.99
20	0.89	e0.56	e0.48	e0.47	e0.47	e0.38	1.2	13	19	2.8	1.2	1.0
21	0.87	e0.56	e0.48	e0.47	e0.47	e0.38	1.2	15	16	2.7	1.1	0.96
22	0.91	e0.56	e0.47	e0.47	e0.47	e0.38	1.2	19	15	2.5	1.2	0.90
23	1.1	e0.56	e0.47	e0.47	e0.47	e0.39	1.2	21	17	2.3	1.5	0.87
24	1.1	e0.56	e0.47	e0.47	e0.47	e0.39	1.3	22	16	2.2	1.6	0.84
25	1.1	e0.56	e0.47	e0.47	e0.47	e0.39	1.5	24	14	2.2	1.6	0.80
26	1.0	e0.56	e0.47	e0.47	e0.47	e0.38	2.3	28	13	2.1	1.5	0.77
27	1.1	e0.55	e0.47	e1.2	e0.87	e0.37	2.6	37	12	2.9	1.3	0.73
28	1.1	e0.54	e0.47	e0.47	e0.78	e0.37	2.7	44	11	3.2	1.3	0.70
29	1.1	e0.54	e0.47	e1.0	---	e0.36	2.9	55	10	2.9	1.2	0.69
30	1.1	e0.53	e0.47	e4.0	---	e0.35	2.8	48	9.6	2.3	1.4	0.65
31	1.1	---	e0.47	e3.9	---	e0.35	---	48	---	2.0	1.3	---
TOTAL	39.47	20.34	20.92	50.05	70.21	18.72	38.61	468.7	789.6	125.5	49.9	33.27
MEAN	1.27	0.68	0.67	1.61	2.51	0.60	1.29	15.1	26.3	4.05	1.61	1.11
MAX	4.7	1.1	3.6	4.8	4.1	2.5	2.9	55	50	8.9	2.7	2.2
MIN	0.87	0.53	0.47	0.47	0.47	0.35	0.36	2.3	9.6	2.0	1.1	0.65
AC-FT	78	40	41	99	139	37	77	930	1,570	249	99	66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2003, BY WATER YEAR (WY)

MEAN	1.27	0.68	0.67	1.61	2.51	0.60	1.29	15.1	26.3	3.04	1.09	0.89
MAX	1.27	0.68	0.67	1.61	2.51	0.60	1.29	15.1	26.3	4.05	1.61	1.11
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)
MIN	1.27	0.68	0.67	1.61	2.51	0.60	1.29	15.1	26.3	2.03	0.56	0.66
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2003 WATER YEAR		WATER YEARS 2002 - 2003	
ANNUAL TOTAL	1,725.29			
ANNUAL MEAN	4.73		4.73	
HIGHEST ANNUAL MEAN			4.73	2003
LOWEST ANNUAL MEAN			4.73	2003
HIGHEST DAILY MEAN	55	May 29	55	May 29, 2003
LOWEST DAILY MEAN	e0.35	Mar 30	a0.13	Sep 5, 2002
ANNUAL SEVEN-DAY MINIMUM	0.36	Mar 26	0.14	Sep 1, 2002
MAXIMUM PEAK FLOW	79	May 29	79	May 29, 2003
MAXIMUM PEAK STAGE	b2.48	May 29	b2.48	May 29, 2003
ANNUAL RUNOFF (AC-FT)	3,420		3,420	
10 PERCENT EXCEEDS	13		13	
50 PERCENT EXCEEDS	1.2		1.2	
90 PERCENT EXCEEDS	0.47		0.47	

e Estimated.
a Also occurred Sep 6, 2002.
b Maximum gage height, 2.85 ft, Feb 7, 2003, backwater from ice.

392511106164000 EAST FORK EAGLE RIVER NEAR RED CLIFF, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 39°25'11", long 106°16'40", in SE¼SE¼ sec. 24, T 7 S. R. 80 W., Eagle County, Hydrologic Unit 14010003, at Resolution Road No. 702, 0.25 mi east of East Fork Eagle ford on East Fork Eagle Road, 1.0 mi west of Camp Hale Campground, and 10.2 mi south-southeast of Red Cliff.

DRAINAGE AREA.--10.9 mi^2.

PERIOD OF RECORD.--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=392511106164000

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)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
NOV 13...	0900	0.63	9.5	7.9	182	0.0	94	22.3	9.40	0.75	0.1	1.76	82
FEB 20...	0936	0.54	9.2	8.0	219	0.0	--	--	--	--	--	--	86
APR 16...	0930	1.6	9.8	8.2	222	1.0	110	26.8	11.2	0.96	0.1	2.10	94
MAY 21...	1500	29	8.3	7.9	160	7.3	--	--	--	--	--	--	68
JUN 06...	0910	49	9.1	8.1	148	4.2	75	17.7	7.51	0.83	0.0	0.99	56
AUG 13...	0955	3.0	8.4	8.1	172	8.0	85	20.0	8.58	0.87	0.1	1.67	73

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

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)
NOV 13...	100	0.26	<0.17	5.5	8.8	98	0.13	0.17	E.05	E.06	<0.015	0.087	<0.002
FEB 20...	105	--	--	--	--	--	--	--	E.06	<0.10	<0.015	0.066	<0.002
APR 16...	115	0.83	0.20	5.1	19.4	124	0.17	0.52	<0.10	E.06	<0.015	0.089	<0.002
MAY 21...	83	--	--	--	--	--	--	--	0.16	0.23	<0.015	0.029	<0.002
JUN 06...	69	0.34	0.2	4.3	15.6	81	0.11	10.8	0.14	0.18	<0.015	0.042	<0.002
AUG 13...	89	0.26	<0.2	5.5	7.9	89	0.12	0.71	E.07	E.09	<0.015	0.051	<0.002

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

Date	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV 13...	<0.007	<0.004	<0.004	<1	<1
FEB 20...	<0.007	<0.004	<0.004	<1	<1
APR 16...	<0.007	E.002	E.003	<1	<1
MAY 21...	<0.007	0.005	0.009	<1	<1
JUN 06...	<0.007	<0.004	0.010	<1	--
AUG 13...	<0.007	<0.004	E.004	43	46

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

392511106164000 EAST FORK EAGLE RIVER NEAR RED CLIFF, CO.—Continued

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

Date	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
NOV 13...	<0.2	<1.2	280	<1	32.0	35.4	<0.02	<3	<0.3	<24
APR 16...	<0.2	<1.2	180	<1	10.3	14.4	<0.02	<3	<0.3	<24
JUN 06...	<0.2	<1.2	550	<1	5.1	12.2	<0.02	<3	<0.3	E2
AUG 13...	<0.2	<1.2	270	<1	20.6	21.8	<0.02	<3	<0.3	<3

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

09063000 EAGLE RIVER AT RED CLIFF, CO

LOCATION.--Lat 39°30'30", long 106°21'58", in NW¼SW¼ sec.20, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank at Red Cliff, and 0.3 mi upstream from Turkey Creek.

DRAINAGE AREA.--70.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1910 to September 1925, May 1944 to current year. Monthly discharge only for some periods, published in WSP 1313. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09063000

REVISED RECORDS.--WSP 2124: Drainage area. WRD Colo. 1972: 1971.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,653.80 ft above NGVD of 1929, (levels by U.S. Bureau of Reclamation). Jan. 8, 1911 to Sept. 30, 1925, nonrecording gage at bridge 0.3 mi downstream at different datum. May 24, 1944 to Oct. 12, 1952, water-stage recorder at site 50 ft downstream at datum 1.46 ft lower. Oct. 13, 1952 to May 5, 1982, at site 250 ft downstream at datum 5.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Columbine, Ewing, and Wurtz ditches. Transbasin diversion upstream from station from Robinson Reservoir (capacity, 2,520 acre-ft) to Tenmile Creek for mining development. Small diversions for irrigation of 400 acres upstream from station.

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	8.3	8.3	e9.2	e7.8	e7.3	e9.3	e13	55	375	55	16	11
2	9.0	8.2	e9.0	e8.0	e7.4	e9.2	e13	54	348	51	15	10
3	11	7.5	e8.9	e7.8	e7.4	e9.3	e10	57	328	48	15	10
4	11	e7.6	e8.7	e8.0	e7.4	e8.9	9.7	60	305	45	18	11
5	9.8	e9.6	e8.7	e7.7	e7.6	e9.2	e9.2	51	283	43	15	10
6	9.3	e8.3	e8.7	e7.7	e7.7	e9.2	9.1	47	248	40	15	12
7	8.8	e8.5	e8.7	e7.9	e7.3	e9.3	8.7	48	230	38	14	14
8	8.6	e7.0	e8.7	e8.4	e7.7	e10	e8.5	49	200	36	14	14
9	8.2	e9.6	e8.5	e8.7	e7.9	e10	e9.4	49	185	34	14	16
10	7.9	e8.6	e8.2	e8.9	e7.4	e10	11	50	182	32	13	19
11	7.5	e10	e8.4	e8.9	e7.7	e11	14	45	175	31	12	19
12	7.1	e8.9	e8.7	e8.5	e8.1	e12	15	51	167	30	14	15
13	6.7	e10	e9.0	e8.2	e7.6	e12	16	64	175	28	15	13
14	6.7	e9.9	e9.0	e7.9	e8.2	e12	20	68	161	27	14	12
15	6.6	e10	e9.0	e7.7	e7.9	e12	22	81	148	26	13	11
16	6.6	e10	e8.7	e7.7	e8.2	e12	20	95	143	26	13	11
17	6.6	e9.9	e8.7	e7.7	e8.9	e13	21	114	133	25	17	11
18	6.7	e9.5	e8.7	e8.0	e8.7	e12	21	121	126	24	20	10
19	6.6	e9.5	e8.7	e8.2	e8.7	e11	19	126	122	24	17	10
20	6.5	e9.5	e8.7	e8.2	e9.0	e11	19	121	122	22	14	10
21	6.6	e9.4	e8.6	e8.0	e9.0	e12	20	126	113	21	12	10
22	6.6	e9.4	e8.5	e7.5	e8.9	e12	24	142	101	20	12	10
23	6.1	e9.2	e8.5	e7.3	e8.9	e12	27	168	94	19	13	10
24	6.8	e8.9	e8.5	e7.2	e8.9	e13	24	199	86	18	14	10
25	7.2	e8.9	e8.4	e7.0	e9.2	e13	24	214	80	19	14	10
26	6.9	e8.2	e8.2	e6.8	e9.3	e12	29	236	75	21	14	10
27	7.9	e8.7	e8.2	e6.8	e9.3	e12	36	255	71	20	13	10
28	7.7	e8.9	e8.2	e6.9	e9.3	e11	44	293	67	21	12	10
29	7.4	e8.9	e8.2	e6.9	---	e11	52	338	63	19	11	9.9
30	7.1	e9.2	e7.8	e6.6	---	e11	58	347	59	18	11	9.8
31	7.9	---	e8.0	e7.1	---	e12	---	336	---	16	12	---
TOTAL	237.7	270.1	266.0	240.0	230.9	343.4	626.6	4,060	4,965	897	436	348.7
MEAN	7.67	9.00	8.58	7.74	8.25	11.1	20.9	131	166	28.9	14.1	11.6
MAX	11	10	9.2	8.9	9.3	13	58	347	375	55	20	19
MIN	6.1	7.0	7.8	6.6	7.3	8.9	8.5	45	59	16	11	9.8
AC-FT	471	536	528	476	458	681	1,240	8,050	9,850	1,780	865	692

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2003, BY WATER YEAR (WY)

MEAN	16.0	13.4	11.2	10.4	10.2	11.8	32.0	154	194	55.3	25.2	18.0
MAX	31.8	25.2	18.8	16.3	19.7	25.6	81.3	387	422	161	54.5	39.0
(WY)	(1962)	(1985)	(1985)	(1918)	(1916)	(1916)	(1916)	(1911)	(1912)	(1995)	(1945)	(1921)
MIN	7.67	8.47	7.06	5.07	4.74	5.68	9.48	36.5	27.4	12.5	6.87	7.32
(WY)	(2003)	(1965)	(1989)	(1989)	(1989)	(1981)	(1975)	(1981)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1911 - 2003	
ANNUAL TOTAL	5,192.9		12,921.4			
ANNUAL MEAN	14.2		35.4		46.0	
HIGHEST ANNUAL MEAN					90.2	1912
LOWEST ANNUAL MEAN					14.8	2002
HIGHEST DAILY MEAN	46	May 21	375	Jun 1	900	Jun 5, 1912
LOWEST DAILY MEAN	4.5	Aug 28	6.1	Oct 23	1.0	Oct 15, 1917
ANNUAL SEVEN-DAY MINIMUM	5.0	Sep 1	6.5	Oct 17	3.8	Jan 31, 1989
MAXIMUM PEAK FLOW			416	Jun 1	1,010	Jun 5, 1912
MAXIMUM PEAK STAGE			4.97	Jun 1	4.00	Jun 5, 1912
ANNUAL RUNOFF (AC-FT)	10,300		25,630		33,350	
10 PERCENT EXCEEDS	35		106		127	
50 PERCENT EXCEEDS	8.8		11		15	
90 PERCENT EXCEEDS	6.7		7.6		9.0	

e Estimated.
a Also occurred Oct 16, 1917.
b Maximum discharge observed, site and datum then in use, from rating curve extended above 500 ft^3/s.
c Maximum gage height recorded, 6.43 ft, May 24, 1984.

09063000 EAGLE RIVER AT RED CLIFF, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--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=09063000

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)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
NOV													
13...	1245	11	12.0	8.0	234	0.5	120	28.0	13.0	0.83	0.1	2.93	107
FEB													
20...	1155	12	10.0	8.3	225	0.0	120	26.1	12.2	0.86	0.1	2.90	111
APR													
16...	1212	19	9.2	8.5	216	5.7	100	23.8	10.9	0.92	0.2	3.64	94
MAY													
21...	1840	123	8.0	8.3	153	10.2	79	17.9	8.26	0.82	0.1	1.98	68
JUN													
06...	1115	245	9.0	8.0	140	5.9	71	16.4	7.37	0.68	0.1	1.31	55
AUG													
13...	1345	14	7.2	8.5	241	17.2	130	29.3	13.0	1.05	0.1	2.76	110

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

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)
NOV													
13...	130	--	2.10	<0.17	7.2	12.2	130	0.18	3.76	<0.10	E.09	<0.015	<0.022
FEB													
20...	135	--	1.07	<0.17	7.8	11.2	129	0.17	4.06	E.06	<0.10	<0.015	0.032
APR													
16...	108	3	5.98	<0.17	7.3	10.2	119	0.16	6.10	E.08	0.11	<0.015	0.036
MAY													
21...	83	--	2.32	<0.2	6.1	8.1	86	0.12	28.7	0.15	0.23	<0.015	0.031
JUN													
06...	67	--	0.96	<0.2	5.6	7.6	73	0.10	48.2	0.13	0.18	<0.015	0.031
AUG													
13...	116	9	1.91	<0.2	7.5	9.9	131	0.18	4.96	E.06	E.10	<0.015	0.034

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
NOV							
13...	<0.002	<0.007	<0.004	0.010	1.5	<1	<1
FEB							
20...	<0.002	<0.007	<0.004	0.007	--	<1	<1
APR							
16...	<0.002	<0.007	E.003	0.008	2.7	<1	E1
MAY							
21...	E.002	<0.007	0.005	0.021	--	E1	<1
JUN							
06...	<0.002	<0.007	E.003	0.016	3.4	<1	--
AUG							
13...	<0.002	<0.007	E.002	0.005	1.3	E1	E3

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

09063000 EAGLE RIVER AT RED CLIFF, CO—Continued

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

Date	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
NOV 13...	<0.2	<1.2	230	<1	5.8	23.1	<0.02	<3	<0.3	<24
APR 16...	<0.2	<1.2	200	<1	3.5	9.7	<0.02	<3	<0.3	<24
JUN 06...	<0.2	<1.2	220	<1	9.8	21.2	<0.02	<3	<0.3	<3
AUG 13...	0.3	E.6	110	<1	5.4	11.2	<0.02	<3	<0.3	<3

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

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT 03...	1225	12	253	7.5	JUN 11...	1425	170	148	8.7
JAN 17...	1120	8.0	231	0.3	JUL 03...	1205	50	194	10.5
MAY 29...	1130	316	116	7.8					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 13...	1245	11	0.5	--	7	0.20
FEB 20...	1155	12	0.0	--	5	0.15
APR 16...	1212	19	5.7	--	2	0.12
MAY 21...	1840	123	10.2	77	12	4.0
JUN 06...	1115	245	5.9	59	17	11
AUG 13...	1345	14	17.2	--	2	0.06

09063200 WEARYMAN CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'20", long 106°19'23", in SE¼SW¼ sec.15, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.15 mi upstream from mouth, 2.25 mi east of Red Cliff.

DRAINAGE AREA.--9.53 mi^2.

PERIOD OF RECORD.--October 1964 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09063200

GAGE.--Water-stage recorder. Elevation of gage is 9,280 ft above NGVD of 1929, from topographic map. Prior to Aug. 7, 1992, at site 0.25 mi upstream, at different datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	1.4	e1.1	e1.0	e0.89	e0.86	e1.3	e7.3	e85	20	5.5	3.8
2	1.9	1.4	e1.1	e1.0	e0.90	e0.85	e1.4	e7.2	e75	19	5.4	3.6
3	e2.1	e1.4	e1.1	e1.0	e0.89	e0.86	e1.5	e6.8	e68	e18	5.9	3.5
4	e1.9	e1.4	e1.1	e1.0	e0.89	e0.86	e1.3	e6.8	e69	e17	5.9	3.4
5	e1.9	e1.4	e1.1	e1.0	e0.88	e0.85	e1.3	e6.3	65	e16	5.3	3.4
6	e1.9	e1.3	e1.1	e0.98	e0.85	e0.85	e1.3	e5.9	61	e15	4.9	4.1
7	e1.8	e1.3	e1.1	e0.98	e0.82	e0.86	e1.3	e5.5	57	e14	4.7	4.0
8	e1.8	e1.2	e1.0	e0.98	e0.84	e0.87	e1.3	e5.3	51	e13	4.7	3.7
9	e1.7	e1.2	e1.0	e0.97	e0.88	e0.88	e1.4	e5.2	50	e12	4.5	4.1
10	1.7	e1.3	e1.0	e0.97	e0.88	e0.90	e1.7	e5.2	49	e12	4.5	4.2
11	1.6	e1.3	e1.0	e0.97	e0.87	e0.93	e2.2	e5.1	e50	e11	4.4	4.0
12	1.6	e1.2	e1.1	e0.97	e0.86	e0.96	e2.5	e5.4	e51	e11	4.4	3.9
13	1.5	e1.2	e1.0	e0.94	e0.87	e1.0	e2.9	e6.3	e53	e10	4.4	3.7
14	1.5	e1.2	e1.0	e0.95	e0.87	e1.1	e3.8	e7.8	e49	e9.7	4.3	3.5
15	1.5	e1.2	e1.0	e0.95	e0.86	e1.2	e4.2	e10	e47	e9.4	4.3	3.4
16	1.5	e1.2	e1.0	e0.92	e0.85	e1.2	e4.0	e13	e46	e9.1	4.4	3.3
17	1.5	e1.2	e1.1	e0.93	e0.86	e1.1	e3.8	e17	e44	e8.7	4.5	3.2
18	1.5	e1.2	e1.1	e0.93	e0.86	e1.1	e3.6	e18	e43	e8.5	5.1	3.2
19	1.5	e1.1	e1.1	e0.92	e0.84	e1.1	e3.6	e18	e43	e7.9	4.3	3.2
20	1.6	e1.1	e1.0	e0.92	e0.83	e1.0	e3.4	e17	e44	e7.6	4.2	3.1
21	1.4	e1.1	e1.0	e0.90	e0.86	e1.1	e3.6	e17	e41	e7.3	4.2	3.0
22	1.4	e1.1	e1.0	e0.89	e0.86	e1.1	e3.7	e19	e38	e7.0	4.2	3.0
23	1.5	e1.1	e1.0	e0.89	e0.86	e1.2	e4.2	21	e35	e6.8	4.3	2.9
24	1.5	e1.1	e1.0	e0.89	e0.87	e1.3	e4.6	24	e32	e6.5	4.2	2.9
25	1.4	e1.1	e1.0	e0.89	e0.87	e1.2	e4.6	26	e30	e6.9	4.2	2.9
26	1.4	e1.1	e1.0	e0.89	e0.86	e1.2	e5.1	27	e28	e6.6	4.2	2.8
27	1.5	e1.1	e1.0	e0.89	e0.86	e1.2	e6.3	33	27	e6.6	4.1	2.6
28	1.4	e1.1	e1.0	e0.89	e0.86	e1.1	e7.2	40	25	e6.3	4.0	2.3
29	1.4	e1.1	e1.0	e0.89	---	e1.1	e7.3	e48	24	e6.5	3.9	2.3
30	e1.3	e1.1	e1.0	e0.89	---	e1.0	e7.3	e68	22	e6.1	4.0	2.2
31	e1.4	---	e1.0	e0.89	---	e1.1	---	e79	---	5.8	4.0	---
TOTAL	49.4	36.2	32.1	29.08	24.19	31.93	101.7	581.1	1,402	321.3	140.9	99.2
MEAN	1.59	1.21	1.04	0.94	0.86	1.03	3.39	18.7	46.7	10.4	4.55	3.31
MAX	2.1	1.4	1.1	1.0	0.90	1.3	7.3	79	85	20	5.9	4.2
MIN	1.3	1.1	1.0	0.89	0.82	0.85	1.3	5.1	22	5.8	3.9	2.2
AC-FT	98	72	64	58	48	63	202	1,150	2,780	637	279	197

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)

MEAN	2.75	1.94	1.56	1.36	1.27	1.38	2.22	12.9	44.5	20.4	6.60	3.79
MAX	5.02	2.86	2.48	1.95	1.80	2.28	4.66	34.4	90.2	55.5	17.4	9.57
(WY)	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	(1984)	(1984)	(1995)	(1984)	(1984)
MIN	1.59	1.21	1.04	0.87	0.45	0.80	1.13	4.96	12.8	3.98	2.11	1.82
(WY)	(2003)	(2003)	(2003)	(1992)	(1967)	(1965)	(1968)	(1995)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	1,151.9		2,849.10			
ANNUAL MEAN	3.16		7.81		8.39	
HIGHEST ANNUAL MEAN					17.4	1984
LOWEST ANNUAL MEAN					3.29	2002
HIGHEST DAILY MEAN	19	Jun 3	e85	Jun 1	140	Jun 20, 1983
LOWEST DAILY MEAN	e1.0	Dec 8	e0.82	Feb 7	0.30	Feb 21, 1967
ANNUAL SEVEN-DAY MINIMUM	e1.0	Dec 20	e0.85	Feb 15	0.40	Feb 8, 1967
MAXIMUM PEAK FLOW			unknown		a155	Jun 20, 1983
MAXIMUM PEAK STAGE			unknown		a3.61	Jun 20, 1983
ANNUAL RUNOFF (AC-FT)	2,280		5,650		6,080	
10 PERCENT EXCEEDS	7.9		24		24	
50 PERCENT EXCEEDS	1.5		1.7		2.4	
90 PERCENT EXCEEDS	1.1		0.89		1.2	

e Estimated.
a Site and datum then in use.

09063400 TURKEY CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'22", long 106°20'08", in NW¼SW¼ sec.16, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 400 ft downstream from Lime Creek, 1.9 mi northeast of Red Cliff, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--23.8 mi^2.

PERIOD OF RECORD.--October 1963 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09063400

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 8,918 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for Nov. 1 to Apr. 9, which are fair, and estimated daily discharges, and the period May 29 to June 11, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	4.0	2.7	2.5	2.3	2.1	3.0	17	272	e52	15	8.1
2	4.7	3.9	2.7	2.5	2.3	2.1	3.2	17	243	e49	14	7.9
3	5.0	e3.9	2.6	2.5	2.3	2.1	3.4	16	227	e46	15	7.7
4	4.7	e3.9	2.6	2.4	e2.2	2.1	e3.1	16	234	44	15	7.9
5	4.7	e3.8	2.6	2.4	2.2	2.1	e3.0	16	241	42	13	7.8
6	4.6	e3.7	2.6	2.4	2.1	2.1	3.0	15	214	39	13	9.9
7	4.5	e3.5	2.6	2.4	2.0	2.1	3.0	14	207	37	12	9.3
8	4.5	3.2	2.5	2.4	2.0	2.1	e3.0	13	173	35	12	8.4
9	4.3	e3.2	2.5	2.4	2.2	2.2	e3.1	13	166	33	11	9.3
10	4.2	e3.2	2.4	2.4	2.2	2.2	3.8	13	152	31	11	10
11	4.2	3.2	2.5	2.4	2.2	e2.3	4.8	12	154	29	11	9.3
12	4.1	e3.2	2.5	2.4	2.2	e2.3	5.3	13	e156	28	11	8.9
13	3.9	3.0	2.5	2.4	2.2	e2.4	6.1	16	e168	26	11	8.5
14	4.0	3.0	2.4	2.4	2.2	e2.6	8.4	20	e156	25	10	8.0
15	3.9	3.0	2.4	2.4	2.1	e2.6	9.2	27	e145	25	10	7.8
16	4.0	e3.0	2.5	2.3	2.1	e2.6	8.8	35	e140	24	11	7.5
17	3.9	e3.0	2.5	e2.3	2.1	e2.6	8.7	50	e131	23	12	7.4
18	3.9	2.9	2.5	2.3	2.1	2.5	8.5	55	e124	22	14	7.4
19	3.8	2.8	2.5	2.3	2.0	2.4	8.1	53	e119	21	11	7.3
20	3.8	2.8	2.5	2.3	2.0	e2.3	7.9	53	e119	20	9.7	7.2
21	3.7	2.8	2.5	2.2	2.1	2.5	8.0	55	e111	19	9.4	7.1
22	3.8	2.8	2.4	2.2	2.1	2.6	8.8	63	e98	18	9.5	7.0
23	4.0	2.8	2.5	2.2	2.1	2.8	9.4	73	e90	18	9.5	6.7
24	4.0	2.8	2.5	2.2	2.1	2.9	11	83	e84	17	9.1	6.5
25	3.8	e2.8	2.5	2.2	2.2	2.8	10	94	e79	18	9.3	6.4
26	3.7	e2.8	2.5	2.2	2.1	e2.7	12	98	e73	17	8.9	6.4
27	4.1	2.7	2.5	2.2	2.1	e2.7	14	111	e69	17	9.1	6.4
28	3.9	2.7	2.5	2.2	2.1	e2.5	16	133	e65	16	8.9	6.4
29	3.7	2.7	2.5	2.2	---	e2.5	17	191	e60	17	8.4	6.3
30	3.5	2.6	2.5	2.2	---	2.4	18	242	e56	16	8.7	6.2
31	3.9	---	2.5	2.3	---	2.6	---	257	---	15	8.5	---
TOTAL	127.3	93.7	78.0	72.1	59.9	74.8	231.6	1,884	4,326	839	341.0	231.0
MEAN	4.11	3.12	2.52	2.33	2.14	2.41	7.72	60.8	144	27.1	11.0	7.70
MAX	5.0	4.0	2.7	2.5	2.3	2.9	18	257	272	52	15	10
MIN	3.5	2.6	2.4	2.2	2.0	2.1	3.0	12	56	15	8.4	6.2
AC-FT	252	186	155	143	119	148	459	3,740	8,580	1,660	676	458

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	6.13	4.58	3.65	3.20	3.01	3.50	7.74	48.1	117	45.6	13.8	7.95
MAX	12.2	9.19	5.76	4.96	4.64	6.36	23.1	103	274	139	39.1	19.8
(WY)	(1985)	(1985)	(1985)	(1985)	(2000)	(1985)	(1985)	(1984)	(1984)	(1995)	(1984)	(1984)
MIN	3.77	2.84	2.52	1.92	1.00	2.10	2.66	17.8	31.3	11.0	5.82	4.23
(WY)	(1978)	(1978)	(2003)	(1987)	(1964)	(1981)	(1973)	(1995)	(2002)	(1977)	(2002)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	3,290.6		8,358.4			
ANNUAL MEAN	9.02		22.9		22.1	
HIGHEST ANNUAL MEAN					49.4	1984
LOWEST ANNUAL MEAN					9.21	2002
HIGHEST DAILY MEAN	46	Jun 3	272	Jun 1	415	Jun 17, 1965
LOWEST DAILY MEAN	e1.8	Mar 15	2.0	Feb 7	a1.0	Jan 21, 1964
ANNUAL SEVEN-DAY MINIMUM	e1.9	Mar 15	2.1	Feb 15	1.0	Jan 21, 1964
MAXIMUM PEAK FLOW			349	Jun 1	b556	Jun 8, 1985
MAXIMUM PEAK STAGE			3.34	Jun 1	c2.87	Jun 8, 1985
ANNUAL RUNOFF (AC-FT)	6,530		16,580		15,980	
10 PERCENT EXCEEDS	25		67		67	
50 PERCENT EXCEEDS	4.3		4.2		5.8	
90 PERCENT EXCEEDS	2.5		2.2		2.8	

e Estimated.
a Also occurred Jan 22 to Feb 29, 1964.
b From rating curve extended above 325 ft^3/s.
c Maximum gage height for period of record, 3.34 ft, Jun 1, 2003.

09063900 MISSOURI CREEK NEAR GOLD PARK, CO

LOCATION.--Lat 39°23'25", long 106°28'10", Eagle County, Hydrologic Unit 14010003, on left bank 50 ft downstream from road culvert, 0.6 mi upstream from Fancy Creek, 2.2 mi southwest of Gold Park, and 10 mi southwest of Red Cliff.

DRAINAGE AREA.--6.39 mi^2.

PERIOD OF RECORD.--August 1972 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09063900

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 9,980 ft above NGVD of 1929, from topographic map.

REMARKS.-- Records good except for the period Apr. 9-12 , which is fair, and estimated daily discharges, which are poor. Transmountain diversion upstream from station to Arkansas River basin through Homestake Tunnel. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	e2.5	e1.7	e1.1	e0.72	e0.66	e1.3	7.2	96	e7.0	8.5	3.4
2	10	e2.5	e1.6	e0.95	e0.72	e0.67	e1.4	6.0	49	e6.4	8.1	3.0
3	10	e2.5	e1.4	e0.98	e0.72	e0.66	e1.5	5.8	34	5.4	9.5	3.1
4	9.3	e2.5	e1.5	e0.98	e0.72	e0.66	e1.3	5.8	24	5.6	11	3.2
5	8.8	e2.5	e1.5	e0.96	e0.72	e0.65	e1.2	5.6	16	5.5	8.4	2.9
6	7.9	e2.6	e1.4	e0.96	e0.71	e0.66	e1.1	5.1	11	5.3	7.2	3.6
7	7.9	e2.5	e1.4	e0.92	e0.64	e0.66	e1.1	4.5	9.9	5.1	6.8	4.9
8	7.5	e2.3	e1.3	e0.93	e0.65	e0.69	e1.1	4.2	9.7	5.0	6.6	5.2
9	6.6	e2.2	e1.3	e0.94	e0.68	e0.73	1.3	4.0	19	4.9	5.9	9.7
10	5.8	e2.2	e1.3	e0.98	e0.68	e0.74	1.8	3.8	35	4.8	5.6	14
11	5.0	e2.2	e1.3	e0.95	e0.68	e0.79	2.7	3.8	29	4.6	5.6	14
12	4.4	e2.2	e1.3	e0.95	e0.67	e0.82	3.4	4.7	25	4.6	5.8	15
13	4.2	e2.2	e1.3	e0.95	e0.69	e0.83	3.7	7.1	29	4.5	5.2	17
14	3.6	e2.2	e1.3	e0.98	e0.69	e0.93	5.4	9.0	20	4.6	4.8	12
15	3.4	e2.2	e1.3	e0.92	e0.69	e1.00	6.8	11	24	4.1	4.2	9.5
16	2.9	e2.2	e1.3	e0.83	e0.69	e0.99	6.5	14	17	4.0	4.1	7.7
17	3.0	e2.2	e1.3	e0.83	e0.69	e0.98	5.5	19	12	3.9	5.7	6.5
18	2.7	e2.1	e1.3	e0.86	e0.69	e0.98	4.9	20	13	3.8	8.9	6.0
19	3.0	e2.1	e1.1	e0.89	e0.69	e0.93	4.3	19	12	3.7	7.2	5.4
20	2.5	e2.0	e1.1	e0.85	e0.69	e0.92	3.8	16	21	3.6	5.4	4.8
21	2.0	e2.0	e1.2	e0.83	e0.69	e0.98	3.4	16	12	3.5	4.7	4.2
22	2.1	e2.0	e1.2	e0.81	e0.65	e0.97	3.2	24	12	3.5	4.4	3.8
23	2.3	e1.9	e1.1	e0.81	e0.64	e1.1	3.3	41	10	4.2	4.7	3.4
24	2.5	e1.9	e1.1	e0.78	e0.64	e1.2	4.1	43	7.2	13	4.4	3.1
25	2.7	e1.8	e1.2	e0.79	e0.66	e1.1	4.7	46	6.1	12	5.0	2.8
26	2.8	e1.6	e1.1	e0.79	e0.67	e1.1	5.2	47	5.9	14	4.6	2.6
27	2.6	e1.6	e1.1	e0.76	e0.68	e1.1	5.8	65	e7.0	14	3.9	2.5
28	2.5	e1.6	e1.1	e0.75	e0.69	e1.1	6.5	77	e7.5	13	4.0	2.4
29	2.5	e1.7	e1.1	e0.73	---	e1.1	7.2	89	e8.1	12	3.4	2.2
30	2.5	e1.7	e1.1	e0.72	---	e0.99	8.2	80	e8.1	10	3.9	2.0
31	e2.5	---	e1.1	e0.74	---	e1.1	---	68	---	9.0	4.2	---
TOTAL	148.5	63.7	39.4	27.22	19.15	27.79	111.7	771.6	589.5	204.6	181.7	179.9
MEAN	4.79	2.12	1.27	0.88	0.68	0.90	3.72	24.9	19.6	6.60	5.86	6.00
MAX	13	2.6	1.7	1.1	0.72	1.2	8.2	89	96	14	11	17
MIN	2.0	1.6	1.1	0.72	0.64	0.65	1.1	3.8	5.9	3.5	3.4	2.0
AC-FT	295	126	78	54	38	55	222	1,530	1,170	406	360	357

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2003, BY WATER YEAR (WY)

MEAN	3.27	1.84	1.12	0.81	0.69	0.84	2.87	15.5	30.5	19.4	8.89	4.95
MAX	7.29	3.59	2.73	1.66	1.47	1.75	7.02	41.7	79.0	78.6	29.1	9.46
(WY)	(1985)	(1997)	(1996)	(1996)	(1998)	(1998)	(1974)	(1984)	(1984)	(1984)	(1983)	(1984)
MIN	0.84	0.61	0.35	0.31	0.28	0.37	0.71	4.00	8.72	5.77	2.22	1.65
(WY)	(1980)	(1977)	(1977)	(1976)	(1977)	(1979)	(1983)	(1983)	(2002)	(2002)	(2002)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1972 - 2003	
ANNUAL TOTAL	1,532.07		2,364.76			
ANNUAL MEAN	4.20		6.48		7.59	
HIGHEST ANNUAL MEAN					20.6	1984
LOWEST ANNUAL MEAN					3.82	2002
HIGHEST DAILY MEAN	25	May 6	96	Jun 1	172	Jul 10, 1984
LOWEST DAILY MEAN	e0.48	Feb 20	e0.64	Feb 7	e,a0.24	Feb 12, 1977
ANNUAL SEVEN-DAY MINIMUM	0.48	Feb 17	0.66	Mar 1	0.25	Feb 7, 1977
MAXIMUM PEAK FLOW			150	May 29	b300	Jul 4, 1975
MAXIMUM PEAK STAGE			3.15	May 29	c3.19	Jul 4, 1975
ANNUAL RUNOFF (AC-FT)	3,040		4,690		5,500	
10 PERCENT EXCEEDS	9.7		13		19	
50 PERCENT EXCEEDS	2.4		2.9		2.3	
90 PERCENT EXCEEDS	0.53		0.72		0.56	

e Estimated.
a Also occurred Feb 13, 1977.
b From rating curve extended above 35 ft^3/s.
c Maximum gage height, 3.83 ft, Jul 30, 1983.

09064000 HOMESTAKE CREEK AT GOLD PARK, CO

LOCATION.--Lat 39°24'20", long 106°25'58", Eagle County, Hydrologic Unit 14010003, on left bank at Gold Park, 400 ft downstream from ford at Gold Park Campground, 0.5 mi downstream from French Creek, and 8 mi southwest of Red Cliff.

DRAINAGE AREA.--36.0 mi^2.

PERIOD OF RECORD.--October 1947 to September 1954, August 1972 to current year. Statistical summary computed for 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=09064000

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. Elevation of gage is 9,200 ft above NGVD of 1929, from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,500 ft upstream at datum 9,245 ft above NGVD of 1929, (river-profile survey).

