

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'23", long 106°50'26", in NE $\frac{1}{4}$ sec.4, T.36 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank 0.3 mi upstream from Sand Creek, 4.0 mi upstream from West Fork San Juan River, and 13 mi northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi².

PERIOD OF RECORD.--October 1956 to September 1996, October 1998 to September 2003 (discontinued). Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09339900

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,940 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 500 acres of hay meadows upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

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	16	12	14	e11	e12	e12	31	121	321	47	29	22
2	23	12	14	e11	e12	e11	37	119	302	45	33	22
3	36	11	13	e11	e12	e11	31	121	290	43	30	24
4	28	12	e12	e11	e11	e11	27	119	271	40	24	23
5	27	11	e12	e11	e11	e11	26	98	250	37	21	24
6	23	10	e12	e11	e11	e11	26	88	212	34	19	45
7	22	11	e12	e11	e11	e12	24	83	191	32	19	38
8	21	12	e11	e11	e11	e12	26	75	179	30	19	31
9	20	15	e11	e11	e11	e12	28	68	178	28	18	102
10	19	16	e11	e11	e11	e14	44	64	176	26	21	210
11	18	14	e11	e11	e11	e15	63	63	169	25	22	104
12	17	13	e11	e11	e12	e17	70	78	156	24	22	74
13	16	13	e11	e11	e14	e21	75	98	140	23	20	62
14	16	14	e11	e11	e15	e22	98	109	121	21	18	54
15	16	14	e11	e11	e13	e22	111	146	113	21	17	47
16	15	13	e11	e11	e12	e23	88	155	108	21	18	41
17	15	14	e11	e11	e12	22	86	216	98	22	17	37
18	15	14	e11	e11	e12	25	76	252	97	20	17	33
19	14	14	e10	e11	e12	25	67	247	99	20	16	31
20	14	14	e11	e11	e12	23	64	252	100	23	15	28
21	14	15	e11	e11	e11	21	81	269	90	20	15	26
22	14	15	e11	e11	e11	20	76	295	85	19	15	25
23	16	16	e11	e11	e11	22	68	306	80	19	23	23
24	16	15	e11	e11	e11	26	59	310	74	19	30	22
25	14	15	e11	e11	e11	27	67	309	68	17	24	21
26	14	14	e11	e11	e12	29	89	297	63	18	22	20
27	15	e13	e11	e11	e12	28	111	331	59	20	19	19
28	14	e13	e11	e11	e12	26	132	362	57	29	22	18
29	14	e13	e11	e11	---	26	139	366	53	36	30	18
30	13	e14	e11	e11	---	25	135	359	51	31	33	18
31	13	---	e11	e11	---	e28	---	350	---	28	30	---
TOTAL	548	402	352	341	329	610	2,055	6,126	4,251	838	678	1,262
MEAN	17.7	13.4	11.4	11.0	11.8	19.7	68.5	198	142	27.0	21.9	42.1
MAX	36	16	14	11	15	29	139	366	321	47	33	210
MIN	13	10	10	11	11	11	24	63	51	17	15	18
AC-FT	1,090	797	698	676	653	1,210	4,080	12,150	8,430	1,660	1,340	2,500

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

	33.9	22.0	14.1	11.8	12.8	27.1	103	291	320	111	54.2	42.6
MEAN	33.9	22.0	14.1	11.8	12.8	27.1	103	291	320	111	54.2	42.6
MAX	107	74.9	30.3	21.7	24.6	62.9	248	520	788	395	177	207
(WY)	(1987)	(1987)	(1987)	(1973)	(1995)	(1986)	(1985)	(1984)	(1957)	(1957)	(1999)	(1970)
MIN	8.39	8.31	4.68	5.00	5.66	8.86	29.2	50.8	29.1	10.5	7.80	10.6
(WY)	(1957)	(1961)	(1959)	(1959)	(1990)	(1977)	(1977)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1957 - 2003	
ANNUAL TOTAL	6,838.0		17,792			
ANNUAL MEAN	18.7		48.7		87.2	
HIGHEST ANNUAL MEAN					155	1985
LOWEST ANNUAL MEAN					18.3	2002
HIGHEST DAILY MEAN	69	May 21	366	May 29	1,180	May 27, 1993
LOWEST DAILY MEAN	6.1	Sep 6	10	Nov 6	3.4	Dec 26, 1958
ANNUAL SEVEN-DAY MINIMUM	6.6	Aug 26	11	Dec 13	3.7	Dec 13, 1958
MAXIMUM PEAK FLOW			413	May 30	a2,260	Sep 14, 1970
MAXIMUM PEAK STAGE			4.43	May 30	6.75	Sep 14, 1970
ANNUAL RUNOFF (AC-FT)	13,560		35,290		63,180	
10 PERCENT EXCEEDS	42		121		264	
50 PERCENT EXCEEDS	12		20		28	
90 PERCENT EXCEEDS	8.7		11		10	

e Estimated.

a From rating curve extended above 460 ft³/s, on basis of slope-area measurement at gage height, 6.13 ft.

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE¼SW¼ sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi upstream from McCabe Creek, 0.6 mi downstream from bridge on U.S. Highway 160, and 2.0 mi upstream from Mill Creek.

DRAINAGE AREA.--298 mi².

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 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=09342500

REVISED RECORDS.--WSP 1313: 1914(M).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,052.04 ft above NGVD of 1929. Jan. 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi upstream, at different datum. Mar. 7 to Oct. 4, 1911, nonrecording gage at present site, at different datum. Nov. 23, 1911 to Nov. 14, 1914, nonrecording gage at site 300 ft upstream, at different datum.

REMARKS.--Records good except for Sept. 24-30, those above 2,040 ft³/s and estimated daily discharges, which are poor. Diversions for irrigation of large areas upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1885, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft, discharge about 16,000 ft³/s, from information by local residents.