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft) since June 7, 1966. Transmountain diversion upstream from station to Arkansas River basin through Homestake Tunnel since June 6, 1967. 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	e31	e17	e8.0	e3.8	e3.2	e3.4	e4.7	26	303	37	23	15
2	26	e17	e7.6	e3.8	e3.1	e3.4	e4.6	19	139	36	22	13
3	28	e16	e7.3	e3.8	e3.1	e3.4	e4.5	19	88	35	20	14
4	26	e16	e7.0	e3.8	e3.1	e3.4	e4.2	20	65	33	24	15
5	24	e16	e6.8	e3.8	e3.0	e3.5	e4.1	18	50	32	21	13
6	22	e16	e6.5	e3.8	e3.0	e3.5	e4.0	15	40	30	18	13
7	24	e15	e6.3	e3.7	e3.0	e3.5	e4.1	14	37	30	18	16
8	26	e15	e5.9	e3.6	e3.0	e3.5	e4.3	15	34	28	22	19
9	25	e15	e5.6	e3.5	e3.0	e3.6	4.3	17	45	26	17	31
10	26	e16	e5.5	e3.5	e3.0	e3.7	5.2	16	69	25	16	40
11	24	e16	e5.5	e3.5	e3.0	e3.9	9.1	17	60	25	15	42
12	23	e15	e5.3	e3.4	e2.9	e4.0	13	21	54	24	16	41
13	21	e16	e5.1	e3.4	e3.0	e4.2	16	29	66	23	15	47
14	20	e16	e5.1	e3.4	e3.0	e4.4	46	36	48	23	14	38
15	19	e15	e5.1	e3.4	e3.0	e4.5	26	40	50	22	13	32
16	19	e15	e5.0	e3.4	e3.0	e4.6	20	54	45	22	12	24
17	18	e15	e4.7	e3.4	e3.0	e4.6	31	63	35	22	16	21
18	17	e14	e4.6	e3.4	e3.0	e4.7	25	74	35	22	31	20
19	17	e14	e4.6	e3.5	e3.0	e4.7	22	70	35	22	25	20
20	17	e13	e4.5	e3.5	e3.0	e4.8	20	52	48	22	19	19
21	15	e12	e4.5	e3.5	e3.0	e4.8	19	50	36	22	15	17
22	15	e11	e4.5	e3.5	e3.1	e4.8	20	67	34	22	15	17
23	16	e10	e4.4	e3.4	e3.2	e4.9	20	103	32	21	18	19
24	16	e9.5	e4.4	e3.4	e3.2	e4.9	18	137	29	26	23	22
25	16	e9.5	e4.4	e3.4	e3.3	e4.9	16	152	30	27	32	22
26	16	e9.0	e4.2	e3.4	e3.3	e4.9	22	147	35	33	26	21
27	17	e8.8	e4.2	e3.4	e3.4	e4.7	27	206	39	38	22	21
28	17	e8.8	e4.1	e3.3	e3.4	e4.6	30	258	40	34	20	21
29	e16	e8.6	e4.0	e3.3	---	e4.6	35	306	39	31	16	20
30	e16	e8.3	e3.9	e3.3	---	e4.6	36	292	38	28	17	20
31	e16	---	e3.9	e3.2	---	e4.7	---	222	---	24	17	---
TOTAL	629	403.5	162.5	108.5	86.3	131.7	515.1	2,575	1,698	845	598	693
MEAN	20.3	13.4	5.24	3.50	3.08	4.25	17.2	83.1	56.6	27.3	19.3	23.1
MAX	31	17	8.0	3.8	3.4	4.9	46	306	303	38	32	47
MIN	15	8.3	3.9	3.2	2.9	3.4	4.0	14	29	21	12	13
AC-FT	1,250	800	322	215	171	261	1,020	5,110	3,370	1,680	1,190	1,370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2003, BY WATER YEAR (WY)

MEAN	13.9	9.71	7.10	5.85	5.46	6.38	15.5	66.1	95.4	58.6	31.2	17.0
MAX	31.4	15.2	13.8	10.9	10.3	12.4	33.8	211	310	243	121	34.8
(WY)	(1985)	(1991)	(1986)	(1986)	(1986)	(1989)	(1989)	(1984)	(1984)	(1995)	(1983)	(1984)
MIN	6.15	4.37	2.78	2.16	1.98	2.56	5.50	29.7	37.6	12.3	12.3	8.36
(WY)	(1990)	(1990)	(1976)	(1976)	(1976)	(1976)	(1983)	(1977)	(2002)	(2002)	(2002)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1973 - 2003	
ANNUAL TOTAL	5,790.8		8,445.6			
ANNUAL MEAN	15.9		23.1		a27.8	
HIGHEST ANNUAL MEAN					79.2	1984
LOWEST ANNUAL MEAN					14.0	2002
HIGHEST DAILY MEAN	109	May 15	306	May 29	b602	Jun 30, 1984
LOWEST DAILY MEAN	3.2	Sep 6	e2.9	Feb 12	1.8	Feb 5, 1976
ANNUAL SEVEN-DAY MINIMUM	e3.4	Feb 15	e3.0	Feb 6	1.9	Jan 31, 1976
MAXIMUM PEAK FLOW			615	May 29	c930	Jun 30, 1984
MAXIMUM PEAK STAGE			5.54	May 29	d6.21	Jun 30, 1984
ANNUAL RUNOFF (AC-FT)	11,490		16,750		20,120	
10 PERCENT EXCEEDS	32		40		62	
50 PERCENT EXCEEDS	11		16		12	
90 PERCENT EXCEEDS	3.5		3.4		4.4	

e Estimated.
a Average discharge for 7 years (water years 1948-54), 63.4 ft^3/s, 45,930 acre-ft/yr, prior to diversion through Homestake Tunnel.
b Maximum daily discharge for period of record, 755 ft^3/s, Jun 21, 1951.
c Maximum discharge and stage for period of record, 1,080 ft^3/s, Jun 13, 1953, gage height, 6.84 ft, site and datum then in use from rating curve extended above 700 ft^3/s.
d Maximum gage height for statistical period, 6.31 ft, Apr 5, 1978, backwater from ice.

09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°28'24", long 106°22'02", in NE¼NE¼ sec.6, T.7 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank at downstream side of Forest Service road bridge, 2.4 mi south of Red Cliff, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--58.2 mi^2.

PERIOD OF RECORD.--October 1910 to September 1918, May 1944 to current year. Published as "at Redcliff" October 1910 to September 1916. Statistical summary computed for 1967 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09064500

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,783 ft above NGVD of 1929 (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

REMARKS.--Records good except for discharges above 300 ft^3/s, which are fair, and estimated daily discharges, which are poor. Flow regulated by Homestake Lake (capacity,44,360 acre-ft) since June 7, 1966. Transmountain diversions upstream from station through Homestake Tunnel (see elsewhere in this report) since June 6, 1967. 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	33	24	e11	e6.0	e5.4	e6.2	e11	72	435	56	25	23
2	30	24	e10	e5.8	e5.4	e6.2	e11	62	274	54	24	20
3	34	23	e9.5	e5.9	e5.5	e6.4	e10	61	186	52	24	20
4	32	24	e9.5	e5.8	e5.4	e6.1	e10	65	155	49	27	22
5	30	22	e9.5	e5.2	e5.3	e6.1	e10	56	129	46	23	19
6	27	22	e9.4	e5.3	e5.5	e6.0	e11	49	108	44	20	22
7	26	23	e8.2	e5.6	e5.2	e6.3	e13	45	102	41	19	26
8	30	22	e8.1	e5.6	e5.5	e6.6	e17	44	93	39	23	28
9	28	23	e8.1	e5.8	e5.3	e6.9	e19	44	93	37	20	39
10	29	e23	e8.0	e5.8	e5.5	e7.2	21	45	119	34	19	54
11	28	e24	e8.0	e5.8	e5.5	e7.5	28	42	113	31	17	56
12	26	e23	e7.5	e5.8	e5.7	e8.5	33	46	104	30	20	47
13	24	e24	e7.3	e5.8	e5.7	e8.5	41	63	119	29	21	57
14	24	e24	e6.3	e5.8	e5.7	e8.7	55	73	96	29	21	45
15	23	e22	e6.3	e4.8	e5.7	e8.7	57	90	95	28	18	37
16	23	e22	e6.2	e5.3	e5.7	e8.8	51	105	94	28	19	33
17	21	e21	e6.2	e5.3	e5.8	e9.5	56	122	79	27	24	31
18	21	e19	e6.2	e5.9	e5.9	e9.2	57	138	79	26	37	28
19	20	e19	e6.2	e6.1	e6.1	e8.8	50	136	78	28	31	28
20	20	e18	e6.2	e5.9	e6.6	e8.8	47	104	91	28	26	27
21	20	e16	e6.2	e5.5	e6.2	e8.8	49	98	77	27	21	26
22	19	e15	e6.2	e5.3	e6.2	e8.8	53	109	69	26	21	25
23	21	e14	e6.0	e5.3	e6.2	e9.3	53	138	66	24	27	25
24	22	e14	e6.0	e5.3	e6.2	e10	47	171	60	29	26	31
25	21	e14	e6.0	e5.2	e6.2	e9.2	49	216	57	33	41	30
26	20	e12	e6.0	e5.3	e6.2	e9.2	65	198	63	39	34	29
27	24	e12	e6.0	e5.5	e6.2	e9.6	77	257	62	45	27	30
28	22	e12	e6.0	e5.3	e6.2	e9.0	82	362	62	38	26	29
29	21	e12	e6.0	e5.3	---	e9.0	87	400	61	34	24	30
30	20	e11	e6.0	e5.3	---	e9.4	89	415	59	33	24	30
31	23	---	e6.0	e5.4	---	e10	---	325	---	28	25	---
TOTAL	762	578	224.1	172.0	162.0	253.3	1,259	4,151	3,278	1,092	754	947
MEAN	24.6	19.3	7.23	5.55	5.79	8.17	42.0	134	109	35.2	24.3	31.6
MAX	34	24	11	6.1	6.6	10	89	415	435	56	41	57
MIN	19	11	6.0	4.8	5.2	6.0	10	42	57	24	17	19
AC-FT	1,510	1,150	445	341	321	502	2,500	8,230	6,500	2,170	1,500	1,880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2003, BY WATER YEAR (WY)

MEAN	18.9	13.5	10.1	8.43	8.25	10.5	36.8	126	143	71.6	36.7	22.5
MAX	45.1	31.0	19.7	16.7	16.7	22.5	73.1	358	439	313	136	42.3
(WY)	(1985)	(1985)	(1985)	(1996)	(1996)	(1989)	(1986)	(1984)	(1984)	(1984)	(1983)	(1984)
MIN	8.59	5.30	4.66	3.19	2.93	3.60	10.8	53.6	41.8	13.4	8.54	8.29
(WY)	(1976)	(1967)	(1989)	(1987)	(1987)	(1981)	(1983)	(1990)	(2002)	(2002)	(1990)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1967 - 2003	
ANNUAL TOTAL	7,860.8		13,632.4			
ANNUAL MEAN	21.5		37.3		a42.4	
HIGHEST ANNUAL MEAN					116	1984
LOWEST ANNUAL MEAN					19.3	2002
HIGHEST DAILY MEAN	126	May 15	435	Jun 1	831	May 25, 1984
LOWEST DAILY MEAN	1.4	Sep 6	e4.8	Jan 15	b1.4	Sep 6, 2002
ANNUAL SEVEN-DAY MINIMUM	1.7	Sep 2	5.3	Jan 22	1.7	Sep 2, 2002
MAXIMUM PEAK FLOW			715	May 30	c943	May 24, 1984
MAXIMUM PEAK STAGE			3.93	May 30	3.96	May 24, 1984
ANNUAL RUNOFF (AC-FT)	15,590		27,040		30,700	
10 PERCENT EXCEEDS	48		84		113	
50 PERCENT EXCEEDS	14		23		17	
90 PERCENT EXCEEDS	5.7		5.8		6.2	

e Estimated.
a Average discharge for 30 years (water years 1911-18, 1945-66), 86.6 ft^3/s; 62,740 acre-ft/yr, prior to diversion through Homestake tunnel.
b Minimum observed for period of record, 0.60 ft^3/s, Jan 25, 1915 (discharge measurement).
c Maximum discharge and stage for period of record, 1,300 ft^3/s, Jun 24, 1918, gage height, 6.20 ft, site and datum then in use.

09064600 EAGLE RIVER NEAR MINTURN, CO

LOCATION.--Lat 39°33'14", long 106°24'07", in SW¼SE¼ of unsurveyed sec. T.6 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on left bank 500 ft upstream from U.S. Highway 24 bridge and 2.5 miles southeast of Minturn.

DRAINAGE AREA.--186 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09064600

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,078.37 ft above NGVD of 1929, from levels by private engineering firm.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Columbine, Ewing, and Wurtz Ditches. Transmountain diversion from Robinson Reservoir (capacity 2,520 acre-ft), for use in Tenmile Creek basin. Several small diversions for irrigation upstream from station. No regulation.

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	57	44	e32	e26	e23	e25	e37	195	1,150	200	69	53
2	54	42	e32	e26	e23	e24	e42	173	981	189	66	48
3	61	e40	e33	e25	e23	e25	e42	172	809	179	65	45
4	59	e40	e32	e25	e23	e24	38	188	722	170	75	47
5	55	e42	e31	e24	e23	e24	37	163	650	161	65	44
6	52	e39	e30	e24	e23	e24	34	141	572	153	60	50
7	49	e39	e30	e24	e22	e24	32	135	544	146	57	64
8	50	e37	e30	e25	e23	e25	32	133	488	137	58	64
9	50	e42	e30	e25	e24	e26	35	130	482	129	56	77
10	49	e41	e29	e25	e23	e26	46	132	523	122	53	102
11	48	e46	e29	e25	e23	e27	61	119	514	112	49	111
12	46	e43	e29	e25	e23	e27	69	131	491	106	53	91
13	43	e45	e28	e24	e23	e29	79	177	518	103	56	95
14	42	e43	e28	e23	e24	e30	106	215	465	99	55	83
15	41	e43	e28	e22	e23	e31	116	278	442	97	48	71
16	40	e42	e29	e24	e23	e31	99	325	433	98	49	64
17	39	e41	e28	e24	e24	e31	109	437	392	94	62	59
18	38	e39	e28	e26	e24	e30	112	489	381	92	89	55
19	38	e39	e28	e26	e24	e28	98	507	373	91	79	55
20	37	e38	e28	e25	e26	e27	91	432	404	86	64	55
21	36	e38	e28	e23	e25	e27	95	424	362	85	55	52
22	36	e37	e28	e23	e25	e27	109	482	325	81	53	50
23	38	e37	e27	e23	e24	e28	118	575	306	77	60	49
24	39	e35	e27	e23	e24	e31	99	644	282	76	66	52
25	39	e35	e27	e23	e25	e31	105	699	258	84	84	54
26	37	e33	e27	e23	e25	e31	141	663	249	96	78	52
27	42	e33	e26	e23	e26	e30	178	716	239	103	69	51
28	41	e33	e26	e22	e26	e29	196	881	229	97	64	51
29	39	e33	e26	e22	---	e28	216	958	221	88	56	50
30	36	e32	e26	e22	---	e31	229	1,050	211	85	54	50
31	41	---	e26	e23	---	e34	---	939	---	75	56	---
TOTAL	1,372	1,171	886	743	667	865	2,801	12,703	14,016	3,511	1,923	1,844
MEAN	44.3	39.0	28.6	24.0	23.8	27.9	93.4	410	467	113	62.0	61.5
MAX	61	46	33	26	26	34	229	1,050	1,150	200	89	111
MIN	36	32	26	22	22	24	32	119	211	75	48	44
AC-FT	2,720	2,320	1,760	1,470	1,320	1,720	5,560	25,200	27,800	6,960	3,810	3,660

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

MEAN	45.1	38.2	30.7	27.8	27.4	32.5	93.0	394	500	186	82.4	54.8
MAX	68.8	47.8	44.6	41.8	42.3	54.4	175	726	962	661	186	73.8
(WY)	(1998)	(1996)	(1996)	(1996)	(1996)	(1997)	(1996)	(1996)	(1995)	(1995)	(1995)	(1995)
MIN	27.6	25.3	21.2	17.9	18.4	21.0	50.4	151	124	49.4	31.1	34.1
(WY)	(1990)	(1990)	(1990)	(1990)	(1990)	(2002)	(1991)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1990 - 2003	
ANNUAL TOTAL	20,445		42,502			
ANNUAL MEAN	56.0		116		126	
HIGHEST ANNUAL MEAN					197	1995
LOWEST ANNUAL MEAN					54.2	2002
HIGHEST DAILY MEAN	212	May 16	1,150	Jun 1	1,540	Jun 18, 1995
LOWEST DAILY MEAN	17	Sep 7	e22	Jan 15	11	Dec 9, 1994
ANNUAL SEVEN-DAY MINIMUM	18	Sep 2	e23	Jan 24	16	Jan 4, 1990
MAXIMUM PEAK FLOW			1,310	Jun 1	1,810	Jun 18, 1995
MAXIMUM PEAK STAGE			6.13	Jun 1	6.75	Jun 18, 1995
ANNUAL RUNOFF (AC-FT)	40,550		84,300		91,450	
10 PERCENT EXCEEDS	139		340		358	
50 PERCENT EXCEEDS	38		46		46	
90 PERCENT EXCEEDS	20		24		25	

e Estimated.

09064600 EAGLE RIVER NEAR MINTURN, CO—Continued

WATER-QUALITY 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=09064600

PERIOD OF DAILY RECORD.--WATER TEMPERATURE: July 2002 to current year.

INSTRUMENTATION.--Water-temperature sensor with satellite telemetry since July 2002.

REMARKS.--Daily water temperature records are poor. Additional water-quality data were collected and are published in the “Eagle River Watershed Retrospective Assessment Program” section of this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--WATER TEMPERATURE: Maximum recorded, 20.5°C July 24, 2002; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--WATER TEMPERATURE: Maximum, 18.8°C, Aug. 10; minimum, 0.0°C, on several days.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT					MAY				
02...	1525	53	120	10.5	30...	1425	907	85	8.5
NOV					JUN				
18...	1550	39	140	0.0	10...	1620	503	119	10.1
JAN					JUL				
16...	1645	24	189	0.0	01...	1745	200	135	14.9
APR					AUG				
03...	1655	42	170	2.8	07...	0845	56	188	11.5

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	15.8	12.7	14.2	13.8	9.7	12.0
2	---	---	---	---	---	---	15.8	12.1	13.9	15.5	9.2	12.3
3	---	---	---	---	---	---	16.7	13.4	14.9	13.3	10.6	12.2
4	---	---	---	---	---	---	16.6	12.8	15.0	14.1	10.0	12.0
5	---	---	---	---	---	---	16.4	13.7	15.1	13.9	9.2	11.6
6	---	---	---	---	---	---	16.5	13.2	14.9	12.9	10.2	11.8
7	---	---	---	---	---	---	16.2	12.6	14.5	13.6	10.7	12.1
8	---	---	---	---	---	---	16.5	11.5	14.0	15.2	11.1	12.9
9	---	---	---	---	---	---	16.9	11.5	14.1	13.9	12.2	13.0
10	---	---	---	---	---	---	16.8	10.1	13.5	14.2	11.6	12.8
11	---	---	---	---	---	---	16.6	10.4	13.6	13.2	11.5	12.5
12	---	---	---	---	---	---	16.0	10.4	13.4	13.5	11.4	12.3
13	---	---	---	---	---	---	16.1	11.8	14.0	12.3	10.2	11.2
14	---	---	---	---	---	---	16.5	11.2	13.8	13.2	8.5	10.8
15	---	---	---	---	---	---	16.7	11.0	13.9	13.5	8.8	11.1
16	---	---	---	---	---	---	17.0	11.2	14.1	12.6	9.2	10.9
17	---	---	---	---	---	---	16.7	11.7	14.3	12.0	9.8	10.9
18	---	---	---	---	---	---	16.4	11.9	14.2	11.2	9.5	10.2
19	---	---	---	---	---	---	15.6	12.0	13.9	10.2	8.9	9.6
20	---	---	---	---	---	---	15.2	13.1	14.0	11.1	8.1	9.6
21	---	---	---	---	---	---	14.5	12.0	13.2	11.2	8.1	9.7
22	---	---	---	---	---	---	15.3	10.4	12.6	11.1	8.6	9.9
23	---	---	---	---	---	---	14.7	10.3	12.5	10.8	7.9	9.4
24	---	---	---	20.5	11.2	15.6	16.2	10.6	13.3	10.7	7.8	9.3
25	---	---	---	16.3	13.5	14.9	15.7	9.6	12.7	10.6	7.8	9.2
26	---	---	---	18.0	11.8	14.6	15.1	10.0	12.8	10.4	8.8	9.7
27	---	---	---	17.1	11.1	14.0	16.2	10.6	13.3	9.6	7.7	8.4
28	---	---	---	17.7	11.9	14.6	15.3	11.6	13.4	8.8	7.1	8.0
29	---	---	---	18.8	9.3	14.1	13.3	11.5	12.5	9.3	7.6	8.4
30	---	---	---	18.3	11.8	15.0	14.2	9.3	11.8	9.9	8.0	8.8
31	---	---	---	17.5	12.1	15.0	13.7	9.7	12.0	---	---	---
MONTH	---	---	---	---	---	---	17.0	9.3	13.7	15.5	7.1	10.8

09064600 EAGLE RIVER NEAR MINTURN, 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	9.5	7.4	8.6	3.3	1.8	2.6	0.2	0.2	0.2	0.2	0.1	0.2
2	9.6	7.9	8.8	3.2	1.9	2.5	0.2	0.2	0.2	0.2	0.1	0.2
3	8.9	7.4	8.0	1.9	1.2	1.4	0.2	0.2	0.2	0.2	0.1	0.2
4	7.4	6.5	7.0	1.2	1.0	1.1	0.2	0.2	0.2	0.2	0.1	0.2
5	7.5	6.6	7.1	1.4	0.9	1.1	0.2	0.2	0.2	0.2	0.1	0.2
6	7.9	5.9	6.9	1.1	0.8	0.9	0.2	0.2	0.2	0.2	0.1	0.2
7	8.0	5.7	6.9	0.9	0.8	0.8	0.2	0.2	0.2	0.2	0.1	0.2
8	8.0	5.9	7.1	1.1	0.8	0.8	0.2	0.2	0.2	0.2	0.1	0.2
9	7.9	6.0	7.0	1.1	0.8	0.9	0.2	0.2	0.2	0.2	0.1	0.2
10	7.6	5.5	6.7	0.8	0.7	0.7	0.2	0.2	0.2	0.2	0.1	0.1
11	7.5	5.7	6.8	0.7	0.7	0.7	0.2	0.1	0.2	0.2	0.1	0.1
12	7.3	5.7	6.6	0.7	0.6	0.7	0.2	0.1	0.2	0.2	0.1	0.1
13	6.2	4.0	5.2	0.7	0.6	0.7	0.2	0.1	0.2	0.2	0.1	0.1
14	5.9	3.8	4.9	0.7	0.6	0.7	0.2	0.1	0.1	0.2	0.1	0.1
15	5.7	3.7	4.8	0.7	0.6	0.7	0.2	0.1	0.1	0.2	0.1	0.1
16	5.6	3.6	4.7	0.7	0.6	0.6	0.2	0.1	0.2	0.2	0.1	0.1
17	5.5	3.4	4.5	0.6	0.5	0.6	0.2	0.1	0.2	0.2	0.1	0.1
18	5.5	3.2	4.4	0.6	0.5	0.5	0.2	0.1	0.2	0.2	0.1	0.1
19	5.3	3.1	4.2	0.6	0.0	0.2	0.2	0.1	0.2	0.2	0.1	0.1
20	4.6	2.7	3.8	0.2	0.0	0.1	0.2	0.1	0.2	0.2	0.1	0.1
21	4.7	2.6	3.7	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1
22	4.6	2.9	3.8	0.3	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1
23	5.3	4.2	4.7	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
24	4.9	4.4	4.6	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
25	4.5	3.4	4.0	0.3	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1
26	4.2	2.5	3.5	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
27	4.6	3.5	4.0	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
28	4.7	3.8	4.2	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
29	4.1	2.7	3.4	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	0.1
30	2.7	1.6	2.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1
31	2.8	1.4	2.1	---	---	---	0.2	0.1	0.2	0.2	0.1	0.1
MONTH	9.6	1.4	5.3	3.3	0.0	0.7	0.2	0.1	0.2	0.2	0.1	0.1
		FEBRUARY			MARCH			APRIL			MAY	
1	0.2	0.1	0.2	0.1	0.1	0.1	4.0	0.8	2.2	6.6	2.2	4.4
2	0.3	0.1	0.2	0.1	0.1	0.1	4.0	0.9	2.3	6.7	2.7	4.8
3	0.2	0.1	0.1	0.1	0.0	0.1	2.9	1.3	2.1	8.5	3.5	6.0
4	0.1	0.1	0.1	0.1	0.1	0.1	1.8	0.8	1.3	6.4	2.9	4.6
5	0.1	0.1	0.1	0.1	0.0	0.1	1.5	0.6	1.0	5.5	2.9	4.1
6	0.1	0.1	0.1	0.1	0.0	0.1	1.3	0.6	0.9	7.2	2.4	4.8
7	0.2	0.1	0.1	0.1	0.1	0.1	2.1	0.6	1.2	7.1	3.3	5.2
8	0.2	0.1	0.1	0.1	0.0	0.1	2.8	0.7	1.5	7.1	3.9	5.4
9	0.1	0.1	0.1	0.2	0.0	0.1	3.8	1.0	2.2	7.6	4.3	5.8
10	0.1	0.1	0.1	0.6	0.0	0.3	4.1	1.4	2.7	6.1	3.6	4.9
11	0.1	0.1	0.1	1.1	0.3	0.5	4.0	1.8	2.7	7.7	2.1	4.9
12	0.1	0.1	0.1	1.6	0.3	0.8	4.0	1.6	2.4	10.6	3.3	6.7
13	0.1	0.1	0.1	2.2	0.2	0.9	7.2	0.3	2.9	8.7	5.3	7.1
14	0.1	0.1	0.1	1.7	0.3	0.9	5.4	0.7	2.8	9.5	5.1	7.3
15	0.1	0.1	0.1	2.9	0.4	1.4	3.3	0.7	1.8	8.1	6.0	7.0
16	0.1	0.1	0.1	1.8	0.8	1.3	6.7	0.6	3.0	9.2	5.9	7.4
17	0.1	0.1	0.1	1.9	0.5	1.0	5.7	1.1	3.4	9.4	4.9	7.4
18	0.1	0.1	0.1	0.9	0.3	0.5	4.9	1.5	3.0	7.9	5.8	6.9
19	0.1	0.1	0.1	2.0	0.3	0.9	5.5	1.0	2.9	7.6	5.8	6.9
20	0.1	0.1	0.1	2.9	0.4	1.4	7.7	1.9	4.2	7.3	5.9	6.7
21	0.1	0.1	0.1	3.4	1.1	2.0	6.7	2.3	4.3	7.8	5.7	6.8
22	0.1	0.1	0.1	4.1	0.9	2.2	8.0	3.5	5.1	8.4	6.0	7.3
23	0.1	0.1	0.1	4.0	0.9	2.3	4.8	0.0	2.0	8.0	6.4	7.2
24	0.1	0.1	0.1	2.2	1.2	1.5	3.7	0.0	1.5	10.0	5.8	7.5
25	0.1	0.1	0.1	3.7	0.6	1.9	9.2	0.8	4.5	8.8	5.0	7.0
26	0.1	0.1	0.1	2.6	1.0	1.7	9.3	2.6	5.7	9.8	4.3	7.0
27	0.1	0.1	0.1	1.3	0.6	0.9	8.3	3.0	5.7	11.4	5.0	7.9
28	0.1	0.1	0.1	1.4	0.4	0.8	7.4	2.9	5.3	11.2	4.8	7.9
29	---	---	---	0.6	0.3	0.5	8.0	2.8	5.4	10.9	5.0	7.9
30	---	---	---	0.6	0.2	0.4	6.9	3.3	5.2	8.8	5.1	7.0
31	---	---	---	4.0	0.3	1.6	---	---	---	9.7	4.7	6.9
MONTH	0.3	0.1	0.1	4.1	0.0	0.9	9.3	0.0	3.0	11.4	2.1	6.4

09064600 EAGLE RIVER NEAR MINTURN, 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	8.6	5.1	6.6	15.0	8.9	11.6	17.1	11.3	14.2	15.9	8.7	12.2
2	9.6	4.0	6.7	15.2	8.1	11.7	18.2	11.2	14.6	15.3	9.0	12.2
3	10.2	4.4	7.1	15.2	8.6	12.0	16.9	13.1	14.8	14.6	10.1	12.2
4	9.3	4.4	6.9	15.4	8.6	12.1	17.1	12.1	14.4	16.0	8.6	12.0
5	9.7	5.6	7.3	15.0	8.5	11.9	17.2	11.0	14.2	13.9	9.8	12.0
6	8.5	3.9	6.2	14.3	8.9	11.6	16.2	11.5	14.0	14.1	10.7	12.3
7	9.8	4.9	7.2	15.0	8.7	12.0	16.4	11.4	13.7	11.8	10.2	11.2
8	10.5	3.7	7.1	16.5	9.1	12.7	17.7	12.1	14.5	14.6	8.0	11.0
9	9.7	5.1	7.4	15.7	8.9	12.5	18.1	11.9	15.0	12.2	10.0	11.1
10	10.4	6.0	7.8	16.2	8.6	12.4	18.8	11.9	15.3	11.3	7.8	9.5
11	10.2	5.2	7.7	15.2	8.7	12.1	17.7	12.5	14.7	9.8	7.7	8.5
12	9.9	5.2	7.7	15.7	9.3	12.4	18.5	11.4	14.4	12.1	6.3	9.1
13	9.2	6.1	7.6	15.8	9.7	12.9	18.3	11.2	14.2	10.0	7.1	9.1
14	11.7	5.3	8.4	16.2	9.7	13.1	18.2	10.8	14.3	10.5	4.2	7.2
15	12.4	6.1	9.1	14.6	10.4	12.6	17.6	10.9	14.0	11.3	4.3	7.6
16	9.3	6.7	8.1	15.0	10.1	12.7	15.3	11.4	13.3	12.6	5.5	8.7
17	11.4	5.4	8.3	17.4	10.6	13.8	13.5	11.1	12.2	13.2	7.1	9.5
18	10.7	6.4	8.6	17.8	11.5	14.4	13.7	10.4	12.1	11.1	5.4	8.0
19	9.5	6.3	8.1	17.6	11.6	14.6	15.2	9.2	12.1	11.0	3.9	7.4
20	10.1	6.6	8.3	18.0	12.3	15.1	16.8	9.4	12.9	10.8	4.7	7.8
21	12.2	5.4	8.6	18.5	11.6	14.9	15.4	10.7	13.2	11.1	4.6	7.7
22	12.0	6.0	9.0	17.5	11.7	14.7	15.5	11.3	13.3	11.4	4.1	7.6
23	12.7	6.3	9.5	17.4	12.0	14.5	15.5	11.2	13.1	11.8	4.4	7.9
24	11.9	6.3	9.2	17.5	11.4	14.5	16.2	11.2	13.6	11.7	4.7	8.0
25	10.8	7.0	9.0	16.9	12.2	14.3	15.0	12.1	13.5	11.3	4.5	7.7
26	12.7	6.0	9.3	17.8	11.5	14.3	15.9	10.6	13.3	11.7	4.6	8.0
27	13.3	6.4	9.9	17.7	12.9	15.0	15.0	11.6	13.4	12.0	5.1	8.4
28	13.5	7.1	10.4	17.9	11.7	14.8	17.3	11.7	14.2	12.1	5.4	8.7
29	13.7	7.9	10.8	17.5	12.3	14.6	16.5	10.8	13.6	12.1	5.7	8.8
30	13.4	8.4	11.1	17.8	11.1	14.3	15.0	11.3	12.7	12.3	7.3	9.5
31	---	---	---	16.8	11.6	14.1	14.7	9.8	12.1	---	---	---
MONTH	13.7	3.7	8.3	18.5	8.1	13.4	18.8	9.2	13.7	16.0	3.9	9.4
YEAR	18.8	0.0	5.2									

09065100 CROSS CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°34'05", long 106°24'43", in SW¼SW¼ sec.36, T.5 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.4 mi upstream from mouth, and 1.5 mi southeast of Minturn.

DRAINAGE AREA.--34.2 mi^2.

PERIOD OF RECORD.--May 1956 to September 1963, October 1967 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09065100

REVISED RECORDS.--WDR CO-81-2: 1980 (M). WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,992 ft above NGVD of 1929, from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Bolts ditch exports water upstream from station to tailings ponds and recreation lake along Eagle River. Diversion 0.5 mi upstream from station for water supply of school and for municipal supply of Minturn. 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	e33	11	e6.4	e5.3	e4.8	e5.0	e15	47	547	151	31	23
2	e30	e10	e6.5	e5.3	e4.6	e4.9	e16	38	429	159	28	20
3	e30	e9.9	e6.2	e5.3	e4.4	e4.9	e13	38	320	154	27	18
4	e28	e9.9	e6.2	e5.2	e4.4	e4.8	e11	47	283	145	33	17
5	e26	e10	e6.0	e5.0	e4.4	e4.9	e11	38	251	135	27	16
6	e24	e9.9	e5.9	e5.0	e4.4	e4.8	e9.0	31	209	123	23	19
7	e24	e9.9	e5.7	e5.0	e4.5	e5.0	e8.3	27	194	113	23	28
8	e24	e10	e5.7	e5.0	e4.6	e5.4	e8.5	27	166	108	28	34
9	e24	e9.9	e5.8	e5.0	e4.6	e6.0	9.6	26	200	102	25	43
10	e22	e9.2	e6.0	e5.0	e4.6	e6.0	11	24	253	89	22	58
11	20	e9.6	e6.0	e5.0	e4.4	e6.3	17	22	236	82	20	63
12	18	e9.3	e6.0	e4.9	e4.5	e7.0	23	26	247	76	23	54
13	16	e9.2	e5.9	e4.6	e4.5	e7.5	30	48	249	72	22	74
14	15	e8.5	e5.6	e4.4	e4.6	e7.9	42	62	216	68	23	56
15	13	e8.1	e5.7	e4.1	e4.8	e8.1	41	102	251	65	19	43
16	13	e7.3	e5.6	e4.3	e4.6	e8.2	35	137	260	75	18	37
17	12	e7.5	e5.5	e4.4	e4.6	e8.5	35	186	212	67	27	32
18	11	e7.1	e5.5	e4.8	e4.6	e8.6	30	229	223	65	77	30
19	11	e6.8	e5.6	e4.9	e4.9	e8.3	25	222	206	63	64	27
20	10	e6.8	e5.5	e4.9	e5.0	e8.3	22	183	225	59	42	24
21	9.5	e6.9	e5.6	e4.4	e4.9	e8.3	21	180	203	55	33	22
22	9.2	e6.9	e5.7	e4.2	e4.8	e9.0	24	224	206	51	28	20
23	9.8	e7.0	e5.7	e4.4	e4.8	e9.1	27	278	210	48	29	18
24	10	e7.0	e5.6	e4.2	e4.9	e9.8	28	331	191	43	30	16
25	9.5	e7.2	e5.5	e4.2	e4.9	e9.5	26	396	161	41	29	15
26	8.7	e7.0	e5.5	e4.5	e5.0	e9.5	40	346	133	66	30	14
27	11	e6.7	e5.5	e4.4	e5.0	e9.5	51	415	162	60	29	13
28	9.6	e6.7	e5.5	e4.5	e4.9	e9.0	57	518	172	58	35	12
29	8.8	e6.7	e5.5	e4.4	---	e8.6	60	509	176	47	27	12
30	8.1	e6.5	e5.3	e4.5	---	e10	59	531	164	43	25	11
31	9.8	---	e5.3	e4.6	---	e14	---	457	---	35	28	---
TOTAL	508.0	248.5	178.0	145.7	131.0	236.7	805.4	5,745	6,955	2,518	925	869
MEAN	16.4	8.28	5.74	4.70	4.68	7.64	26.8	185	232	81.2	29.8	29.0
MAX	33	11	6.5	5.3	5.0	14	60	531	547	159	77	74
MIN	8.1	6.5	5.3	4.1	4.4	4.8	8.3	22	133	35	18	11
AC-FT	1,010	493	353	289	260	469	1,600	11,400	13,800	4,990	1,830	1,720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2003, BY WATER YEAR (WY)

MEAN	13.7	7.24	4.38	3.21	3.08	4.26	21.8	124	247	128	43.4	22.5
MAX	49.5	15.6	9.81	8.85	8.84	11.4	57.6	221	360	355	122	65.0
(WY)	(1962)	(1962)	(1997)	(1997)	(1997)	(1997)	(1962)	(1970)	(1980)	(1957)	(1983)	(1961)
MIN	3.39	1.99	0.99	0.17	0.48	1.09	6.35	57.8	90.8	20.0	12.1	6.68
(WY)	(1957)	(1957)	(1963)	(1963)	(1977)	(1977)	(1973)	(1995)	(2002)	(2002)	(2002)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1957 - 2003	
ANNUAL TOTAL	9,499.3		19,265.3			
ANNUAL MEAN	26.0		52.8		52.0	
HIGHEST ANNUAL MEAN					83.2	1984
LOWEST ANNUAL MEAN					25.3	2002
HIGHEST DAILY MEAN	242	May 31	547	Jun 1	618	Jun 30, 1957
LOWEST DAILY MEAN	e3.3	Feb 26	e4.1	Jan 15	a0.10	Dec 27, 1962
ANNUAL SEVEN-DAY MINIMUM	3.4	Feb 25	4.3	Jan 21	0.13	Dec 26, 1962
MAXIMUM PEAK FLOW			676	May 29	754	Jun 30, 1957
MAXIMUM PEAK STAGE			5.13	May 29	b5.45	Jun 30, 1957
ANNUAL RUNOFF (AC-FT)	18,840		38,210		37,700	
10 PERCENT EXCEEDS	67		184		175	
50 PERCENT EXCEEDS	9.9		15		11	
90 PERCENT EXCEEDS	3.7		4.8		2.4	

e Estimated.
a Also occurred Dec 28-31, 1962, Jan 6-8, 11-15, 1963.
b Maximum gage height, 6.14 ft, Aug 6, 1983.

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO

LOCATION.--Lat 39°37'33", long 106°16'39", in NE$^1/_4$NW$^1/_4$ sec.18, T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 20 ft downstream from bridge pier on Interstate 70, 0.2 mi upstream from Black Gore Creek, 4.4 mi east of Vail, and 8.4 mi northeast of Minturn.

DRAINAGE AREA.--14.4 mi^2.

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09065500

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,600 ft above NGVD of 1929, from topographic map. Oct. 1, 1947 to Sept. 30, 1956, Oct. 1, 1963 to Sept. 30, 1980, at various sites about 1200 ft upstream at different datums. See WDR CO-80-2, for history of changes prior to Oct. 1, 1980. Oct. 1, 1980 to Apr. 21, 1992, gage at site 10 ft upstream and at datum 2.0 ft higher.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	e4.5	e4.5	e4.0	e4.5	e3.7	e5.2	19	447	100	16	13
2	9.2	e4.5	e4.3	e4.0	e4.5	e3.9	e6.4	16	301	99	15	11
3	10	e4.7	e4.2	e4.0	e4.5	e3.8	e7.6	15	287	93	15	11
4	9.5	e5.0	e4.2	e4.1	e4.5	e3.8	e9.1	16	245	86	16	10
5	9.3	e5.3	e4.1	e3.9	e4.6	e3.7	e8.4	15	212	80	14	9.8
6	9.2	e5.5	e4.0	e4.7	e4.7	e3.6	e7.7	14	172	73	13	12
7	9.6	e5.2	e4.0	e4.7	e4.7	e3.3	e7.2	13	148	65	14	13
8	9.6	e5.2	e4.0	e4.7	e3.9	e3.4	e6.9	13	134	61	16	13
9	8.7	e5.2	e3.8	e4.7	e3.5	e3.3	e8.5	12	175	60	13	23
10	8.0	e5.0	e3.9	e4.8	e3.6	e3.3	e9.9	12	235	54	12	24
11	7.4	e5.0	e3.7	e5.1	e4.0	e3.4	e11	11	253	50	11	26
12	6.7	e5.0	e3.9	e5.1	e4.3	e3.5	e16	13	215	45	11	28
13	6.2	e4.9	e3.9	e5.1	e4.5	e4.1	e19	20	201	43	9.9	32
14	6.0	e4.8	e3.9	e5.1	e4.7	e5.1	e28	32	216	41	9.2	29
15	5.6	e4.8	e3.9	e5.1	e5.1	e6.0	e29	47	228	38	8.7	24
16	5.6	e4.8	e3.9	e5.1	e4.9	e6.1	22	70	200	39	10	21
17	5.4	e4.8	e3.7	e5.1	e4.8	e5.7	19	111	177	38	22	19
18	5.3	e4.8	e3.8	e5.0	e4.5	e5.4	17	118	186	34	37	17
19	5.1	e4.8	e3.8	e4.9	e4.0	e5.0	14	111	186	32	25	16
20	4.9	e4.8	e3.8	e4.9	e3.7	e4.1	12	100	198	31	19	15
21	4.8	e4.8	e3.8	e4.8	e3.6	e4.1	12	116	172	29	16	14
22	4.8	e4.8	e3.8	e4.8	e3.6	e4.2	13	150	171	26	15	13
23	5.1	e4.8	e3.9	e4.7	e3.6	e4.9	13	184	162	23	15	12
24	5.2	e4.7	e3.9	e4.6	e3.7	e5.1	15	204	141	23	14	11
25	5.0	e4.6	e4.0	e4.6	e3.6	e5.5	12	236	121	23	19	10
26	4.8	e4.5	e4.1	e4.5	e3.6	e5.4	17	234	111	29	15	9.1
27	5.4	e4.5	e4.1	e4.5	e3.6	e5.0	22	278	114	26	14	8.6
28	5.0	e4.5	e4.1	e4.5	e3.6	e4.6	21	328	115	21	16	8.0
29	4.6	e4.5	e4.0	e4.5	---	e4.2	22	328	115	21	14	7.5
30	4.6	e4.5	e3.9	e4.5	---	e3.9	22	337	105	19	14	7.2
31	4.8	---	e3.9	e4.5	---	e4.7	---	377	---	18	15	---
TOTAL	204.4	144.8	122.8	144.6	116.4	135.8	432.9	3,550	5,743	1,420	473.8	467.2
MEAN	6.59	4.83	3.96	4.66	4.16	4.38	14.4	115	191	45.8	15.3	15.6
MAX	10	5.5	4.5	5.1	5.1	6.1	29	377	447	100	37	32
MIN	4.6	4.5	3.7	3.9	3.5	3.3	5.2	11	105	18	8.7	7.2
AC-FT	405	287	244	287	231	269	859	7,040	11,390	2,820	940	927

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	7.44	4.94	3.68	3.17	3.05	3.70	11.9	70.4	152	67.9	20.1	9.62
MAX	19.8	15.3	9.23	9.75	10.6	12.6	22.5	121	245	198	83.7	22.9
(WY)	(1985)	(1985)	(1986)	(1986)	(1986)	(1985)	(1969)	(1974)	(1978)	(1983)	(1983)	(1984)
MIN	3.12	2.50	1.94	1.86	1.55	1.57	3.81	23.4	52.4	10.2	5.44	3.52
(WY)	(1976)	(1976)	(1964)	(1964)	(1977)	(1977)	(1973)	(1968)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	5,105.1		12,955.7			
ANNUAL MEAN	14.0		35.5		29.9	
HIGHEST ANNUAL MEAN					48.3	1983
LOWEST ANNUAL MEAN					13.7	2002
HIGHEST DAILY MEAN	156	May 31	447	Jun 1	455	Jun 25, 1983
LOWEST DAILY MEAN	e1.5	Mar 16	e3.3	Mar 7	1.2	Mar 5, 1977
ANNUAL SEVEN-DAY MINIMUM	e1.9	Mar 4	e3.4	Mar 6	1.3	Feb 27, 1977
MAXIMUM PEAK FLOW			526	May 31	a662	Jun 24, 1983
MAXIMUM PEAK STAGE			3.74	May 31	b2.60	Jun 24, 1983
ANNUAL RUNOFF (AC-FT)	10,130		25,700		21,640	
10 PERCENT EXCEEDS	36		117		100	
50 PERCENT EXCEEDS	5.0		8.4		7.0	
90 PERCENT EXCEEDS	2.4		3.9		2.5	

e Estimated.
a From rating curve extended above 140 ft^3/s.
b Maximum gage height, 6.65 ft, Jun 18, 1951, datum then in use.

09066000 BLACK GORE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°35'47", long 106°15'52", T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft from U.S. Highway 6, 0.3 mi upstream from Timber Creek, 2.5 mi upstream from mouth, and 9 mi east of Minturn.

DRAINAGE AREA.--12.6 mi^2.

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09066000

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,150 ft above NGVD of 1929, from topographic map. Prior to October 1963, at site 15 ft upstream, at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversions upstream from station. Natural regulation by two small recreation lakes upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	e2.3	e1.9	e2.2	e2.8	e3.3	e4.3	e14	275	e30	6.4	3.8
2	3.2	e2.3	e1.9	e2.2	e2.8	e3.3	e5.5	e13	223	26	6.1	3.6
3	3.8	e2.3	e1.9	e2.2	e2.8	e3.3	e6.1	e13	190	24	6.0	3.6
4	3.5	e2.3	e1.9	e2.2	e2.8	e3.2	e6.4	e15	159	22	7.4	3.5
5	3.8	e2.3	e1.9	e2.2	e2.9	e3.2	e6.8	e14	141	21	6.6	3.3
6	3.6	e2.3	e1.9	e2.2	e2.9	e3.3	e6.1	e14	125	20	e6.4	4.9
7	3.3	e2.3	e1.9	e2.2	e3.0	e3.3	e5.6	e13	116	18	e6.2	5.6
8	3.0	e2.2	e1.9	e2.3	e3.0	e3.3	e5.6	e12	105	17	e6.0	4.9
9	2.8	e2.2	e1.9	e2.3	e3.0	e3.4	e5.8	e12	105	16	e5.8	6.5
10	2.8	e2.3	e1.9	e2.3	e3.2	e3.4	e5.9	e11	106	15	e5.6	7.9
11	2.5	e2.3	e1.9	e2.4	e3.2	e3.4	e6.1	e10	103	14	e5.4	7.0
12	2.4	e2.3	e1.8	e2.4	e3.3	e4.3	e6.8	e10	99	13	5.1	6.0
13	2.4	e2.3	e1.8	e2.5	e3.3	e4.3	e7.1	e11	96	13	4.9	5.3
14	2.3	e2.3	e1.7	e2.5	e3.3	e4.7	e8.3	e13	92	12	4.7	4.6
15	2.3	e2.3	e1.7	e2.5	e3.4	e5.5	e8.8	e23	88	11	4.5	4.2
16	2.2	e2.1	e1.7	e2.7	e3.4	e5.8	e9.4	e33	83	12	5.2	3.8
17	2.2	e2.3	e1.7	e2.6	e3.4	e5.3	e9.4	38	75	11	6.8	3.6
18	2.1	e2.2	e1.6	e2.6	e3.4	e4.8	e9.0	38	71	10	9.8	3.7
19	2.1	e2.1	e1.8	e2.6	e3.4	e4.7	e8.2	43	70	9.7	6.1	3.5
20	2.1	e2.1	e1.8	e2.6	e3.4	e4.7	e7.9	43	71	9.1	5.2	3.4
21	2.0	e2.1	e1.8	e2.6	e3.4	e5.1	e8.1	50	61	8.8	4.7	3.2
22	2.0	e2.2	e2.0	e2.6	e3.4	e5.1	e8.2	68	55	9.2	4.6	3.1
23	2.2	e2.2	e2.0	e2.7	e3.4	e5.1	e8.9	103	51	8.0	4.7	3.3
24	2.4	e2.2	e2.0	e2.7	e3.4	e5.7	e9.7	118	47	7.7	4.6	3.0
25	2.3	e2.2	e2.0	e2.7	e3.3	e5.4	e10	125	43	7.5	5.0	3.1
26	2.3	e2.2	e2.0	e2.7	e3.3	e5.2	e10	125	40	7.9	4.5	2.8
27	2.7	e2.1	e2.0	e2.7	e3.4	e5.2	e9.7	149	37	8.0	4.2	2.6
28	2.5	e2.1	e2.0	e2.7	e3.4	e4.8	e11	183	35	7.3	4.4	2.6
29	2.3	e2.1	e2.1	e2.7	---	e4.1	e13	204	e33	7.5	3.9	2.6
30	e2.3	e2.0	e2.1	e2.7	---	e4.0	e14	205	e32	7.4	4.4	3.0
31	e2.2	---	e2.1	e2.8	---	e4.3	---	202	---	6.8	4.2	---
TOTAL	80.6	66.5	58.6	77.3	89.7	134.5	241.7	1,925	2,827	409.9	169.4	122.0
MEAN	2.60	2.22	1.89	2.49	3.20	4.34	8.06	62.1	94.2	13.2	5.46	4.07
MAX	3.8	2.3	2.1	2.8	3.4	5.8	14	205	275	30	9.8	7.9
MIN	2.0	2.0	1.6	2.2	2.8	3.2	4.3	10	32	6.8	3.9	2.6
AC-FT	160	132	116	153	178	267	479	3,820	5,610	813	336	242

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2003, BY WATER YEAR (WY)

MEAN	3.85	3.35	2.82	2.53	2.48	3.03	7.66	55.4	89.2	21.4	7.10	4.29
MAX	10.7	10.7	9.57	8.08	9.09	14.5	22.8	130	160	69.2	21.4	12.0
(WY)	(1985)	(1985)	(1985)	(1986)	(1986)	(1986)	(1985)	(1948)	(1978)	(1995)	(1984)	(1984)
MIN	1.90	1.84	1.35	1.01	0.91	1.40	2.86	15.0	21.2	4.08	2.37	2.43
(WY)	(1951)	(1964)	(1970)	(1979)	(1979)	(1971)	(1973)	(1995)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1948 - 2003	
ANNUAL TOTAL	2,803.2		6,202.2			
ANNUAL MEAN	7.68		17.0		16.9	
HIGHEST ANNUAL MEAN					30.3	1984
LOWEST ANNUAL MEAN					7.76	2002
HIGHEST DAILY MEAN	50	May 21	275	Jun 1	275	Jun 1, 2003
LOWEST DAILY MEAN	e1.1	Jan 2	e1.6	Dec 18	0.90	Feb 22, 1968
ANNUAL SEVEN-DAY MINIMUM	e1.5	Jan 8	e1.7	Dec 12	0.90	Feb 4, 1979
MAXIMUM PEAK FLOW			310	Jun 1	370	Jun 17, 1995
MAXIMUM PEAK STAGE			5.21	Jun 1	a5.06	Jun 17, 1995
ANNUAL RUNOFF (AC-FT)	5,560		12,300		12,270	
10 PERCENT EXCEEDS	22		43		52	
50 PERCENT EXCEEDS	3.2		3.9		3.8	
90 PERCENT EXCEEDS	1.8		2.1		2.0	

e Estimated.
a Maximum gage height, 6.00 ft, Mar 30, 1968, backwater from ice.

09066100 BIGHORN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'24", long 106°17'34", in N½ sec.12, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.3 mi upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 4.5 mi east of Vail, and 8.5 mi northeast of Minturn.

DRAINAGE AREA.--4.54 mi^2.

PERIOD OF RECORD.--October 1963 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09066100

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,625 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e3.1	e1.5	e1.5	e1.2	e1.2	e0.93	e4.7	8.7	171	28	7.0	6.4
2	e3.1	e1.6	e1.4	e1.2	e1.1	e0.96	e5.2	7.3	112	29	6.7	5.6
3	e3.1	e1.6	e1.4	e1.2	e0.99	e0.96	e5.8	7.2	89	27	6.9	5.2
4	e3.1	e1.6	e1.4	e1.2	e0.90	e0.96	e5.5	7.6	71	25	7.4	4.6
5	e3.1	e1.6	e1.4	e1.2	e0.86	e0.94	e5.3	6.6	64	23	5.9	4.3
6	e3.1	e1.4	e1.4	e1.2	e0.82	e0.94	e5.2	5.8	49	21	5.4	5.0
7	e3.2	e1.5	e1.3	e1.2	e0.74	e0.96	e5.0	5.4	31	20	5.4	6.9
8	e3.2	e1.5	e1.3	e1.2	e0.68	e0.96	e5.1	5.0	31	18	5.9	7.0
9	e3.2	e1.5	e1.3	e1.2	e0.66	e0.98	e5.5	4.7	44	18	4.8	13
10	e3.1	e1.5	e1.3	e1.2	e0.67	e0.98	e6.0	4.6	67	17	4.4	13
11	e3.0	e1.5	e1.3	e1.2	e0.67	e0.98	e6.3	4.3	83	16	4.3	15
12	e2.9	e1.5	e1.3	e1.2	e0.69	e1.2	e6.7	5.1	79	16	4.2	16
13	e2.8	e1.5	e1.3	e1.2	e0.72	e1.7	e7.3	8.2	59	15	4.0	18
14	e2.7	e1.5	e1.2	e1.2	e0.76	e1.9	e9.4	13	60	15	3.8	16
15	e2.6	e1.5	e1.2	e1.2	e0.77	e2.2	e10	20	72	15	3.6	13
16	e2.4	e1.5	e1.2	e1.2	e0.79	e2.3	7.3	24	69	15	4.7	11
17	e2.3	e1.5	e1.2	e1.2	e0.82	e2.3	6.5	35	50	15	11	9.0
18	e1.9	e1.5	e1.2	e1.2	e0.83	e2.2	6.0	42	53	14	16	8.2
19	e2.0	e1.5	e1.2	e1.2	e0.83	e1.9	4.9	41	54	14	13	7.0
20	e1.8	e1.5	e1.2	e1.2	e0.83	e1.7	4.4	39	63	14	9.2	6.0
21	e1.6	e1.5	e1.2	e1.2	e0.86	e1.7	4.4	42	60	13	7.4	5.2
22	e1.6	e1.5	e1.2	e1.2	e0.87	e1.9	4.9	49	64	12	6.7	4.6
23	e1.5	e1.5	e1.2	e1.2	e0.89	e2.4	4.9	56	55	11	6.6	4.0
24	e1.8	e1.6	e1.2	e1.2	e0.89	e3.3	5.5	68	40	10	e6.3	3.7
25	e1.8	e1.6	e1.2	e1.2	e0.89	e2.9	4.2	78	33	11	e10	3.4
26	e1.8	e1.6	e1.2	e1.2	e0.89	e2.4	5.2	76	31	13	9.7	3.1
27	e1.8	e1.6	e1.2	e1.2	e0.91	e2.4	7.0	97	32	12	9.1	2.9
28	e1.5	e1.5	e1.2	e1.2	e0.93	e1.9	8.6	140	32	9.6	10	2.7
29	e1.5	e1.5	e1.2	e1.2	---	e2.3	9.7	129	32	9.6	8.5	2.6
30	e1.5	e1.5	e1.2	e1.2	---	e3.3	10	142	29	8.2	8.3	2.4
31	e1.5	---	e1.2	e1.2	---	e4.0	---	130	---	7.2	8.0	---
TOTAL	73.6	45.7	39.2	37.2	23.46	56.45	186.5	1,301.5	1,779	491.6	224.2	224.8
MEAN	2.37	1.52	1.26	1.20	0.84	1.82	6.22	42.0	59.3	15.9	7.23	7.49
MAX	3.2	1.6	1.5	1.2	1.2	4.0	10	142	171	29	16	18
MIN	1.5	1.4	1.2	1.2	0.66	0.93	4.2	4.3	29	7.2	3.6	2.4
AC-FT	146	91	78	74	47	112	370	2,580	3,530	975	445	446

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	2.74	1.69	1.06	0.86	0.83	1.04	4.05	25.0	48.5	21.6	7.28	3.70
MAX	8.03	4.65	2.53	2.04	2.54	2.97	10.0	52.5	85.2	61.2	22.6	9.94
(WY)	(1986)	(1985)	(1985)	(1986)	(1986)	(1986)	(1985)	(1984)	(1978)	(1983)	(1984)	(1984)
MIN	1.01	0.84	0.63	0.45	0.30	0.32	0.86	8.09	16.7	3.54	2.13	1.12
(WY)	(1964)	(1980)	(1977)	(1967)	(1964)	(1981)	(1964)	(1995)	(2002)	(2002)	(2002)	(1975)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	1,755.28		4,483.21			
ANNUAL MEAN	4.81		12.3		9.88	
HIGHEST ANNUAL MEAN					18.6	1984
LOWEST ANNUAL MEAN					4.77	2002
HIGHEST DAILY MEAN	45	May 31	171	Jun 1	171	Jun 1, 2003
LOWEST DAILY MEAN	e0.64	Mar 16	e0.66	Feb 9	a0.10	Feb 8, 1967
ANNUAL SEVEN-DAY MINIMUM	e0.68	Mar 15	e0.69	Feb 7	0.20	Mar 4, 1981
MAXIMUM PEAK FLOW			205	May 28	b338	Jun 8, 1985
MAXIMUM PEAK STAGE			4.11	May 28	c4.10	Jun 8, 1985
ANNUAL RUNOFF (AC-FT)	3,480		8,890		7,160	
10 PERCENT EXCEEDS	12		37		32	
50 PERCENT EXCEEDS	1.8		3.2		2.4	
90 PERCENT EXCEEDS	0.81		0.99		0.70	

e Estimated.
a Also occurred Jan 30, 1970.
b From rating curve extended above 82 ft^3/s.
c Maximum gage height, 4.26 ft, Jun 8, 1985, backwater from debris.

09066150 PITKIN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'37", long 106°18'07", in SW¼SW¼ sec.1, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank, 100 ft downstream from Pitkin ditch headgate, 1,000 ft upstream from U.S. Highway 6, 1,200 ft upstream from mouth, 4.0 mi east of Vail, and 8 mi northeast of Minturn.

DRAINAGE AREA.--5.32 mi^2.

PERIOD OF RECORD.--Annual maximum and occasional low-flow measurements, water years 1965-66. October 1966 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09066150

REVISED RECORDS.--WRD Colo. 1971: 1967-70. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,525 ft above NGVD of 1929, from topographic map. Oct. 1, 1964 to Sept. 30, 1966, crest-stage gage at datum 0.98 ft lower, at site 300 ft downstream.

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	5.2	3.2	2.7	e2.1	e2.4	e1.9	e3.3	e16	303	36	7.0	7.3
2	5.2	3.0	e2.7	e2.1	e2.4	e1.9	e4.9	e15	224	36	6.6	6.5
3	5.7	3.3	e2.6	e2.1	e2.3	e1.8	e5.7	e14	182	34	7.0	6.1
4	5.5	3.8	e2.6	e2.1	e2.1	e1.5	e4.9	e13	151	32	7.5	5.7
5	5.4	3.8	e2.5	e2.0	e2.0	e1.4	e4.6	e15	134	30	6.3	6.6
6	5.3	3.7	e2.4	e2.0	e1.8	e1.3	e4.6	e15	117	27	5.7	7.8
7	5.7	3.5	e2.3	e1.9	e1.7	e1.3	e4.6	e14	101	25	5.9	10
8	6.0	3.0	e2.3	e1.8	e1.5	e1.3	e5.0	e13	95	24	6.3	10
9	5.8	2.8	e2.3	e1.8	e1.7	e1.3	e5.1	e13	112	23	5.5	16
10	5.3	2.9	e2.2	e1.8	e1.6	e1.3	e5.5	e13	126	21	5.2	16
11	4.8	3.0	e2.2	e2.0	e1.8	e1.3	e6.1	e13	124	20	5.1	16
12	4.3	3.0	e2.2	e2.0	e1.8	e1.0	e6.9	e12	114	18	4.9	18
13	3.9	3.0	e2.2	e2.0	e2.3	e1.4	e7.1	e13	104	18	4.6	20
14	3.6	3.0	e2.2	e2.0	e2.3	e2.2	e7.5	e14	110	17	4.4	17
15	3.4	3.0	e2.2	e2.0	e2.4	e2.9	e8.4	18	113	17	4.2	14
16	3.3	3.0	e2.1	e2.0	e2.6	e3.1	e8.4	27	105	17	5.2	13
17	3.2	3.0	e2.0	e2.1	e2.6	e2.8	e6.9	39	97	16	11	11
18	3.0	3.0	e1.9	e2.1	e2.5	e2.3	e5.8	41	92	16	16	10
19	2.9	3.0	e2.1	e2.2	e2.1	e1.7	e4.9	42	93	16	12	8.8
20	2.7	2.8	e2.0	e2.4	e1.8	e1.9	e3.7	44	88	15	9.2	7.7
21	2.6	2.5	e2.0	e2.3	e2.3	e2.5	e3.4	52	81	14	7.6	6.9
22	2.5	2.6	e2.0	e2.3	e2.4	e3.1	e4.5	64	82	e14	7.5	6.3
23	3.0	2.7	e2.0	e2.4	e2.4	e3.2	e7.2	84	76	e14	7.6	5.7
24	3.0	2.7	e2.0	e2.4	e2.4	e3.4	e5.8	108	66	12	8.8	5.3
25	2.8	3.0	e2.1	e2.4	e2.4	e3.2	e5.4	117	49	11	12	5.0
26	2.7	3.0	e2.1	e2.4	e2.3	e3.4	e6.3	116	44	12	9.8	4.9
27	3.0	3.0	e2.0	e2.4	e2.1	e3.1	e8.0	136	50	11	9.0	4.6
28	2.8	3.0	e2.0	e2.4	e2.0	e3.1	e10	170	51	9.8	9.4	4.4
29	2.6	3.0	e2.0	e2.4	---	e3.1	e13	185	49	9.9	7.6	4.3
30	2.7	2.9	e2.1	e2.4	---	e3.1	e16	186	40	8.7	8.7	4.0
31	3.1	---	e2.1	e2.4	---	e3.2	---	291	---	7.6	9.1	---
TOTAL	121.0	91.2	68.1	66.7	60.0	70.0	193.5	1,913	3,173	582.0	236.7	278.9
MEAN	3.90	3.04	2.20	2.15	2.14	2.26	6.45	61.7	106	18.8	7.64	9.30
MAX	6.0	3.8	2.7	2.4	2.6	3.4	16	291	303	36	16	20
MIN	2.5	2.5	1.9	1.8	1.5	1.0	3.3	12	40	7.6	4.2	4.0
AC-FT	240	181	135	132	119	139	384	3,790	6,290	1,150	469	553

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2003, BY WATER YEAR (WY)

MEAN	4.05	2.56	1.81	1.46	1.36	1.51	4.26	25.8	54.2	28.6	9.39	5.20
MAX	9.43	3.84	3.28	3.84	3.94	3.85	7.77	61.7	106	94.5	31.1	11.2
(WY)	(1985)	(1982)	(1986)	(1986)	(1986)	(1985)	(2002)	(2003)	(2003)	(1984)	(1983)	(1984)
MIN	1.49	1.26	0.94	0.58	0.70	0.87	1.44	8.48	20.3	3.94	2.59	2.78
(WY)	(1967)	(1980)	(1967)	(1967)	(1981)	(1981)	(1973)	(1995)	(2002)	(2002)	(2002)	(1988)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1967 - 2003	
ANNUAL TOTAL	2,207.78		6,854.1			
ANNUAL MEAN	6.05		18.8		11.7	
HIGHEST ANNUAL MEAN					22.7	1984
LOWEST ANNUAL MEAN					5.94	2002
HIGHEST DAILY MEAN	54	May 31	303	Jun 1	303	Jun 1, 2003
LOWEST DAILY MEAN	e0.98	Mar 20	e1.0	Mar 12	0.24	Oct 29, 1972
ANNUAL SEVEN-DAY MINIMUM	e1.0	Mar 15	e1.3	Mar 6	0.26	Oct 26, 1972
MAXIMUM PEAK FLOW			408	May 30	408	May 30, 2003
MAXIMUM PEAK STAGE			3.11	May 30	a3.11	May 30, 2003
ANNUAL RUNOFF (AC-FT)	4,380		13,600		8,480	
10 PERCENT EXCEEDS	14		50		37	
50 PERCENT EXCEEDS	3.0		4.6		3.3	
90 PERCENT EXCEEDS	1.3		2.0		1.1	

e Estimated.
a Maximum gage height, 3.75 ft, Jul 13, 1995, backwater from debris.

09066200 BOOTH CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'54", long 106°19'21", in NE¼SE¼ of sec.3, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank, downstream side of old Highway 6 bridge pier, 100 ft upstream from frontage road to I-70, 0.2 mi upstream from mouth, 3.0 mi northeast of Vail, and 7.0 mi northeast of Minturn.

DRAINAGE AREA.--6.02 mi^2.

PERIOD OF RECORD.--October 1964 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09066200

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,325 ft above NGVD of 1929, from topographic map. Prior to June 4, 1984, gage at site 1,000 ft upstream at different datum (gage destroyed by rock slide).

REMARKS.--Records fair except for estimated daily discharges, which are 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.

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	3.0	2.3	e1.6	e1.2	e1.1	e1.0	e2.3	11	e215	33	4.6	4.2
2	3.0	2.2	e1.6	e1.2	e1.1	e1.0	e2.6	9.6	e144	32	4.1	3.6
3	3.5	2.1	e1.5	e1.2	e1.1	e1.0	e2.8	8.8	e87	30	4.0	3.2
4	3.4	2.2	e1.5	e1.2	e1.1	e1.0	e2.5	9.2	70	28	4.4	3.1
5	3.5	2.0	e1.5	e1.2	e1.0	e1.0	e2.4	8.5	66	26	3.8	3.0
6	3.7	2.0	e1.5	e1.2	e1.0	e1.0	e2.4	7.6	57	22	3.4	3.7
7	4.5	2.1	e1.4	e1.2	e1.0	e1.0	e2.2	7.1	49	19	3.3	4.8
8	4.8	2.1	e1.4	e1.2	e1.00	e1.1	e1.9	6.9	49	17	3.5	4.9
9	4.4	2.1	e1.4	e1.2	e0.99	e1.1	e1.7	6.5	55	17	3.2	9.4
10	4.0	e2.1	e1.4	e1.2	e0.98	e1.1	e2.2	6.4	60	15	3.0	9.6
11	3.6	e2.1	e1.4	e1.2	e0.98	e1.2	e3.0	6.0	63	13	2.8	11
12	3.1	e2.0	e1.3	e1.2	e0.96	e1.2	e3.7	6.8	58	12	2.7	14
13	2.7	e2.0	e1.3	e1.2	e0.97	e1.3	e4.8	10	54	11	2.5	15
14	2.5	e2.0	e1.2	e1.2	e0.96	e1.6	e8.8	16	57	11	2.3	11
15	2.3	e2.0	e1.2	e1.2	e0.96	e2.0	e12	26	59	11	2.1	9.1
16	2.1	e2.0	e1.2	e1.2	e0.97	e2.2	e10	33	61	10	3.0	7.8
17	2.0	e1.9	e1.2	e1.2	e0.97	e2.1	9.2	45	59	9.5	7.2	6.7
18	1.9	e1.9	e1.2	e1.2	e0.98	e1.9	7.9	47	57	9.9	11	6.2
19	1.8	e1.9	e1.2	e1.2	e0.98	e1.6	6.7	43	57	9.4	6.3	e5.7
20	1.7	e1.9	e1.2	e1.2	e0.98	e1.5	5.8	43	57	8.3	5.0	5.2
21	1.6	e1.9	e1.2	e1.2	e0.98	e1.4	5.5	e48	53	7.7	4.2	4.8
22	1.6	e1.8	e1.2	e1.2	e0.99	e1.4	5.9	e58	52	7.1	3.9	4.2
23	1.9	e1.8	e1.2	e1.2	e0.99	e1.6	6.9	e68	49	6.4	4.1	3.7
24	1.8	e1.8	e1.2	e1.2	e0.99	e1.9	13	e80	44	6.0	5.0	3.3
25	1.7	e1.8	e1.2	e1.1	e0.99	e1.6	6.2	e84	39	5.8	7.1	2.9
26	1.7	e1.7	e1.2	e1.1	e0.99	e1.6	8.0	e85	37	6.1	5.4	2.7
27	1.9	e1.7	e1.2	e1.1	e0.99	e1.5	10	e87	38	6.1	4.8	2.6
28	1.9	e1.7	e1.2	e1.1	e1.0	e1.3	12	e101	39	5.6	4.9	2.4
29	1.7	e1.6	e1.2	e1.1	---	e1.1	13	e119	38	5.8	4.1	2.3
30	1.8	e1.6	e1.2	e1.1	---	e1.4	13	e131	35	5.4	4.6	2.2
31	2.0	---	e1.2	e1.1	---	e1.9	---	e132	---	5.0	5.1	---
TOTAL	81.1	58.3	40.4	36.5	28.00	43.6	188.4	1,350.4	1,858	411.1	135.4	172.3
MEAN	2.62	1.94	1.30	1.18	1.00	1.41	6.28	43.6	61.9	13.3	4.37	5.74
MAX	4.8	2.3	1.6	1.2	1.1	2.2	13	132	215	33	11	15
MIN	1.6	1.6	1.2	1.1	0.96	1.0	1.7	6.0	35	5.0	2.1	2.2
AC-FT	161	116	80	72	56	86	374	2,680	3,690	815	269	342

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)

MEAN	2.83	1.97	1.25	1.00	0.95	1.36	5.65	32.6	62.8	23.8	5.63	3.03
MAX	8.30	7.17	3.54	2.48	2.97	5.72	14.2	58.0	123	70.4	14.4	7.29
(WY)	(1985)	(1985)	(1985)	(1985)	(1985)	(1986)	(1986)	(2001)	(1982)	(1983)	(1984)	(1984)
MIN	0.88	0.64	0.67	0.37	0.39	0.41	1.39	10.0	16.8	2.03	1.07	0.97
(WY)	(1975)	(2000)	(1975)	(1977)	(1981)	(1981)	(1973)	(1995)	(2002)	(2002)	(2002)	(1974)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	2,151.54		4,403.50			
ANNUAL MEAN	5.89		12.1		11.9	
HIGHEST ANNUAL MEAN					19.0	1982
LOWEST ANNUAL MEAN					5.84	2002
HIGHEST DAILY MEAN	54	May 31	e215	Jun 1	218	Jun 15, 1978
LOWEST DAILY MEAN	0.48	Sep 4	e0.96	Feb 12	0.20	Feb 8, 1967
ANNUAL SEVEN-DAY MINIMUM	0.50	Sep 1	e0.97	Feb 11	0.33	Feb 7, 1967
MAXIMUM PEAK FLOW			a		355	Jun 15, 1978
MAXIMUM PEAK STAGE			a		b,c4.07	Jun 15, 1978
ANNUAL RUNOFF (AC-FT)	4,270		8,730		8,640	
10 PERCENT EXCEEDS	20		44		40	
50 PERCENT EXCEEDS	1.8		2.5		2.3	
90 PERCENT EXCEEDS	0.80		1.1		0.76	

e Estimated.
a Not determined.
b Maximum gage height, 4.62 ft, Jun 18, 1983, backwater from debris.
c Site and datum then in use.

09066300 MIDDLE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'45", long 106°22'54", in sec.6, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft upstream from Interstate Highway 70, 0.2 mi upstream from mouth, and 5.0 mi northeast of Minturn.

DRAINAGE AREA.--5.94 mi^2.

PERIOD OF RECORD.--October 1964 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09066300

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,200 ft above NGVD of 1929, from topographic map. Prior to Oct. 1, 1977 at site 700 ft upstream, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are 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.

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	0.39	e0.39	e0.35	e0.33	e0.31	e0.25	e1.2	e9.0	143	e16	2.7	2.1
2	0.39	e0.39	e0.35	e0.33	e0.31	e0.25	e1.6	e7.3	120	16	2.5	1.8
3	0.77	e0.39	e0.35	e0.33	e0.32	e0.25	e1.9	e5.3	e60	15	2.5	1.8
4	0.79	e0.38	e0.35	e0.33	e0.32	e0.25	e1.9	e9.0	e46	14	2.8	1.7
5	0.92	e0.38	e0.34	e0.33	e0.32	e0.25	e1.6	e7.3	e42	13	2.3	1.7
6	0.90	e0.38	e0.34	e0.33	e0.32	e0.25	e1.7	e7.2	e36	12	2.3	2.6
7	1.1	e0.38	e0.34	e0.32	e0.31	e0.24	e1.7	e7.0	e31	11	2.4	3.1
8	1.2	e0.37	e0.34	e0.32	e0.31	e0.24	e1.4	e7.0	e29	10	2.6	2.7
9	1.0	e0.37	e0.35	e0.32	e0.31	e0.24	e1.5	e6.8	e30	10	2.2	3.5
10	0.91	e0.37	e0.35	e0.32	e0.31	e0.24	e1.6	e6.5	e33	9.1	2.0	3.4
11	0.87	e0.37	e0.35	e0.32	e0.31	e0.24	e1.6	e6.2	e36	6.9	1.9	3.4
12	0.75	e0.37	e0.34	e0.32	e0.30	e0.27	e1.7	e5.8	e35	6.6	1.9	3.7
13	0.63	e0.37	e0.34	e0.31	e0.30	e0.32	e1.9	e5.6	e35	6.0	1.8	3.6
14	0.73	e0.37	e0.34	e0.31	e0.30	e0.42	e2.0	e5.9	e34	5.8	1.7	3.2
15	0.68	e0.37	e0.34	e0.31	e0.29	e0.48	e2.1	5.9	e36	5.8	1.5	2.9
16	0.62	e0.36	e0.34	e0.31	e0.29	e0.50	e1.9	7.8	e38	5.6	2.7	2.8
17	0.57	e0.36	e0.33	e0.32	e0.29	e0.50	e1.5	11	e35	5.3	5.5	2.6
18	0.54	e0.36	e0.33	e0.32	e0.29	e0.50	e1.5	13	e35	5.1	5.8	2.7
19	0.50	e0.37	e0.33	e0.32	e0.29	e0.47	e1.5	15	e35	5.6	3.5	2.5
20	0.44	e0.37	e0.33	e0.32	e0.28	e0.45	e1.2	17	e38	4.5	2.6	2.3
21	0.44	e0.37	e0.33	e0.32	e0.28	e0.54	e1.0	20	e34	4.0	2.3	2.2
22	0.46	e0.37	e0.33	e0.32	e0.27	e0.64	e1.0	23	e32	3.9	2.3	2.1
23	0.58	e0.35	e0.33	e0.32	e0.27	e0.75	e1.0	28	e30	3.6	2.4	2.0
24	0.57	e0.35	e0.33	e0.32	e0.26	e0.89	e1.0	30	e28	3.5	2.5	1.9
25	0.45	e0.35	e0.33	e0.32	e0.26	e0.89	e1.0	33	e24	3.4	3.6	1.7
26	0.41	e0.35	e0.33	e0.32	e0.26	e0.89	e2.2	35	e22	3.5	2.7	1.6
27	0.52	e0.35	e0.33	e0.32	e0.26	e0.76	e2.2	42	e20	3.6	2.3	1.5
28	0.41	e0.35	e0.33	e0.32	e0.25	e0.81	e3.3	55	e18	3.3	2.5	1.4
29	0.34	e0.35	e0.33	e0.32	---	e0.81	e4.8	70	e17	3.4	2.1	1.4
30	0.32	e0.35	e0.33	e0.32	---	e0.83	e6.2	75	e16	3.1	2.3	1.3
31	e0.39	---	e0.33	e0.31	---	e1.0	---	84	---	2.8	2.5	---
TOTAL	19.59	11.01	10.46	9.93	8.19	15.42	56.7	660.6	1,168	221.4	80.7	71.2
MEAN	0.63	0.37	0.34	0.32	0.29	0.50	1.89	21.3	38.9	7.14	2.60	2.37
MAX	1.2	0.39	0.35	0.33	0.32	1.0	6.2	84	143	16	5.8	3.7
MIN	0.32	0.35	0.33	0.31	0.25	0.24	1.0	5.3	16	2.8	1.5	1.3
AC-FT	39	22	21	20	16	31	112	1,310	2,320	439	160	141

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)

MEAN	1.18	0.80	0.49	0.40	0.36	0.40	1.38	12.4	34.2	12.4	3.11	1.64
MAX	3.90	3.10	1.75	2.45	2.34	2.16	6.53	25.5	53.1	39.5	14.0	7.18
(WY)	(1985)	(1983)	(1986)	(1986)	(1986)	(1985)	(1985)	(1984)	(1984)	(1995)	(1983)	(1979)
MIN	0.36	0.030	0.000	0.000	0.000	0.000	0.26	3.41	9.35	1.37	0.33	0.36
(WY)	(1965)	(1965)	(1965)	(1965)	(1965)	(1965)	(1976)	(1995)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	784.30		2,333.20			
ANNUAL MEAN	2.15		6.39		5.73	
HIGHEST ANNUAL MEAN					11.3	1984
LOWEST ANNUAL MEAN					2.20	2002
HIGHEST DAILY MEAN	21	Jun 1	143	Jun 1	143	Jun 1, 2003
LOWEST DAILY MEAN	0.00	Aug 28	e0.24	Mar 7	a0.00	Nov 10, 1964
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 28	e0.24	Mar 5	0.00	Nov 10, 1964
MAXIMUM PEAK FLOW			180	Jun 1	180	Jun 1, 2003
MAXIMUM PEAK STAGE			3.03	Jun 1	b3.03	Jun 1, 2003
ANNUAL RUNOFF (AC-FT)	1,560		4,630		4,150	
10 PERCENT EXCEEDS	7.9		21		19	
50 PERCENT EXCEEDS	0.40		1.0		0.92	
90 PERCENT EXCEEDS	0.11		0.31		0.20	

e Estimated.
a No flow at times several years.
b Maximum gage height, 3.28 ft, Jun 25, 1983, backwater from debris.

09066325 GORE CREEK ABOVE RED SANDSTONE CREEK, AT VAIL, CO

LOCATION.--Lat 39°38'28", long 106°23'39", in NW¼NW¼ sec.7, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 200 ft downstream of the water treatment plant at Vail, 0.1 mi upstream from Red Sandstone Creek, and 0.6 mi downstream from Middle Creek.

DRAINAGE AREA.--77.1 mi^2.

PERIOD OF RECORD.--October 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=09066325

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,055 ft above NGVD of 1929, from topographic map.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	25	17	13	15	20	23	96	1,730	292	56	46
2	28	24	17	13	15	19	27	87	1,390	290	55	42
3	32	20	16	14	14	18	29	86	1,110	267	55	40
4	31	20	16	14	13	20	27	94	898	254	61	39
5	32	22	17	14	12	20	25	87	803	237	54	38
6	30	20	16	13	12	20	25	80	709	218	50	45
7	32	21	15	12	10	19	23	77	605	201	49	52
8	33	22	14	13	10	20	23	75	541	188	53	53
9	31	24	13	13	11	20	25	72	600	181	47	77
10	29	23	13	14	11	20	34	72	695	169	47	85
11	27	23	14	13	11	21	47	68	781	160	44	85
12	25	21	15	14	11	20	57	73	763	151	41	85
13	23	21	15	15	13	21	61	99	712	117	40	97
14	23	21	15	15	14	24	85	138	690	111	37	80
15	22	21	15	15	15	26	92	203	697	105	34	69
16	22	22	14	15	15	26	75	271	682	105	40	61
17	21	26	15	17	15	26	69	396	631	111	68	55
18	20	23	14	14	14	24	64	444	616	106	97	54
19	19	19	13	15	13	21	57	447	615	98	74	50
20	19	19	14	14	14	19	53	446	620	92	59	45
21	18	20	14	14	18	20	54	490	551	89	52	43
22	18	19	14	16	18	19	59	584	526	83	50	40
23	22	20	13	14	18	21	62	718	499	78	52	38
24	22	21	14	14	18	23	58	815	440	74	50	36
25	21	20	15	14	18	21	61	870	378	73	66	34
26	20	15	13	14	18	20	75	858	353	83	56	33
27	24	19	14	15	18	20	91	995	346	79	51	31
28	22	17	15	15	19	19	95	1,240	342	69	55	30
29	21	17	13	14	---	18	100	1,360	327	69	49	29
30	21	17	13	14	---	19	104	1,370	306	65	51	28
31	23	---	12	14	---	19	---	1,380	---	60	53	---
TOTAL	760	622	448	438	403	643	1,680	14,091	19,956	4,275	1,646	1,540
MEAN	24.5	20.7	14.5	14.1	14.4	20.7	56.0	455	665	138	53.1	51.3
MAX	33	26	17	17	19	26	104	1,380	1,730	292	97	97
MIN	18	15	12	12	10	18	23	68	306	60	34	28
AC-FT	1,510	1,230	889	869	799	1,280	3,330	27,950	39,580	8,480	3,260	3,050

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

MEAN	25.6	19.9	17.6	15.7	15.3	18.9	62.7	400	437	92.5	40.6	34.7
MAX	27.9	22.1	20.0	19.2	19.1	22.4	74.6	531	665	138	53.1	51.3
(WY)	(2000)	(2001)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(2003)	(2003)	(2003)	(2003)
MIN	24.2	17.3	14.5	14.1	12.8	14.2	56.0	203	189	36.6	19.9	21.1
(WY)	(2002)	(2000)	(2003)	(2003)	(2002)	(2002)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	19,321.5		46,502			
ANNUAL MEAN	52.9		127		98.5	
HIGHEST ANNUAL MEAN					127	2003
LOWEST ANNUAL MEAN					53.1	2002
HIGHEST DAILY MEAN	451	May 31	1,730	Jun 1	1,730	Jun 1, 2003
LOWEST DAILY MEAN	9.3	Sep 6	10	Feb 7	9.3	Sep 6, 2002
ANNUAL SEVEN-DAY MINIMUM	9.9	Sep 1	11	Feb 6	9.9	Sep 1, 2002
MAXIMUM PEAK FLOW			1,890	Jun 1	a1,890	Jun 1, 2003
MAXIMUM PEAK STAGE			9.88	Jun 1	9.88	Jun 1, 2003
ANNUAL RUNOFF (AC-FT)	38,320		92,240		71,390	
10 PERCENT EXCEEDS	155		445		286	
50 PERCENT EXCEEDS	21		29		25	
90 PERCENT EXCEEDS	13		14		14	

a From rating curve extended above 700 ft^3/s.