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	60	54	58	36	42	40	e144	531	1,730	129	58	80
2	74	53	50	30	42	37	181	506	1,500	118	52	66
3	164	50	52	33	41	38	142	524	1,410	108	57	78
4	115	50	49	34	37	39	119	512	1,300	102	53	74
5	118	51	46	34	33	37	113	414	1,100	97	53	69
6	90	50	44	37	40	35	106	349	890	92	43	104
7	84	55	40	33	31	39	96	314	765	82	42	109
8	80	60	41	33	35	41	85	286	694	73	41	90
9	76	85	37	35	36	45	105	256	680	63	43	308
10	72	92	35	40	33	51	174	242	654	53	45	1,020
11	67	69	36	38	34	63	280	224	611	49	51	455
12	63	57	27	36	38	86	327	289	561	47	50	305
13	58	62	31	32	55	113	323	403	518	46	54	241
14	57	62	33	36	76	132	441	435	452	44	50	195
15	56	60	36	37	60	126	520	647	420	40	43	161
16	53	48	40	33	49	141	389	690	421	42	45	140
17	50	52	39	33	44	131	392	998	385	45	48	125
18	48	50	40	32	45	106	356	1,200	372	48	49	115
19	47	48	29	36	41	e121	304	1,080	376	47	44	102
20	46	53	28	36	40	e117	262	1,120	414	47	41	97
21	46	59	38	38	40	e111	275	1,180	346	48	35	88
22	45	63	31	41	36	e120	284	1,370	308	42	36	73
23	52	69	38	41	34	e166	285	1,600	282	40	37	70
24	60	64	38	40	38	e187	253	1,620	251	43	81	64
25	56	61	37	39	39	e191	292	1,570	220	41	77	61
26	55	54	34	36	41	e184	416	1,530	200	37	83	56
27	70	55	30	38	43	136	530	1,670	185	40	67	54
28	64	47	33	38	42	112	606	1,920	171	52	66	55
29	61	51	36	37	---	95	660	2,040	153	66	102	51
30	56	50	36	39	---	93	626	2,020	137	80	95	48
31	54	---	33	41	---	e101	---	1,930	---	52	113	---
TOTAL	2,097	1,734	1,175	1,122	1,165	3,034	9,086	29,470	17,506	1,913	1,754	4,554
MEAN	67.6	57.8	37.9	36.2	41.6	97.9	303	951	584	61.7	56.6	152
MAX	164	92	58	41	76	191	660	2,040	1,730	129	113	1,020
MIN	45	47	27	30	31	35	85	224	137	37	35	48
AC-FT	4,160	3,440	2,330	2,230	2,310	6,020	18,020	58,450	34,720	3,790	3,480	9,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 2003, BY WATER YEAR (WY)

MEAN	145	93.9	64.1	55.1	61.7	147	552	1,273	1,304	385	181	151
MAX	937	399	160	107	142	442	1,210	2,665	3,066	1,515	740	859
(WY)	(1942)	(1987)	(1987)	(1986)	(1995)	(1986)	(1985)	(1941)	(1957)	(1941)	(1999)	(1970)
MIN	23.3	33.6	27.5	26.8	29.2	50.3	141	158	56.6	15.5	13.5	18.8
(WY)	(1957)	(1956)	(1990)	(1990)	(1964)	(1964)	(1977)	(2002)	(2002)	(2002)	(2002)	(1956)
SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR						FOR 2003 WATER YEAR			WATER YEARS 1936 - 2003		

ANNUAL TOTAL	22,073.7						74,610					
ANNUAL MEAN	60.5						204			368		
HIGHEST ANNUAL MEAN										730		
LOWEST ANNUAL MEAN										59.0		
HIGHEST DAILY MEAN	235		Apr 15		2,040		May 29		4,640		May 13, 1941	
LOWEST DAILY MEAN	8.3		Aug 28		27		Dec 12		a8.3		Aug 28, 2002	
ANNUAL SEVEN-DAY MINIMUM	8.7		Aug 28		33		Dec 27		8.7		Aug 28, 2002	
MAXIMUM PEAK FLOW							2,580			25,000		
MAXIMUM PEAK STAGE							4.99			b17.80		
ANNUAL RUNOFF (AC-FT)	43,780						148,000			266,800		
10 PERCENT EXCEEDS	142						522			1,140		
50 PERCENT EXCEEDS	41						60			107		
90 PERCENT EXCEEDS	14						36			42		

e Estimated.

a Also occurred Sep 3, 2002.

b From floodmarks.

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank five feet above the maximum water surface of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River.

DRAINAGE AREA.--1,230 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1961 to current year. Statistical summary computed for 1971 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09346400

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,090 ft above NGVD of 1929, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. Highwater diversions upstream from station into Rio Grande basin through Azotea tunnel(station 08284160) began in March 1971. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

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	141	126	e108	e62	e78	e80	251	717	1,830	163	99	181
2	130	124	e106	e61	e78	e79	266	713	1,630	145	98	144
3	234	121	e104	e61	e74	e78	261	689	1,500	144	97	126
4	280	115	e103	e64	e71	e80	225	686	1,370	135	78	138
5	237	121	e101	e68	e71	e81	217	628	1,230	128	65	152
6	204	107	97	e70	e69	e82	209	541	1,030	123	51	171
7	175	102	93	e70	e68	87	200	483	891	114	49	213
8	165	116	90	e71	e72	100	179	422	796	102	49	201
9	152	e143	98	e73	e70	116	177	415	763	94	47	244
10	136	e137	e90	e74	e70	147	219	388	726	80	50	2,080
11	123	e119	e88	e74	e72	199	332	377	686	73	59	745
12	118	e113	e84	e71	e80	288	403	382	627	66	82	436
13	118	e117	e88	e70	e105	394	410	494	584	63	82	332
14	109	e118	e88	e72	e137	478	513	557	525	61	94	281
15	101	e108	e88	e72	e110	515	643	689	472	62	70	244
16	96	e104	e84	e71	e102	478	596	871	461	54	60	220
17	93	e105	e79	e71	e102	605	527	1,040	436	54	62	197
18	90	e106	e74	e71	e99	449	495	1,380	452	53	55	179
19	87	e106	e66	e72	e99	354	445	1,240	466	50	53	169
20	81	e111	e68	e74	102	293	384	1,270	500	46	45	150
21	80	e116	e72	e75	99	302	358	1,300	450	61	40	145
22	81	e120	e71	e77	97	315	377	1,480	373	78	37	127
23	87	e123	e74	e77	86	281	400	1,640	337	64	51	116
24	120	e119	e74	e77	80	336	359	1,720	307	54	154	114
25	130	e114	e73	e76	e82	334	361	1,670	272	58	184	99
26	122	e110	e69	e75	e84	336	437	1,670	245	52	160	93
27	168	e104	e68	e74	e85	330	556	1,740	227	49	148	91
28	160	e103	e70	e74	e84	243	673	1,890	209	109	146	88
29	146	e106	e71	e74	---	277	723	1,970	193	148	200	86
30	146	e111	e69	e74	---	247	743	1,960	178	157	196	83
31	129	---	e66	e77	---	e248	---	1,970	---	138	202	---
TOTAL	4,239	3,445	2,574	2,222	2,426	8,232	11,939	32,992	19,766	2,778	2,863	7,645
MEAN	137	115	83.0	71.7	86.6	266	398	1,064	659	89.6	92.4	255
MAX	280	143	108	77	137	605	743	1,970	1,830	163	202	2,080
MIN	80	102	66	61	68	78	177	377	178	46	37	83
AC-FT	8,410	6,830	5,110	4,410	4,810	16,330	23,680	65,440	39,210	5,510	5,680	15,160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2003, BY WATER YEAR (WY)