09066400 RED SANDSTONE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°40'58", long 106°24'03", in sec.25, T.4 S., R.81 W., (projected), Eagle County, Hydrologic Unit 14010003, on left bank 150 ft upstream from road culvert, 1,400 ft upstream from Indian Creek, and 6.8 mi north of Minturn.

DRAINAGE AREA.--7.32 mi^2.

PERIOD OF RECORD.--October 1963 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09066400

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, concrete control, and crest-stage gage. Elevation of gage is 9,212 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, and discharges above 54 ft^3/s, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.2	e1.0	0.99	1.0	0.90	1.4	6.5	215	16	2.6	1.7
2	e1.4	1.1	0.99	0.97	1.0	0.92	1.5	5.8	182	15	2.4	1.5
3	e1.6	e1.1	0.96	0.97	1.0	0.89	1.5	5.6	139	13	2.4	1.5
4	e1.6	e1.1	0.96	0.97	1.0	0.89	1.3	5.5	105	12	2.7	1.5
5	e1.6	1.1	0.98	0.98	e1.0	0.90	1.2	4.9	85	11	2.3	1.6
6	e1.6	1.2	0.96	0.99	e1.0	0.89	1.2	4.6	69	9.9	2.2	2.3
7	e1.5	1.1	0.94	0.98	e1.00	0.89	1.1	4.3	61	9.2	2.2	3.4
8	e1.5	1.0	0.95	0.98	e0.98	0.90	1.2	4.2	55	8.4	2.5	2.6
9	1.5	1.0	e0.95	0.99	e0.97	0.90	1.4	4.0	54	7.6	2.1	3.9
10	1.4	1.0	e0.96	0.97	e0.95	0.92	1.9	3.9	57	6.9	2.0	3.9
11	1.3	1.0	e0.96	0.97	0.92	0.96	2.6	3.9	58	6.4	1.9	4.4
12	1.2	e1.1	e0.96	0.97	0.90	0.99	3.1	5.1	55	6.0	2.0	4.5
13	1.2	e1.1	e0.96	0.96	0.89	1.1	3.5	7.7	54	5.7	1.9	4.1
14	1.1	1.0	e0.97	1.00	0.89	1.2	5.2	11	52	5.3	1.7	3.3
15	1.1	0.99	e0.97	1.0	0.90	e1.2	5.1	17	52	5.1	1.6	2.9
16	1.0	e1.0	0.96	1.0	0.90	e1.2	3.9	23	50	4.9	3.4	2.7
17	1.0	1.0	0.97	1.0	0.90	e1.2	3.8	36	47	5.0	5.1	2.5
18	1.00	0.98	0.97	1.2	0.89	e1.2	3.4	43	46	5.2	5.9	2.6
19	0.98	0.96	0.97	1.2	0.89	e1.1	3.0	50	47	4.9	3.2	2.5
20	e0.98	0.96	0.97	1.1	0.88	1.1	2.7	56	46	4.3	2.4	2.4
21	e0.97	0.95	0.96	1.1	0.89	1.2	2.8	62	41	4.0	2.1	2.2
22	0.97	0.97	0.96	1.1	0.90	1.1	3.4	72	39	3.8	2.0	2.0
23	1.1	0.96	0.96	1.0	0.90	1.2	e3.4	82	35	3.5	2.1	1.9
24	1.1	1.0	0.93	0.98	0.89	1.3	e3.3	92	29	3.4	1.9	1.9
25	1.1	e1.0	0.95	1.0	0.89	1.2	3.7	102	25	3.4	2.1	1.8
26	1.0	e1.0	0.92	0.98	0.89	1.2	5.2	106	22	3.7	2.0	1.7
27	1.1	e1.0	0.91	1.0	0.90	1.2	6.3	122	21	3.5	1.8	1.7
28	1.1	e1.0	0.95	1.0	0.90	1.1	6.6	128	20	3.1	1.9	1.6
29	1.0	e1.0	0.98	1.0	---	1.1	6.8	120	19	3.4	1.7	1.6
30	e1.0	e1.0	0.99	0.99	---	1.0	7.1	125	17	3.0	2.1	1.6
31	1.2	---	0.97	1.0	---	1.1	---	136	---	2.8	2.0	---
TOTAL	38.30	30.87	29.79	31.34	26.02	32.95	98.6	1,449.0	1,797	199.4	74.2	73.8
MEAN	1.24	1.03	0.96	1.01	0.93	1.06	3.29	46.7	59.9	6.43	2.39	2.46
MAX	2.1	1.2	1.0	1.2	1.0	1.3	7.1	136	215	16	5.9	4.5
MIN	0.97	0.95	0.91	0.96	0.88	0.89	1.1	3.9	17	2.8	1.6	1.5
AC-FT	76	61	59	62	52	65	196	2,870	3,560	396	147	146

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2003, BY WATER YEAR (WY)

MEAN	1.98	1.52	1.23	1.07	1.00	1.13	3.52	30.3	48.8	11.6	3.51	2.19
MAX	5.14	3.80	2.60	2.14	2.14	1.90	6.60	69.9	92.0	44.0	15.0	5.57
(WY)	(1985)	(1985)	(1985)	(1985)	(1985)	(1985)	(1971)	(1996)	(1983)	(1983)	(1983)	(1984)
MIN	0.92	0.57	0.51	0.52	0.48	0.46	1.47	6.85	11.0	1.95	1.03	0.98
(WY)	(1989)	(1977)	(1977)	(1987)	(1987)	(1987)	(1973)	(1995)	(2002)	(2002)	(2002)	(1987)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1964 - 2003	
ANNUAL TOTAL	1,292.31		3,881.27			
ANNUAL MEAN	3.54		10.6		9.00	
HIGHEST ANNUAL MEAN					14.9	1983
LOWEST ANNUAL MEAN					3.60	2002
HIGHEST DAILY MEAN	26	May 31	215	Jun 1	215	Jun 1, 2003
LOWEST DAILY MEAN	e0.77	Aug 18	0.88	Feb 20	0.20	Jan 30, 1970
ANNUAL SEVEN-DAY MINIMUM	0.81	Aug 31	0.89	Feb 18	0.34	Jan 28, 1970
MAXIMUM PEAK FLOW			289	Jun 1	289	Jun 1, 2003
MAXIMUM PEAK STAGE			a5.13	Jun 1	a,b5.13	Jun 1, 2003
ANNUAL RUNOFF (AC-FT)	2,560		7,700		6,520	
10 PERCENT EXCEEDS	14		37		28	
50 PERCENT EXCEEDS	1.1		1.5		1.8	
90 PERCENT EXCEEDS	0.93		0.95		0.85	

e Estimated.
a From crest-stage gage.
b Maximum gage height, 5.18 ft, Apr 17, 1987, backwater from ice.

09066510 GORE CREEK AT MOUTH NEAR MINTURN, CO
(Eagle River Watershed Retrospective Assessment Program)

LOCATION.--Lat 39°36'34", long 106°26'50", in NE¼NW¼ sec.22, T.5 S., R.81W., Eagle County, Hydrologic Unit 14010003, on left bank 0.1 mi upstream from the confluence with Eagle River and 2 mi northwest of Minturn.

DRAINAGE AREA.-- 102 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09066510

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,730 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion upstream from station for Vail water treatment plant.

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	31	26	e21	16	17	18	27	139	e1,960	e320	67	49
2	31	24	20	16	17	18	32	128	e1,590	e320	63	44
3	35	19	20	15	16	17	34	126	e1,270	e295	61	42
4	33	21	20	16	15	18	30	141	e1,020	e280	68	40
5	34	21	21	15	17	19	29	127	e900	e260	59	39
6	32	19	19	15	e15	19	29	115	e800	e235	54	50
7	33	21	e19	e16	e14	19	26	109	e680	e220	54	58
8	35	22	e19	e16	e14	20	25	107	e610	e210	61	59
9	33	25	e18	e17	e14	19	28	103	e674	e200	53	90
10	30	24	e18	e17	e15	19	38	101	e770	e190	49	102
11	28	23	e18	17	e15	20	55	95	e850	e180	47	101
12	26	23	e19	17	e15	22	69	105	e830	e167	46	98
13	23	27	e19	17	e16	24	74	152	e770	e135	45	114
14	23	22	20	17	16	28	104	210	e760	e125	43	92
15	22	21	18	17	16	29	113	302	e760	e120	40	77
16	22	21	17	e17	15	30	96	361	e740	e120	46	69
17	21	26	17	e17	15	31	88	484	e690	e125	86	62
18	21	20	17	e19	15	28	84	526	e670	e120	122	59
19	20	20	17	e18	14	25	74	546	e670	e113	89	55
20	19	20	e18	e18	16	23	68	552	e675	e110	67	49
21	19	20	e18	e18	16	23	71	595	e600	e107	57	45
22	19	22	e19	17	16	22	80	691	e580	104	54	43
23	24	22	e18	17	16	24	85	810	e550	99	56	41
24	24	23	e18	17	16	28	80	884	e480	90	51	39
25	22	22	e18	17	17	24	84	906	e410	85	75	37
26	21	24	e18	17	17	24	105	910	e380	98	62	36
27	25	e23	e17	17	17	24	131	1,050	e365	95	54	35
28	23	e22	18	16	18	21	139	1,380	e355	82	61	33
29	21	e22	16	16	---	19	145	1,510	e350	82	52	32
30	20	e22	16	15	---	e21	150	1,530	e330	77	54	31
31	23	---	e16	17	---	e26	---	1,560	---	70	59	---
TOTAL	793	667	567	517	440	702	2,193	16,355	22,089	4,834	1,855	1,721
MEAN	25.6	22.2	18.3	16.7	15.7	22.6	73.1	528	736	156	59.8	57.4
MAX	35	27	21	19	18	31	150	1,560	1,960	320	122	114
MIN	19	19	16	15	14	17	25	95	330	70	40	31
AC-FT	1,570	1,320	1,120	1,030	873	1,390	4,350	32,440	43,810	9,590	3,680	3,410

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

MEAN	36.1	26.6	21.9	19.2	18.2	26.5	74.4	440	629	176	63.9	41.1
MAX	48.5	33.3	27.0	26.6	22.3	42.4	102	678	1,103	291	108	57.4
(WY)	(1998)	(1997)	(1997)	(1997)	(1997)	(1997)	(1996)	(1996)	(1997)	(1997)	(1997)	(2003)
MIN	25.6	18.2	18.3	15.9	14.0	16.3	48.1	224	196	39.1	20.6	23.4
(WY)	(2003)	(2000)	(2003)	(2002)	(2002)	(2002)	(1998)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1996 - 2003	
ANNUAL TOTAL	21,260		52,733			
ANNUAL MEAN	58.2		144		131	
HIGHEST ANNUAL MEAN					194	1996
LOWEST ANNUAL MEAN					58.5	2002
HIGHEST DAILY MEAN	439	May 31	1,960	Jun 1	1,960	Jun 1, 2003
LOWEST DAILY MEAN	11	Sep 2	e14	Feb 7	11	Sep 2, 2002
ANNUAL SEVEN-DAY MINIMUM	11	Sep 1	e15	Feb 6	11	Sep 1, 2002
MAXIMUM PEAK FLOW			2,690	Jun 1	2,690	Jun 1, 2003
MAXIMUM PEAK STAGE			a10.88	Jun 1	a10.88	Jun 1, 2003
ANNUAL RUNOFF (AC-FT)	42,170		104,600		95,150	
10 PERCENT EXCEEDS	177		534		400	
50 PERCENT EXCEEDS	22		31		35	
90 PERCENT EXCEEDS	14		17		18	

e Estimated.
a From highwater marks.

09066510 GORE CREEK AT MOUTH NEAR MINTURN, CO—Continued
(Eagle River Watershed Retrospective Assessment Program)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1995 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09066510

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1996 to September 1997.
WATER TEMPERATURE: October 1996 to September 1998, July 2002 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry, October 1996 to September 1997. Water temperature sensor and logger, October 1997 to September 1998. Water temperature sensor with satellite telemetry, July 2002 to current year.

REMARKS.--Daily record of water temperature is good, except for the period July 24, 2002 to Dec. 15, 2002 which is fair.

EXTREMES FOR PERIOD OF DAILY RECORD.-
SPECIFIC CONDUCTANCE: Maximum, 464 microsiemens Jan. 29, 1997; minimum, 83 microsiemens June 19-20, 1997.
WATER TEMPERATURE: Maximum, 21.1°C July 30, 2002; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 19.1°C, Aug. 9; minimum, 0.0°C, on many days.

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)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
OCT													
22...	1010	19	10.1	8.4	342	3.0	160	51.6	8.75	1.34	0.2	7.11	108
NOV													
13...	1515	20	10.6	8.9	367	1.5	180	55.0	9.75	1.22	0.3	9.39	104
DEC													
16...	1620	26	10.7	8.7	392	0.0	180	55.2	9.45	1.80	0.3	9.08	108
JAN													
16...	0945	13	12.2	8.3	446	0.0	200	61.7	10.8	1.81	0.5	14.6	106
FEB													
20...	1500	22	11.3	8.6	485	0.2	200	62.4	11.1	3.15	0.6	19.7	117
MAR													
27...	0900	21	11.5	8.6	498	0.6	190	58.5	10.8	1.59	0.7	21.6	108
APR													
16...	1455	94	9.3	9.0	276	8.0	110	33.8	5.92	0.96	0.5	11.9	73
MAY													
21...	0845	550	10.2	8.1	131	2.7	62	19.8	3.17	0.55	0.2	3.15	50
JUN													
04...	1345	947	8.9	8.0	117	7.3	56	17.8	2.79	0.59	0.1	2.40	46
JUL													
22...	1250	107	8.5	9.1	206	14.3	110	32.8	5.70	0.83	0.2	4.18	73
AUG													
14...	0845	43	8.7	8.4	324	11.7	160	49.3	8.28	1.38	0.3	7.41	104
SEP													
10...	0920	101	9.0	7.9	202	7.4	92	28.2	5.33	0.84	0.2	4.48	69

09066510 GORE CREEK AT MOUTH NEAR MINTURN, CO—Continued

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

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)
OCT 22...	124	4	12.9	<0.2	4.1	46.0	199	0.27	10.2	0.14	0.16	E.008	0.515
NOV 13...	113	7	19.7	<0.17	4.91	51.4	217	0.30	11.7	0.13	0.18	<0.015	0.709
DEC 16...	128	2	17.1	<0.17	5.2	53.8	222	0.30	15.6	0.19	0.35	0.023	1.22
JAN 16...	126	2	30.5	<0.17	5.4	55.2	251	0.34	9.07	0.12	0.14	E.010	1.37
FEB 20...	120	12	37.1	0.19	4.6	62.7	288	0.39	17.3	0.31	0.69	E.014	3.43
MAR 27...	117	8	54.7	0.17	3.8	46.0	270	0.37	15.3	0.20	0.29	E.008	1.51
APR 16...	73	8	28.9	0.10	4.95	16.8	149	0.20	37.9	0.14	0.28	<0.015	0.521
MAY 21...	62	--	6.46	<0.2	5.3	5.4	75	0.10	112	0.12	0.25	<0.015	0.264
JUN 04...	56	--	4.29	<0.2	5.14	4.4	65	0.09	167	E.07	0.23	<0.015	0.120
JUL 22...	62	13	7.54	<0.2	3.5	19.3	118	0.16	34.0	E.09	0.15	<0.015	0.025
AUG 14...	119	4	13.4	<0.2	4.60	35.1	184	0.25	21.4	0.10	0.24	<0.015	0.517
SEP 10...	85	--	8.46	<0.2	4.4	18.2	113	0.15	30.8	E.10	0.28	<0.015	0.344

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT 22...	0.004	--	0.083	0.094	0.106	--	--	--
NOV 13...	0.006	--	0.088	0.099	0.114	1.7	E2	E2
DEC 16...	0.020	0.17	0.194	0.21	0.25	--	--	--
JAN 16...	0.004	--	0.169	0.179	0.190	--	--	--
FEB 20...	0.016	--	0.452	0.51	0.58	--	E10	E2
MAR 27...	0.005	--	0.170	0.192	0.20	--	--	--
APR 16...	0.003	--	0.030	0.039	0.068	3.6	E13	28
MAY 21...	E.002	--	E.004	0.008	0.031	--	E3	E7
JUN 04...	0.003	--	<0.007	E.004	0.061	3.5	E4	--
JUL 22...	E.002	--	0.015	0.022	0.033	--	--	--
AUG 14...	0.007	--	0.053	0.066	0.077	1.4	E8	E6
SEP 10...	E.002	--	0.022	0.030	0.070	--	--	--

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

09066510 GORE CREEK AT MOUTH NEAR MINTURN, CO—Continued

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

Date	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	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, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
NOV													
13...	<0.2	<0.8	1.2	<10	50	<0.08	E1.4	5.1	<0.02	1.27	<0.5	<0.20	<24
APR													
16...	<0.2	<0.8	1.2	13	160	<0.08	2.7	14.6	<0.02	1.39	<0.5	<0.20	<24
JUN													
04...	<0.2	<0.8	0.6	13	1,100	E.05	4.0	42.4	<0.02	0.30	<0.5	<0.20	E2
AUG													
14...	<0.2	<0.8	0.9	13	50	<0.08	2.8	5.1	<0.02	1.62	<0.5	<0.20	4

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instan-taneous dis-charge, cfs (00061)	Temper-ature, water, deg C (00010)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
NOV						
13...	1515	20	1.5	--	2	0.14
FEB						
20...	1500	22	0.2	--	14	0.85
APR						
16...	1455	94	8.0	--	7	1.7
MAY						
21...	0845	550	2.7	50	26	39
JUN						
04...	1345	947	7.3	35	144	368
AUG						
14...	0845	43	11.7	--	13	1.5

09066510 GORE CREEK AT MOUTH NEAR MINTURN, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	17.4	13.4	15.2	16.5	10.5	13.6
2	---	---	---	---	---	---	17.4	12.5	14.9	18.1	10.0	13.9
3	---	---	---	---	---	---	18.7	14.1	16.0	15.4	11.4	13.7
4	---	---	---	---	---	---	18.8	13.4	16.2	16.7	10.5	13.5
5	---	---	---	---	---	---	17.6	13.7	15.5	16.8	10.0	13.5
6	---	---	---	---	---	---	17.3	12.7	15.0	14.4	11.1	13.1
7	---	---	---	---	---	---	16.9	12.0	14.5	15.1	11.5	13.2
8	---	---	---	---	---	---	17.0	11.1	14.0	17.2	11.8	14.2
9	---	---	---	---	---	---	18.6	11.2	14.7	15.6	12.9	14.1
10	---	---	---	---	---	---	18.9	10.5	14.5	15.6	12.0	13.5
11	---	---	---	---	---	---	19.0	10.9	14.7	14.8	12.2	13.4
12	---	---	---	---	---	---	17.3	10.9	14.2	14.1	11.2	12.4
13	---	---	---	---	---	---	17.9	11.5	14.5	12.6	10.0	11.1
14	---	---	---	---	---	---	18.9	10.6	14.5	14.9	7.6	11.0
15	---	---	---	---	---	---	19.2	10.7	14.8	15.3	8.6	11.7
16	---	---	---	---	---	---	19.2	11.1	15.0	15.0	8.7	11.7
17	---	---	---	---	---	---	18.6	11.6	15.1	12.9	9.6	11.1
18	---	---	---	---	---	---	18.1	11.8	14.9	11.1	8.8	9.9
19	---	---	---	---	---	---	18.0	11.8	15.0	10.0	7.1	8.6
20	---	---	---	---	---	---	16.8	13.5	14.9	13.3	6.3	9.4
21	---	---	---	---	---	---	16.1	12.3	14.1	13.5	7.1	10.2
22	---	---	---	---	---	---	16.7	10.5	13.3	13.2	7.0	10
23	---	---	---	---	---	---	17.6	11.0	14.2	12.8	6.6	9.6
24	---	---	---	20.7	12.7	16.5	18.7	11.3	14.9	12.9	6.8	9.7
25	---	---	---	17.4	14.4	15.9	17.2	10.1	13.9	11.9	7.2	9.5
26	---	---	---	19.4	12.6	15.6	18.3	10.7	14.5	12.8	8.4	10.3
27	---	---	---	18.6	12.0	15.3	17.8	11.4	14.6	9.5	6.1	7.8
28	---	---	---	19.2	12.6	15.7	16.0	11.5	14.0	9.7	6.1	7.9
29	---	---	---	20.2	11.3	15.6	15.0	11.9	13.4	10.3	7.0	8.4
30	---	---	---	21.1	12.5	16.5	17.0	9.7	13.3	11.3	6.9	8.7
31	---	---	---	20.4	12.7	16.6	16.6	10.7	13.8	---	---	---
MONTH	---	---	---	---	---	---	19.2	9.7	14.6	18.1	6.1	11.3

09066510 GORE CREEK AT MOUTH NEAR MINTURN, 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
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	10.3	5.5	8.1	5.4	1.0	3.1	2.2	0.0	1.0	2.1	0.4	1.2
2	11.5	6.6	9.0	4.2	1.8	2.9	3.0	1.3	2.2	1.5	0.0	0.5
3	9.3	6.1	7.3	2.7	0.0	1.2	1.5	0.0	0.7	3.3	0.9	1.9
4	7.4	5.0	6.2	2.6	0.0	1.0	2.0	0.0	0.8	3.5	1.3	2.4
5	8.2	5.9	6.9	3.7	0.6	1.7	3.5	1.3	2.1	3.1	1.7	2.5
6	10.3	4.6	7.2	1.8	0.0	0.6	1.8	0.1	0.9	2.1	0.0	0.9
7	10.2	4.8	7.5	3.0	0.0	1.1	0.2	0.0	0.0	0.4	0.0	0.0
8	10.2	5.1	7.6	3.3	1.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0
9	9.9	4.7	7.2	3.0	0.7	1.6	0.0	0.0	0.0	0.0	0.0	0.0
10	9.4	4.2	6.9	2.8	0.4	1.5	0.0	0.0	0.0	2.4	0.0	1.2
11	7.9	4.7	6.6	3.2	0.0	0.9	0.0	0.0	0.0	3.1	2.0	2.4
12	8.5	4.2	6.3	0.3	0.0	0.0	0.0	0.0	0.0	2.7	1.1	1.9
13	7.8	2.3	4.9	1.7	0.0	0.6	0.2	0.0	0.0	2.1	0.0	0.8
14	8.0	2.7	5.2	4.1	0.9	2.1	0.7	0.0	0.2	2.7	0.3	1.4
15	7.8	2.6	5.0	2.8	0.4	1.4	1.8	0.0	0.7	1.7	0.3	0.9
16	7.9	2.8	5.2	0.4	0.0	0.1	1.2	0.0	0.4	0.3	0.0	0.0
17	7.9	2.5	5.0	0.9	0.0	0.1	2.1	1.1	1.5	1.8	0.0	0.6
18	7.8	2.7	5.0	2.4	0.2	1.1	1.2	0.0	0.6	0.0	0.0	0.0
19	7.7	2.7	4.9	1.7	0.0	0.5	0.5	0.0	0.1	0.0	0.0	0.0
20	6.2	2.3	4.2	3.3	0.2	1.5	0.0	0.0	0.0	0.0	0.0	0.0
21	7.0	1.9	4.3	2.6	0.0	1.1	0.0	0.0	0.0	2.2	0.0	0.6
22	6.4	3.3	4.7	2.3	0.0	0.8	0.0	0.0	0.0	2.8	0.5	1.5
23	7.2	4.5	5.8	2.8	0.0	1.2	0.0	0.0	0.0	3.6	1.7	2.5
24	6.8	4.8	5.7	3.5	1.5	2.2	0.0	0.0	0.0	3.8	1.5	2.7
25	6.3	3.0	4.7	2.2	0.0	1.0	0.0	0.0	0.0	4.0	2.3	3.2
26	6.3	2.5	4.5	0.0	0.0	0.0	0.0	0.0	0.0	3.8	1.5	2.5
27	6.7	4.4	5.3	0.0	0.0	0.0	0.4	0.0	0.0	4.1	1.1	2.6
28	6.6	4.0	4.9	0.0	0.0	0.0	1.3	0.0	0.3	3.1	1.5	2.4
29	4.0	2.2	3.0	0.0	0.0	0.0	2.0	0.0	0.7	3.8	1.5	2.5
30	3.9	1.0	2.3	0.0	0.0	0.0	1.3	0.2	0.9	2.7	0.7	1.8
31	3.9	0.2	1.9	---	---	---	1.9	0.0	0.5	5.6	2.6	3.7
MONTH	11.5	0.2	5.6	5.4	0.0	1.1	3.5	0.0	0.4	5.6	0.0	1.4
		FEBRUARY			MARCH			APRIL			MAY	
1	4.8	1.8	3.2	4.0	0.0	1.8	9.7	2.6	6.0	6.6	1.6	4.0
2	4.2	2.2	3.0	4.7	0.0	1.9	8.9	2.4	5.6	7.2	1.9	4.4
3	2.4	0.3	1.3	3.5	0.0	1.1	5.5	2.8	4.1	8.4	3.0	5.5
4	0.6	0.0	0.1	2.5	0.0	1.3	5.8	0.8	3.3	5.8	1.4	4.0
5	0.6	0.0	0.1	2.8	0.0	0.6	6.9	1.1	3.8	7.3	2.1	4.6
6	0.0	0.0	0.0	4.4	0.0	1.8	5.4	1.3	2.9	7.8	2.5	5.1
7	0.0	0.0	0.0	5.9	2.0	3.6	4.6	0.7	2.7	7.7	2.3	4.9
8	0.0	0.0	0.0	7.0	2.0	4.1	9.5	0.0	4.0	6.7	3.4	5.1
9	0.0	0.0	0.0	6.2	1.1	3.6	11.0	1.6	5.9	8.3	3.4	5.4
10	0.0	0.0	0.0	7.3	1.7	4.3	11.2	2.7	6.5	6.5	2.5	4.4
11	0.0	0.0	0.0	8.4	3.4	5.5	10.2	2.4	6.0	8.5	1.6	5.0
12	0.0	0.0	0.0	8.2	3.2	5.4	7.1	1.8	4.7	11.5	2.5	6.6
13	2.4	0.0	0.6	8.6	1.8	5.0	10.6	1.8	5.6	9.5	3.3	6.5
14	3.3	1.9	2.5	6.4	1.4	4.1	8.7	1.3	4.8	11.2	3.1	6.6
15	4.6	2.0	3.2	7.9	2.1	4.9	4.9	1.6	3.3	6.6	3.2	5.0
16	3.7	1.1	2.5	5.2	2.3	3.9	9.6	1.5	4.8	9.4	3.3	5.6
17	3.7	0.4	1.9	4.6	1.6	3.0	7.7	1.9	4.9	7.7	2.3	4.5
18	4.5	1.7	2.9	4.5	0.9	2.8	6.6	2.6	4.5	6.9	2.6	4.3
19	3.1	0.0	1.4	7.4	1.4	4.0	5.4	1.7	3.6	7.9	2.5	4.5
20	2.2	0.0	0.5	7.7	2.0	4.8	10.2	2.4	5.8	7.8	2.4	4.5
21	3.1	0.6	1.5	6.9	3.4	5.0	8.3	3.1	5.8	8.4	2.0	4.6
22	2.7	0.6	1.3	9.3	2.7	5.6	8.3	3.6	6.0	9.0	2.4	4.8
23	2.4	0.0	0.9	8.9	2.7	5.8	6.3	0.0	2.1	8.4	2.5	4.6
24	3.6	0.0	1.6	6.3	3.1	4.2	4.8	0.0	1.7	7.8	2.6	4.6
25	3.6	1.5	2.5	8.7	1.3	4.6	9.9	0.8	4.7	6.4	3.0	4.5
26	3.3	1.1	2.2	4.9	1.7	3.6	10.3	1.6	5.5	7.0	2.9	4.7
27	3.3	1.2	2.1	6.8	0.3	2.9	8.7	2.1	5.2	8.8	3.3	5.1
28	3.8	0.0	1.3	5.1	0.0	2.0	8.8	2.0	5.1	8.1	3.1	4.9
29	---	---	---	2.6	0.0	0.9	7.9	2.4	5.1	8.4	3.3	5.0
30	---	---	---	6.3	---	---	6.7	2.7	4.6	7.9	3.5	4.9
31	---	---	---	---	1.9	---	---	---	---	8.2	3.6	5.2
MONTH	4.8	0.0	1.3	---	---	---	11.2	0.0	4.6	11.5	1.4	4.9

09066510 GORE CREEK AT MOUTH NEAR MINTURN, 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	6.3	3.8	4.7	12.8	7.1	9.8	16.6	10.8	13.8	15.8	9.0	12.3
2	---	---	---	13.3	6.6	9.8	18.2	10.9	14.3	16.0	9.4	12.6
3	---	---	---	13.4	7.0	10.1	16.8	12.6	14.8	16.0	10.5	13.0
4	8.0	3.2	5.2	13.7	7.1	10.3	17.5	11.5	14.4	15.3	9.4	12.3
5	7.8	4.1	5.4	13.9	7.0	10.4	17.5	11.0	14.4	14.4	10.2	12.6
6	7.1	2.9	4.9	14.0	7.5	10.5	16.2	11.3	14.0	14.6	11.0	12.8
7	7.8	3.7	5.5	12.7	7.7	10.3	17.6	11.6	14.3	12.9	10.3	11.5
8	9.5	2.7	5.7	14.8	7.6	11.0	18.7	11.9	14.9	13.4	8.0	10.6
9	8.7	3.9	6.0	14.3	7.5	10.9	19.1	11.9	15.3	12.0	9.2	10.5
10	8.8	4.5	6.1	14.8	7.5	11.0	18.2	12.2	15.2	10.2	7.1	8.7
11	9.5	3.9	6.1	15.5	7.6	11.1	17.6	12.4	14.9	9.1	6.3	7.5
12	9.2	3.7	6.0	---	---	---	18.0	11.6	14.7	12.3	5.7	8.7
13	9.1	4.6	6.4	---	---	---	18.3	12.0	15.0	10.4	7.1	8.8
14	9.7	4.3	6.6	---	---	---	18.9	11.8	15.1	10.3	3.9	6.9
15	10.6	4.1	6.8	---	---	---	17.8	11.2	14.5	11.1	4.3	7.5
16	7.7	4.8	6.2	---	---	---	15.0	12.1	13.7	11.3	5.5	8.3
17	9.3	4.3	6.6	---	---	---	13.5	10.9	12.3	11.6	6.5	8.8
18	10.0	4.9	7.1	---	---	---	12.9	10.3	11.7	10.4	5.0	7.7
19	8.3	4.8	6.6	---	---	---	16.0	8.9	12.1	10.7	4.1	7.4
20	8.3	5.1	6.7	---	---	---	16.7	9.7	13.2	10.7	5.1	8.0
21	10.4	4.7	7.0	---	---	---	14.9	10.7	13.1	11.0	5.1	8.1
22	10.6	4.5	7.3	16.5	10.7	13.5	15.4	11.3	13.4	11.3	4.8	8.0
23	10.7	4.8	7.6	16.9	11.0	13.7	15.5	11.1	13.4	11.6	5.3	8.4
24	10.0	4.9	7.4	16.6	10.8	13.8	18.2	11.3	14.4	11.7	5.5	8.6
25	10.4	5.5	7.7	16.8	11.4	14.0	16.1	11.4	13.7	11.3	5.3	8.3
26	11.1	4.5	7.7	17.8	10.9	13.9	15.1	10.3	12.8	11.8	5.7	8.6
27	11.7	5.1	8.3	16.5	11.8	13.9	15.6	11.2	13.5	12.1	6.2	9.1
28	12.3	5.6	8.8	16.9	10.8	13.8	16.3	11.3	13.7	12.5	6.5	9.3
29	12.5	6.2	9.2	16.6	11.2	13.7	15.7	10.4	13.2	12.3	6.6	9.4
30	11.9	6.3	9.1	17.3	10.3	13.5	15.0	11.1	12.6	12.5	8.0	10.1
31	---	---	---	17.1	10.5	13.3	15.3	9.3	11.9	---	---	---
MONTH	---	---	---	---	---	---	19.1	8.9	13.8	16.0	3.9	9.5

09067000 BEAVER CREEK AT AVON, CO

LOCATION.--Lat 39°37'47", long 106°31'20", in NE¼SW¼ sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank at Avon, 550 ft upstream from U.S. Highway 6 and 24, and 700 ft upstream from mouth.

DRAINAGE AREA.--14.8 mi^2.

PERIOD OF RECORD.--January to December 1911, January 1912 to September 1914 (gage heights and discharge measurements only), May 1974 to February 1988, October 1988 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09067000

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,453 ft above NGVD of 1929, from topographic map. Prior to May 1, 1974, nonrecording gage near present site, at different datum.

REMARKS.--Records good except for estimated daily discharges, and the period Apr. 10 to Sept. 30, which are poor. Diversions upstream from station for irrigation upstream and downstream from station. Slight natural regulation by several small lakes in headwaters. 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	4.5	3.9	e2.6	e2.1	e2.1	e2.5	3.8	9.7	e145	23	5.3	e4.4
2	4.1	3.8	2.6	e2.1	e2.1	e2.4	4.2	6.6	e109	20	5.1	e3.9
3	4.7	3.5	2.6	e2.1	e2.1	e2.6	3.9	7.9	e92	19	5.2	e3.5
4	4.3	e3.4	e2.6	e2.1	e2.1	e2.5	3.4	10	e83	19	4.7	e3.2
5	4.4	3.3	2.6	e2.1	e2.1	e2.6	2.9	7.1	e70	17	4.9	e3.0
6	4.2	e3.1	2.6	e2.1	e2.1	e2.5	3.1	5.1	e59	16	5.5	e3.5
7	4.2	e3.0	e2.5	e2.1	e2.1	e2.7	3.0	4.9	e56	15	5.4	e4.3
8	4.0	3.0	e2.5	e2.1	e2.2	e2.8	3.3	5.0	e50	14	5.8	e5.4
9	3.9	3.5	e2.5	2.1	e2.2	2.9	3.2	5.2	e54	14	5.7	e6.7
10	3.8	3.3	e2.5	2.1	e2.2	3.0	4.3	5.8	58	12	4.9	e7.5
11	3.8	3.2	e2.5	2.1	e2.2	3.1	5.9	4.5	60	11	5.1	7.4
12	4.2	e3.0	e2.4	2.1	e2.2	3.2	6.4	7.7	57	11	5.1	6.6
13	3.6	e3.0	e2.3	2.1	e2.2	3.3	7.3	15	59	11	5.4	6.0
14	3.5	3.1	2.3	2.1	e2.3	3.4	8.7	25	53	9.7	4.7	5.9
15	3.3	3.1	2.3	2.2	e2.2	3.5	9.1	29	60	9.6	3.8	5.4
16	3.2	e2.9	2.2	e2.2	e2.3	3.4	7.5	43	60	9.8	4.5	4.3
17	2.8	e3.0	2.3	e2.2	e2.4	3.8	6.7	56	58	8.7	7.8	4.0
18	2.8	3.0	2.3	e2.2	e2.3	3.8	6.8	60	56	8.8	10	4.3
19	2.7	e2.8	2.3	e2.2	e2.4	3.4	5.9	60	52	8.4	8.2	3.7
20	2.7	e2.8	2.2	e2.2	e2.5	3.3	5.9	52	56	7.8	6.2	3.7
21	2.7	e2.8	2.3	e2.2	e2.4	3.5	7.7	57	49	7.6	5.2	3.5
22	2.8	e2.8	2.3	e2.1	e2.4	3.7	10	67	44	7.2	5.2	3.2
23	3.6	e2.8	2.2	e2.1	e2.4	4.1	10	80	42	7.1	4.5	3.5
24	3.4	2.7	2.2	e2.1	e2.4	4.2	9.6	85	39	6.4	4.4	3.2
25	3.2	e2.7	2.3	e2.1	e2.4	3.6	11	e92	36	6.5	e4.5	3.2
26	3.0	e2.6	2.2	e2.1	e2.5	3.5	10	e95	33	7.8	e4.5	3.3
27	3.5	e2.6	2.2	e2.1	e2.5	3.7	12	e105	33	7.6	e4.4	2.7
28	3.2	e2.6	2.2	e2.1	e2.5	3.6	14	e130	33	7.5	e5.0	2.9
29	2.7	e2.6	2.2	e2.1	---	4.1	15	e138	28	6.7	e4.5	2.5
30	3.2	e2.6	e2.1	e2.1	---	3.1	15	e130	26	6.5	e4.3	2.6
31	3.7	---	2.1	e2.1	---	3.4	---	e116	---	5.9	e4.9	---
TOTAL	109.7	90.5	73.0	65.8	63.8	101.2	219.6	1,514.5	1,710	341.6	164.7	127.3
MEAN	3.54	3.02	2.35	2.12	2.28	3.26	7.32	48.9	57.0	11.0	5.31	4.24
MAX	4.7	3.9	2.6	2.2	2.5	4.2	15	138	145	23	10	7.5
MIN	2.7	2.6	2.1	2.1	2.1	2.4	2.9	4.5	26	5.9	3.8	2.5
AC-FT	218	180	145	131	127	201	436	3,000	3,390	678	327	252

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

MEAN	4.46	3.61	2.97	2.51	2.40	2.99	6.48	29.8	60.3	27.6	9.65	5.64
MAX	8.42	5.78	5.01	4.17	3.99	4.71	11.2	60.3	114	79.5	25.6	10.6
(WY)	(1998)	(1997)	(1984)	(1986)	(1986)	(1997)	(1996)	(2000)	(1983)	(1983)	(1984)	(1984)
MIN	2.28	2.07	1.65	1.44	1.51	1.49	2.48	11.5	17.5	4.69	2.34	1.41
(WY)	(1981)	(1980)	(1995)	(1981)	(1977)	(1977)	(1975)	(1977)	(2002)	(2002)	(1977)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1974 - 2003	
ANNUAL TOTAL	2,136.9		4,581.7			
ANNUAL MEAN	5.85		12.6		13.2	
HIGHEST ANNUAL MEAN					22.7	1984
LOWEST ANNUAL MEAN					4.94	1977
HIGHEST DAILY MEAN	36	Jun 2	e145	Jun 1	242	Jun 27, 1983
LOWEST DAILY MEAN	1.7	Sep 6	e2.1	Dec 30	0.55	Sep 10, 1977
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 2	e2.1	Dec 30	0.75	Sep 5, 1977
MAXIMUM PEAK FLOW			unknown		249	Jun 27, 1983
MAXIMUM PEAK STAGE			unknown		3.46	Jun 27, 1983
ANNUAL RUNOFF (AC-FT)	4,240		9,090		9,550	
10 PERCENT EXCEEDS	13		46		39	
50 PERCENT EXCEEDS	3.2		3.7		4.4	
90 PERCENT EXCEEDS	2.3		2.2		2.1	

e Estimated.