MEAN	298	239	172	155	190	574	1,030	1,687	1,700	609	330	285
MAX	932	983	406	296	481	1,369	2,524	3,195	4,039	2,427	1,004	880
(WY)	(1987)	(1987)	(1987)	(1987)	(1986)	(1995)	(1979)	(1973)	(1985)	(1995)	(1999)	(1982)
MIN	106	104	72.9	71.7	85.0	130	233	269	72.1	22.5	18.8	61.2
(WY)	(1979)	(1990)	(1990)	(2003)	(1990)	(2002)	(1977)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1971 - 2003

ANNUAL TOTAL	41,282.80	101,121	
ANNUAL MEAN	113	277	a607
HIGHEST ANNUAL MEAN			b1,191 1985
LOWEST ANNUAL MEAN			b112 2002
HIGHEST DAILY MEAN	365 May 20	2,080 Sep 10	b6,700 Mar 12, 1985
LOWEST DAILY MEAN	0.80 Sep 1	37 Aug 22	c0.80 Sep 1, 2002
ANNUAL SEVEN-DAY MINIMUM	1.3 Aug 31	49 Aug 17	1.3 Aug 31, 2002
MAXIMUM PEAK FLOW		3,510 Sep 10	d8,590 Mar 6, 1995
MAXIMUM PEAK STAGE		5.28 Sep 10	f8.10 Mar 6, 1995
ANNUAL RUNOFF (AC-FT)	81,880	200,600	439,500
10 PERCENT EXCEEDS	240	678	1,660
50 PERCENT EXCEEDS	101	118	270
90 PERCENT EXCEEDS	17	67	105

e Estimated.

a Average discharge for 9 years (water years 1962-70), 632 ft³/s; 457,900 acre-ft/yr, prior to completion of Azotea tunnel.

b Also the highest (or lowest, as is appropriate) for the period of record.

c Also minimum daily discharge for period of record.

d Maximum discharge for period of record, 9,730 ft³/s, Sep 6, 1970, gage height, 8.34 ft, from rating curve extended above 6,000 ft³/s, on basis of slope-area measurement of peak flow.

f Maximum gage height for statistical period, and period of record, 9.63 ft, Jan 4, 1994, backwater from ice.

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 2.5 mi upstream from Navajo Reservoir, 3.0 mi downstream from Ignacio Creek, and 4.6 mi northeast of Arboles Post Office.

DRAINAGE AREA.--629 mi².

PERIOD OF RECORD.--August 1962 to current year. Gage 09350000 (Piedra River At Arboles) operated 1895-99 and 1910-27 at site 7.5 mi downstream at elevation 6,000 ft, published in WSP 1313. Low-flow records probably not equivalent. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09349800

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. Datum of gage is 6,147.52 ft above NGVD of 1929, Colorado State Highway Department benchmark.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,800 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

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	80	77	56	e29	21	28	187	603	1,100	63	53	81
2	84	75	54	e27	24	27	223	564	981	57	53	65
3	108	76	51	e26	25	27	204	548	918	55	45	65
4	115	69	54	e29	21	29	172	561	810	52	43	70
5	104	72	50	e31	18	30	161	500	715	50	40	79
6	100	62	44	32	19	27	151	437	599	51	35	96
7	95	63	39	26	e15	26	137	390	e517	50	33	108
8	95	70	33	24	17	29	123	358	e442	48	33	99
9	96	104	34	20	22	35	131	329	e422	42	38	150
10	90	110	27	21	e17	42	167	289	404	38	41	926
11	86	87	30	e21	e18	53	237	274	380	34	40	517
12	81	67	34	e20	e22	72	306	301	344	31	39	328
13	76	59	30	e17	30	124	323	382	310	32	43	259
14	71	65	34	19	34	191	410	428	285	32	40	210
15	67	62	36	22	34	232	521	574	255	30	36	178
16	64	53	35	e17	36	303	465	662	236	29	35	158
17	61	47	39	e16	34	335	439	764	225	32	38	141
18	60	55	35	e17	35	236	447	943	212	28	33	126
19	57	49	28	20	35	178	391	892	222	29	31	116
20	56	50	22	21	29	162	336	895	286	29	35	105
21	54	56	32	21	26	175	324	885	232	35	35	98
22	52	60	27	21	24	205	346	988	195	34	34	93
23	56	65	32	21	22	229	358	1,150	175	34	39	85
24	68	67	33	21	21	310	325	1,180	154	34	59	77
25	70	65	34	21	28	303	339	1,120	139	35	51	70
26	66	58	34	20	30	254	437	e1,090	125	34	56	67
27	85	54	31	19	31	250	569	1,140	111	52	60	70
28	84	50	31	19	32	191	647	1,250	96	55	62	68
29	80	48	38	20	---	156	659	1,310	84	66	64	65
30	81	52	e33	20	---	e149	642	1,190	74	67	68	63
31	76	---	e30	19	---	e156	---	1,180	---	61	96	---
TOTAL	2,418	1,947	1,120	677	720	4,564	10,177	23,177	11,048	1,319	1,408	4,633
MEAN	78.0	64.9	36.1	21.8	25.7	147	339	748	368	42.5	45.4	154
MAX	115	110	56	32	36	335	659	1,310	1,100	67	96	926
MIN	52	47	22	16	15	26	123	274	74	28	31	63
AC-FT	4,800	3,860	2,220	1,340	1,430	9,050	20,190	45,970	21,910	2,620	2,790	9,190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

	1963	1968	1987	1987	1986	1995	1979	1979	1979	1975	1999	1970
MEAN	172	126	89.2	73.7	90.7	315	851	1,267	1,004	329	221	210
MAX	618	517	257	153	244	895	2,126	2,926	2,526	1,133	1,014	943
(WY)	(1973)	(1987)	(1987)	(1987)	(1986)	(1995)	(1979)	(1979)	(1979)	(1975)	(1999)	(1970)
MIN	51.2	48.4	31.2	21.8	25.7	47.4	126	91.7	24.8	12.7	15.2	35.3
(WY)	(1979)	(1968)	(1990)	(2003)	(2003)	(1964)	(1977)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1963 - 2003

ANNUAL TOTAL	19,973.0	63,208		
ANNUAL MEAN	54.7	173		
HIGHEST ANNUAL MEAN			822	1979
LOWEST ANNUAL MEAN			53.5	2002
HIGHEST DAILY MEAN	307	Sep 12	1,310	May 29
LOWEST DAILY MEAN	3.9	Aug 26	e15	Feb 7
ANNUAL SEVEN-DAY MINIMUM	4.3	Aug 26	18	Feb 5
MAXIMUM PEAK FLOW			1,440	May 29
MAXIMUM PEAK STAGE			3.29	May 29
ANNUAL RUNOFF (AC-FT)	39,620	125,400		287,100
10 PERCENT EXCEEDS	108	479		1,170
50 PERCENT EXCEEDS	43	64		145
90 PERCENT EXCEEDS	11	23		52

e Estimated.

a Also occurred Aug 28-29, 2002.

b From rating curve extended above 4,400 ft³/s, on basis of slope-area measurement of peak flow.

c Gage height, 6.38 ft, recorded, 7.55 ft, from floodmarks.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic Benchmark Station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft upstream from Fall Creek, 0.8 mi downstream from Bear Creek, 6.7 mi north of Vallecito Dam, and 18 mi north of Bayfield.