09067005 EAGLE RIVER AT AVON, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°37'54", long 106°31'19", in SE¼NW¼ sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank 100 ft downstream from bridge, 300 ft north of Highway 6 and 24, and 350 ft downstream from Beaver Creek, in the city of Avon.

DRAINAGE AREA.--395 mi^2.

PERIOD OF RECORD.--October 1993 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09067005

REMARKS.--Records of discharge are given for Eagle River below wastewater treatment plant at Avon (station 09067020), located 0.6 mi downstream; flows are considered to be equivalent. Additional water-quality data were collected and are published in the "Eagle River Watershed Retrospective Assessment Program" section of this report.

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

Date	Time	Instantaneous discharge, cfs (00061)	Turbidity, wat unf lab, Hach 2100AN NTU (99872)	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)
OCT													
22...	1210	67	--	9.8	8.1	293	4.0	140	38.3	10.6	1.08	0.2	6.02
NOV													
14...	0850	92	--	10.7	7.8	262	0.5	120	33.0	9.75	0.90	0.2	5.57
DEC													
16...	1345	62	--	11.3	8.2	324	0.5	150	39.6	11.3	1.30	0.2	6.40
JAN													
16...	1200	39	--	13.3	8.3	401	0.0	190	51.5	14.3	1.43	0.3	8.85
FEB													
21...	0850	52	--	11.1	8.2	379	0.2	170	46.2	13.8	1.44	0.3	8.90
MAR													
27...	1240	71	--	10.6	8.4	393	4.1	170	44.5	13.3	1.30	0.4	11.8
APR													
17...	0915	241	--	10.4	7.9	223	2.7	95	26.0	7.32	0.81	0.3	6.57
24...	1135	225	6.3	10.7	8.0	240	0.7	100	28.5	8.03	0.93	0.3	6.18
MAY													
02...	1425	362	5.4	9.2	8.2	221	5.6	94	25.9	7.15	0.87	0.2	4.90
07...	1048	301	2.5	9.4	8.3	233	5.0	100	27.7	7.56	0.87	0.2	5.15
13...	1025	399	4.3	9.3	8.3	207	5.8	91	25.1	6.73	0.86	0.2	4.59
21...	1130	1,240	5.4	9.9	8.1	128	5.8	--	--	4.43	0.62	--	2.45
28...	1410	2,910	15	8.7	7.8	93	8.7	41	11.4	2.96	0.57	0.1	1.50
JUN													
04...	1030	2,560	11	9.5	7.9	105	5.3	50	14.2	3.41	0.60	0.1	1.62
JUL													
23...	1145	261	--	8.2	8.6	202	13.6	97	27.6	6.91	0.70	0.1	3.13
AUG													
14...	1045	141	--	8.4	8.4	246	14.4	120	33.1	8.35	0.96	0.2	4.14
SEP													
10...	1450	306	--	8.4	8.2	179	10.4	80	22.1	5.92	0.95	0.2	3.48

09067005 EAGLE RIVER AT AVON, CO—Continued

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

Date	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT													
22...	78	95	--	5.89	<0.2	5.3	58.4	173	0.24	31.4	E.08	0.11	<0.015
NOV													
14...	69	84	--	7.26	<0.17	5.6	46.6	152	0.21	37.6	E.07	0.12	<0.015
DEC													
16...	80	98	--	7.68	<0.17	6.4	60.5	184	0.25	30.8	0.11	0.12	0.023
JAN													
16...	90	104	3	12.4	<0.17	6.9	79.0	231	0.31	24.4	E.06	0.11	E.008
FEB													
21...	94	114	--	12.8	0.12	6.9	73.2	223	0.30	31.3	E.09	0.11	<0.015
MAR													
27...	87	106	4	24.0	0.12	6.0	66.6	226	0.31	43.3	0.15	0.21	E.009
APR													
17...	58	70	--	12.9	0.07	6.5	27.4	124	0.17	80.7	0.31	0.23	<0.015
24...	62	75	--	11.4	<0.17	6.39	30.6	130	0.18	78.7	--	--	--
MAY													
02...	68	78	2	8.04	<0.17	6.71	22.0	117	0.16	114	--	--	--
07...	74	90	--	10.2	<0.17	6.31	22.2	125	0.17	101	--	--	--
13...	58	70	--	8.72	<0.2	5.87	19.4	106	0.14	114	--	--	--
21...	46	56	--	3.49	<0.2	5.90	8.8				0.15	0.28	<0.015
28...	36	43	--	1.93	<0.2	4.68	5.3	50	0.07	392	--	--	--
JUN													
04...	42	51	--	2.03	<0.2	5.26	6.0	59	0.08	406	E.10	0.24	<0.015
JUL													
23...	--	--	--	4.39	<0.2	4.4	25.6	--	--	--	0.10	0.10	<0.015
AUG													
14...	78	95	6	6.09	<0.2	5.6	31.0	143	0.19	54.4	E.10	0.15	<0.015
SEP													
10...	56	68	--	4.85	<0.2	5.0	23.5	100	0.14	82.6	E.08	0.35	<0.015

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

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT									
22...	0.193	E.002	--	0.012	0.017	0.024	--	--	--
NOV									
14...	0.251	<0.002	--	0.008	0.012	0.020	1.8	43	21
DEC									
16...	0.560	0.008	0.09	0.043	0.050	0.061	--	--	--
JAN									
16...	0.639	0.003	--	0.048	0.055	0.068	--	--	--
FEB									
21...	0.716	0.003	--	0.058	0.069	0.083	--	E5	E8
MAR									
27...	0.531	0.003	--	0.030	0.037	0.066	--	--	--
APR									
17...	0.403	E.002	--	0.007	0.012	0.031	4.1	E3	E2
24...	--	--	--	--	--	--	--	--	--
MAY									
02...	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
21...	0.224	E.002	--	<0.007	0.007	0.026	--	E4	E6
28...	--	--	--	--	--	--	--	--	--
JUN									
04...	0.095	0.003	--	<0.007	E.003	0.037	3.6	E5	--
JUL									
23...	0.062	<0.002	--	<0.007	0.005	0.016	--	--	--
AUG									
14...	0.227	0.003	--	<0.007	0.016	0.026	1.6	33	30
SEP									
10...	0.187	0.003	--	0.008	0.015	0.082	--	--	--

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

09067005 EAGLE RIVER AT AVON, CO—Continued

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

Date	Alum-inum, water, fltrd, ug/L (01106)	Arsenic water, fltrd, ug/L (01000)	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	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)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)
NOV													
14...	--	--	<0.2	--	E.9	83	320	<1	73.3	97.7	<0.02	--	<3
APR													
17...	--	--	E.2	--	3.7	--	530	<1	93.7	136	<0.02	--	<3
24...	28	E.1	0.33	<0.8	--	138	690	0.37	115	256	--	1.09	--
MAY													
02...	31	E.2	0.24	<0.8	--	91	400	0.18	58.5	80	--	0.82	--
07...	28	E.2	0.27	<0.8	--	123	360	0.23	71.5	79	--	0.94	--
13...	25	E.2	0.20	<0.8	--	118	420	0.22	50.1	75	--	1.32	--
21...	86	E.2	0.08	0.8	--	86	420	0.40	19.5	59	--	1.61	--
28...	41	E.2	0.04	--	1.8	45	--	--	13.9	--	--	--	--
JUN													
04...	32	E.1	0.04	--	1.4	39	--	<1	10.3	60.2	<0.02	--	<3
AUG													
14...	--	--	<0.2	--	7.6	--	330	<1	42.9	53.0	<0.02	--	<3

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

Date	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
NOV			
14...	<0.3	53	--
APR			
17...	<0.3	120	--
24...	<0.20	138	230
MAY			
02...	<0.20	72	101
07...	<0.20	92	112
13...	<0.20	64	100
21...	<0.20	29	43
28...	--	12	--
JUN			
04...	<0.3	11	--
AUG			
14...	<0.3	23	--

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instan-taneous dis-charge, cfs (00061)	Temper-ature, water, deg C (00010)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
NOV						
14...	0850	92	0.5	--	3	0.72
FEB						
21...	0850	52	0.2	--	4	0.56
APR						
17...	0915	241	2.7	--	7	4.5
MAY						
21...	1130	1,240	5.8	60	17	57
JUN						
04...	1030	2,560	5.3	40	64	442
AUG						
14...	1045	141	14.4	--	5	1.8

09067020 EAGLE RIVER BELOW WASTEWATER TREATMENT PLANT AT AVON, CO

LOCATION.--Lat 39°38'06", long 106°31'57", in NE¼NE¼ sec.11, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on right bank 60 ft downstream from Eagle River Wastewater Treatment Plant effluent discharge point, and 0.2 mi upstream from Beaver Creek Boulevard bridge, in the city of Avon.

DRAINAGE AREA.--402 mi^2.

PERIOD OF RECORD.--October 1999 to current year. October 1988 to September 1999, streamflow data were collected 0.6 mi upstream at site 09067005 Eagle River at Avon; streamflow records are considered to be equivalent. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09067020

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 7,380 ft above NGVD of 1929, from topographic map. Prior to October 14, 1999, streamflow data were collected 0.6 mi upstream at site 09067005 Eagle River at Avon; streamflow records are considered to be equivalent.

REMARKS.--No estimated daily discharges. Records good except Nov. 18 to Mar. 18 and May 28 to June 13, which are fair, and June 14 to July 1, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, and diversions for irrigation and municipal use.

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	129	88	66	58	51	54	85	423	3,730	841	197	143
2	120	86	66	53	52	52	102	375	3,400	820	186	128
3	133	71	62	55	50	49	112	368	2,940	780	179	118
4	131	66	60	54	44	54	102	415	2,600	731	209	117
5	128	73	59	52	50	55	90	370	2,310	674	181	111
6	121	58	50	48	45	51	92	327	2,040	618	164	131
7	116	65	47	45	40	54	84	309	1,870	569	160	165
8	116	80	44	43	42	56	77	304	1,680	522	170	181
9	114	90	37	48	50	56	87	295	1,700	494	158	224
10	109	81	38	58	48	58	114	298	1,830	452	144	283
11	104	89	47	54	52	60	158	276	1,830	423	136	297
12	96	78	51	53	48	65	190	292	1,750	397	137	262
13	88	85	56	49	49	71	206	396	1,730	378	137	303
14	86	88	53	49	52	78	277	491	1,650	363	137	258
15	83	81	61	43	48	81	306	707	1,680	349	120	220
16	81	66	62	44	44	84	268	850	1,680	358	121	194
17	76	72	67	49	47	86	260	1,130	1,530	347	192	175
18	74	79	69	40	45	80	262	1,260	1,520	338	298	168
19	71	68	62	46	44	73	232	1,300	1,490	326	255	160
20	68	73	54	44	43	69	213	1,250	1,550	305	193	151
21	69	71	67	46	49	73	218	1,280	1,420	294	160	139
22	69	71	60	45	49	70	246	1,380	1,370	274	147	132
23	77	69	51	45	48	76	271	1,780	1,330	255	158	125
24	80	71	61	48	49	89	244	2,060	1,210	242	163	121
25	78	68	56	49	51	81	252	2,240	1,080	245	196	120
26	71	42	48	48	51	78	316	2,170	985	300	184	116
27	83	55	51	51	52	80	387	2,460	989	300	163	112
28	81	63	50	50	51	73	423	3,170	974	280	176	109
29	77	65	52	48	---	66	452	3,660	958	256	151	107
30	68	62	53	47	---	70	475	3,970	900	242	149	103
31	79	---	49	50	---	71	---	3,550	---	212	162	---
TOTAL	2,876	2,174	1,709	1,512	1,344	2,113	6,601	39,156	51,726	12,985	5,283	4,973
MEAN	92.8	72.5	55.1	48.8	48.0	68.2	220	1,263	1,724	419	170	166
MAX	133	90	69	58	52	89	475	3,970	3,730	841	298	303
MIN	68	42	37	40	40	49	77	276	900	212	120	103
AC-FT	5,700	4,310	3,390	3,000	2,670	4,190	13,090	77,670	102,600	25,760	10,480	9,860

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

MEAN	101	75.1	66.3	63.2	58.4	67.6	250	1,174	1,158	296	146	124
MAX	128	78.6	83.9	74.9	69.1	76.8	298	1,665	1,724	419	188	166
(WY)	(2000)	(2001)	(2001)	(2001)	(2000)	(2000)	(2000)	(2000)	(2003)	(2003)	(2001)	(2003)
MIN	77.2	70.9	55.1	48.8	48.0	53.5	220	555	488	114	65.1	80.0
(WY)	(2002)	(2002)	(2003)	(2003)	(2003)	(2002)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	59,477		132,452			
ANNUAL MEAN	163		363		299	
HIGHEST ANNUAL MEAN					369	2000
LOWEST ANNUAL MEAN					163	2002
HIGHEST DAILY MEAN	1,060	May 31	3,970	May 30	3,970	May 30, 2003
LOWEST DAILY MEAN	29	Sep 6	37	Dec 9	a29	Sep 6, 2002
ANNUAL SEVEN-DAY MINIMUM	31	Sep 2	45	Jan 15	31	Sep 2, 2002
MAXIMUM PEAK FLOW			4,670	May 30	4,670	May 30, 2003
MAXIMUM PEAK STAGE			9.26	May 30	9.26	May 30, 2003
ANNUAL RUNOFF (AC-FT)	118,000		262,700		216,700	
10 PERCENT EXCEEDS	448		1,250		837	
50 PERCENT EXCEEDS	74		109		95	
90 PERCENT EXCEEDS	48		49		53	

a Also occurred Sep 7, 2002.

09067200 LAKE CREEK NEAR EDWARDS, CO

LOCATION.--Lat 39°38'51", long 106°36'31", in SE¼NE¼ sec.6, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on right bank 30 ft upstream from U.S. Highway 6, and 1.0 mi west of Edwards.

DRAINAGE AREA.--49.0 mi^2.

PERIOD OF RECORD.--October 1993 to current year. Published as station number 09066980 during the 1994-96 water years. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09067200

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,160 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	46	22	13	9.5	8.4	9.2	12	39	650	143	42	23
2	38	21	13	9.7	8.4	8.9	13	35	644	158	38	21
3	39	18	12	9.3	8.2	9.4	13	33	539	150	33	22
4	37	17	e12	9.2	8.5	8.9	12	38	453	134	30	19
5	35	19	12	9.2	8.3	9.1	12	38	347	121	28	20
6	33	16	11	9.2	8.8	8.9	12	37	221	107	26	22
7	32	16	e11	e9.0	e7.7	9.3	11	32	191	97	26	29
8	32	15	e11	e9.0	e8.6	9.8	11	30	174	95	29	36
9	31	17	e11	e9.0	8.5	10	12	27	215	94	27	43
10	27	17	e11	9.1	8.2	10	14	27	340	90	26	58
11	26	18	e11	9.0	8.3	11	16	25	366	84	23	58
12	23	15	11	9.0	8.4	11	18	25	344	77	23	54
13	21	17	11	8.5	8.3	12	20	35	336	72	22	69
14	20	16	10	8.0	8.8	12	23	44	271	68	23	56
15	18	16	11	7.7	8.5	12	28	72	353	62	21	49
16	17	15	11	8.4	8.7	12	29	106	384	69	21	43
17	16	16	11	8.3	8.9	12	30	142	279	62	26	38
18	17	15	10	9.5	8.8	12	28	190	268	62	71	35
19	18	14	10	9.4	8.9	11	24	181	228	63	58	34
20	16	14	e10	9.2	9.6	11	22	149	239	58	42	32
21	15	14	11	8.3	9.0	12	22	159	230	54	32	29
22	16	13	10	8.3	8.9	12	23	214	232	52	28	28
23	18	13	e10	8.3	8.8	12	26	286	235	50	29	24
24	18	13	11	8.2	8.8	13	24	303	205	47	30	22
25	17	14	10	8.2	9.1	12	28	307	171	50	30	22
26	17	e13	10	8.2	9.3	12	31	315	135	67	30	23
27	20	e14	9.8	8.3	9.3	12	35	493	165	56	26	22
28	19	e13	9.7	8.2	9.2	11	41	570	174	54	29	21
29	19	e13	9.5	8.0	---	11	45	733	173	52	25	21
30	18	e13	9.4	8.0	---	11	44	609	155	51	24	21
31	20	---	9.5	8.4	---	11	---	546	---	45	26	---
TOTAL	739	467	332.9	269.6	243.2	338.5	679	5,840	8,717	2,444	944	994
MEAN	23.8	15.6	10.7	8.70	8.69	10.9	22.6	188	291	78.8	30.5	33.1
MAX	46	22	13	9.7	9.6	13	45	733	650	158	71	69
MIN	15	13	9.4	7.7	7.7	8.9	11	25	135	45	21	19
AC-FT	1,470	926	660	535	482	671	1,350	11,580	17,290	4,850	1,870	1,970

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

MEAN	28.1	20.7	13.8	11.8	11.1	12.5	23.7	130	240	116	55.0	33.6
MAX	44.8	28.4	19.0	16.0	13.3	14.9	36.1	197	418	293	125	56.0
(WY)	(1998)	(1996)	(1996)	(1997)	(1998)	(1997)	(2000)	(2000)	(1997)	(1995)	(1995)	(1997)
MIN	16.1	13.7	10.6	8.70	8.14	8.92	15.4	43.8	90.5	22.2	14.5	19.8
(WY)	(2002)	(2002)	(2002)	(2003)	(2002)	(2002)	(1995)	(1995)	(2002)	(2002)	(2002)	(2001)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1994 - 2003	
ANNUAL TOTAL	10,288.6		22,008.2			
ANNUAL MEAN	28.2		60.3		58.2	
HIGHEST ANNUAL MEAN					87.3	1997
LOWEST ANNUAL MEAN					27.4	2002
HIGHEST DAILY MEAN	181	May 21	733	May 29	845	Jun 16, 1995
LOWEST DAILY MEAN	5.4	Sep 5	7.7	Jan 15	a5.4	Sep 5, 2002
ANNUAL SEVEN-DAY MINIMUM	5.6	Sep 2	8.2	Jan 24	5.6	Sep 2, 2002
MAXIMUM PEAK FLOW			1,180	May 29	1,290	Jun 16, 1995
MAXIMUM PEAK STAGE			3.30	May 29	3.63	Jun 16, 1995
ANNUAL RUNOFF (AC-FT)	20,410		43,650		42,160	
10 PERCENT EXCEEDS	65		174		170	
50 PERCENT EXCEEDS	15		21		23	
90 PERCENT EXCEEDS	8.1		8.9		10	

e Estimated.
a Also occurred Sep 6,7, 2002.

394220106431500 EAGLE RIVER BELOW MILK CREEK NEAR WOLCOTT, CO
(Eagle River Watershed Retrospective Assessment Program)

WATER-QUALITY RECORDS

LOCATION.--Lat 39°42'20", long 106°43'15", in SW¼NW¼ sec. 17, T.4S, R.83W., Eagle County, Hydrologic Unit 14010003, at U.S. Highway 6, 0.75 mi downstream from Milk Creek, and 2.3 mi west of Wolcott.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--May to August 1976, October 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=394220106431500

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)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
OCT 22...	1440	115	10.8	8.9	887	7.5	210	62.2	13.6	3.06	3	98.9	99
NOV 12...	1445	116	12.8	9.0	814	2.0	200	57.1	13.4	2.46	3	86.3	84
DEC 16...	1015	73	11.1	8.2	1,030	0.0	230	67.3	15.9	3.62	3	104	100
JAN 15...	1415	75	11.7	8.4	1,130	0.0	260	74.9	17.3	3.68	3	126	103
FEB 19...	1440	75	12.0	8.7	1,250	4.3	280	81.5	19.4	4.70	4	145	112
MAR 26...	1500	123	9.9	8.8	1,000	6.4	250	70.1	18.2	2.91	3	101	103
APR 15...	1450	315	9.3	8.3	374	6.1	120	33.7	8.59	1.42	1	25.8	65
MAY 20...	1710	1,610	8.6	8.2	186	9.8	77	22.0	5.46	0.90	0.3	6.28	54
JUN 05...	0930	3,100	9.3	8.0	138	6.9	59	17.1	3.94	0.699	0.2	4.01	46
JUL 23...	1400	294	8.0	8.9	467	18.1	140	40.0	8.92	1.62	1	40.3	75
AUG 12...	1515	177	7.4	8.7	724	21.6	190	55.8	13.4	2.78	2	72.8	98
SEP 09...	1610	292	7.9	8.3	478	14.3	150	42.0	10.7	1.91	1	36.2	83

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

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)
OCT 22...	99	11	152	<0.2	4.6	111	508	0.69	158	0.13	0.16	E.009	0.617
NOV 12...	93	5	137	<0.17	4.8	102	456	0.62	143	0.11	0.18	<0.015	0.621
DEC 16...	122	--	175	0.17	6.1	122	561	0.76	111	0.18	0.19	0.016	1.71
JAN 15...	120	3	199	0.18	5.9	135	634	0.86	128	0.18	0.34	0.021	2.15
FEB 19...	122	7	229	0.17	4.4	152	713	0.97	144	0.30	0.34	0.015	2.02
MAR 26...	106	10	157	0.16	4.5	130	551	0.75	183	0.24	0.61	0.025	1.25
APR 15...	79	--	43.1	0.09	6.23	45.5	207	0.28	176	0.22	0.66	0.021	0.676
MAY 20...	66	--	8.71	<0.2	6.3	18.5	102	0.14	442	0.17	0.46	E.010	0.306
JUN 05...	57	--	5.01	<0.2	5.28	11.9	76	0.10	639	0.11	0.21	<0.015	0.131
JUL 23...	80	6	61.5	<0.2	4.1	49.5	252	0.34	200	0.15	0.18	0.018	0.176
AUG 12...	120	--	110	<0.2	5.52	78.5	401	0.55	192	0.18	0.24	E.010	0.606
SEP 09...	101	--	59.4	<0.2	5.7	56.9	265	0.36	209	0.13	0.49	<0.015	0.522

394220106431500 EAGLE RIVER BELOW MILK CREEK NEAR WOLCOTT, CO—Continued

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

Date	Nitrite water, fltrd, mg/L as N (00613)	Organic nitro-gen, water, fltrd, mg/L (00607)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)
OCT 22...	0.034	--	0.046	0.054	0.068	--	--	--
NOV 12...	0.036	--	0.042	0.051	0.072	1.8	<1	E1
DEC 16...	0.135	0.17	0.150	0.166	0.184	--	--	--
JAN 15...	0.092	0.15	0.216	0.22	0.26	--	--	--
FEB 19...	0.067	0.28	0.243	0.26	0.27	--	<1	<1
MAR 26...	0.036	0.21	0.140	0.159	0.30	--	--	--
APR 15...	0.015	0.20	0.035	0.044	0.24	4.2	23	30
MAY 20...	0.003	--	0.010	0.015	0.120	--	E3	E4
JUN 05...	0.003	--	<0.007	0.007	0.065	3.6	E7	--
JUL 23...	0.004	0.13	0.020	0.030	0.039	--	--	--
AUG 12...	0.010	--	0.061	0.079	0.096	1.6	E90	E10
SEP 09...	0.005	--	0.035	0.051	0.190	--	--	--

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

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

Date	Cadmium water, fltrd, ug/L (01025)	Chrom-ium, water, fltrd, ug/L (01030)	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)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Nickel, water, fltrd, ug/L (01065)	Selen-ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
NOV 12...	<0.2	--	E.9	42	150	<1	19.8	28.0	<0.02	--	<3	<0.3	<24
APR 15...	<0.2	<0.8	2.2	68	1,500	0.23	69.3	162	<0.02	1.77	E.3	<0.2	24
JUN 05...	<0.2	<0.8	1.3	33	1,110	0.12	12.8	79.6	<0.02	0.41	<0.5	<0.2	9
AUG 12...	<0.2	<0.8	1.4	38	320	0.27	19.4	47.2	<0.02	1.25	E.4	<0.2	9

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instan-taneous dis-charge, cfs (00061)	Temper-ature, water, deg C (00010)	Suspnd. sedi-ment, sieve diametr percent <.063mm (70331)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
NOV 12...	1445	116	2.0	--	5	1.6
FEB 19...	1440	75	4.3	--	7	1.5
APR 15...	1450	315	6.1	84	174	148
MAY 20...	1710	1,610	9.8	75	134	582
JUN 05...	0930	3,100	6.9	62	46	385
AUG 12...	1515	177	21.6	98	15	7.2

09069000 EAGLE RIVER AT GYPSUM, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°39'00", long 106°57'06", Eagle County, Hydrologic Unit 14010003, at bridge at Gypsum, about 400 ft upstream from Gypsum Creek, about 520 ft upstream from bridge on U.S. Highways 6 and 24, and about 550 ft upstream from gaging station.

DRAINAGE AREA.--944 mi^2, at gaging station.

PERIOD OF RECORD.--April 1947 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09069000

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1947 to March 31, 1995.
WATER TEMPERATURE: April 1949 to March 31, 1995.

REMARKS.--Records of discharge are given for Eagle River below Gypsum (station 09070000), located 550 ft downstream from Eagle River at Gypsum (station 09069000), except for Nov. 12, Dec. 17, Jan. 15, Feb. 19, and Mar 26.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd 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)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)
OCT													
23...	0850	162	9.5	8.2	983	6.5	330	103	18.3	3.38	2	76.7	125
NOV													
12...	1145	143	13.6	8.6	941	2.5	310	94.6	17.7	2.84	2	75.4	114
DEC													
17...	0900	122	11.2	8.2	1,100	0.0	320	97.6	19.0	3.44	2	89.0	120
JAN													
15...	1050	96	11.8	8.3	1,160	0.2	330	101	19.9	3.07	2	93.4	120
FEB													
19...	1200	86	12.4	8.3	1,190	2.8	360	108	21.7	4.09	2	104	116
MAR													
26...	1045	146	9.6	8.3	1,040	6.4	310	91.5	20.6	3.11	2	85.3	116
APR													
15...	1200	420	9.0	8.2	486	8.4	170	49.5	11.2	1.70	1	31.7	81
MAY													
20...	1315	1,680	9.0	7.9	218	9.6	94	27.5	6.05	0.90	0.3	6.86	38
JUN													
05...	1345	3,020	8.4	8.1	178	11.7	79	23.3	4.92	0.82	0.3	5.82	49
JUL													
23...	0844	336	7.9	8.3	599	15.9	220	67.0	12.1	1.97	1	37.5	98
AUG													
12...	1220	216	7.6	8.2	881	20.2	300	93.0	16.1	3.22	2	62.1	109
SEP													
09...	1200	305	7.5	8.1	735	14.3	280	84.9	16.6	3.02	1	46.2	112

09069000 EAGLE RIVER AT GYPSUM, CO—Continued

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

Date	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	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 total at 105 deg. C, suspended, mg/L (00530)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)
OCT													
23...	152	--	119	<0.2	4.1	200	601	0.82	263	--	0.15	0.21	E.013
NOV													
12...	133	3	119	<0.17	4.6	184	569	0.77	220	--	0.11	0.22	E.010
DEC													
17...	146	--	150	<0.17	5.6	196	637	0.87	210	--	0.14	0.18	E.014
JAN													
15...	147	2	156	0.18	6.1	215	675	0.92	174	--	0.14	0.20	0.025
FEB													
19...	128	7	169	0.18	4.1	219	706	0.96	164	--	0.22	0.26	0.038
MAR													
26...	135	4	133	0.18	6.2	185	600	0.82	237	--	0.27	0.63	0.059
APR													
15...	99	2	48.9	0.11	6.7	77.9	281	0.38	319	--	0.24	1.5	0.062
MAY													
20...	47	--	9.30	<0.2	6.5	29.5	111	0.15	503	--	0.19	0.63	E.012
JUN													
05...	60	--	6.45	<0.2	5.5	22.6	100	0.14	812	28	0.14	0.23	<0.015
JUL													
23...	112	4	55.7	<0.2	5.4	106	345	0.47	313	--	0.19	0.19	0.021
AUG													
12...	132	--	94.4	<0.2	7.4	168	512	0.70	299	442	0.20	1.3	0.030
SEP													
09...	137	--	68.0	<0.2	7.1	151	447	0.61	368	--	0.13	7.0	0.037

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

Date	Nitrite + nitrate water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Organic nitrogen, water, fltrd, mg/L (00607)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, fltrd, mg/L (00666)	Phosphorus, water, unfltrd mg/L (00665)	Organic carbon, water, fltrd, mg/L (00681)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT									
23...	0.351	0.014	--	0.007	0.012	0.029	--	--	--
NOV									
12...	0.484	0.065	--	0.015	0.023	0.046	2.0	E2	E2
DEC									
17...	1.03	0.024	--	0.057	0.066	0.085	--	--	--
JAN									
15...	1.40	0.032	0.12	0.110	0.120	0.137	--	--	--
FEB									
19...	1.31	0.017	0.18	0.127	0.150	0.173	--	E1	<1
MAR									
26...	1.15	0.024	0.21	0.122	0.134	0.27	--	--	--
APR									
15...	0.667	0.014	0.18	0.031	0.040	0.56	3.2	E14	33
MAY									
20...	0.279	0.003	--	0.007	0.013	0.190	--	E30	28
JUN									
05...	0.138	0.004	--	E.004	0.009	0.056	3.4	E10	--
JUL									
23...	0.300	0.006	0.17	0.022	0.032	0.045	--	--	--
AUG									
12...	0.659	0.008	0.17	0.032	0.043	0.46	1.9	E3	250
SEP									
09...	0.586	0.006	0.09	0.014	0.022	2.55	--	--	--

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

09069000 EAGLE RIVER AT GYPSUM, CO—Continued

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

Date	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Barium, water, fltrd, ug/L (01005)	Beryll-ium, water, fltrd, ug/L (01010)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chrom-ium, water, fltrd, ug/L (01030)	Chrom-ium, water, unfltrd recover-able, ug/L (01034)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)
OCT 23...	--	--	--	--	--	--	--	--	--	--	26	--	--
NOV 12...	--	--	--	--	<0.2	--	--	--	E.9	--	30	160	<1
DEC 17...	--	--	--	--	--	--	--	--	--	--	14	--	--
JAN 15...	--	--	--	--	--	--	--	--	--	--	<10	--	--
FEB 19...	--	--	--	--	--	--	--	--	--	--	E9	--	--
MAR 26...	--	--	--	--	--	--	--	--	--	--	<10	--	--
APR 15...	--	--	--	--	<0.2	--	--	--	1.3	--	56	6,450	<1
MAY 20...	--	--	--	--	--	--	--	--	--	--	41	--	--
JUN 05...	<2	<2	36.3	<0.4	<0.2	E.1	<0.8	1.1	E.9	1.8	29	--	<1
JUL 23...	--	--	--	--	--	--	--	--	--	--	49	--	--
AUG 12...	<2	3	83.1	<0.4	<0.2	1.8	<0.8	2.4	1.5	7.9	E4	--	<1
SEP 09...	--	--	--	--	--	--	--	--	--	--	<8	--	--

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

Date	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, fltrd, ug/L (01145)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)
OCT 23...	--	25.6	--	--	--	--	--	--	--	--	--	--	--
NOV 12...	--	22.8	30.1	<0.02	--	--	--	<3	--	<0.3	--	<24	--
DEC 17...	--	24.2	--	--	--	--	--	--	--	--	--	--	--
JAN 15...	--	22.3	--	--	--	--	--	--	--	--	--	--	--
FEB 19...	--	33.3	--	--	--	--	--	--	--	--	--	--	--
MAR 26...	--	31.7	--	--	--	--	--	--	--	--	--	--	--
APR 15...	--	71.0	289	<0.02	--	--	--	<3	--	<0.3	--	E13	--
MAY 20...	--	19.2	--	--	--	--	--	--	--	--	--	--	--
JUN 05...	3	17.6	--	<0.02	<0.02	<2.0	<2.0	<3	<3	<0.3	<0.3	7	40
JUL 23...	--	23.5	--	--	--	--	--	--	--	--	--	--	--
AUG 12...	6	17.1	--	<0.02	0.02	<2.0	15.1	<3	<3	<0.3	<0.3	4	20
SEP 09...	--	8.5	--	--	--	--	--	--	--	--	--	--	--

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

09069000 EAGLE RIVER AT GYPSUM, CO—Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV						
12...	1145	143	2.5	--	7	2.9
FEB						
19...	1200	86	2.8	--	5	1.2
APR						
15...	1200	420	8.4	97	421	477
MAY						
20...	1315	1,680	9.6	78	158	717
JUN						
05...	1345	3,020	11.7	54	79	644
AUG						
12...	1220	216	20.2	100	456	266

09070000 EAGLE RIVER BELOW GYPSUM, CO

LOCATION.--Lat 39°38'58", long 106°57'11", in SW¼NW¼ sec.5, T.5 S., R.85 W., Eagle County, Hydrologic Unit 14010003, on right bank 20 ft downstream from bridge on U.S. Highways 6 and 24 at Gypsum and 150 ft downstream from Gypsum Creek.

DRAINAGE AREA.--944 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1946 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09070000

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,275.11 ft, above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good except for the period Aug. 19-27, and estimated daily discharges, which are poor. Transmountain diversions upstream from station, see elsewhere in this report. Transbasin diversions upstream from station from Robinson Reservoir (capacity, 2,520 acre-ft) to Tenmile Creek for mining development. Many small diversions for irrigation of hay meadows upstream from station.

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	231	200	144	146	130	123	145	571	5,140	1,060	302	235
2	222	193	152	165	132	123	164	502	5,030	1,030	283	210
3	231	185	146	149	133	118	181	476	3,980	1,020	268	195
4	238	159	149	143	123	121	187	544	3,440	957	278	192
5	230	172	140	142	121	122	175	528	3,030	889	272	186
6	223	163	131	132	120	120	172	453	2,640	830	250	190
7	211	156	117	139	106	119	169	413	2,360	768	238	237
8	203	173	115	137	95	125	158	405	2,090	709	250	280
9	204	200	121	142	137	135	157	396	2,100	663	247	315
10	194	195	95	144	137	136	171	395	2,290	619	231	418
11	186	185	106	146	150	145	209	375	2,350	569	222	478
12	180	177	132	140	152	148	254	365	2,310	538	214	410
13	170	166	133	151	135	146	275	454	2,250	508	215	426
14	163	184	137	149	140	148	328	585	2,120	486	215	407
15	164	170	131	133	149	147	397	849	2,160	448	209	351
16	161	154	146	132	132	152	384	1,030	2,210	452	202	314
17	156	148	152	140	130	157	350	1,440	1,970	440	265	288
18	152	165	153	152	126	162	356	1,760	1,940	428	432	272
19	154	153	156	132	119	146	333	1,850	1,860	426	485	263
20	153	150	130	149	113	139	307	1,690	1,960	399	354	250
21	147	153	148	154	121	145	298	1,670	1,830	379	284	240
22	148	152	162	147	125	143	316	1,910	1,720	361	242	229
23	166	154	139	132	122	153	373	2,390	1,680	338	259	219
24	167	155	114	134	117	154	361	2,730	1,540	318	263	199
25	165	155	146	137	123	156	388	3,030	1,360	319	265	199
26	161	130	133	134	123	150	429	3,030	1,210	374	258	193
27	163	107	136	131	124	160	519	3,230	1,210	388	234	187
28	171	147	143	132	121	149	603	4,020	1,200	371	250	187
29	171	156	146	129	---	138	596	4,430	1,220	362	239	186
30	166	165	137	126	---	140	636	4,780	1,140	364	224	185
31	176	---	134	127	---	141	---	4,570	---	326	245	---
TOTAL	5,627	4,922	4,224	4,346	3,556	4,361	9,391	50,871	67,340	17,139	8,195	7,941
MEAN	182	164	136	140	127	141	313	1,641	2,245	553	264	265
MAX	238	200	162	165	152	162	636	4,780	5,140	1,060	485	478
MIN	147	107	95	126	95	118	145	365	1,140	318	202	185
AC-FT	11,160	9,760	8,380	8,620	7,050	8,650	18,630	100,900	133,600	34,000	16,250	15,750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 2003, BY WATER YEAR (WY)

MEAN	258	239	197	181	174	189	350	1,343	2,260	986	380	267
MAX	526	382	277	243	252	297	862	2,722	4,134	2,989	1,096	625
(WY)	(1962)	(1985)	(1985)	(1984)	(1986)	(1986)	(1962)	(1984)	(1984)	(1957)	(1984)	(1984)
MIN	129	164	136	139	125	138	183	528	597	170	124	141
(WY)	(1957)	(2003)	(2003)	(1990)	(1992)	(1965)	(1983)	(1977)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1947 - 2003	
ANNUAL TOTAL	91,473		187,913			
ANNUAL MEAN	251		515		569	
HIGHEST ANNUAL MEAN					1,082	1984
LOWEST ANNUAL MEAN					255	2002
HIGHEST DAILY MEAN	1,270	Jun 1	5,140	Jun 1	6,580	May 25, 1984
LOWEST DAILY MEAN	70	Sep 6	95	Dec 10	70	Sep 6, 2002
ANNUAL SEVEN-DAY MINIMUM	72	Sep 1	117	Dec 6	72	Sep 1, 2002
MAXIMUM PEAK FLOW			5,880	Jun 2	7,020	May 25, 1984
MAXIMUM PEAK STAGE			8.72	Jun 2	9.46	May 25, 1984
ANNUAL RUNOFF (AC-FT)	181,400		372,700		412,500	
10 PERCENT EXCEEDS	516		1,670		1,560	
50 PERCENT EXCEEDS	171		187		241	
90 PERCENT EXCEEDS	117		130		158	

09070000 EAGLE RIVER BELOW GYPSUM, CO—Continued

WATER-QUALITY 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=09070000

PERIOD OF DAILY RECORD.--WATER TEMPERATURE: July 2002 to current year.

INSTRUMENTATION.--Water-temperature sensor with satellite telemetry since July 2002.