DRAINAGE AREA.--72.5 mi².

PERIOD OF RECORD.--October 1962 to current year. Daily record for water temperature available, November 1962 to September 1982. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09352900

REVISED RECORDS.--WDR CO-00-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 7,906.08 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion upstream from station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

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	71	47	32	e12	e14	17	46	186	553	100	67	105
2	78	46	33	e12	e16	20	51	178	497	97	64	92
3	91	41	30	e11	18	e18	46	173	414	93	60	85
4	90	44	30	e10	20	e15	43	172	351	89	e58	80
5	99	40	e30	e10	e18	e14	42	149	311	84	e56	82
6	96	40	e27	e10	e16	e14	40	136	264	79	e46	85
7	104	40	e24	e11	e13	e14	38	128	227	73	46	85
8	109	43	e22	e11	e11	e13	37	116	231	71	88	76
9	107	46	e18	e10	e10	e14	43	106	227	68	77	147
10	102	47	e17	e10	e11	e17	61	97	219	64	82	377
11	95	46	e15	e11	e11	e19	83	97	199	61	72	235
12	88	42	e13	e12	e11	26	93	135	186	59	70	239
13	82	47	e12	e12	e11	31	99	189	170	56	65	262
14	77	43	e13	e12	e14	35	128	209	156	54	115	229
15	71	42	e12	e12	e14	32	140	269	165	51	85	186
16	67	42	e12	e12	16	33	119	246	162	54	92	162
17	63	40	e13	e11	16	32	119	399	142	56	84	141
18	59	44	e15	e11	16	31	115	406	138	52	77	122
19	56	41	e16	e10	16	29	104	339	160	58	76	109
20	53	39	e16	e9.6	18	28	96	381	172	55	67	96
21	50	38	e15	e11	15	29	98	481	150	54	62	88
22	49	40	e14	e12	e16	29	96	759	147	59	59	81
23	54	42	e14	e14	e16	33	92	785	147	51	61	75
24	55	41	e14	e15	e14	38	89	675	137	44	68	70
25	50	39	e14	18	e12	38	104	578	122	43	78	66
26	51	37	e14	17	e12	40	146	579	118	41	87	60
27	54	37	e14	e16	e15	40	181	828	117	56	92	57
28	50	38	e12	e14	17	37	203	944	114	64	115	54
29	51	35	e8.8	e14	---	38	201	917	107	89	112	52
30	48	35	e7.5	e14	---	36	191	694	105	92	134	49
31	48	---	e10	e14	---	e40	---	627	---	73	135	---
TOTAL	2,218	1,242	537.3	378.6	407	850	2,944	11,978	6,208	2,040	2,450	3,647
MEAN	71.5	41.4	17.3	12.2	14.5	27.4	98.1	386	207	65.8	79.0	122
MAX	109	47	33	18	20	40	203	944	553	100	135	377
MIN	48	35	7.5	9.6	10	13	37	97	105	41	46	49
AC-FT	4,400	2,460	1,070	751	807	1,690	5,840	23,760	12,310	4,050	4,860	7,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2003, BY WATER YEAR (WY)

MEAN	78.0	44.2	27.2	20.7	19.8	34.1	111	401	506	237	136	115
MAX	280	104	52.0	42.5	44.5	80.8	226	697	927	596	442	455
(WY)	(1973)	(1987)	(1986)	(1986)	(1986)	(1989)	(1989)	(2001)	(1980)	(1995)	(1999)	(1970)
MIN	22.3	16.7	9.89	9.51	8.42	9.11	40.3	132	64.1	27.5	27.5	25.1
(WY)	(1979)	(1976)	(1977)	(1977)	(1977)	(1977)	(1964)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1963 - 2003

ANNUAL TOTAL	18,079.0	34,899.9	
ANNUAL MEAN	49.5	95.6	145
HIGHEST ANNUAL MEAN			226
LOWEST ANNUAL MEAN			43.9
HIGHEST DAILY MEAN	400	Sep 11	3,020
LOWEST DAILY MEAN	6.6	Feb 8	6.6
ANNUAL SEVEN-DAY MINIMUM	7.7	Feb 6	7.4
MAXIMUM PEAK FLOW			10
MAXIMUM PEAK STAGE			1,610
ANNUAL RUNOFF (AC-FT)	35,860	69,220	a7,050
10 PERCENT EXCEEDS	107	194	b6.51
50 PERCENT EXCEEDS	33	54	
90 PERCENT EXCEEDS	11	12	

e Estimated.

a From rating curve extended above 1,400 ft³/s, on basis of slope-area measurement of peak flow.

b Maximum gage height, 6.51 ft, from water-stage recorder, 6.76 ft, from floodmarks.

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¹/₄SW¹/₄ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft left of spillway, 0.4 mi upstream from Jack Creek, and 11 mi northeast of Bayfield.

DRAINAGE AREA.--255 mi².

PERIOD OF RECORD.--April 1941 to current year, monthly acre feet only 1941-1960, published in WSP 1313 and 1733. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09353000

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956. WDR CO-00-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,580 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 earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 125,640 acre-ft between elevations 7,580 ft, sill of outlet gate, and 7,665 ft, top of spillway gates. Dead storage, 4,314 acre-ft. Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin and provide hydroelectric power.

COOPERATION.--Records provided by Pine River Irrigation District.

EXTREMES (AT 0900) FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft, July 27, 1957, elevation, 7,665.72 ft; minimum, 1,520 acre-ft, Oct. 24-25, 1944, elevation, 7,584.10 ft. No usable storage prior to April 1941.