REMARKS.--Daily water temperature records are good except for the period May 29 to Aug. 5, 2003, which is poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--WATER TEMPERATURE: Maximum recorded, 25.8°C July 30, 2002; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--WATER TEMPERATURE: Maximum, 24.9°C, Aug. 13; minimum, 0.0°C, on many days.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
JAN 15...	1115	134	--	0.2
APR 15...	1330	430	--	8.3
JUL 01...	1530	1,030	298	15.8

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	20.9	16.5	18.7	20.3	13.3	16.7
2	---	---	---	---	---	---	20.7	15.5	18.0	21.4	13.1	17.0
3	---	---	---	---	---	---	22.7	16.9	19.3	18.3	14.0	16.5
4	---	---	---	---	---	---	24.2	16.6	20.0	18.8	13.5	16.4
5	---	---	---	---	---	---	22.7	17.3	19.9	20.0	12.8	16.3
6	---	---	---	---	---	---	21.7	16.7	18.7	18.3	13.4	16.1
7	---	---	---	---	---	---	20.0	15.8	17.8	17.6	14.2	15.9
8	---	---	---	---	---	---	20.1	15.1	17.4	19.6	14.0	16.7
9	---	---	---	---	---	---	21.5	14.5	17.7	18.4	15.8	17.1
10	---	---	---	---	---	---	21.4	13.7	17.5	20.3	15.2	17.4
11	---	---	---	---	---	---	22.4	13.9	17.9	19.1	15.9	17.4
12	---	---	---	---	---	---	21.8	14.1	17.7	17.0	14.7	15.9
13	---	---	---	---	---	---	21.9	14.4	17.9	17.3	13.5	15.1
14	---	---	---	---	---	---	22.2	14.0	17.9	17.7	11.4	14.5
15	---	---	---	---	---	---	23.1	13.9	18.2	18.1	11.6	14.8
16	---	---	---	---	---	---	22.6	14.3	18.3	17.8	12.0	14.9
17	---	---	---	---	---	---	21.4	14.6	18.0	16.4	12.5	14.3
18	---	---	---	---	---	---	21.0	14.5	17.6	14.2	11.7	13.0
19	---	---	---	---	---	---	19.8	14.3	17.1	14.7	10.9	12.6
20	---	---	---	---	---	---	19.1	16.0	17.6	15.7	9.1	12.3
21	---	---	---	---	---	---	20.0	15.6	17.6	16.5	10.3	13.3
22	---	---	---	---	---	---	20.2	13.9	17.2	16.0	10.1	13.0
23	---	---	---	24.3	---	---	21.2	14.7	17.7	15.7	9.7	12.6
24	---	---	---	25.3	16.7	20.7	21.6	14.1	17.7	15.6	9.7	12.6
25	---	---	---	21.4	17.8	19.0	21.5	13.3	17.4	15.2	10.0	12.6
26	---	---	---	24.2	16.1	19.2	21.6	13.8	17.6	16.6	11.7	13.9
27	---	---	---	23.4	15.8	19.1	20.9	14.0	17.4	13.2	10.1	11.6
28	---	---	---	22.9	16.2	19.0	18.8	13.5	16.5	12.7	9.3	11.0
29	---	---	---	24.6	14.5	19.1	18.2	14.8	16.5	13.1	9.8	11.3
30	---	---	---	25.8	16.0	20.4	19.0	12.4	15.9	13.5	8.8	10.9
31	---	---	---	25.0	16.2	20.4	19.2	13.2	16.4	---	---	---
MONTH	---	---	---	---	---	---	24.2	12.4	17.8	21.4	8.8	14.5

09070000 EAGLE RIVER BELOW GYPSUM, 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	13.6	8.7	11.2	6.3	2.0	4.0	0.3	0.0	0.1	0.4	0.0	0.1
2	13.1	10.1	11.6	6.9	3.7	5.4	1.9	0.0	0.7	0.3	0.0	0.0
3	12.1	9.3	10.8	5.8	2.0	3.6	1.0	0.0	0.3	0.4	0.0	0.1
4	10.8	8.6	9.5	3.9	0.5	2.1	1.0	0.0	0.3	0.4	0.0	0.1
5	12.2	8.8	10	5.0	0.1	2.5	2.8	0.0	1.2	0.3	0.0	0.1
6	13.2	7.3	10.1	5.1	0.3	2.5	2.8	0.0	1.1	0.7	0.0	0.2
7	13.5	7.9	10.6	4.6	0.1	2.3	1.8	0.0	0.5	0.5	0.0	0.1
8	13.7	8.5	11.0	4.5	2.2	3.4	0.6	0.0	0.1	0.3	0.0	0.0
9	13.0	8.0	10.5	5.1	3.7	4.4	0.0	0.0	0.0	0.0	0.0	0.0
10	12.2	7.4	9.9	4.3	1.9	3.2	0.0	0.0	0.0	0.1	0.0	0.0
11	11.0	7.6	9.5	5.8	2.0	3.3	0.0	0.0	0.0	0.7	0.0	0.2
12	11.9	6.5	9.1	3.8	0.0	1.8	0.2	0.0	0.0	1.0	0.0	0.2
13	10.7	5.0	7.8	2.9	0.6	1.8	0.3	0.0	0.0	0.6	0.0	0.1
14	11.0	4.8	7.7	5.3	1.5	3.2	0.4	0.0	0.1	0.5	0.0	0.1
15	10.8	4.7	7.7	5.2	2.4	3.5	0.5	0.0	0.1	0.9	0.0	0.2
16	11.0	4.9	7.7	3.3	0.2	1.7	0.4	0.0	0.1	0.1	0.0	0.0
17	10.8	4.7	7.6	2.7	0.0	1.3	1.2	0.0	0.5	0.3	0.0	0.1
18	11.0	4.8	7.7	4.4	0.3	2.3	1.5	0.0	0.4	0.0	0.0	0.0
19	10.6	4.6	7.5	4.3	0.3	2.2	0.4	0.0	0.1	0.0	0.0	0.0
20	9.6	4.1	6.9	4.5	0.1	2.2	0.0	0.0	0.0	0.1	0.0	0.0
21	10.0	4.0	6.8	4.7	0.6	2.5	0.2	0.0	0.0	0.2	0.0	0.0
22	9.6	4.7	7.2	4.3	0.3	2.2	0.3	0.0	0.1	0.6	0.0	0.1
23	9.3	7.0	8.1	3.6	0.3	1.9	0.0	0.0	0.0	1.3	0.0	0.4
24	10.5	7.0	8.3	4.9	1.8	3.1	0.1	0.0	0.0	1.4	0.0	0.7
25	9.6	6.0	7.6	4.3	0.5	2.1	0.1	0.0	0.0	2.9	0.4	1.4
26	9.4	5.2	7.3	0.5	0.0	0.1	0.2	0.0	0.0	3.5	0.2	1.6
27	9.6	6.6	8.0	0.0	0.0	0.0	0.1	0.0	0.0	4.1	0.0	1.9
28	9.1	6.2	7.5	0.0	0.0	0.0	0.3	0.0	0.0	3.2	0.8	2.1
29	7.1	4.7	6.1	0.3	0.0	0.0	0.4	0.0	0.1	4.3	0.2	2.0
30	6.3	3.3	4.9	0.3	0.0	0.0	0.5	0.0	0.1	3.0	0.3	1.8
31	6.1	3.0	4.5	---	---	---	0.2	0.0	0.0	6.0	2.1	3.8
MONTH	13.7	3.0	8.4	6.9	0.0	2.3	2.8	0.0	0.2	6.0	0.0	0.6
		FEBRUARY			MARCH			APRIL			MAY	
1	6.4	1.6	3.9	5.7	0.6	3.1	12.2	5.5	8.8	10.6	5.8	8.2
2	5.4	2.6	3.9	7.0	0.7	3.5	11.4	5.8	8.6	11.1	5.1	8.1
3	4.6	0.7	2.5	7.0	0.1	3.4	7.8	5.4	6.3	11.8	7.3	9.4
4	3.9	0.0	1.6	3.6	1.4	2.3	9.2	3.2	6.1	10.4	6.9	8.4
5	2.7	0.0	1.0	6.1	0.0	2.6	10.5	3.8	6.9	11.9	6.3	8.9
6	0.6	0.0	0.2	5.3	0.5	2.8	8.9	4.8	6.6	11.3	6.3	8.9
7	0.1	0.0	0.0	8.1	1.8	4.8	8.3	3.9	5.9	12.4	5.6	9.0
8	0.1	0.0	0.0	9.9	2.9	6.2	11.7	1.9	6.5	10.4	7.3	9.0
9	0.2	0.0	0.0	8.4	2.7	5.6	13.8	4.5	9.0	12.5	6.9	9.3
10	0.1	0.0	0.0	8.9	2.8	5.8	14.9	6.2	10.5	11.5	6.2	8.7
11	0.2	0.0	0.0	10.3	4.4	7.1	14.3	7.8	11.0	11.4	5.6	8.6
12	0.2	0.0	0.0	11.0	5.2	7.9	11.7	7.6	9.9	14.5	6.6	10.6
13	0.6	0.0	0.2	11.2	4.3	7.7	13.6	6.2	9.8	14.1	9.0	11.7
14	4.4	0.5	1.9	9.4	4.8	7.1	12.9	7.1	10.2	14.7	8.9	11.8
15	4.4	0.7	2.4	10.9	4.9	7.9	10.8	6.8	8.4	12.5	9.2	10.9
16	3.3	0.1	1.9	8.8	6.2	7.5	12.2	5.3	8.4	12.8	8.0	10.4
17	5.2	0.6	2.9	9.2	5.2	6.9	10.4	6.1	8.4	11.5	8.6	10.2
18	5.2	1.5	3.3	8.1	3.7	6.0	11.1	6.3	8.5	10.2	7.8	9.2
19	6.1	0.4	3.0	8.5	3.8	6.1	9.7	6.1	7.9	11.1	7.2	9.1
20	5.6	0.0	2.4	9.5	3.2	6.4	13.3	5.3	9.2	11.2	6.6	9.0
21	5.5	0.9	2.9	10.0	5.8	7.7	11.4	6.4	9.2	11.1	6.8	9.0
22	3.9	1.0	2.4	12.2	5.1	8.4	11.8	7.5	9.6	11.6	7.5	9.7
23	5.0	0.0	2.1	12.2	5.8	9.0	9.7	5.1	7.0	10.9	7.1	9.3
24	4.6	0.1	2.3	9.3	6.7	7.8	9.5	3.9	6.6	10.6	6.8	9.1
25	4.6	1.2	3.1	11.3	4.6	7.7	13.0	5.3	9.1	10.4	7.0	8.9
26	4.5	2.0	3.3	9.5	4.9	7.1	14.0	7.6	10.8	10.2	6.6	8.6
27	6.9	1.8	4.1	7.3	3.6	5.5	13.3	7.7	10.7	11.3	7.1	9.4
28	5.9	1.9	3.8	6.9	1.4	4.0	12.7	7.5	10.2	11.2	7.2	9.5
29	---	---	---	7.6	0.7	4.0	11.8	7.7	9.8	10.9	7.3	9.3
30	---	---	---	8.8	1.5	4.9	11.2	7.4	9.2	10.8	7.6	9.1
31	---	---	---	12.2	3.6	7.8	---	---	---	10.4	7.2	8.8
MONTH	6.9	0.0	2.0	12.2	0.0	6.0	14.9	1.9	8.6	14.7	5.1	9.4

09070000 EAGLE RIVER BELOW GYPSUM, 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	10.3	7.6	8.9	15.0	12.9	13.9	22.6	15.8	18.9	20.7	13.5	16.9
2	9.7	7.2	8.4	15.4	13.1	14.3	21.7	16.3	19.1	19.9	14.2	17.1
3	9.9	7.8	8.9	15.6	13.5	14.6	22.8	17.6	19.8	19.0	14.4	16.8
4	9.9	8.0	9.0	16.0	13.6	14.8	21.5	16.8	19.0	20.8	13.8	17.2
5	10.0	8.7	9.4	16.1	13.8	15.0	23.3	15.8	19.3	18.8	15.0	17.1
6	9.9	8.2	8.9	15.7	14.0	14.9	22.2	16.3	19.3	18.4	15.5	16.9
7	10.3	8.6	9.4	16.3	13.7	14.9	21.4	16.4	18.7	17.9	15.3	16.3
8	10.5	8.5	9.6	16.7	13.8	15.3	23.7	16.3	19.6	17.3	12.8	15.1
9	10.4	9.5	10.1	17.2	14.3	15.7	24.3	16.8	20.4	15.4	13.5	14.4
10	10.7	9.5	10.2	17.5	14.3	15.9	23.9	17.0	20.1	13.8	11.4	12.5
11	11.2	9.2	10.2	17.0	14.4	15.9	23.0	16.9	19.8	13.5	10.2	11.7
12	11.0	9.3	10.3	17.2	14.6	16.0	22.8	16.3	19.4	15.3	9.7	12.4
13	11.1	9.6	10.4	17.6	14.9	16.3	24.9	16.8	20.3	15.6	11.5	13.3
14	11.6	9.6	10.6	18.6	15.1	16.8	24.2	16.8	20.2	13.8	8.4	11.2
15	11.9	10.1	11.1	18.7	15.7	17.3	21.7	16.2	18.9	14.4	8.5	11.5
16	11.9	10.7	11.3	18.4	15.8	17.2	19.9	16.3	18.1	15.1	9.7	12.3
17	11.1	9.7	10.5	19.4	16.0	17.6	18.7	16.0	17.3	14.8	11.3	12.9
18	11.9	10.4	11.2	19.8	17.0	18.4	18.4	15.3	16.8	14.6	8.9	11.7
19	11.9	10.5	11.3	19.1	17.0	18.2	19.2	13.4	16.3	14.4	8.6	11.5
20	11.6	10.4	11.0	19.5	16.6	18.1	21.3	14.4	17.6	14.9	9.3	12.0
21	11.9	10.0	10.9	20.1	17.0	18.6	21.1	15.3	18.2	15.2	9.4	12.2
22	12.4	10.7	11.5	19.7	17.0	18.5	22.0	16.4	18.6	15.4	9.0	12.2
23	12.8	11.0	11.9	19.1	16.8	18.1	22.3	16.2	18.7	15.4	9.4	12.4
24	12.8	11.5	12.2	22.5	16.2	19.1	22.3	16.3	18.9	16.0	9.4	12.6
25	13.0	11.4	12.2	24.3	17.0	20.1	22.5	17.0	19.2	15.6	9.3	12.4
26	13.4	11.2	12.3	22.7	16.9	19.4	20.2	15.7	18.1	15.8	9.3	12.5
27	13.8	11.6	12.6	20.8	16.7	18.8	19.4	16.0	17.8	16.3	9.7	12.9
28	14.3	12.2	13.2	22.5	16.4	19.2	21.0	16.0	18.2	16.4	10.2	13.2
29	14.4	12.7	13.6	22.0	16.7	19.0	21.4	15.2	18.1	16.1	10.3	13.2
30	14.4	12.8	13.6	21.3	15.5	18.2	18.6	15.1	16.7	16.7	11.0	13.7
31	---	---	---	21.8	16.0	18.6	19.7	13.8	16.6	---	---	---
MONTH	14.4	7.2	10.8	24.3	12.9	17.1	24.9	13.4	18.6	20.8	8.4	13.6
YEAR	24.9	0.0	8.2									

09070500 COLORADO RIVER NEAR DOTSERO, CO

LOCATION.--Lat 39°38'38", long 107°04'38", in NW¼ SE¼ sec.6, T.5 S., R.86 W., Eagle County, Hydrologic Unit- 14010001, on left bank about 500 ft south of Interstate Highway 70, 1.5 mi west of Dotsero, and 1.5 mi downstream from Eagle River.

DRAINAGE AREA.--4,394 mi^2.

PERIOD OF RECORD.--October 1940 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09070500

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 6,130 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 development, diversions for irrigation of about 68,000 acres upstream from station, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

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	635	928	713	598	595	579	674	1,500	10,300	1,820	1,260	1,360
2	613	951	776	649	613	578	743	1,350	10,900	1,750	1,310	1,280
3	648	933	695	626	597	575	812	1,250	8,790	1,810	1,320	1,240
4	659	884	719	629	535	604	818	1,330	7,180	1,730	1,390	1,260
5	644	882	737	656	562	613	727	1,400	5,960	1,620	1,460	1,350
6	629	822	685	609	553	594	673	1,280	5,050	1,530	1,400	1,380
7	630	792	649	646	505	614	630	1,180	4,410	1,470	1,370	1,480
8	623	881	657	609	454	623	641	1,190	3,870	1,410	1,370	1,560
9	611	946	591	573	528	634	699	1,190	3,730	1,470	1,340	1,560
10	662	967	583	574	574	643	757	1,440	3,890	1,450	1,310	1,580
11	674	930	548	596	603	696	804	1,510	3,980	1,310	1,300	1,660
12	678	901	586	e595	634	765	879	1,330	3,860	1,430	1,250	1,420
13	657	903	609	e571	614	824	895	1,310	3,730	1,470	1,190	1,240
14	646	917	582	e594	621	876	1,050	1,490	3,580	1,440	1,240	1,190
15	651	928	583	e591	643	888	1,260	1,900	3,670	1,380	1,270	1,200
16	648	881	588	e539	603	762	1,210	2,370	3,680	1,430	1,250	1,150
17	674	846	623	e536	608	710	1,050	3,060	3,390	1,440	1,330	1,170
18	690	801	628	e501	600	723	994	3,640	3,200	1,450	1,590	1,250
19	680	719	631	e479	563	686	951	3,990	3,080	1,410	1,830	1,330
20	680	681	593	e510	543	646	877	3,890	3,250	1,380	1,540	1,350
21	671	677	627	e539	588	629	823	3,910	3,140	1,390	1,410	1,350
22	678	672	633	e557	593	697	861	4,150	2,930	1,500	1,350	1,380
23	729	635	602	e574	557	794	1,030	4,740	2,810	1,270	1,360	1,400
24	829	640	560	573	562	833	1,080	5,270	2,600	1,140	1,460	1,400
25	833	697	597	580	578	838	1,050	6,020	2,360	1,190	1,490	1,470
26	816	622	683	566	575	710	1,140	6,370	2,160	1,370	1,450	1,610
27	833	470	637	559	581	711	1,420	6,680	2,110	1,540	1,430	1,590
28	880	597	609	585	575	672	1,610	7,620	2,060	1,520	1,430	1,560
29	857	701	618	562	---	620	1,700	8,330	2,010	1,470	1,350	1,560
30	870	684	627	565	---	632	1,650	9,350	1,920	1,400	1,320	1,550
31	876	---	594	596	---	651	---	9,630	---	1,280	1,360	---
TOTAL	21,904	23,888	19,563	17,937	16,157	21,420	29,508	109,670	123,600	45,270	42,730	41,880
MEAN	707	796	631	579	577	691	984	3,538	4,120	1,460	1,378	1,396
MAX	880	967	776	656	643	888	1,700	9,630	10,900	1,820	1,830	1,660
MIN	611	470	548	479	454	575	630	1,180	1,920	1,140	1,190	1,150
AC-FT	43,450	47,380	38,800	35,580	32,050	42,490	58,530	217,500	245,200	89,790	84,750	83,070

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2003, BY WATER YEAR (WY)

MEAN	1,207	1,079	941	899	910	1,035	1,843	4,754	6,246	3,082	1,708	1,301
MAX	2,038	1,664	1,503	1,473	1,603	1,961	5,601	10,770	13,440	9,354	4,055	2,616
(WY)	(1963)	(1963)	(1985)	(1985)	(1962)	(1962)	(1962)	(1984)	(1984)	(1983)	(1984)	(1984)
MIN	707	677	521	504	529	610	984	1,254	1,220	1,021	912	661
(WY)	(2003)	(1978)	(1943)	(1941)	(1943)	(1964)	(2003)	(2002)	(2002)	(1963)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1941 - 2003	
ANNUAL TOTAL	315,618		513,527			
ANNUAL MEAN	865		1,407		2,086	
HIGHEST ANNUAL MEAN					4,173	1984
LOWEST ANNUAL MEAN					898	2002
HIGHEST DAILY MEAN	1,910	Jun 1	10,900	Jun 2	20,800	May 25, 1984
LOWEST DAILY MEAN	470	Nov 27	454	Feb 8	a350	Jan 5, 1944
ANNUAL SEVEN-DAY MINIMUM	528	Jan 31	e523	Jan 16	417	Jan 13, 1944
MAXIMUM PEAK FLOW			11,700	Jun 2	22,200	May 25, 1984
MAXIMUM PEAK STAGE			9.54	Jun 2	14.20	May 25, 1984
ANNUAL RUNOFF (AC-FT)	626,000		1,019,000		1,511,000	
10 PERCENT EXCEEDS	1,300		2,980		4,780	
50 PERCENT EXCEEDS	790		881		1,260	
90 PERCENT EXCEEDS	560		580		750	

e Estimated.
a Also occurred Jan 1, 1995.

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°33'32", long 107°17'25", in NW¼SE¼ sec.2, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010001, 0.25 mi upstream from No Name Creek and 2.0 mi above Glenwood Springs.

DRAINAGE AREA.--4,556 mi^2.

PERIOD OF RECORD.--December 1985 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09071750

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1985 to current year.
WATER TEMPERATURE: December 1985 to current year.

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

REMARKS.--Discharge obtained by subtracting the flow in Roaring Fork River at Glenwood Springs (station 09085000) from the flow in the Colorado River below Glenwood Springs (station 09085100). Water-quality data collection was moved downstream to the site downstream from No Name Creek previous site 09071100 on Dec. 12, 1985. Water-quality data collection was relocated upstream 0.25 mi above No Name Creek on Oct. 19, 1995. Water-quality data collected at this site are considered equivalent to data collected at old site. Prior to Oct. 1995, daily maximum and minimum specific-conductance data available in district office. Daily specific-conductance records are excellent except Oct. 11-26, Nov. 30 to Dec. 8, Dec. 13-18, Jan. 22 to Feb. 6, and Feb. 11 to June 10, which are good, and Nov. 27-29, Jan. 3-7, Jan. 10-18, Feb. 7-10, June 11-26, July 2-14, and minimums from Oct. 13 to Nov. 12, and Mar. 18-26, which are fair, and Dec 9-12, Dec. 19 to Jan. 2, and Jan. 8-9, 19-21, which are poor. Daily water temperature records are excellent except June 26 to July 1, and July 14-22, which are good. Interruptions in record are due to equipment malfunctions or sensor fouling.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,740 microsiemens/cm, Aug. 21, 1990; minimum, 178 microsiemens/cm, June 1, 2003.
WATER TEMPERATURE: Maximum, 23.0°C, July 19, 2002; minimum, 0.0°C on many days during the winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,280 microsiemens/cm, Aug. 18; minimum, 178 microsiemens/cm, June 1.
WATER TEMPERATURE: Maximum, 22.5°C, July 25, Aug. 14, 15; minimum, 0.0°C, on many days.

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)	Residue on evap. at 180degC wat flt mg/L (70300)
OCT 23...	1125	798	10.1	8.6	963	8.0	588
NOV 12...	0945	1,020	11.2	8.3	707	3.0	418
DEC 17...	1145	517	12.5	8.4	979	1.0	584
FEB 19...	0920	741	11.6	8.3	893	2.5	529
APR 15...	0935	1,270	8.3	8.2	642	11.4	393
MAY 20...	1000	4,500	--	7.9	306	10.1	176
JUN 10...	1000	4,050	8.6	8.0	311	11.6	185
JUL 22...	1015	1,640	7.1	8.0	593	21.3	344
AUG 12...	1020	1,290	8.3	8.5	567	21.0	337

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, 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	---	---	---	741	729	737	969	856	889	1,010	919	967
2	---	---	---	734	669	715	883	827	850	1,000	---	---
3	---	---	---	714	632	703	898	789	823	1,020	---	---
4	---	---	---	727	699	717	898	823	849	954	890	922
5	---	---	---	---	---	---	865	815	836	935	895	915
6	---	---	---	779	732	760	876	808	835	915	869	894
7	---	---	---	793	773	781	882	816	847	968	877	916
8	---	---	---	800	754	780	917	841	876	1,030	824	921
9	---	---	---	762	742	750	928	---	---	---	855	---
10	---	---	---	750	718	729	1,010	907	979	1,060	937	990
11	863	844	851	730	716	724	1,050	957	1,010	990	931	968
12	856	816	831	731	718	723	1,150	942	1,050	943	892	925
13	854	761	824	741	724	735	1,030	953	987	945	885	908
14	872	831	864	738	724	733	1,010	919	959	946	865	914
15	882	831	872	742	719	734	1,020	963	991	955	852	913
16	887	760	853	727	716	721	1,010	960	983	1,010	---	---
17	889	845	876	736	726	732	1,030	921	976	977	878	936
18	914	865	885	793	734	760	942	897	913	997	917	951
19	950	914	932	832	788	807	952	---	---	1,060	895	968
20	956	947	951	850	831	843	---	---	---	1,080	871	967
21	961	938	951	896	849	870	---	---	---	1,030	909	972
22	967	870	943	896	870	877	996	903	951	986	897	947
23	961	902	940	910	868	884	977	883	936	926	871	907
24	939	885	922	917	890	910	---	---	---	927	882	897
25	885	860	870	917	890	904	---	---	---	912	881	899
26	874	855	865	894	837	852	---	---	---	922	897	911
27	883	764	862	1,030	862	942	---	---	---	933	887	909
28	864	822	839	1,250	1,030	1,110	---	---	---	946	888	911
29	839	805	831	1,120	948	1,000	---	---	---	941	894	910
30	805	734	763	970	902	924	990	901	948	958	895	918
31	740	726	734	---	---	---	1,000	888	947	958	875	909
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
		FEBRUARY			MARCH			APRIL			MAY	
1	920	891	902	916	862	894	938	889	919	497	481	487
2	922	864	893	937	831	887	903	861	883	536	497	519
3	894	866	879	935	828	890	870	816	844	570	536	556
4	939	883	900	926	815	881	816	785	792	582	561	572
5	989	883	929	923	850	878	836	779	802	561	541	547
6	995	886	930	910	822	878	879	828	842	574	543	562
7	1,060	973	1,010	919	846	888	912	848	880	608	574	593
8	1,130	978	1,040	897	846	870	925	909	920	631	608	620
9	1,140	1,000	1,070	884	851	865	909	883	893	617	593	607
10	1,040	947	987	887	846	868	883	835	858	647	557	619
11	1,030	911	951	895	823	858	847	803	821	561	522	541
12	938	871	906	863	773	818	843	775	804	601	558	589
13	871	848	856	814	756	792	792	748	764	614	595	603
14	860	833	846	779	637	713	749	689	735	603	535	571
15	843	815	823	755	645	709	689	582	637	535	448	503
16	839	803	818	802	651	723	582	559	567	448	390	419
17	851	792	824	869	802	846	621	579	598	390	326	362
18	853	826	840	896	865	879	657	621	640	326	290	311
19	949	842	878	889	870	881	663	653	660	299	282	289
20	977	880	923	890	839	869	701	662	681	291	283	288
21	1,020	863	934	917	851	902	744	701	723	297	280	288
22	974	883	915	917	840	896	751	735	746	290	266	278
23	959	913	932	878	815	849	735	662	703	274	244	259
24	987	910	935	817	782	801	662	625	634	254	230	241
25	974	880	918	789	727	768	654	625	641	239	217	227
26	919	894	909	854	759	802	674	645	663	239	220	229
27	922	897	908	859	837	846	647	577	618	226	209	216
28	909	868	893	868	852	860	582	522	561	215	199	206
29	---	---	---	902	867	884	522	489	507	206	192	197
30	---	---	---	925	902	917	489	484	486	195	182	187
31	---	---	---	937	893	922	---	---	---	200	181	186
MONTH	1,140	792	912	937	637	849	938	484	727	647	181	409

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, 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	190	178	183	---	---	---	597	592	595	585	557	572
2	190	180	183	505	485	496	597	574	584	582	563	574
3	206	190	195	508	479	493	574	555	565	599	576	586
4	227	206	212	508	478	493	568	543	553	603	595	599
5	244	227	234	517	495	505	550	526	535	597	557	572
6	271	244	256	543	517	528	534	524	526	570	545	558
7	292	271	282	565	541	549	547	534	544	553	540	546
8	315	292	303	575	560	565	557	541	546	551	521	542
9	325	308	316	587	567	576	572	557	565	653	537	561
10	317	265	302	569	553	559	564	559	562	590	545	561
11	305	289	296	602	538	578	566	557	562	558	531	547
12	307	292	299	610	562	584	579	565	572	560	531	546
13	311	299	306	568	554	561	592	573	583	623	560	596
14	320	304	313	567	562	565	604	579	593	623	606	613
15	330	304	316	---	---	---	784	555	597	621	598	608
16	323	308	319	---	---	---	578	563	570	618	600	611
17	342	323	334	---	---	---	588	575	583	620	615	618
18	356	341	348	---	---	---	1,280	570	731	619	595	602
19	362	346	354	---	---	---	614	488	535	597	562	569
20	366	340	353	---	---	---	531	493	502	564	556	560
21	354	341	350	---	---	---	556	531	547	568	554	563
22	373	354	365	---	---	---	566	548	559	564	556	560
23	384	361	374	616	558	593	579	563	572	562	546	550
24	391	366	382	664	609	639	622	529	565	553	542	546
25	408	382	399	670	657	665	667	503	582	548	538	543
26	421	---	---	657	605	620	663	564	595	538	495	503
27	---	---	---	606	541	568	564	550	556	501	495	497
28	---	---	---	553	536	544	560	544	553	510	500	503
29	---	---	---	551	539	547	574	560	567	511	505	508
30	---	---	---	633	547	582	575	564	571	514	507	510
31	---	---	---	598	583	591	617	567	582	---	---	---
MONTH	---	---	---	---	---	---	1,280	488	569	653	495	561

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, 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	12.9	11.4	11.8	5.8	4.8	5.4	0.6	0.1	0.4	0.4	0.0	0.1
2	12.8	11.4	12.1	5.7	4.8	5.3	0.9	0.3	0.6	0.1	0.0	0.0
3	12.3	11.1	11.8	5.0	3.7	4.5	1.3	0.1	0.7	0.4	0.0	0.1
4	11.2	9.9	10.7	4.2	2.8	3.6	0.8	0.0	0.4	0.4	0.0	0.1
5	10.9	10.0	10.3	3.2	2.0	2.8	1.2	0.6	0.9	0.3	0.0	0.1
6	11.8	10.0	10.7	3.3	2.1	2.7	1.4	0.3	0.9	0.4	0.0	0.1
7	11.9	10.0	10.8	3.3	2.3	2.8	1.2	0.0	0.6	0.3	0.0	0.1
8	12.3	10.6	11.3	3.8	2.6	3.3	0.9	0.0	0.4	0.1	0.0	0.0
9	12.3	10.6	11.4	4.4	3.3	3.9	0.1	0.0	0.0	0.0	0.0	0.0
10	11.8	10.4	11.0	4.2	3.0	3.8	0.0	0.0	0.0	0.4	0.0	0.2
11	11.3	10.2	10.7	3.7	2.7	3.2	0.0	0.0	0.0	0.8	0.4	0.5
12	10.7	9.0	9.9	3.2	2.0	2.7	0.2	0.0	0.1	0.9	0.1	0.5
13	10.0	8.2	9.1	3.1	2.4	2.7	0.5	0.0	0.2	0.6	0.0	0.3
14	9.4	7.8	8.5	3.3	2.6	2.9	0.5	0.0	0.2	0.6	0.0	0.3
15	8.9	7.6	8.2	3.9	2.8	3.3	0.7	0.0	0.4	0.6	0.0	0.3
16	8.9	7.6	8.1	3.1	1.9	2.6	0.7	0.2	0.4	0.3	0.0	0.0
17	8.9	7.6	8.1	2.3	1.3	1.9	1.2	0.4	0.8	0.4	0.0	0.1
18	8.9	7.6	8.1	2.7	1.6	2.1	1.1	0.0	0.6	0.4	0.0	0.1
19	8.8	7.4	8.0	2.4	1.7	2.0	0.7	0.0	0.2	0.0	0.0	0.0
20	8.4	7.1	7.7	2.5	1.7	2.1	0.0	0.0	0.0	0.4	0.0	0.1
21	8.0	6.8	7.3	2.6	1.8	2.2	0.4	0.0	0.0	0.5	0.0	0.1
22	7.9	6.8	7.5	2.8	2.1	2.4	0.0	0.0	0.0	1.0	0.1	0.4
23	8.3	7.3	7.9	3.0	2.3	2.6	0.0	0.0	0.0	1.1	0.5	0.7
24	8.7	7.9	8.4	3.2	2.6	2.8	0.0	0.0	0.0	1.4	1.0	1.2
25	8.5	7.7	8.1	3.3	2.1	2.8	0.0	0.0	0.0	2.0	1.2	1.6
26	8.0	7.0	7.6	2.1	0.0	1.2	0.0	0.0	0.0	2.4	1.1	1.7
27	8.1	7.0	7.5	0.7	0.0	0.1	0.0	0.0	0.0	1.9	0.9	1.5
28	8.0	7.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0	2.5	1.2	1.9
29	7.7	6.6	7.3	0.4	0.0	0.1	0.0	0.0	0.0	2.3	0.8	1.5
30	6.6	4.9	6.0	0.6	0.0	0.2	0.0	0.0	0.0	2.1	1.0	1.6
31	5.8	5.0	5.3	---	---	---	0.0	0.0	0.0	2.6	1.4	2.0
MONTH	12.9	4.9	9.0	5.8	0.0	2.6	1.4	0.0	0.3	2.6	0.0	0.6
		FEBRUARY			MARCH			APRIL			MAY	
1	3.3	1.9	2.7	3.4	1.9	2.8	9.3	6.7	8.1	10.0	9.4	9.7
2	3.6	2.1	2.9	3.2	1.3	2.4	9.1	7.9	8.5	10.3	9.0	9.6
3	2.5	0.9	1.9	3.1	1.7	2.3	7.9	6.0	7.3	10.6	9.6	10.1
4	1.5	0.4	1.0	3.1	1.3	2.5	7.1	5.5	6.0	10.5	9.0	9.6
5	1.7	0.0	0.9	2.9	1.3	1.9	7.6	6.1	6.7	10.2	9.4	9.7
6	0.8	0.0	0.3	3.7	2.1	2.8	7.6	6.2	6.7	10.5	9.6	10.1
7	0.2	0.0	0.0	4.6	3.0	3.7	7.7	6.3	6.9	10.6	9.2	10.1
8	0.2	0.0	0.0	5.7	4.1	4.7	8.1	6.1	6.7	10.7	9.4	10.0
9	0.0	0.0	0.0	6.0	4.6	5.1	9.5	6.3	7.9	10.1	8.9	9.5
10	0.4	0.0	0.1	6.1	5.0	5.4	11.1	8.4	9.7	10.7	9.2	10
11	0.8	0.0	0.2	7.1	5.4	6.2	12.4	10.0	11.0	10.3	9.3	9.8
12	0.9	0.0	0.3	7.8	6.3	6.7	12.2	10.4	11.2	11.6	9.5	10.3
13	1.1	0.4	0.9	8.2	6.4	7.1	11.7	10.0	10.6	13.0	11.6	12.3
14	1.9	1.1	1.6	8.0	6.4	7.2	12.0	10.3	11.0	13.5	12.6	12.9
15	2.8	1.9	2.3	8.3	6.3	7.2	11.3	8.9	10.4	13.8	12.3	13.1
16	2.6	1.5	2.2	7.9	6.9	7.4	9.7	8.5	8.9	13.3	11.2	12.1
17	2.7	1.4	1.9	7.5	6.6	7.0	10.4	9.0	9.8	13.3	11.6	12.4
18	3.3	1.8	2.5	7.5	6.1	6.6	10.1	9.0	9.5	12.6	10.9	11.5
19	2.8	0.8	1.9	6.8	5.7	6.2	10.2	8.5	9.4	11.7	9.6	10.7
20	2.7	0.7	1.8	7.2	5.8	6.2	10.6	8.4	9.2	11.8	9.8	10.8
21	2.7	1.2	2.1	8.2	6.3	7.2	11.4	9.3	10.5	11.8	9.8	10.8
22	3.0	1.5	2.3	8.8	7.3	7.9	11.5	10.0	10.6	12.2	10.2	11.3
23	2.1	0.7	1.4	9.5	7.4	8.4	10.7	7.9	9.7	12.2	10.7	11.5
24	2.1	0.8	1.5	9.2	7.9	8.7	8.7	7.3	7.8	11.9	10.2	11.0
25	2.2	1.4	1.9	8.7	7.0	7.7	10.2	7.8	9.0	11.5	10.5	10.9
26	2.9	1.7	2.4	8.1	6.8	7.6	11.4	9.6	10.6	11.6	9.9	10.7
27	3.1	2.3	2.6	7.5	5.6	6.7	12.3	10.9	11.5	12.0	10.3	11.0
28	3.8	2.4	3.0	6.0	4.1	5.1	12.0	10.8	11.4	12.2	11.1	11.6
29	---	---	---	5.7	3.6	4.5	11.4	10.4	10.9	12.2	11.0	11.6
30	---	---	---	5.9	3.8	4.7	11.4	9.5	10.4	11.8	10.9	11.3
31	---	---	---	7.9	4.7	6.3	---	---	---	11.5	10.8	11.2
MONTH	3.8	0.0	1.5	9.5	1.3	5.7	12.4	5.5	9.3	13.8	8.9	10.9

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, 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	11.4	10.6	11.1	17.3	16.5	16.8	20.8	19.6	20.1	17.5	16.3	16.8
2	11.0	9.8	10.4	17.6	17.1	17.3	21.3	20.1	20.6	17.9	16.6	17.3
3	11.8	10.3	10.9	18.2	17.3	17.7	21.2	20.1	20.6	18.1	16.4	17.1
4	11.8	10.5	11.1	18.5	17.8	18.2	21.1	20.5	20.8	17.3	16.1	16.7
5	11.9	10.6	11.2	18.7	18.0	18.3	21.7	20.1	20.7	17.5	16.7	17.2
6	11.9	10.2	10.9	18.8	17.5	18.1	21.9	20.7	21.2	17.7	16.5	16.9
7	12.6	10.3	11.2	18.2	17.4	17.8	21.6	20.3	20.9	17.7	16.1	16.7
8	12.8	10.5	11.6	19.1	18.0	18.4	21.2	20.2	20.6	16.4	15.0	15.7
9	13.2	11.3	12.3	19.2	18.4	18.7	22.1	20.9	21.3	15.9	14.6	15.2
10	13.0	11.4	12.2	19.7	18.5	19.1	22.1	20.9	21.5	15.0	13.2	13.7
11	13.4	11.0	12.1	20.1	18.7	19.4	22.0	20.9	21.4	13.2	12.2	12.6
12	13.5	11.6	12.6	19.9	19.0	19.3	22.0	20.8	21.3	13.7	12.5	12.9
13	13.5	11.6	12.7	19.9	18.8	19.3	21.9	20.8	21.3	14.7	13.6	14.1
14	14.1	11.9	12.9	19.9	19.0	19.5	22.5	21.3	21.9	14.4	12.1	13.2
15	15.0	12.6	13.7	20.7	19.7	20.1	22.5	19.9	21.3	13.5	12.0	12.7
16	15.0	13.6	14.3	20.9	19.9	20.4	21.2	18.9	20.1	14.0	12.7	13.3
17	13.9	12.3	13.0	20.8	19.9	20.4	19.3	18.4	18.8	13.9	12.4	13.2
18	14.3	12.5	13.5	22.2	20.7	21.5	18.4	17.8	18.1	12.5	11.1	12.0
19	14.3	13.0	13.6	22.1	21.0	21.5	18.3	16.8	17.2	12.5	11.4	12.1
20	14.0	12.6	13.2	21.2	20.1	20.7	18.8	17.0	17.7	12.9	11.7	12.4
21	14.1	12.1	12.9	21.6	20.8	21.1	19.5	18.4	18.9	13.1	11.6	12.4
22	14.6	13.0	13.8	21.9	21.2	21.6	19.7	18.9	19.4	13.1	11.8	12.6
23	15.0	13.4	14.2	21.7	20.3	21.0	20.3	19.0	19.6	13.4	12.0	12.8
24	15.0	14.0	14.4	20.9	20.0	20.5	20.4	18.8	19.5	13.6	12.1	12.9
25	14.9	13.8	14.3	22.5	20.8	21.5	19.9	18.8	19.3	13.7	11.9	12.9
26	15.3	14.0	14.6	22.3	21.3	21.8	19.6	18.4	18.9	13.4	12.3	12.8
27	15.9	14.8	15.2	22.4	20.4	21.2	19.5	17.7	18.7	13.8	12.6	13.0
28	16.6	15.4	15.9	21.5	20.4	20.9	18.9	18.0	18.3	14.1	12.9	13.3
29	17.0	16.3	16.6	21.6	20.5	21.1	19.0	17.9	18.5	14.3	13.0	13.6
30	17.3	16.4	16.8	21.0	19.7	20.4	19.1	17.3	18.3	14.4	13.2	13.7
31	---	---	---	20.7	19.5	20.1	18.0	16.2	17.0	---	---	---
MONTH	17.3	9.8	13.1	22.5	16.5	19.8	22.5	16.2	19.8	18.1	11.1	14.1
YEAR	22.5	0.0	8.9									

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°08'28", long 106°46'25", Pitkin County, Hydrologic Unit 14010004, on left bank in the White River National Forest at Difficult Creek Campground, 0.45 mi upstream from Difficult Creek, and 4.25 mi southeast of Aspen.

DRAINAGE AREA.--75.8 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=09073300

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,120 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Transmountain diversion 11 mi upstream through Twin Lakes Tunnel to Arkansas River basin since May 24, 1935 (45,240 acre-ft diverted during current year, provided by Colorado Division of Water Resources).

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	14	12	11	10	9.7	13	35	385	68	21	20
2	21	13	12	11	11	e9.2	14	33	216	67	22	19
3	19	12	11	11	10	e9.4	14	31	186	63	22	20
4	18	12	11	11	e10	10	14	31	187	55	23	20
5	18	11	12	11	e10	10	13	28	169	55	22	19
6	16	9.1	11	11	e7.8	e9.4	13	26	147	52	21	20
7	15	11	12	10	e7.6	10	13	26	129	49	21	26
8	16	12	11	11	e8.8	10	e12	27	132	47	36	26
9	15	11	e9.4	10	e9.8	9.8	13	25	133	43	34	25
10	15	10	e9.0	11	e10	9.9	16	26	141	42	34	28
11	14	11	e9.6	11	10	11	19	25	139	40	32	28
12	14	13	11	10	9.9	11	21	29	130	38	35	26
13	14	12	11	10	10	11	22	37	136	35	35	25
14	14	13	11	11	10	12	27	43	133	34	34	24
15	13	12	11	11	9.9	12	28	58	134	33	33	24
16	13	e11	11	e8.6	9.7	12	25	76	129	32	33	22
17	13	12	11	11	10	11	27	101	121	31	37	24
18	13	12	11	e8.4	10	11	27	107	119	29	40	37
19	13	e11	11	e9.8	9.5	11	25	103	124	28	38	48
20	13	12	e8.4	10	9.6	11	24	100	117	26	21	43
21	13	12	11	10	10	11	25	104	111	27	19	36
22	13	12	e8.8	10	10	11	26	120	105	25	19	35
23	13	12	e7.4	10	9.6	11	25	136	99	24	20	33
24	13	12	e9.6	10	10	12	22	146	91	25	19	32
25	13	12	e10	10	10	12	24	167	85	23	19	33
26	13	e10	e9.8	10	10	12	28	172	80	26	23	30
27	14	e9.0	e10	10	9.9	11	32	225	77	45	30	28
28	14	e10	11	10	9.8	e11	35	292	73	28	22	27
29	13	12	11	9.9	---	e10	39	529	69	26	21	27
30	13	12	11	10	---	e11	38	571	66	22	21	26
31	14	---	11	10	---	12	---	401	---	22	21	---
TOTAL	458	347.1	327.0	318.7	272.9	334.4	674	3,830	3,963	1,160	828	831
MEAN	14.8	11.6	10.5	10.3	9.75	10.8	22.5	124	132	37.4	26.7	27.7
MAX	25	14	12	11	11	12	39	571	385	68	40	48
MIN	13	9.0	7.4	8.4	7.6	9.2	12	25	66	22	19	19
AC-FT	908	688	649	632	541	663	1,340	7,600	7,860	2,300	1,640	1,650

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

MEAN	29.4	21.6	17.2	15.1	14.3	15.8	31.1	139	361	164	57.9	38.6
MAX	53.3	43.3	31.0	24.4	21.1	24.4	53.8	512	939	872	145	83.7
(WY)	(1987)	(1985)	(1985)	(1985)	(1998)	(1997)	(1985)	(1984)	(1984)	(1995)	(1995)	(1986)
MIN	14.8	11.6	10.5	10.3	9.75	9.60	14.9	57.4	55.9	33.8	18.1	17.7
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(1981)	(1983)	(1995)	(2002)	(2001)	(2002)	(1981)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1980 - 2003	
ANNUAL TOTAL	9,344.9		13,344.1			
ANNUAL MEAN	25.6		36.6		a126	
HIGHEST ANNUAL MEAN					194	1984
LOWEST ANNUAL MEAN					26.8	2002
HIGHEST DAILY MEAN	100	May 31	571	May 30	1,930	Jun 8, 1985
LOWEST DAILY MEAN	e7.4	Dec 23	e7.4	Dec 23	e7.4	Dec 23, 2002
ANNUAL SEVEN-DAY MINIMUM	9.3	Dec 20	9.1	Feb 6	9.1	Feb 6, 2003
MAXIMUM PEAK FLOW			942	May 29	b2,350	Jun 8, 1985
MAXIMUM PEAK STAGE			3.89	May 29	5.10	Jun 8, 1985
ANNUAL RUNOFF (AC-FT)	18,540		26,470		a91,290	
10 PERCENT EXCEEDS	59		100		164	
50 PERCENT EXCEEDS	14		15		27	
90 PERCENT EXCEEDS	11		10		12	

e Estimated.
a Includes Twin Lakes Tunnel diversions.
b From rating curve extended above 910 ft^3/s.

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1996 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09073300

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1999 to June 2000.
WATER TEMPERATURE: December 1999 to June 2000.

INSTRUMENTATION.--Water-quality monitor, December 1999 to June 2000.

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)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)
OCT													
08...	1150	16	9.3	8.0	79	5.3	33	10.5	1.76	0.41	0.1	1.95	E29
FEB													
05...	1115	12	10.6	7.5	86	0.0	--	--	--	--	--	--	--
APR													
23...	1150	25	11.6	7.6	69	1.0	29	9.07	1.51	0.46	0.2	1.99	26
MAY													
28...	1505	190	9.5	--	33	8.3	15	4.48	0.820	0.34	0.1	1.09	14
JUL													
22...	1430	25	7.7	7.9	58	16.4	--	--	--	--	--	--	--
SEP													
03...	1420	20	8.1	8.0	79	12.5	36	11.4	1.81	0.52	0.1	1.80	25

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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)
OCT													
08...	1.12	0.4	5.4	9.7	--	--	--	E.08	E.07	<0.015	0.025	E.002	<0.007
FEB													
05...	--	--	--	--	--	--	--	E.07	E.10	<0.015	0.102	<0.002	<0.007
APR													
23...	0.62	0.38	6.6	7.1	44	0.06	2.93	0.11	E.09	<0.015	0.091	<0.002	<0.007
MAY													
28...	0.23	0.2	5.8	2.1	24	0.03	12.2	0.13	0.24	<0.015	0.026	E.002	<0.007
JUL													
22...	--	--	--	--	--	--	--	E.06	0.12	<0.015	E.021	<0.002	<0.007
SEP													
03...	0.25	0.5	6.0	12.1	50	0.07	2.69	<0.10	E.08	<0.015	0.048	<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)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT				
08...	<0.004	E.003	E1	E1
FEB				
05...	<0.004	<0.004	<1	<1
APR				
23...	0.004	E.003	E3	<1
MAY				
28...	<0.004	0.014	<1	E2
JUL				
22...	E.002	E.003	E1	<1
SEP				
03...	<0.004	<0.004	<1	<1

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

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO—Continued

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

Date	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Mangan- ese, water, fltrd, ug/L (01056)	Mangan- ese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Selen- ium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT 08...	<0.2	E1.1	30	<1	E2.2	E2.6	<0.02	<3	<0.3	<24
APR 23...	<0.2	1.4	80	<1	3.8	E3.7	<0.02	<3	<0.3	<24
MAY 28...	<0.2	1.7	250	<1	2.5	11.4	<0.02	<3	<0.3	<3
SEP 03...	<0.2	E1.0	30	<1	1.3	2.4	<0.02	<3	<0.3	<3

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

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instan- taneous dis- charge, cfs (00061)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Date	Time	Instan- taneous dis- charge, cfs (00061)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
OCT 02...	1135	20	80	6.2	JUN 03...	0900	178	31	3.9
NOV 13...	1130	13	80	1.0	JUL 01...	1145	68	44	10.9

09073400 ROARING FORK RIVER NEAR ASPEN, CO

LOCATION.--Lat 39°10'48", long 106°48'05", T. 10 S., R. 84 W., Pitkin County, Hydrologic Unit 14010004, on right bank 25 ft upstream from private bridge, 115 ft upstream from Salvation ditch headgate, 1.0 mi southeast of Aspen, and 2.0 mi upstream from Hunter Creek.

DRAINAGE AREA.--108 mi^2.

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,014.01 ft above NGVD of 1929. Prior to Apr. 25, 1968, at site 85 ft upstream, at datum 1.16 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversion 14 mi upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935, (45,240 acre-ft diverted during current year, provided by Colorado Division of Water Resources). 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	41	26	23	21	20	20	25	69	832	107	36	32
2	35	25	23	20	20	19	28	65	568	102	35	29
3	36	22	22	21	20	19	28	62	454	95	35	29
4	33	21	25	21	18	21	28	65	411	87	37	30
5	33	22	23	21	20	20	26	61	354	82	35	29
6	30	18	23	20	e15	20	28	55	304	78	34	32
7	28	20	25	21	e14	20	27	55	280	74	33	49
8	27	23	23	23	e17	20	24	57	264	69	49	49
9	27	24	20	22	19	20	26	55	277	64	49	44
10	26	21	20	20	20	20	31	58	290	61	47	52
11	25	22	20	21	20	21	37	54	280	58	45	54
12	23	21	21	21	19	22	42	60	270	55	51	49
13	22	22	21	21	20	22	43	84	295	53	53	49
14	24	25	22	22	21	23	55	98	257	52	50	42
15	22	24	21	21	20	24	54	136	258	51	47	39
16	22	21	24	e18	20	24	46	167	247	51	50	39
17	21	23	21	20	21	24	49	225	228	49	58	36
18	21	24	21	21	20	24	49	247	228	47	60	52
19	20	22	20	20	19	23	45	245	234	44	64	71
20	20	23	e18	21	18	22	42	241	220	42	38	68
21	20	24	21	20	20	24	42	240	206	42	32	56
22	21	23	20	20	20	23	45	277	192	40	31	54
23	24	23	e16	20	20	23	45	319	182	39	33	52
24	22	24	e18	20	20	25	41	349	168	40	32	49
25	23	24	20	20	21	25	43	372	156	38	30	50
26	22	19	20	19	21	23	51	363	144	38	35	45
27	25	20	20	20	20	24	58	429	137	69	42	44
28	24	22	21	20	20	22	64	546	129	45	38	43
29	24	24	21	19	---	20	72	752	119	48	34	42
30	21	24	20	19	---	23	75	916	112	39	33	40
31	26	---	20	20	---	24	---	756	---	36	34	---
TOTAL	788	676	653	633	543	684	1,269	7,478	8,096	1,795	1,280	1,349
MEAN	25.4	22.5	21.1	20.4	19.4	22.1	42.3	241	270	57.9	41.3	45.0
MAX	41	26	25	23	21	25	75	916	832	107	64	71
MIN	20	18	16	18	14	19	24	54	112	36	30	29
AC-FT	1,560	1,340	1,300	1,260	1,080	1,360	2,520	14,830	16,060	3,560	2,540	2,680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2003, BY WATER YEAR (WY)

MEAN	43.6	34.8	29.8	26.7	25.5	27.5	49.0	198	415	194	68.6	51.0
MAX	80.0	61.6	47.5	44.6	41.1	44.3	79.7	554	1,017	1,057	186	94.0
(WY)	(1966)	(1985)	(1987)	(1997)	(1997)	(1997)	(1985)	(1984)	(1984)	(1995)	(1995)	(1999)
MIN	23.5	20.7	18.6	17.0	15.4	16.6	26.2	97.0	77.8	46.5	25.7	23.8
(WY)	(1978)	(1978)	(1977)	(1977)	(1977)	(1977)	(1973)	(1983)	(2002)	(2002)	(2002)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	14,493		25,244			
ANNUAL MEAN	39.7		69.2		a150	
HIGHEST ANNUAL MEAN					229	1984
LOWEST ANNUAL MEAN					41.0	2002
HIGHEST DAILY MEAN	166	May 31	916	May 30	1,900	Jul 10, 1995
LOWEST DAILY MEAN	e16	Dec 23	e14	Feb 7	12	Nov 28, 1976
ANNUAL SEVEN-DAY MINIMUM	19	Dec 19	18	Feb 3	15	Feb 1, 1977
MAXIMUM PEAK FLOW			1,090	May 30	b2,230	Jul 11, 1995
MAXIMUM PEAK STAGE			4.11	May 30	5.97	Jul 11, 1995
ANNUAL RUNOFF (AC-FT)	28,750		50,070		a108,700	
10 PERCENT EXCEEDS	90		198		244	
50 PERCENT EXCEEDS	24		28		40	
90 PERCENT EXCEEDS	20		20		22	

e Estimated.
a Includes diversions through Twin Lakes Tunnel.
b Also occurred Jun 9, 1985.

09074000 HUNTER CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°12'21", long 106°47'49", Pitkin County, Hydrologic Unit 14010004, on right bank 280 ft upstream from headgate of Red Mountain ditch, 1.5 mi upstream from mouth, and 1.5 mi northeast of Aspen.

DRAINAGE AREA.--41.1 mi^2.

PERIOD OF RECORD.--June 1950 to September 1956, September 1969 to current year. Statistical summary computed for 1980 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09074000

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,610 ft above NGVD of 1929, from topographic map. Prior to Sept. 1, 1969, at site 220 ft downstream, at different datum, Sept. 1, 1969 to July 10, 1991 at datum 1.0 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Charles H. Boustead tunnel by feeder conduit. Several small diversions upstream from station for irrigation of hay meadows upstream and 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	22	9.5	e7.0	5.2	4.3	3.9	7.1	29	567	46	19	13
2	18	9.2	e6.6	5.0	4.4	3.9	7.8	26	422	44	18	11
3	18	e7.8	e6.4	5.0	4.3	3.9	7.3	25	355	41	17	10
4	17	e7.8	e6.0	5.1	4.3	3.9	e7.1	26	324	40	19	11
5	15	e7.6	e6.4	5.1	4.3	3.8	e6.9	23	248	39	16	11
6	15	e7.0	e6.0	5.0	4.3	3.9	e6.9	21	77	38	15	13
7	15	e7.4	e5.8	4.9	3.9	4.0	e6.8	20	74	36	14	22
8	15	e7.6	e5.6	4.9	3.9	4.0	e6.4	21	68	35	17	24
9	14	e10	e5.0	5.0	3.8	4.0	e7.6	20	76	34	14	25
10	13	e8.8	e4.6	5.1	3.7	4.2	9.8	20	101	33	13	27
11	12	e8.2	e4.8	5.1	3.7	4.5	12	19	67	32	13	27
12	12	e7.4	e5.8	4.8	3.8	4.7	13	24	63	31	16	26
13	10	e8.0	e6.2	4.7	4.0	5.1	15	37	81	31	e16	25
14	9.6	e7.8	e5.4	4.8	4.1	5.6	19	43	66	30	e15	23
15	8.8	e7.5	e5.8	4.8	4.0	5.6	21	56	63	30	e15	20
16	9.1	e6.8	e5.6	4.5	4.0	5.6	20	70	62	30	14	18
17	9.1	e7.2	e5.8	4.5	4.0	5.3	20	87	60	30	18	17
18	8.7	e7.2	e5.8	4.5	4.1	5.1	19	84	58	29	19	15
19	8.2	e6.8	e5.0	4.5	3.8	e4.9	17	84	58	29	18	15
20	7.7	e7.0	5.7	4.4	3.9	4.6	16	83	59	28	14	14
21	7.8	e7.0	5.8	4.3	4.0	3.6	16	84	56	28	12	13
22	7.8	e7.2	5.5	4.3	3.9	3.5	18	93	53	27	12	12
23	9.8	e7.4	5.3	4.3	4.0	4.8	17	110	52	26	17	12
24	8.7	e7.0	5.1	4.3	4.0	6.2	16	121	51	26	14	11
25	8.7	e7.2	5.1	4.2	4.0	5.8	16	124	50	25	13	9.9
26	8.4	e6.0	4.9	4.1	4.0	5.6	23	140	49	23	16	9.7
27	10	e5.4	4.9	4.1	3.9	e5.6	28	290	48	23	17	10
28	8.8	e6.0	5.0	4.1	3.9	e5.4	30	496	48	24	16	9.7
29	7.7	e6.8	5.1	4.2	---	e5.2	33	571	47	26	14	9.0
30	e7.5	e6.6	5.0	4.2	---	5.6	34	592	47	23	14	7.4
31	e8.8	---	5.0	4.3	---	6.6	---	550	---	20	16	---
TOTAL	351.2	223.2	172.0	143.3	112.3	148.4	476.7	3,989	3,450	957	481	470.7
MEAN	11.3	7.44	5.55	4.62	4.01	4.79	15.9	129	115	30.9	15.5	15.7
MAX	22	10	7.0	5.2	4.4	6.6	34	592	567	46	19	27
MIN	7.5	5.4	4.6	4.1	3.7	3.5	6.4	19	47	20	12	7.4
AC-FT	697	443	341	284	223	294	946	7,910	6,840	1,900	954	934

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

MEAN	16.0	10.4	6.85	5.79	5.35	6.43	20.0	122	192	73.3	30.7	19.0
MAX	32.7	25.1	14.4	11.3	9.21	11.3	40.8	287	462	271	74.4	42.1
(WY)	(1985)	(1985)	(1985)	(1987)	(1985)	(1997)	(1989)	(1996)	(1996)	(1995)	(1995)	(1999)
MIN	5.35	3.32	2.33	2.74	2.89	3.66	7.68	44.8	36.3	11.1	4.90	7.03
(WY)	(1990)	(1990)	(1981)	(1981)	(1990)	(1990)	(1983)	(1995)	(2002)	(2002)	(2002)	(1980)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1980 - 2003	
ANNUAL TOTAL	5,399.9		10,974.8			
ANNUAL MEAN	14.8		30.1		a42.4	
HIGHEST ANNUAL MEAN					81.2	1996
LOWEST ANNUAL MEAN					14.3	2002
HIGHEST DAILY MEAN	78	May 12	592	May 30	786	Jun 6, 1988
LOWEST DAILY MEAN	e2.1	Jan 31	3.5	Mar 22	e1.8	Dec 20, 1980
ANNUAL SEVEN-DAY MINIMUM	2.6	Jan 28	3.8	Feb 7	1.9	Dec 20, 1980
MAXIMUM PEAK FLOW			884	May 29	b1,170	Jun 8, 1985
MAXIMUM PEAK STAGE			3.16	May 29	c2.33	Jun 8, 1985
ANNUAL RUNOFF (AC-FT)	10,710		21,770		30,730	
10 PERCENT EXCEEDS	42		57		108	
50 PERCENT EXCEEDS	7.4		10		13	
90 PERCENT EXCEEDS	3.0		4.2		4.6	

e Estimated.
a Average discharge for 16 years (water years 1951-1956, 1970-1979), 50.7 ft^3/s; 36,730 acre-ft/yr, prior to diversion through Charles H. Boustead tunnel.
b From rating curve extended above 300 ft^3/s.
c Maximum gage height for period of record, 4.30 ft, Nov 30, 1984, backwater from ice.

09080190 RUEDI RESERVOIR NEAR BASALT, CO

LOCATION.--Lat 39°21'50", long 106°49'05", in NW$^1/_4$ sec.18, T.8 S., R.84 W., Pitkin County, Hydrologic Unit 14010004, in gatehouse of Ruedi Dam just upstream from Rocky Fork Creek, and 13 mi east of Basalt.

DRAINAGE AREA.--223 mi^2.

PERIOD OF RECORD.--May 1968 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09080190

GAGE.--Water-stage recorder. Datum of gage is 7766.00 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 earthfill dam. Storage began in May 1968; dam completed July 16, 1968. Capacity, 102,300 acre-ft, 1969 survey, between elevations 7,540.00 ft, sill of auxiliary outlet and 7,766.00 ft, crest of spillway. Dead storage below elevation 7,540.00 ft, 61 acre-ft. Figures given are total contents.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 104,000 acre-ft, June 11, 12, 2000, elevation, 7,767.62 ft; minimum after first filling, 32,430 acre-ft, Apr. 24, 1996, elevation, 7,670.17 ft.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum contents, 98,160 acre-ft, July 24, elevation, 7,761.72 ft; minimum contents, 46,110 acre-ft, Mar. 13, elevation, 7,694.95 ft.

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

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,697.75	47,830	-
Oct. 31	7,696.96	47,340	-490
Nov. 30	7,697.63	47,750	+410
Dec. 31	7,697.15	47,450	-300
CAL YR 2002	-	-	-18,850
Jan. 31	7,696.20	46,870	-580
Feb. 28	7,695.35	46,350	-520
Mar. 31	7,695.12	46,210	-140
Apr. 30	7,701.51	50,190	+3,980
May 31	7,730.98	71,160	+20,970
June 30	7,759.31	95,840	+24,680
July 31	7,760.72	97,190	+1,350
Aug. 31	7,753.34	90,250	-6,940
Sept. 30	7,745.94	83,610	-6,640
WTR YR 2003	-	-	+35,780

09080400 FRYINGPAN RIVER NEAR RUEDI, CO

LOCATION.--Lat 39°21'56", long 106°49'30", in SE¼SE¼ sec.12, T.8 S., R.85 W., Pitkin County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Rocky Fork Creek and Ruedi Dam, 1.5 mi west of former site of Ruedi, and 12.5 mi east of Basalt.

DRAINAGE AREA.--238 mi^2.

PERIOD OF RECORD.--October 1964 to current year. Statistical summary computed for 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=09080400

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 7,473.25 ft above NGVD of 1929, (levels by U.S. Bureau of Reclamation). Prior to Nov. 7, 1970, at site 2.0 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from station to Arkansas River basin through Busk-Ivanhoe Tunnel since June 1925 and Charles H. Boustead Tunnel since May 16, 1972 (see elsewhere in this report). Flow regulated by Ruedi Reservoir (station 09080190) since May 18, 1968. Several observations 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	94	51	42	41	40	41	41	65	140	116	129	239
2	94	43	42	41	40	41	41	115	134	118	130	239
3	94	42	42	41	40	41	42	116	111	118	130	315
4	94	42	42	41	40	41	41	116	108	118	131	288
5	94	42	42	41	40	41	41	116	117	118	130	301
6	94	42	42	41	40	41	41	116	111	118	135	293
7	94	42	42	41	40	41	41	113	107	117	163	293
8	95	42	42	41	40	41	41	110	104	116	178	254
9	94	43	41	41	40	41	41	110	102	116	221	175
10	89	42	41	41	40	41	41	109	102	116	220	137
11	71	42	41	41	40	41	42	109	108	116	220	136
12	71	42	41	41	40	41	73	109	114	116	228	136
13	71	42	41	41	40	41	88	109	117	116	247	139
14	70	42	41	41	40	41	63	109	113	116	242	139
15	71	42	41	41	40	41	42	109	111	115	242	139
16	70	42	41	41	40	41	42	111	109	116	242	139
17	70	42	41	41	40	41	42	114	109	116	242	150
18	67	42	41	41	41	41	42	119	109	116	242	219
19	53	42	41	41	40	41	43	124	110	116	242	231
20	52	42	41	41	40	41	42	130	117	116	241	231
21	52	42	41	41	41	41	43	131	119	116	241	231
22	52	42	41	41	41	41	43	134	117	116	242	230
23	52	42	41	41	41	41	44	144	115	116	242	229
24	52	42	41	41	41	42	44	148	114	116	242	229
25	52	42	41	41	41	42	45	149	112	146	242	229
26	52	42	41	40	41	42	45	150	111	277	242	228
27	52	42	41	40	41	42	44	140	110	329	242	228
28	52	42	41	40	41	41	44	114	109	275	242	228
29	52	42	41	40	---	41	45	121	109	120	241	228
30	52	42	41	40	---	41	45	128	110	102	239	228
31	52	---	41	40	---	41	---	129	---	108	238	---
TOTAL	2,174	1,271	1,279	1,265	1,129	1,275	1,372	3,717	3,379	4,151	6,608	6,481
MEAN	70.1	42.4	41.3	40.8	40.3	41.1	45.7	120	113	134	213	216
MAX	95	51	42	41	41	42	88	150	140	329	247	315
MIN	52	42	41	40	40	41	41	65	102	102	129	136
AC-FT	4,310	2,520	2,540	2,510	2,240	2,530	2,720	7,370	6,700	8,230	13,110	12,860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2003, BY WATER YEAR (WY)

MEAN	151	122	129	126	128	137	157	262	352	261	172	155
MAX	366	185	224	228	250	280	370	669	950	812	293	262
(WY)	(1970)	(1985)	(1996)	(1996)	(1996)	(1996)	(1971)	(1970)	(1984)	(1995)	(2000)	(2001)
MIN	54.8	42.4	38.2	36.8	36.3	33.6	39.1	116	113	95.9	57.1	49.1
(WY)	(1978)	(2003)	(1969)	(1969)	(1969)	(1977)	(1969)	(1990)	(2003)	(1977)	(1977)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1969 - 2003	
ANNUAL TOTAL	39,084		34,101			
ANNUAL MEAN	107		93.4		a180	
HIGHEST ANNUAL MEAN					288	1984
LOWEST ANNUAL MEAN					83.9	1977
HIGHEST DAILY MEAN	322	Aug 27	329	Jul 27	1,390	Jun 25, 1983
LOWEST DAILY MEAN	41	Dec 9	40	Jan 26	b28	Nov 14, 1995
ANNUAL SEVEN-DAY MINIMUM	41	Dec 9	40	Jan 26	29	Mar 5, 1981
MAXIMUM PEAK FLOW			710	Sep 3	c1,400	Sep 16, 1976
MAXIMUM PEAK STAGE			2.96	Sep 3	d3.50	Sep 16, 1976
ANNUAL RUNOFF (AC-FT)	77,520		67,640		130,100	
10 PERCENT EXCEEDS	211		229		295	
50 PERCENT EXCEEDS	67		52		152	
90 PERCENT EXCEEDS	42		41		73	

a Subsequent to completion of Ruedi Reservoir.
b Minimum daily discharge for period of record, 16 ft^3/s, Feb 2, 1968 (result of storage in Ruedi Reservoir); minimum daily discharge prior to construction of Ruedi Reservoir, 28 ft^3/s, Mar 4, 1966.
c Maximum discharge and stage for period of record, 2,690 ft^3/s, Jun 18, 1965, gage height 5.16 ft, site and datum then in use.
d Maximum gage height for statistical period, 3.89 ft, Jun 24, 1983.

09081000 ROARING FORK RIVER NEAR EMMA, CO

LOCATION.--Lat 39°22'24", long 107°05'00", in SW¼NW¼ sec.11, T.8 S., R.87 W., Eagle County, Hydrologic Unit 14010004, on left bank 10 ft upstream from bridge on Hooks Lane, 1.2 mi downstream from Sopris Creek, and 1.2 mi northwest of Emma.

DRAINAGE AREA.--853 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1908 to September 1909 (monthly discharge only, published in WSP 1313), 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=09081000

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,470 ft above NGVD of 1929, from topographic map. Prior to Mar. 1998, nonrecording gage at different datum.

REMARKS.--Records good except for the period July 3-24, which is fair, and estimated daily discharges, which are poor. Diversions for irrigation of about 16,000 acres above station. Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925 and through Twin Lakes tunnel since 1935. Transmountain diversion from headwaters of Fryingpan River through Charles H. Boustead Tunnel to Arkansas River basin began May 16, 1972. Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968.

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	277	250	221	195	168	158	181	291	3,860	814	326	337
2	277	249	210	179	170	152	190	322	3,190	810	323	332
3	295	227	204	182	170	154	192	322	2,630	778	319	379
4	289	214	200	183	160	163	185	361	2,440	748	316	367
5	282	217	207	e170	e150	162	177	351	2,190	727	305	376
6	277	207	192	e155	e120	159	185	315	1,670	694	300	371
7	274	209	189	e165	e115	162	181	300	1,480	664	311	425
8	268	214	191	e160	135	163	174	286	1,330	640	316	438
9	262	264	175	e165	157	162	177	274	1,410	601	352	379
10	268	233	177	e195	e155	164	186	277	1,540	573	345	424
11	250	219	187	187	e165	169	200	269	1,420	541	337	406
12	246	200	209	183	e160	177	227	262	1,480	518	339	368
13	244	210	203	178	e175	180	266	277	1,570	501	355	369
14	242	233	186	180	187	182	280	293	1,360	476	349	356
15	242	227	198	170	175	185	266	376	1,430	455	343	341
16	243	207	190	157	163	185	244	424	1,510	453	349	327
17	243	218	202	182	164	186	244	577	1,320	430	362	324
18	242	222	196	e140	162	186	254	690	1,290	420	379	377
19	226	210	180	e160	159	177	239	739	1,310	410	376	407
20	222	215	160	e170	154	172	231	717	1,260	413	353	414
21	218	216	197	e175	164	179	229	716	1,180	403	337	401
22	216	213	165	182	161	173	249	793	1,130	395	335	395
23	229	220	139	180	156	177	274	1,040	1,120	390	333	385
24	229	227	173	172	160	192	262	1,240	1,040	369	333	376
25	223	227	176	172	163	188	254	1,500	933	346	332	374
26	219	193	161	167	159	181	268	1,440	922	432	334	365
27	225	179	166	166	158	191	301	1,750	920	535	336	358
28	223	197	e170	168	158	177	324	2,530	908	495	345	352
29	220	214	e180	166	---	165	313	3,120	877	353	334	349
30	219	217	e180	164	---	171	309	3,680	851	325	339	341
31	241	---	e160	168	---	175	---	3,440	---	310	342	---
TOTAL	7,631	6,548	5,744	5,336	4,443	5,367	7,062	28,972	45,571	16,019	10,455	11,213
MEAN	246	218	185	172	159	173	235	935	1,519	517	337	374
MAX	295	264	221	195	187	192	324	3,680	3,860	814	379	438
MIN	216	179	139	140	115	152	174	262	851	310	300	324
AC-FT	15,140	12,990	11,390	10,580	8,810	10,650	14,010	57,470	90,390	31,770	20,740	22,240

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

MEAN	381	283	250	237	215	218	342	920	1,439	786	506	420
MAX	555	318	283	270	245	260	551	1,177	2,476	1,495	741	547
(WY)	(2000)	(2000)	(2002)	(2002)	(2000)	(1999)	(1998)	(1998)	(1999)	(1999)	(1999)	(1999)
MIN	246	218	185	172	159	173	235	399	519	307	298	292
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1998 - 2003	
ANNUAL TOTAL	103,927		154,361			
ANNUAL MEAN	285		423		481	
HIGHEST ANNUAL MEAN					680	1999
LOWEST ANNUAL MEAN					308	2002
HIGHEST DAILY MEAN	920	Jun 1	3,860	Jun 1	3,860	Jun 1, 2003
LOWEST DAILY MEAN	139	Dec 23	e115	Feb 7	e115	Feb 7, 2003
ANNUAL SEVEN-DAY MINIMUM	164	Dec 22	142	Feb 4	142	Feb 4, 2003
MAXIMUM PEAK FLOW			4,350	May 30	8,070	Jun 19, 1909
MAXIMUM PEAK STAGE			9.33	May 30	a10.40	Jun 19, 1909
ANNUAL RUNOFF (AC-FT)	206,100		306,200		348,500	
10 PERCENT EXCEEDS	388		913		986	
50 PERCENT EXCEEDS	264		244		304	
90 PERCENT EXCEEDS	193		163		208	

e Estimated.
a Datum then in use.

09081000 ROARING FORK RIVER NEAR EMMA, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 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=09081000

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)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)
OCT													
08...	1415	271	9.5	8.5	406	10.3	210	66.3	11.7	1.33	0.1	4.16	E115
FEB													
05...	1700	173	11.9	8.8	435	0.8	--	--	--	--	--	--	--
APR													
24...	0915	263	11.2	8.2	393	3.9	200	61.2	10.6	1.28	0.1	4.46	105
MAY													
27...	1730	1,490	8.9	--	210	12.7	94	29.9	4.62	0.75	0.1	1.94	59
JUL													
22...	1905	376	7.9	8.2	363	18.0	--	--	--	--	--	--	--
SEP													
04...	0900	359	9.8	8.1	345	9.2	170	53.5	9.29	1.13	0.1	3.35	96

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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)
OCT													
08...	3.17	0.2	7.7	96.1	--	--	--	E.09	0.17	E.009	0.131	E.002	0.010
FEB													
05...	--	--	--	--	--	--	--	0.13	0.14	<0.015	0.263	0.004	0.027
APR													
24...	4.48	0.23	6.6	90.5	243	0.33	173	0.12	0.23	E.012	0.195	E.002	0.009
MAY													
27...	1.58	0.2	6.4	39.6	121	0.16	488	0.18	0.37	<0.015	0.122	E.002	E.005
JUL													
22...	--	--	--	--	--	--	--	E.09	0.12	E.013	0.084	0.003	0.010
SEP													
04...	2.56	0.2	7.7	74.5	211	0.29	204	0.12	0.19	<0.015	0.177	<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)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT				
08...	0.014	0.020	E2	E6
FEB				
05...	0.035	0.046	<1	E1
APR				
24...	0.014	0.038	E23	E18
MAY				
27...	0.009	0.059	E51	83
JUL				
22...	0.015	0.021	E19	E11
SEP				
04...	0.015	0.023	E30	30

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

09081000 ROARING FORK RIVER NEAR EMMA, CO—Continued

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

Date	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recover -able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover -able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT										
08...	<0.2	<1.2	50	<1	4.1	6.9	<0.02	<3	<0.3	<24
APR										
24...	<0.2	<1.2	210	<1	4.5	15.3	<0.02	<3	<0.3	<24
MAY										
27...	<0.2	E.9	700	<1	6.0	38.4	<0.02	<3	<0.3	4
SEP										
04...	<0.2	1.2	90	<1	5.5	15.4	<0.02	<3	<0.3	3

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

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT					APR				
03...	1445	297	400	9.5	02...	1525	183	422	11.4
NOV					MAY				
12...	1415	183	427	2.9	08...	1350	302	346	9.0
JAN					JUL				
15...	1500	164	425	1.4	02...	1215	804	283	11.8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT						
08...	1415	271	10.3	--	2	1.3
FEB						
05...	1700	173	0.8	--	3	1.3
APR						
24...	0915	263	3.9	--	8	5.7
MAY						
27...	1730	1,490	12.7	77	45	181
JUL						
22...	1905	376	18.0	--	2	2.3
SEP						
04...	0900	359	9.2	--	7	6.9

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO

LOCATION.--Lat 39°13'56", long 107°13'36", in SE¼SW¼ sec.33, T.9 S., R.88 W., Pitkin County, Hydrologic Unit 14010004, on right bank 1.2 mi upstream from Avalanche Creek, and 3.6 mi north of Redstone.

DRAINAGE AREA.--167 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09081600

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,905 ft above NGVD of 1929, from river-profile map.

REMARKS.--Records good except for estimated discharges, which are fair. A few small diversions for irrigation upstream from station.

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	111	70	56	43	38	37	60	284	2,180	603	189	89
2	101	74	51	36	38	34	66	266	2,010	613	161	86
3	111	61	50	40	38	35	65	266	1,710	578	160	85
4	106	62	47	43	35	37	62	305	1,560	550	150	85
5	107	60	51	39	35	36	60	270	1,370	513	139	83
6	100	55	47	e36	27	35	60	235	1,200	472	132	89
7	99	59	46	e38	26	35	58	221	1,060	443	128	116
8	98	61	44	37	30	39	55	220	1,020	427	132	117
9	94	83	38	38	37	42	62	215	1,120	404	124	136
10	88	71	36	45	35	43	83	204	1,150	373	121	223
11	84	65	38	44	37	45	120	192	1,090	352	119	177
12	80	57	45	41	35	48	150	218	1,200	328	121	152
13	75	64	48	36	42	53	158	296	1,210	314	126	165
14	74	61	42	41	48	58	207	362	1,160	304	127	145
15	70	59	45	40	42	60	209	531	1,220	299	123	130
16	68	52	43	32	39	61	170	660	1,240	293	124	122
17	66	57	45	41	38	58	166	868	1,050	272	144	117
18	64	56	44	31	38	57	171	1,060	995	274	135	113
19	61	53	38	37	36	53	150	973	949	262	130	106
20	59	55	33	38	35	53	138	912	917	253	115	100
21	58	55	45	40	39	56	144	954	e920	240	108	95
22	58	56	36	40	38	55	186	1,080	e940	228	107	91
23	68	58	29	40	34	58	196	1,270	e920	216	107	88
24	70	56	40	39	38	63	183	1,370	e850	210	103	86
25	65	56	42	39	40	61	190	1,420	e670	204	102	83
26	62	48	37	37	38	60	e233	1,460	647	208	97	81
27	69	42	38	38	37	61	e276	1,660	679	254	96	79
28	65	47	38	38	38	56	e312	1,970	684	199	93	77
29	67	53	41	37	---	52	e319	2,150	669	187	90	75
30	65	52	41	37	---	54	310	2,210	636	173	96	73
31	69	---	35	38	---	55	---	2,020	---	163	98	---
TOTAL	2,432	1,758	1,309	1,199	1,031	1,550	4,619	26,122	33,026	10,209	3,797	3,264
MEAN	78.5	58.6	42.2	38.7	36.8	50.0	154	843	1,101	329	122	109
MAX	111	83	56	45	48	63	319	2,210	2,180	613	189	223
MIN	58	42	29	31	26	34	55	192	636	163	90	73
AC-FT	4,820	3,490	2,600	2,380	2,040	3,070	9,160	51,810	65,510	20,250	7,530	6,470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2003, BY WATER YEAR (WY)

MEAN	98.1	71.9	55.5	49.0	48.6	65.9	193	762	1,255	611	197	124
MAX	223	152	95.9	85.3	89.9	184	464	1,223	2,019	1,872	640	253
(WY)	(1998)	(1987)	(1986)	(1985)	(1986)	(1986)	(1962)	(1984)	(1957)	(1957)	(1995)	(1986)
MIN	49.7	39.5	34.1	32.2	28.3	32.4	83.4	288	375	96.9	58.0	59.8
(WY)	(1978)	(1978)	(2002)	(2002)	(1964)	(1964)	(1964)	(1977)	(1977)	(1977)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1956 - 2003	
ANNUAL TOTAL	49,614		90,316			
ANNUAL MEAN	136		247		295	
HIGHEST ANNUAL MEAN					468	1957
LOWEST ANNUAL MEAN					107	1977
HIGHEST DAILY MEAN	873	Jun 1	2,210	May 30	3,500	Jun 25, 1983
LOWEST DAILY MEAN	21	Jan 3	26	Feb 7	21	Jan 3, 2002
ANNUAL SEVEN-DAY MINIMUM	29	Jan 29	32	Feb 4	27	Feb 11, 1964
MAXIMUM PEAK FLOW			2,630	May 29	4,180	Jun 25, 1983
MAXIMUM PEAK STAGE			4.92	May 29	6.12	Jun 25, 1983
ANNUAL RUNOFF (AC-FT)	98,410		179,100		213,600	
10 PERCENT EXCEEDS	364		914		938	
50 PERCENT EXCEEDS	65		80		94	
90 PERCENT EXCEEDS	34		38		43	

e Estimated.