EXTREMES (AT 0900) FOR CURRENT YEAR.--Maximum contents, 82,100 acre-ft, June 6, elevation, 7,647.95 ft; minimum contents, 19,430 acre-ft, October 1, elevation, 7,611.92 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0900, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,611.78	19,280	-
Oct. 31	7,615.88	23,910	+4,630
Nov. 30	7,619.82	28,880	+4,970
Dec. 31	7,622.37	32,440	+3,560
CAL YR 2002	-	-	-21,770
Jan. 31	7,624.24	35,220	+2,780
Feb. 28	7,625.98	37,960	+2,740
Mar. 31	7,628.62	42,360	+4,400
Apr. 30	7,635.63	55,310	+12,950
May 31	7,646.68	79,130	+23,820
June 30	7,641.97	68,530	-10,600
July 31	7,627.82	40,990	-27,540
Aug. 31	7,616.93	25,180	-15,810
Sept. 30	7,624.58	35,740	+10,560
WTR YR 2003	-	-	+16,460

09353800 LOS PINOS RIVER NEAR IGNACIO, CO

LOCATION.--Lat 37°09'58", long 107°34'57", in NW¹/₄NW¹/₄ sec.26, T.34 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank 1.7 mi downstream from Pine River Canal, 2.2 mi upstream from Beaver Creek and 5.2 mi northeast of Ignacio.

DRAINAGE AREA.--340 mi².

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=09353800

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Vallecito Reservoir (station 09353000, capacity 125,640 acre ft.) 14 mi upstream since April 1941. Diversions for irrigation of about 2,040 acres upstream and about 40,040 acres downstream from the station. Some waste water is diverted to adjacent basins. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.1	17	12	e6.6	e8.5	10	28	6.1	7.4	3.6	1.2	18
2	11	16	12	e6.5	e8.6	10	31	16	6.8	2.4	4.6	5.5
3	13	14	12	e6.5	e8.4	10	30	23	7.5	1.5	9.0	3.1
4	12	16	12	e6.5	8.0	11	25	11	6.6	3.7	4.3	3.0
5	11	16	11	e6.5	8.1	11	24	8.5	5.5	3.3	1.3	3.9
6	9.8	15	11	e6.5	8.6	10	24	12	5.2	2.4	1.4	7.9
7	7.2	12	11	e6.5	8.0	11	22	7.3	6.2	4.1	1.3	8.8
8	2.9	7.8	11	e6.5	9.0	12	21	4.9	6.5	1.3	1.8	4.5
9	2.6	24	e10	e6.5	11	14	18	15	5.6	2.5	4.0	133
10	2.5	15	e9.9	e6.5	12	15	20	e20	8.5	8.3	9.9	71
11	3.0	9.0	e9.4	e6.6	11	18	22	e14	10	8.1	4.3	21
12	4.1	7.3	e9.4	e6.7	11	25	23	e8.0	6.6	10	2.9	9.4
13	3.7	6.4	e9.4	e6.9	12	29	25	7.9	3.6	9.7	3.3	6.0
14	4.2	5.6	e9.3	e7.2	15	32	24	17	6.6	8.3	4.0	5.2
15	4.0	5.2	e7.8	e7.3	13	31	27	31	6.8	3.3	1.5	4.1
16	17	5.0	e7.6	e7.8	10	38	29	22	5.2	1.5	7.2	4.3
17	21	5.6	e7.3	e7.9	9.5	51	29	7.1	11	2.4	24	3.6
18	9.8	5.3	e7.5	e8.1	10	43	28	3.8	13	3.0	17	3.1
19	13	5.1	7.5	e8.1	9.7	38	22	3.5	20	1.2	7.1	3.4
20	28	6.7	e7.3	e8.2	9.3	32	17	5.1	12	0.92	2.9	4.4
21	16	12	e7.2	e8.2	9.1	34	14	5.5	8.8	1.2	2.4	5.5
22	18	14	e7.2	e8.2	8.7	33	14	9.7	2.9	1.4	7.4	5.9
23	22	15	e7.1	e8.3	8.8	33	16	14	2.0	1.5	1.7	5.4
24	24	15	e7.0	e8.3	8.8	40	16	27	1.9	1.0	3.3	5.7
25	24	16	e6.9	8.3	10	42	13	21	1.1	1.8	3.0	6.1
26	21	15	6.8	7.8	12	44	17	60	2.8	1.1	2.8	6.8
27	28	14	e6.9	e8.3	11	41	16	26	1.8	1.2	6.7	7.9
28	22	11	e6.6	e8.3	11	35	18	6.2	1.3	2.4	8.8	7.4
29	22	11	e6.6	e8.4	---	31	16	3.7	1.1	3.4	7.8	7.5
30	21	11	e6.6	e8.4	---	30	13	6.3	1.6	5.1	22	7.2
31	18	---	e6.6	e8.5	---	29	---	5.1	---	1.3	22	---
TOTAL	422.9	348.0	269.9	230.9	280.1	843	642	427.7	185.9	102.92	200.9	388.6
MEAN	13.6	11.6	8.71	7.45	10.0	27.2	21.4	13.8	6.20	3.32	6.48	13.0
MAX	28	24	12	8.5	15	51	31	60	20	10	24	133
MIN	2.5	5.0	6.6	6.5	8.0	10	13	3.5	1.1	0.92	1.2	3.0
AC-FT	839	690	535	458	556	1,670	1,270	848	369	204	398	771

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

MEAN	48.2	22.5	26.5	26.6	25.2	72.7	165	90.3	70.7	10.3	13.6	12.9
MAX	120	31.6	46.3	45.0	36.9	188	531	298	253	24.2	36.4	17.1
(WY)	(2000)	(2002)	(2002)	(2002)	(2000)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)
MIN	13.6	11.6	8.71	7.45	10.0	24.0	17.6	12.0	6.20	3.32	2.31	8.28
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2003)	(2003)	(2002)	(2000)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 2000 - 2003

ANNUAL TOTAL	5,822.46		4,342.82			
ANNUAL MEAN	16.0		11.9		48.7	
HIGHEST ANNUAL MEAN					123 2001	
LOWEST ANNUAL MEAN					11.9 2003	
HIGHEST DAILY MEAN	61	Jan 22	133	Sep 9	1,040	Jun 12, 2001
LOWEST DAILY MEAN	e0.33	Aug 16	0.92	Jul 20	0.33	Aug 16, 2002
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 15	1.3	Jul 20	1.1	Aug 15, 2002
MAXIMUM PEAK FLOW			449	Sep 9	1,100	Jun 12, 2001
MAXIMUM PEAK STAGE			4.08	Sep 9	4.95	Jun 12, 2001
ANNUAL RUNOFF (AC-FT)	11,550		8,610		35,290	
10 PERCENT EXCEEDS	33		25		67	
50 PERCENT EXCEEDS	12		8.4		22	
90 PERCENT EXCEEDS	2.5		2.8		4.0	

e Estimated.

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¹/₄NW¹/₄ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.5 mi upstream from Spring Creek, and 2 mi upstream from maximum elevation of Navajo Reservoir.

DRAINAGE AREA.--520 mi².

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09354500

REVISED RECORDS.--WDR CO-00-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,127.21 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Vallecito Reservoir (station 09353000, capacity 125,640 acre-ft.) 24 mi upstream since April 1941. Diversions for irrigation of about 55,000 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on Oct. 5, 1911 has not yet been exceeded.

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	26	30	22	e15	e17	26	43	41	65	72	101	68
2	30	28	22	e15	e17	25	49	36	71	74	102	55
3	37	27	23	e15	17	24	52	43	60	74	164	52
4	37	28	23	e15	16	25	47	39	58	79	104	56
5	30	29	21	e15	e17	26	42	28	55	78	68	53
6	28	27	20	e15	16	24	41	29	61	73	55	51
7	27	26	19	e15	17	25	40	25	65	76	55	59
8	23	23	20	e15	17	28	38	20	68	71	59	50
9	21	85	20	e15	17	36	34	19	68	65	70	564
10	18	67	20	e15	18	49	34	41	65	65	63	727
11	17	36	e19	e15	20	88	39	36	66	65	58	151
12	17	27	e19	e16	19	122	48	33	71	70	58	74
13	16	23	e19	e16	27	106	55	27	70	67	59	52
14	16	21	e19	e16	57	80	60	27	74	69	55	41
15	15	19	e18	e16	41	66	67	61	72	67	51	37
16	20	17	e17	e16	28	68	70	46	72	64	69	31
17	49	17	e17	e17	24	164	64	37	83	67	82	28
18	32	17	e16	17	24	146	65	38	94	64	106	25
19	44	16	e16	e17	26	94	59	37	112	63	71	27
20	48	16	e16	e17	22	71	50	34	124	63	55	27
21	47	19	e16	e17	20	68	44	39	103	72	50	26
22	38	22	e16	e17	19	70	42	39	94	69	55	25
23	41	23	e16	e17	17	62	47	47	92	68	55	25
24	44	24	e16	e17	18	68	48	70	84	72	50	25
25	40	25	e16	e17	22	71	43	70	83	71	51	24
26	39	25	e16	17	29	71	47	99	86	76	47	23
27	58	25	e16	e17	30	68	52	85	85	112	48	24
28	46	22	e16	e17	29	60	55	60	80	125	65	23
29	40	20	e16	e17	---	53	51	56	77	119	57	23
30	37	20	e16	e17	---	47	48	61	73	120	61	22
31	34	---	e16	e17	---	45	---	59	---	104	82	---
TOTAL	1,015	804	562	500	641	1,976	1,474	1,382	2,331	2,394	2,126	2,468
MEAN	32.7	26.8	18.1	16.1	22.9	63.7	49.1	44.6	77.7	77.2	68.6	82.3
MAX	58	85	23	17	57	164	70	99	124	125	164	727
MIN	15	16	16	15	16	24	34	19	55	63	47	22
AC-FT	2,010	1,590	1,110	992	1,270	3,920	2,920	2,740	4,620	4,750	4,220	4,900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	192	132	100	73.5	94.8	215	337	418	493	293	234	211
MAX	672	709	396	182	362	972	1,339	1,719	1,555	1,381	1,349	725
(WY)	(1987)	(1987)	(1983)	(1985)	(1993)	(1993)	(1979)	(1958)	(1979)	(1957)	(1999)	(1997)
MIN	32.7	26.8	18.1	16.1	22.9	31.7	22.6	40.6	60.8	23.8	13.0	33.4
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1951 - 2003

ANNUAL TOTAL	11,778.1	17,673										
ANNUAL MEAN	32.3	48.4									236	
HIGHEST ANNUAL MEAN											582	1973
LOWEST ANNUAL MEAN											44.6	2002
HIGHEST DAILY MEAN	114	Sep 11					727	Sep 10		4,560	Jul 27, 1957	
LOWEST DAILY MEAN	6.6	Aug 28					15	Oct 15		6.1	May 1, 1977	
ANNUAL SEVEN-DAY MINIMUM	8.7	Aug 23					15	Jan 1		8.3	Apr 30, 1977	
MAXIMUM PEAK FLOW							1,490	Sep 10		a6,400	Jul 27, 1957	
MAXIMUM PEAK STAGE							6.28	Sep 10		b8.95	Jul 27, 1957	
ANNUAL RUNOFF (AC-FT)	23,360						35,050			171,000		
10 PERCENT EXCEEDS	58						80			542		
50 PERCENT EXCEEDS	28						39			131		
90 PERCENT EXCEEDS	14						16			48		

e Estimated.

a From rating curve extended above 5100 ft³/s.

b Maximum gage height, 9.00 ft, backwater from ice, sometime during period, Dec 23, 1990 to Jan 17, 1991.

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi upstream from mouth, and 0.2 mi east of La Boca.

DRAINAGE AREA.--58.2 mi².

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974, January 1988 to September 1991. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09355000.

REVISED RECORDS.-- WDR CO-00-02: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,160 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Part of flow is return waste from irrigation. Nearly all irrigation in this basin is water diverted from Los Pinos River which causes a considerable change in the annual pattern and natural flow. 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	1.3	1.0	1.5	e0.48	0.34	7.2	0.90	0.17	30	40	43	46
2	1.8	0.92	e1.6	e0.49	0.13	5.6	0.90	3.4	31	42	50	63
3	2.0	0.85	1.7	e0.74	e0.28	5.2	0.97	9.4	29	41	71	69
4	1.6	1.2	1.5	e0.85	e0.51	5.2	0.90	1.7	29	38	56	48
5	1.4	1.2	1.2	e0.85	e0.58	5.9	0.96	1.4	28	42	49	45
6	1.3	0.82	e1.4	e0.79	e0.74	5.7	0.91	4.4	30	42	47	45
7	1.2	0.83	e1.6	e0.63	e1.3	5.7	0.82	7.3	37	41	48	48
8	1.1	1.2	e1.9	e0.46	e1.8	6.2	0.68	7.1	37	40	48	45
9	1.2	12	e2.4	e0.38	e2.3	8.1	0.67	9.2	34	39	51	276
10	e1.1	11	e2.9	e0.38	e3.0	12	0.67	9.4	36	35	46	281
11	e1.0	3.4	e3.0	e0.38	e3.4	22	0.66	8.2	39	41	41	9.1
12	e0.84	2.0	e3.3	e0.38	e3.9	40	0.64	9.3	41	42	40	0.99
13	0.96	1.4	e3.6	e0.35	6.0	34	0.60	8.9	45	43	40	0.33
14	0.89	1.2	e2.7	e0.37	7.7	20	0.45	7.7	43	44	46	0.12
15	0.92	1.1	e2.4	e0.42	7.7	13	0.53	11	41	44	49	0.08
16	0.82	e1.3	e2.0	e0.46	4.8	12	0.60	13	40	43	63	0.05
17	10	e1.4	e1.7	e0.53	3.8	48	0.48	13	41	43	61	0.04
18	6.1	e1.4	e1.5	e0.53	3.8	26	0.40	16	46	43	70	0.02
19	11	e1.3	e1.2	e0.51	3.7	14	0.44	19	49	41	59	0.02
20	17	e1.2	e1.1	e0.46	e2.9	7.1	0.39	19	54	42	52	0.01
21	4.9	e1.2	e0.86	e0.46	e2.7	6.2	0.41	19	43	45	49	0.05
22	1.5	e1.2	e0.86	e0.42	e2.8	7.8	0.39	18	41	48	54	0.02
23	e1.0	e1.2	e0.79	e0.38	e2.8	4.9	0.59	19	39	47	55	0.01
24	1.1	e1.3	e0.67	e0.38	e2.7	4.8	0.51	19	37	50	63	0.01
25	0.55	1.2	e0.67	e0.35	4.0	3.9	0.36	19	37	50	59	0.01
26	1.0	e1.2	e0.67	e0.27	6.5	3.1	0.32	26	40	64	60	0.05
27	3.8	e1.3	e0.67	e0.24	7.4	2.5	0.32	23	41	62	57	0.29
28	1.1	e1.3	e0.67	e0.24	15	1.8	0.27	23	40	95	63	0.78
29	0.77	e1.4	e0.61	0.41	---	1.5	0.23	20	39	46	70	1.4
30	1.1	e1.4	e0.58	0.12	---	e1.3	0.17	27	40	47	61	2.1
31	1.1	---	e0.48	0.39	---	1.1	---	28	---	43	68	---
TOTAL	81.45	59.42	47.73	14.10	102.58	341.8	17.14	419.57	1,157	1,423	1,689	981.48
MEAN	2.63	1.98	1.54	0.45	3.66	11.0	0.57	13.5	38.6	45.9	54.5	32.7
MAX	17	12	3.6	0.85	15	48	0.97	28	54	95	71	281
MIN	0.55	0.82	0.48	0.12	0.13	1.1	0.17	0.17	28	35	40	0.01
AC-FT	162	118	95	28	203	678	34	832	2,290	2,820	3,350	1,950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