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1996 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09081600

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)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)
OCT													
09...	0935	93	9.7	7.8	469	5.8	210	71.6	8.26	1.42	0.5	17.6	E107
FEB													
06...	1520	36	10.4	7.6	740	3.0	--	--	--	--	--	--	--
APR													
22...	1250	186	10.4	7.8	404	7.9	180	58.7	8.04	1.14	0.5	14.6	105
MAY													
27...	1440	1,360	9.5	--	165	10.4	72	22.9	3.50	0.51	0.2	3.35	61
JUL													
23...	1355	212	8.7	7.7	331	15.6	--	--	--	--	--	--	--
SEP													
04...	1350	84	8.4	7.7	525	14.2	240	78.9	10.2	1.78	0.5	17.1	116

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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)
OCT													
09...	5.54	0.3	7.9	126	--	--	--	E.06	0.13	<0.015	0.067	E.002	<0.007
FEB													
06...	--	--	--	--	--	--	--	<0.10	E.08	0.028	0.078	<0.002	<0.007
APR													
22...	4.23	0.19	6.9	92.1	250	0.34	125	E.06	0.19	<0.015	0.193	<0.002	<0.007
MAY													
27...	0.95	<0.2	5.3	20.3	94	0.13	346	E.08	0.37	<0.015	0.179	<0.002	<0.007
JUL													
23...	--	--	--	--	--	--	--	<0.10	<0.10	<0.015	0.053	<0.002	<0.007
SEP													
04...	7.44	0.3	8.8	141	335	0.46	76.0	<0.10	<0.10	E.009	0.046	<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)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT				
09...	<0.004	0.005	E7	E15
FEB				
06...	<0.004	E.003	<1	<1
APR				
22...	E.004	0.050	<1	<1
MAY				
27...	E.002	0.25	<33	E18
JUL				
23...	<0.004	E.003	E2	E5
SEP				
04...	<0.004	E.003	E4	E6

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

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO—Continued

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

Date	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT										
09...	<0.2	<1.2	90	<1	7.4	9.8	<0.02	<3	<0.3	<24
APR										
22...	<0.2	<1.2	970	<1	5.5	28.8	<0.02	<3	<0.3	<24
MAY										
27...	<0.2	E.7	4,740	<1	4.0	143	<0.02	<3	<0.3	3
SEP										
04...	<0.2	<1.2	80	<1	9.8	12.1	<0.02	E1	<0.3	<3

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

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT					APR				
03...	1145	118	440	8.4	03...	1130	61	604	4.1
NOV					30...	1055	305	321	5.4
14...	1115	61	595	3.6	JUN				
JAN					02...	1240	1,690	152	7.3
16...	1055	26	808	3.2	JUL				
					02...	0900	613	196	7.5

09083800 CRYSTAL RIVER BELOW CARBONDALE, CO

LOCATION.--Lat 39°24'29", long 107°13'47", in NE¼NW¼ sec.33, T.7 S., R.88 W., Garfield County, Hydrologic Unit 14010004, on left bank at downstream side of bridge on County Road 108, 1.0 mi upstream from mouth, and 1.0 mi northwest of Carbondale.

DRAINAGE AREA.--350 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 2000 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09083800

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,120 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 4,000 acres upstream and downstream from station.

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	78	103	94	74	66	68	97	340	2,870	638	158	69
2	72	107	90	e66	68	66	103	316	2,620	651	126	67
3	81	104	88	72	67	66	105	310	2,230	602	119	69
4	83	106	84	74	62	73	102	368	2,060	550	124	71
5	82	103	87	72	62	70	101	315	1,820	502	118	69
6	76	98	84	70	e50	69	101	259	1,580	445	106	75
7	76	104	82	67	e48	68	100	233	1,360	407	100	89
8	76	107	81	70	e56	70	96	219	1,260	386	97	98
9	74	126	79	75	e64	74	98	210	1,400	364	91	126
10	73	122	80	71	e62	77	109	196	1,450	331	86	193
11	71	115	82	72	e66	81	141	175	1,310	310	83	184
12	70	105	84	68	e64	84	172	173	1,480	285	88	158
13	69	110	86	64	69	89	181	241	1,500	268	87	161
14	71	112	82	66	76	93	231	305	1,420	253	83	151
15	70	107	85	68	71	95	232	531	1,500	245	79	134
16	72	100	83	e60	67	96	209	751	1,580	248	82	124
17	76	104	86	e70	66	95	199	1,170	1,310	224	93	113
18	74	102	84	e58	64	93	202	1,530	1,250	218	94	107
19	74	96	79	e68	65	89	182	1,410	1,240	210	97	101
20	73	98	e68	e70	64	88	173	1,280	1,190	203	83	94
21	63	98	e78	75	70	92	173	1,320	1,020	195	76	87
22	65	98	e72	73	68	90	198	1,520	1,050	183	77	84
23	75	100	e60	72	66	93	220	1,790	1,040	169	77	74
24	75	98	71	71	65	98	205	1,890	964	174	75	65
25	78	97	76	71	71	97	212	2,030	756	169	72	59
26	81	90	82	69	69	96	255	1,980	709	176	68	49
27	83	81	71	68	68	98	304	2,230	750	246	59	44
28	85	85	75	70	69	92	350	2,540	768	192	60	40
29	81	91	74	68	---	87	393	2,800	745	167	57	33
30	84	91	75	68	---	92	369	2,850	697	145	61	32
31	94	---	71	67	---	93	---	2,780	---	131	73	---
TOTAL	2,355	3,058	2,473	2,147	1,823	2,632	5,613	34,062	40,929	9,287	2,749	2,820
MEAN	76.0	102	79.8	69.3	65.1	84.9	187	1,099	1,364	300	88.7	94.0
MAX	94	126	94	75	76	98	393	2,850	2,870	651	158	193
MIN	63	81	60	58	48	66	96	173	697	131	57	32
AC-FT	4,670	6,070	4,910	4,260	3,620	5,220	11,130	67,560	81,180	18,420	5,450	5,590

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

MEAN	64.7	99.5	86.9	73.9	71.8	84.0	210	891	989	209	91.2	68.5
MAX	76.0	102	93.4	79.6	76.6	84.9	256	1,129	1,364	300	162	94.0
(WY)	(2003)	(2003)	(2002)	(2002)	(2001)	(2003)	(2002)	(2001)	(2003)	(2003)	(2001)	(2003)
MIN	48.2	94.8	79.8	69.3	65.1	82.8	187	446	447	62.0	33.9	41.8
(WY)	(2002)	(2002)	(2003)	(2003)	(2003)	(2001)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 2000 - 2003	
ANNUAL TOTAL	54,202		109,948			
ANNUAL MEAN	148		301		240	
HIGHEST ANNUAL MEAN					301	2003
LOWEST ANNUAL MEAN					147	2002
HIGHEST DAILY MEAN	1,190	Jun 1	2,870	Jun 1	2,980	May 30, 2000
LOWEST DAILY MEAN	28	Aug 19	32	Sep 30	28	Aug 19, 2002
ANNUAL SEVEN-DAY MINIMUM	29	Sep 1	46	Sep 24	29	Sep 1, 2002
MAXIMUM PEAK FLOW			3,490	May 29	3,510	May 30, 2000
MAXIMUM PEAK STAGE			4.56	May 29	a4.40	May 30, 2000
ANNUAL RUNOFF (AC-FT)	107,500		218,100		174,000	
10 PERCENT EXCEEDS	337		1,040		609	
50 PERCENT EXCEEDS	81		93		89	
90 PERCENT EXCEEDS	38		66		52	

e Estimated.
a Maximum gage height, 4.56 ft, May 29, 2003.

09083800 CRYSTAL RIVER BELOW CARBONDALE, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to January 1978, January 2000 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09083800

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)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)
OCT													
09...	1130	75	10.4	8.1	550	10.4	280	90.2	13.1	1.68	0.3	13.2	E120
FEB													
06...	1140	53	12.2	8.5	665	0.0	--	--	--	--	--	--	--
APR													
22...	1435	210	9.6	8.4	431	11.0	190	62.4	9.11	1.33	0.4	12.8	111
MAY													
28...	1115	2,320	10.3	--	154	6.5	72	23.3	3.45	0.60	0.1	2.86	58
JUL													
23...	1105	179	9.2	8.1	419	15.0	--	--	--	--	--	--	--
SEP													
04...	1100	75	9.2	8.4	568	14.3	290	90.9	14.9	1.85	0.3	12.1	140

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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)
OCT													
09...	4.72	0.2	10.6	134	--	--	--	E.07	E.08	<0.015	0.177	0.003	<0.007
FEB													
06...	--	--	--	--	--	--	--	E.09	0.15	0.019	0.158	<0.002	<0.007
APR													
22...	4.27	0.18	7.4	102	267	0.36	151	0.10	0.25	E.009	0.188	E.002	<0.007
MAY													
28...	0.96	<0.2	5.8	19.2	92	0.12	575	0.24	0.79	<0.015	0.174	E.002	<0.007
JUL													
23...	--	--	--	--	--	--	--	E.05	E.05	E.008	0.164	E.002	<0.007
SEP													
04...	4.79	0.2	11.7	132	353	0.48	71.5	<0.10	E.08	E.008	0.215	<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)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
OCT				
09...	<0.004	0.007	E3	E6
FEB				
06...	E.002	0.014	<1	<1
APR				
22...	<0.004	0.055	E8	E9
MAY				
28...	0.005	0.48	E110	E54
JUL				
23...	E.004	0.007	21	29
SEP				
04...	0.006	0.007	E10	E21

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

09083800 CRYSTAL RIVER BELOW CARBONDALE, CO—Continued

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

Date	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT										
09...	<0.2	<1.2	30	<1	E3.0	E2.8	<0.02	<3	<0.3	<24
APR										
22...	<0.2	<1.2	950	<1	2.4	28.7	<0.02	<3	<0.3	<24
MAY										
28...	<0.2	E.6	7,850	<1	5.0	259	<0.02	<3	<0.3	<3
SEP										
04...	<0.2	E.6	40	<1	3.4	4.9	<0.02	<3	<0.3	E2

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

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT					APR				
03...	0920	85	543	9.7	03...	0930	106	585	5.7
NOV					MAY				
14...	0930	109	584	4.2	07...	1430	222	371	11.6
JAN									
16...	0915	60	649	0.0					

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°32'37", long 107°19'44", in SW$^1/_4$SE$^1/_4$ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010004, on left bank at Glenwood Springs, 2,100 ft upstream from mouth.

DRAINAGE AREA.--1,451 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to September 1909, September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1960, published as Roaring Fork at Glenwood Springs. Statistical summary computed for 1972 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09085000

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,720.73 ft above NGVD of 1929. Prior to Nov. 20, 1915, nonrecording gage on highway bridge 800 ft downstream, at different datum. Nov. 20, 1915 to Oct. 26, 1917, nonrecording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 35,000 acres. Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925, Twin Lakes tunnel since 1935, and Charles H. Boustead tunnel since 1972. Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968.

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	529	489	395	342	282	252	308	713	6,950	1,710	712	657
2	511	489	385	321	287	245	329	687	6,150	1,710	678	644
3	548	473	369	331	292	236	341	683	5,070	1,630	670	653
4	545	446	362	335	268	261	332	786	4,630	1,550	682	704
5	529	446	372	331	272	261	319	752	4,160	1,470	660	690
6	514	426	357	325	e190	253	326	663	3,450	1,380	629	710
7	503	424	346	306	e180	255	325	609	2,980	1,300	626	766
8	488	435	344	302	e210	259	307	594	2,710	1,240	629	822
9	471	537	333	306	e260	269	308	597	2,890	1,170	647	781
10	470	515	330	330	259	274	322	581	3,120	1,110	648	910
11	456	469	341	333	286	289	374	550	2,830	1,050	627	909
12	440	430	360	318	286	308	438	537	3,050	998	632	805
13	440	422	367	297	308	317	501	607	3,180	957	641	802
14	429	443	340	308	322	321	584	692	2,940	913	654	782
15	425	431	352	307	310	325	604	997	3,040	885	648	745
16	423	400	345	276	285	326	541	1,290	3,260	889	664	712
17	427	403	360	303	277	327	504	1,790	2,810	865	695	689
18	420	418	360	276	270	332	522	2,250	2,710	849	731	711
19	406	394	337	286	262	307	492	2,260	2,720	834	719	750
20	396	398	324	303	249	295	472	2,070	2,660	825	686	747
21	383	398	367	306	270	302	466	2,040	2,430	794	666	725
22	385	393	331	310	267	291	524	2,250	2,410	772	672	706
23	415	400	308	315	259	295	594	2,700	2,390	748	673	679
24	417	404	375	304	247	327	560	3,130	2,280	753	665	659
25	414	405	338	297	270	335	554	3,550	1,970	734	660	647
26	411	377	311	291	262	318	614	3,470	1,880	801	644	626
27	411	338	329	285	261	330	730	4,060	1,910	1,020	634	613
28	417	353	326	284	257	302	792	5,240	1,910	942	651	601
29	409	379	349	279	---	280	809	5,990	1,880	785	643	590
30	410	387	351	277	---	285	775	6,720	1,800	725	655	581
31	447	---	315	281	---	297	---	6,520	---	683	675	---
TOTAL	13,889	12,722	10,779	9,465	7,448	9,074	14,667	65,378	92,170	32,092	20,516	21,416
MEAN	448	424	348	305	266	293	489	2,109	3,072	1,035	662	714
MAX	548	537	395	342	322	335	809	6,720	6,950	1,710	731	910
MIN	383	338	308	276	180	236	307	537	1,800	683	626	581
AC-FT	27,550	25,230	21,380	18,770	14,770	18,000	29,090	129,700	182,800	63,650	40,690	42,480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2003, BY WATER YEAR (WY)

MEAN	729	658	559	494	467	523	807	2,211	3,952	2,297	978	739
MAX	1,159	969	790	677	689	861	1,602	4,663	7,383	7,483	2,676	1,160
(WY)	(1985)	(1985)	(1985)	(1996)	(1986)	(1986)	(1985)	(1984)	(1984)	(1995)	(1995)	(1995)
MIN	384	411	348	305	266	293	352	593	1,100	422	316	363
(WY)	(1978)	(1978)	(2003)	(2003)	(2003)	(2003)	(1977)	(1977)	(2002)	(1977)	(1977)	(1977)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1972 - 2003	
ANNUAL TOTAL	192,968		309,616			
ANNUAL MEAN	529		848		a1,203	
HIGHEST ANNUAL MEAN					2,092	1984
LOWEST ANNUAL MEAN					485	1977
HIGHEST DAILY MEAN	2,170	Jun 1	6,950	Jun 1	b11,800	Jul 12, 1995
LOWEST DAILY MEAN	e270	Jan 31	e180	Feb 7	c,d180	Feb 7, 2003
ANNUAL SEVEN-DAY MINIMUM	302	Jan 30	234	Feb 4	234	Feb 4, 2003
MAXIMUM PEAK FLOW			7,650	May 31	f13,000	Jul 13, 1995
MAXIMUM PEAK STAGE			6.43	May 31	g8.31	Jul 13, 1995
ANNUAL RUNOFF (AC-FT)	382,800		614,100		871,600	
10 PERCENT EXCEEDS	787		2,140		2,870	
50 PERCENT EXCEEDS	445		472		668	
90 PERCENT EXCEEDS	331		283		420	

e Estimated.
a Average discharge for 65 years (water years 1906-09, 1911-71), 1368 ft^3/s; 99,1100 acre-ft/yr, prior to diversion through Charles H. Boustead tunnel.
b Maximum daily discharge for period of record, 16,600 ft^3/s, Jun 30, 1957.
c Minimum daily discharge for period of record, 179 ft^3/s, Jan 21, 1935; minimum discharge during the day of Jan 21, 1935, 145 ft^3/s, gage height, 0.65 ft.
d Also occurred Aug 12, 1977.
f Maximum discharge for period of record, 19,000 ft^3/s, Jul 1, 1957, gage height, 8.65 ft.
g Maximum gage height for period of record, 8.7 ft, Jun 14, 1921, from floodmarks.

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1958 to August 1961, May 1962 to September 1967, January 1970 to May 1972, January 1980 to September 1984, October 1993 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09085000

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1962 to September 1967, January 1980 to September 1984.
WATER TEMPERATURE: May 1962 to May 1967, January 1980 to September 1984, July 2002 to current year.

INSTRUMENTATION:.--Water-quality monitor, January 1980 to September 1984. Water temperature sensor with satellite telemetry, July 2002 to current year.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office. Daily water temperature records are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 21.7°C July 24, 2002; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 21.5°C, July 20, Aug. 9; minimum, 0.0°C, on many days.

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)	Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801)
OCT													
10...	1020	469	10.8	8.5	658	8.2	280	87.0	14.7	1.69	0.9	33.4	126
FEB													
04...	1355	258	13.1	8.6	652	1.6	--	--	--	--	--	--	--
APR													
24...	1125	547	11.2	8.3	482	6.8	210	66.0	11.3	1.44	0.5	18.1	116
MAY													
28...	0915	5,700	11.8	--	186	7.2	82	26.1	3.96	0.86	0.2	3.52	59
JUL													
24...	1140	780	10.7	8.6	540	16.2	--	--	--	--	--	--	--
SEP													
05...	1155	685	10.7	8.6	590	14.7	230	72.4	13.2	1.61	0.8	28.8	130

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)	Ammonia + org-N, water, fltrd, mg/L as N (00623)	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)	Organic nitrogen, water, fltrd, mg/L (00607)
OCT													
10...	43.5	0.2	8.7	132	397	0.54	502	0.10	0.14	<0.015	0.067	0.003	--
FEB													
04...	--	--	--	--	--	--	--	0.16	0.15	E.012	0.173	0.003	--
APR													
24...	18.6	0.21	8.0	104	297	0.40	439	0.15	0.36	0.021	0.208	0.004	0.13
MAY													
28...	2.96	<0.2	6.1	28.4	108	0.15	1,660	0.23	1.7	E.011	0.160	E.002	--
JUL													
24...	--	--	--	--	--	--	--	0.10	0.11	E.014	0.076	0.003	--
SEP													
05...	39.7	0.2	8.9	110	352	0.48	652	0.12	0.30	<0.015	0.069	<0.002	--

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO—Continued

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

Date	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L (00666)	Phos-phorus, water, unfltrd mg/L (00665)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)
OCT 10...	<0.007	E.003	0.011	E18	24
FEB 04...	E.005	0.013	0.022	<1	E2
APR 24...	0.007	0.013	0.065	E20	20
MAY 28...	E.006	0.010	0.64	E86	E114
JUL 24...	<0.007	0.006	0.013	E9	E15
SEP 05...	<0.007	0.008	0.015	E35	26

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

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

Date	Cadmium water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Selenium, water, fltrd, ug/L (01145)	Silver, water, fltrd, ug/L (01075)	Zinc, water, fltrd, ug/L (01090)
OCT 10...	<0.2	<1.2	40	<1	4.9	8.9	<0.02	<3	<0.3	<24
APR 24...	<0.2	E.9	720	<1	5.1	30.4	<0.02	<3	<0.3	<24
MAY 28...	<0.2	<1.2	9,730	M	8.1	403	<0.02	<3	<0.3	E3
SEP 05...	<0.2	<1.2	60	M	3.4	9.6	<0.02	<3	<0.3	E2

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

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instan-taneous dis-charge, cfs (00061)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Date	Time	Instan-taneous dis-charge, cfs (00061)	Specif. conduc-tance, wat unf uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)
OCT 04...	0915	547	648	8.8	MAY 06...	0955	708	422	6.6
NOV 15...	0915	436	668	3.6	30...	1230	6,350	173	8.2
JAN 14...	1200	302	652	0.9	JUL 03...	0845	1,750	344	12.0
APR 04...	0915	329	598	4.0					

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	---	---	---	18.9	14.8	16.9	16.7	11.8	14.4
2	---	---	---	---	---	---	17.6	14.4	16.3	17.4	11.4	14.6
3	---	---	---	---	---	---	18.7	15.4	17.1	16.0	12.3	14.2
4	---	---	---	---	---	---	20.0	14.8	17.5	16.8	12.1	14.4
5	---	---	---	---	---	---	19.8	15.9	18.0	16.4	11.2	14.0
6	---	---	---	---	---	---	19.0	15.2	17.2	16.0	12.2	14.3
7	---	---	---	---	---	---	17.2	14.4	16.0	16.4	13.6	14.9
8	---	---	---	---	---	---	18.7	13.8	16.1	17.2	13.3	15.3
9	---	---	---	---	---	---	19.3	13.3	16.4	---	---	---
10	---	---	---	---	---	---	19.1	12.8	16.3	16.8	---	---
11	---	---	---	---	---	---	19.4	12.9	16.4	16.7	14.2	15.3
12	---	---	---	---	---	---	18.8	13.0	16.3	15.4	---	---
13	---	---	---	---	---	---	18.8	13.8	16.5	15.9	12.6	14.3
14	---	---	---	---	---	---	19.1	12.7	16.2	---	11.1	---
15	---	---	---	---	---	---	19.1	13.0	16.5	---	---	---
16	---	---	---	---	---	---	19.5	13.0	16.6	16.9	---	---
17	---	---	---	---	---	---	18.9	13.5	16.6	15.5	12.5	14.1
18	---	---	---	---	---	---	18.8	13.7	16.3	13.5	11.5	12.6
19	---	---	---	---	---	---	17.6	13.3	15.8	14.2	10.4	12.3
20	---	---	---	---	---	---	16.9	14.5	15.7	15.3	9.5	12.6
21	---	---	---	---	---	---	16.8	13.8	15.3	15.9	10.4	13.4
22	---	---	---	---	---	---	17.4	12.8	15.2	15.7	10.7	13.6
23	---	---	---	---	---	---	18.5	13.6	16.1	15.3	10.0	13.0
24	---	---	---	21.7	---	---	18.1	12.8	15.8	15.3	9.8	12.9
25	---	---	---	20.0	16.8	17.6	17.8	12.1	15.2	13.8	10.0	12.4
26	---	---	---	20.5	14.7	17.4	17.6	11.9	15.0	15.5	11.5	13.4
27	---	---	---	19.7	14.4	17.3	17.5	12.4	15.2	13.3	9.8	11.5
28	---	---	---	20.6	15.1	17.8	16.5	11.8	14.5	12.6	9.7	11.3
29	---	---	---	20.9	13.7	17.5	15.4	13.3	14.4	13.3	10.7	12.0
30	---	---	---	21.6	14.7	18.3	16.3	11.1	13.8	13.4	9.4	11.4
31	---	---	---	21.4	15.0	18.4	16.3	12.1	14.5	---	---	---
MONTH	---	---	---	---	---	---	20.0	11.1	16.0	---	---	---

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, 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
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	9.0	11.7	7.2	5.3	6.2	3.6	2.1	2.9	2.0	0.2	0.9
2	12.6	9.9	11.5	7.1	5.0	6.2	3.8	1.8	3.1	0.7	0.0	0.3
3	11.4	9.8	10.7	6.0	3.3	4.8	3.5	1.7	2.8	1.1	0.0	0.3
4	11.2	8.7	9.9	5.6	3.2	4.5	3.0	0.7	2.1	2.4	0.0	1.1
5	12.2	9.5	10.7	5.8	2.7	4.5	4.0	2.1	3.1	1.7	0.0	0.9
6	12.8	8.2	10.6	5.9	2.5	4.5	3.7	1.4	2.8	2.2	0.0	1.2
7	13.0	8.3	10.9	5.8	2.6	4.4	2.8	0.8	2.0	1.6	0.0	0.8
8	13.3	8.6	11.1	6.0	4.7	5.3	2.3	0.5	1.6	1.4	0.0	0.6
9	12.6	8.3	10.8	6.0	4.7	5.8	1.9	0.0	0.9	1.6	0.0	0.6
10	12.5	7.8	10.4	4.9	3.8	4.3	1.4	0.0	0.6	2.6	0.6	1.5
11	11.8	8.6	10.3	5.9	3.2	4.4	1.9	0.0	0.7	3.8	2.0	2.8
12	11.7	7.7	10	4.8	2.2	3.8	2.4	0.8	1.6	3.3	1.2	2.4
13	10.4	6.1	8.6	4.1	2.7	3.6	3.3	1.3	2.4	2.6	0.0	1.5
14	10.8	6.2	8.7	6.0	3.9	5.0	2.5	0.1	1.6	2.4	0.0	1.3
15	10.4	6.0	8.5	5.5	3.7	4.6	2.9	0.9	2.0	2.6	0.5	1.4
16	10.4	6.1	8.5	4.3	1.8	3.3	3.3	0.3	1.8	0.9	0.0	0.4
17	10.4	6.0	8.5	4.2	1.5	3.1	3.2	2.0	2.7	1.9	0.0	0.9
18	10.4	6.1	8.6	4.8	2.6	3.9	2.8	0.9	1.8	1.0	0.0	0.4
19	10.0	6.0	8.3	4.4	1.6	3.3	1.3	0.0	0.3	1.3	0.0	0.5
20	9.5	5.7	7.9	4.8	2.0	3.6	0.1	0.0	0.0	1.7	0.0	0.7
21	9.5	5.6	7.9	5.1	2.1	3.8	1.3	0.0	0.5	2.2	0.0	1.1
22	9.5	6.3	7.9	5.1	2.2	3.9	0.9	0.0	0.4	3.0	0.1	1.7
23	9.9	8.2	9.1	4.7	2.4	3.8	0.0	0.0	0.0	3.1	1.6	2.3
24	9.7	7.8	8.6	5.6	3.4	4.6	0.2	0.0	0.0	3.6	1.2	2.5
25	9.4	6.5	7.9	5.1	3.4	4.3	0.5	0.0	0.2	5.4	3.0	4.1
26	8.8	6.0	7.5	3.5	1.0	2.3	0.6	0.0	0.1	4.9	2.6	4.0
27	9.7	7.3	8.5	2.5	0.0	1.4	0.5	0.0	0.1	4.8	1.5	3.4
28	8.9	7.3	8.1	2.7	0.0	1.4	0.7	0.0	0.2	4.6	2.8	3.7
29	8.0	5.8	7.0	3.2	0.3	1.9	1.2	0.0	0.4	4.4	1.9	3.3
30	6.7	4.3	5.5	3.5	0.6	2.3	1.6	0.0	0.8	3.6	1.7	2.9
31	7.2	5.3	6.2	---	---	---	0.5	0.0	0.1	5.7	3.1	4.3
MONTH	14.0	4.3	9.0	7.2	0.0	4.0	4.0	0.0	1.3	5.7	0.0	1.7
		FEBRUARY			MARCH			APRIL			MAY	
1	5.6	2.9	4.5	5.1	2.5	3.9	11.4	6.4	9.2	10.4	6.7	8.6
2	6.3	3.6	4.7	6.4	2.0	4.1	9.5	6.3	8.2	9.7	6.4	8.1
3	4.4	1.9	3.2	5.5	1.6	3.9	8.6	5.5	6.6	12.0	7.0	9.6
4	2.8	1.1	1.7	4.7	1.8	3.3	7.7	3.4	5.9	10.5	7.1	8.4
5	2.7	0.3	1.3	5.1	1.0	3.1	8.7	4.2	6.6	11.3	6.5	8.6
6	1.7	0.0	0.6	6.0	2.8	4.6	8.3	5.0	6.7	11.4	6.0	8.9
7	0.7	0.0	0.1	8.0	4.0	6.0	8.6	4.6	6.8	12.5	7.1	9.7
8	0.3	0.0	0.0	8.8	4.4	6.8	10.6	4.3	7.5	11.3	8.4	9.5
9	0.4	0.0	0.1	8.4	4.2	6.6	12.4	5.6	9.2	9.7	7.2	8.2
10	0.8	0.0	0.3	8.5	4.4	6.6	13.7	6.9	10.5	9.8	6.5	8.0
11	2.0	0.0	0.9	9.6	5.6	7.5	13.3	7.6	10.7	11.0	5.7	8.6
12	2.6	0.0	1.2	10.8	5.8	8.4	11.2	7.3	9.5	14.5	7.0	10.7
13	4.0	1.4	2.7	10.2	5.2	8.1	12.8	6.1	9.5	13.9	9.2	11.9
14	5.0	2.9	4.0	9.3	5.7	7.8	12.5	7.3	9.9	14.9	8.8	11.9
15	5.1	3.2	4.2	9.6	5.8	8.2	10.2	7.3	8.1	13.0	9.7	10.9
16	4.1	1.9	3.0	8.8	6.9	8.0	12.2	5.9	8.8	13.9	8.4	11.1
17	5.1	2.0	3.7	8.1	5.8	6.4	10.3	6.8	8.9	12.2	7.9	10.4
18	5.7	3.1	4.4	7.7	4.2	6.2	10.0	7.3	8.6	11.2	8.0	9.2
19	5.2	1.6	3.6	7.3	4.7	6.2	10.4	6.4	8.4	11.8	6.4	9.0
20	4.9	0.9	3.2	7.9	4.3	6.5	12.4	7.1	9.7	11.9	6.8	9.5
21	4.3	2.3	3.6	10.0	5.9	7.7	11.3	7.2	9.5	12.3	6.6	9.5
22	3.9	2.3	2.9	10.9	6.0	8.5	12.6	7.9	10.2	13.0	7.3	10.2
23	3.3	0.8	2.2	10.8	6.0	8.8	10.4	6.3	7.6	12.0	7.3	9.8
24	3.9	1.1	2.7	9.7	7.1	8.0	10.8	5.5	7.9	12.3	7.2	9.8
25	4.0	2.5	3.3	10.7	5.3	8.1	13.5	6.4	9.9	11.4	7.4	9.3
26	4.6	3.4	3.9	8.7	6.0	7.0	13.5	8.1	11.0	12.4	6.9	9.6
27	5.1	2.7	3.8	6.9	4.8	6.0	12.7	7.9	10.5	13.0	7.6	10.2
28	6.0	3.2	4.4	6.9	3.0	5.0	13.2	8.0	10.4	12.7	7.1	9.9
29	---	---	---	6.5	2.3	4.8	12.4	8.0	10.2	11.9	7.3	9.7
30	---	---	---	8.5	3.1	6.0	11.2	7.6	9.6	11.2	7.3	9.3
31	---	---	---	---	4.8	---	---	---	---	10.8	7.1	9.1
MONTH	6.3	0.0	2.6	---	1.0	---	13.7	3.4	8.9	14.9	5.7	9.6

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, 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	10.9	7.3	9.1	16.5	11.8	14.2	20.3	14.9	17.7	18.4	12.7	15.8
2	11.4	7.0	9.1	16.8	11.8	14.5	20.1	15.4	17.9	18.0	13.3	15.8
3	11.8	7.3	9.6	16.9	12.0	14.6	19.5	15.8	17.5	17.3	13.6	15.5
4	11.4	7.3	9.5	17.3	12.3	15.0	20.7	15.1	17.9	17.8	11.8	14.9
5	11.4	8.1	9.8	17.4	12.3	15.0	20.5	15.2	18.0	16.6	13.4	15.0
6	11.1	7.2	9.4	16.1	12.5	14.5	19.7	14.9	17.7	16.5	13.3	14.9
7	12.5	8.5	10.4	17.3	12.3	14.9	19.0	15.2	17.3	16.4	13.6	14.7
8	12.7	7.6	10.3	18.0	12.6	15.5	21.1	15.3	18.1	16.0	11.8	14.0
9	12.2	8.7	10.6	18.1	12.9	15.7	21.5	15.8	18.7	15.1	12.9	13.9
10	10.9	8.8	10.2	18.4	12.5	15.6	21.1	15.7	18.5	13.2	11.1	12.2
11	12.8	8.6	10.7	18.2	12.8	15.9	19.8	15.6	18.0	13.8	10.0	11.9
12	12.9	8.6	10.9	18.6	13.5	16.2	20.7	15.1	18.0	15.2	9.5	12.5
13	12.1	9.0	10.7	18.5	13.2	16.1	21.4	15.6	18.5	15.2	11.8	13.5
14	13.9	8.6	11.1	19.8	13.7	16.8	20.7	15.3	18.1	13.7	8.6	11.4
15	13.9	9.0	11.6	18.8	14.4	16.8	19.4	14.5	17.3	14.4	8.7	11.7
16	13.3	10.3	11.6	19.6	14.0	16.6	18.1	15.1	16.7	15.0	10.2	12.8
17	12.7	9.0	11.0	20.4	15.0	17.7	17.6	14.0	15.8	14.7	11.8	13.1
18	13.7	9.6	11.6	21.2	15.9	18.5	18.3	14.4	16.1	13.5	8.8	11.3
19	12.6	9.4	11.3	20.0	15.4	18.0	18.7	12.8	15.8	13.3	8.4	10.7
20	12.3	9.7	11.2	21.5	15.4	18.3	19.4	13.8	16.8	13.9	9.1	11.6
21	14.4	9.3	11.8	21.3	15.7	18.4	18.4	14.1	16.6	13.6	8.8	11.4
22	14.4	9.8	12.2	20.6	15.4	18.2	19.3	15.0	17.1	13.9	8.7	11.5
23	14.8	9.8	12.5	21.0	15.4	18.2	17.8	15.3	16.8	14.2	9.2	11.9
24	14.1	10.7	12.6	20.3	15.1	18.0	19.7	14.5	17.1	14.3	9.3	12.1
25	14.5	10.4	12.4	20.6	15.9	18.5	19.4	15.1	17.2	13.9	9.0	11.8
26	14.8	9.7	12.4	20.6	16.0	18.3	18.4	14.7	16.9	14.3	9.0	11.9
27	15.4	10.4	13.0	19.3	15.4	17.4	16.8	14.1	15.4	14.5	9.6	12.4
28	15.6	10.8	13.4	19.5	14.4	17.2	19.0	14.0	16.3	14.8	9.9	12.6
29	16.1	11.2	13.8	19.7	15.6	17.8	17.9	14.2	16.3	14.8	9.9	12.7
30	15.9	11.3	13.8	20.7	14.7	17.7	16.9	13.6	15.3	14.9	10.7	13.0
31	---	---	---	20.2	15.2	17.8	18.0	12.8	15.5	---	---	---
MONTH	16.1	7.0	11.3	21.5	11.8	16.7	21.5	12.8	17.1	18.4	8.4	12.9

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°33'18", long 107°20'13", in NW¼NW¼ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010005, on left bank 0.6 mi downstream from Roaring Fork River and 1.0 mi northwest of Post Office in Glenwood Springs.

DRAINAGE AREA.--6,013 mi^2.

PERIOD OF RECORD.--October 1966 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09085100

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,700.75 ft above NGVD of 1929, Colorado State Highway Department benchmark.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres.

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	1,300	1,500	1,170	969	947	963	1,000	2,390	16,700	3,520	1,930	2,000
2	1,260	1,530	1,240	931	987	1,000	1,090	2,210	17,100	3,450	1,930	1,900
3	1,330	1,500	1,210	932	985	972	1,170	2,090	14,000	3,410	1,940	1,860
4	1,340	1,420	1,100	993	898	1,020	1,210	2,230	11,900	3,300	2,000	1,930
5	1,320	1,410	1,140	980	916	1,040	1,110	2,300	10,300	3,120	2,070	2,010
6	1,280	1,340	1,120	987	838	1,020	1,040	2,100	8,700	2,960	2,010	2,040
7	1,250	1,290	1,050	893	748	1,050	1,020	1,900	7,650	2,810	1,980	2,210
8	1,230	1,370	1,030	862	684	1,010	967	1,860	6,890	2,720	1,990	2,410
9	1,200	1,590	841	848	788	1,020	1,010	1,890	6,820	2,640	1,990	2,400
10	1,230	1,590	962	933	868	1,040	1,150	1,970	7,130	2,610	1,960	2,530
11	1,230	1,490	918	974	912	1,080	1,160	2,150	6,990	2,430	1,960	2,660
12	1,240	1,440	909	964	957	1,170	1,370	2,000	7,080	2,340	1,910	2,320
13	1,210	1,360	1,030	929	1,030	1,210	1,500	1,980	7,050	2,400	1,900	2,100
14	1,180	1,400	962	948	1,050	1,370	1,690	2,220	6,680	2,340	1,890	2,040
15	1,180	1,420	951	945	1,070	1,350	1,950	3,030	6,790	2,250	2,010	1,950
16	1,180	1,360	942	848	1,020	1,310	1,900	3,880	6,980	2,260	1,940	1,890
17	1,180	1,320	1,010	922	1,020	1,230	1,680	5,080	6,350	2,300	2,040	1,860
18	1,200	1,280	1,050	864	974	1,250	1,620	6,170	6,060	2,290	2,270	1,950
19	1,170	1,200	955	827	946	1,160	1,550	6,590	5,900	2,260	2,570	2,090
20	1,160	1,130	844	870	901	1,110	1,440	6,380	5,990	2,220	2,310	2,110
21	1,140	1,120	967	915	963	1,040	1,370	6,440	5,730	2,190	2,080	2,100
22	1,150	1,140	945	936	987	1,080	1,430	6,920	5,450	2,280	2,040	2,080
23	1,220	1,110	804	961	941	1,200	1,690	7,950	5,300	2,080	2,000	2,080
24	1,320	1,110	814	949	922	1,300	1,750	8,840	4,980	1,930	2,100	2,090
25	1,340	1,150	871	943	1,020	1,350	1,700	9,850	4,460	1,890	2,120	2,100
26	1,310	1,090	840	921	992	1,200	1,810	10,200	4,160	2,100	2,060	2,250
27	1,310	870	837	924	980	1,220	2,230	11,000	4,070	2,580	2,030	2,220
28	1,380	906	890	944	978	1,060	2,540	12,800	3,970	2,510	2,040	2,180
29	1,340	1,090	965	915	---	948	2,700	14,100	3,880	2,250	2,000	2,170
30	1,360	1,080	993	915	---	939	2,600	15,500	3,710	2,120	1,930	2,140
31	1,420	---	884	949	---	977	---	15,800	---	1,960	1,990	---
TOTAL	38,960	38,606	30,244	28,691	26,322	34,689	46,447	179,820	218,770	77,520	62,990	63,670
MEAN	1,257	1,287	976	926	940	1,119	1,548	5,801	7,292	2,501	2,032	2,122
MAX	1,420	1,590	1,240	993	1,070	1,370	2,700	15,800	17,100	3,520	2,570	2,660
MIN	1,140	870	804	827	684	939	967	1,860	3,710	1,890	1,890	1,860
AC-FT	77,280	76,580	59,990	56,910	52,210	68,810	92,130	356,700	433,900	153,800	124,900	126,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2003, BY WATER YEAR (WY)

MEAN	2,109	1,874	1,574	1,484	1,466	1,685	2,666	6,867	10,040	5,446	2,848	2,267
MAX	3,082	2,703	2,487	2,192	2,209	2,814	5,113	15,570	20,710	15,180	5,975	3,716
(WY)	(1985)	(1985)	(1985)	(1985)	(1986)	(1986)	(1996)	(1984)	(1984)	(1995)	(1984)	(1984)
MIN	1,257	1,186	976	926	940	1,018	1,548	2,146	2,364	1,594	1,464	1,255
(WY)	(2003)	(1978)	(2003)	(2003)	(2003)	(1977)	(2003)	(1977)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1967 - 2003	
ANNUAL TOTAL	537,176		846,729			
ANNUAL MEAN	1,472		2,320		3,365	
HIGHEST ANNUAL MEAN					6,276	1984
LOWEST ANNUAL MEAN					1,523	2002
HIGHEST DAILY MEAN	4,170	Jun 1	17,100	Jun 2	30,200	May 25, 1984
LOWEST DAILY MEAN	804	Dec 23	684	Feb 8	684	Feb 8, 2003
ANNUAL SEVEN-DAY MINIMUM	857	Dec 22	820	Feb 4	820	Feb 4, 2003
MAXIMUM PEAK FLOW			18,500	Jun 2	31,500	May 25, 1984
MAXIMUM PEAK STAGE			9.39	Jun 2	12.49	May 25, 1984
ANNUAL RUNOFF (AC-FT)	1,065,000		1,679,000		2,438,000	
10 PERCENT EXCEEDS	2,080		5,360		7,610	
50 PERCENT EXCEEDS	1,320		1,380		2,070	
90 PERCENT EXCEEDS	967		927		1,280	