	34.1	10.4	5.38	4.73	9.78	17.9	12.8	38.1	56.9	65.9	65.1	56.9
MEAN	34.1	10.4	5.38	4.73	9.78	17.9	12.8	38.1	56.9	65.9	65.1	56.9
MAX	87.9	29.6	20.4	19.3	54.8	89.7	41.1	64.5	79.3	111	132	92.0
(WY)	(1973)	(1956)	(1985)	(1980)	(1980)	(1979)	(1979)	(1992)	(1986)	(1996)	(1996)	(1983)
MIN	2.63	1.98	1.54	0.45	2.06	2.36	0.57	13.5	24.4	1.07	0.45	0.93
(WY)	(2003)	(2003)	(2003)	(2003)	(2000)	(1999)	(2003)	(2003)	(1977)	(2002)	(2002)	(2002)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1951 - 2003

ANNUAL TOTAL	2,589.82	6,334.27	
ANNUAL MEAN	7.10	17.4	31.9
HIGHEST ANNUAL MEAN			47.7 1987
LOWEST ANNUAL MEAN			9.78 2002
HIGHEST DAILY MEAN	64 Jun 11	281 Sep 10	918 Mar 6, 1995
LOWEST DAILY MEAN	0.00 Aug 1	0.01 Sep 20	0.00 Aug 1, 2002
ANNUAL SEVEN-DAY MINIMUM	0.03 Aug 12	0.02 Sep 19	0.02 Sep 19, 2003
MAXIMUM PEAK FLOW		742 Sep 10	a1,980 Sep 6, 1970
MAXIMUM PEAK STAGE		5.50 Sep 10	b4.62 Sep 6, 1970
ANNUAL RUNOFF (AC-FT)	5,140	12,560	23,090
10 PERCENT EXCEEDS	27	48	71
50 PERCENT EXCEEDS	1.7	3.0	21
90 PERCENT EXCEEDS	0.37	0.38	3.0

e Estimated.

a From rating curve extended above 160 ft³/s, on the basis of field estimate of peak flow.

b Maximum gage height, 5.98 ft, Mar 9, 1960, backwater from ice.

09358000 ANIMAS RIVER AT SILVERTON, CO

LOCATION.--Lat 37°48'40", long 107°39'31", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.17, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on right bank at southeast end of 14th Street, 800 feet upstream from Cement Creek, in the city of Silverton.

DRAINAGE AREA.--70.6 mi².

PERIOD OF RECORD.--June to October 1903 (staff gage), monthly discharge only, published in WSP 1313. October 1991 to September 1993. October 1994 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09358000

REVISED RECORDS.--WDR CO 92-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,290 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversions upstream for irrigation in Animas River drainage. Natural regulation by many lakes upstream from station. Mineral Point Ditch exports 100 to 400 acre feet of water per year from headwaters of Animas River to Uncompahgre River drainage. City of Silverton diverts some water from Boulder Creek (tributary) for municipal use. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1884, was probably that of October 5, 1911.

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	63	39	e28	e18	e18	e17	e26	128	772	162	56	59
2	68	40	e27	e18	e18	e18	e26	125	743	163	52	55
3	76	33	e26	e18	e18	e18	e25	126	660	156	51	54
4	69	33	e26	e19	e18	e19	e25	129	610	146	45	51
5	74	31	e25	e19	e18	e19	e25	110	549	136	44	59
6	71	31	e25	e19	e18	e19	e24	96	468	122	43	67
7	71	31	e26	e19	e19	e19	e24	90	430	114	44	70
8	72	32	e26	e19	e19	e19	e23	86	439	112	47	66
9	71	32	e26	e19	e19	e20	e24	77	453	108	43	101
10	69	e33	e26	e19	e19	e20	e25	70	437	101	44	151
11	67	e33	e25	e19	e19	e20	34	67	402	95	43	135
12	65	e33	e24	e19	e19	e20	38	83	361	90	42	148
13	62	e33	e23	e19	e18	e19	41	118	313	84	67	182
14	59	e33	e23	e20	e17	e19	61	146	289	79	129	179
15	54	e33	e23	e20	e17	e19	75	193	326	74	87	170
16	51	e33	e23	e21	e16	e17	62	187	301	77	81	165
17	50	e33	e22	e22	e16	e16	60	277	262	75	75	159
18	49	e33	e22	e22	e16	e16	58	308	242	71	70	145
19	47	e33	e21	e22	e16	e16	52	282	246	70	64	127
20	45	e32	e20	e22	e16	e16	53	325	241	66	58	117
21	43	e32	e19	e22	e16	e17	61	394	230	65	55	105
22	44	e32	e19	e21	e16	e18	62	525	248	64	53	96
23	45	e32	e18	e21	e15	e19	58	633	250	61	53	87
24	46	e32	e18	e20	e16	e21	55	639	228	58	54	82
25	42	e31	e18	e19	e16	e22	65	590	204	57	50	76
26	40	e30	e18	e19	e16	e22	91	641	198	57	50	71
27	42	e30	e18	e19	e16	e22	120	829	197	57	53	68
28	39	e30	e18	e19	e16	e22	140	967	189	61	66	64
29	39	e29	e18	e19	---	e22	141	1,020	177	60	62	61
30	36	e29	e18	e18	---	e23	136	855	172	63	68	58
31	37	---	e18	e18	---	e25	---	769	---	58	64	---
TOTAL	1,706	971	687	608	481	599	1,710	10,885	10,637	2,762	1,813	3,028
MEAN	55.0	32.4	22.2	19.6	17.2	19.3	57.0	351	355	89.1	58.5	101
MAX	76	40	28	22	19	25	141	1,020	772	163	129	182
MIN	36	29	18	18	15	16	23	67	172	57	42	51
AC-FT	3,380	1,930	1,360	1,210	954	1,190	3,390	21,590	21,100	5,480	3,600	6,010

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

	60.8	37.3	28.7	25.0	23.1	27.5	63.7	312	498	252	113	79.7
MEAN	60.8	37.3	28.7	25.0	23.1	27.5	63.7	312	498	252	113	79.7
MAX	136	64.9	41.4	33.8	36.1	43.3	92.9	454	794	734	253	131
(WY)	(1998)	(1998)	(1998)	(1995)	(1995)	(1995)	(2000)	(1996)	(1997)	(1995)	(1995)	(1999)
MIN	30.4	21.2	18.9	13.8	15.7	18.6	39.6	147	128	30.5	28.0	42.2
(WY)	(2002)	(2002)	(1992)	(1992)	(1992)	(1992)	(1993)	(1995)	(2002)	(2002)	(2002)	(2001)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	20,398		35,887			
ANNUAL MEAN	55.9		98.3		127	
HIGHEST ANNUAL MEAN					194	
LOWEST ANNUAL MEAN					52.7	
HIGHEST DAILY MEAN	281	Jun 1	1,020	May 29	1,180	Jun 4, 1997
LOWEST DAILY MEAN	e14	Mar 1	e15	Feb 23	9.7	Oct 30, 1999
ANNUAL SEVEN-DAY MINIMUM	15	Feb 25	16	Feb 17	13	Jan 16, 1992
MAXIMUM PEAK FLOW			1,390	May 28	1,470	Jun 4, 1997
MAXIMUM PEAK STAGE			4.32	May 28	a,b3.99	Jun 4, 1997
ANNUAL RUNOFF (AC-FT)	40,460		71,180		91,980	
10 PERCENT EXCEEDS	128		241		370	
50 PERCENT EXCEEDS	32		45		48	
90 PERCENT EXCEEDS	20		18		19	

e Estimated.

a Maximum gage height during period Jun to Oct 1903, 4.90 ft, Jun 17, 1903, site and datum then in use.

b Maximum gage height since 1992, 4.32 ft, May 28, 2003, due to channel change, present site and datum.

09358550 CEMENT CREEK AT SILVERTON, CO

LOCATION.--Lat 37°49'11", long 107°39'47", in SW¹/₄SW¹/₄ sec.8, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on left bank, at abandoned railroad crossing Cement Creek, 0.1 mile north of Silverton, and 0.8 mile upstream from mouth.

DRAINAGE AREA.--20.1 mi².

PERIOD OF RECORD.--October 1991 to September 1993, October 1994 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09358550

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,380 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural regulation by many lakes upstream from station. Diversions for mining operations upstream from station. However, these diversions are returned to the creek upstream of the gage. Mine drainage contributes considerable amounts of water to the creek. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred October 5, 1911. A more recent flood occurred June 6, 1978, when Lake Emma (6.5 mi northeast of Silverton) was undermined by mining operations, and released a large quantity of water into the headwaters of Cement Creek. Discharge not determined.

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	19	16	e13	e8.0	e8.7	e8.4	18	53	196	36	16	14
2	20	16	e13	e8.2	e8.7	e8.5	17	49	194	35	16	14
3	21	15	e13	e8.3	e8.7	e8.6	15	48	168	35	16	14
4	22	15	e13	e8.4	e8.7	e8.7	14	48	146	33	16	14
5	22	15	e13	e8.5	e8.8	e8.9	14	40	129	30	15	15
6	21	15	e13	e8.5	e8.9	e9.0	14	35	116	28	16	16
7	21	15	13	e8.5	e8.9	e9.2	14	33	109	26	16	18
8	21	16	13	e8.5	e8.9	e9.4	13	31	109	24	16	15
9	20	16	e11	e8.5	e9.0	e9.7	16	28	108	23	15	25
10	19	15	e11	e8.5	e9.1	e10	22	26	104	22	16	36
11	19	15	e10	e8.6	e9.3	e12	27	29	99	21	e15	33
12	18	14	e9.7	e8.8	e8.7	13	28	42	86	20	e14	38
13	18	15	e8.5	e9.0	e8.4	14	32	55	73	20	19	35
14	17	15	e8.2	e9.3	e8.2	14	38	70	71	19	20	31
15	17	15	e8.0	e9.3	e8.1	14	35	77	75	18	16	29
16	17	13	e8.0	e9.5	e7.9	13	28	85	69	19	20	27
17	17	15	e8.0	e9.7	e7.7	13	29	122	60	19	18	25
18	16	14	e8.0	e9.8	e7.5	13	29	119	56	18	17	23
19	15	14	e8.0	e10	e7.6	12	24	107	56	19	16	e22
20	16	14	e7.9	e11	e7.7	12	25	118	55	17	15	e21
21	16	15	e7.8	e13	e7.7	12	28	137	53	17	15	20
22	16	16	e7.8	e12	e7.8	13	26	170	55	17	15	19
23	16	16	e7.7	e11	e8.0	14	23	194	55	17	18	18
24	15	15	e7.6	e10	e8.1	15	23	202	50	17	16	17
25	15	15	e7.6	e9.8	e8.2	15	32	166	46	17	15	17
26	16	14	e7.6	e9.3	e8.3	15	47	167	45	16	15	16
27	16	14	e7.6	e9.2	e8.3	15	60	205	44	17	15	16
28	15	e14	e7.6	e8.9	e8.3	13	65	239	42	17	16	15
29	16	e14	e7.6	e8.7	---	e15	59	237	40	17	15	15
30	14	e13	e7.7	e8.7	---	e17	55	218	39	16	18	15
31	16	---	e7.9	e8.7	---	e17	---	203	---	16	15	---
TOTAL	547	444	294.8	288.2	234.2	381.4	870	3,353	2,548	666	501	633
MEAN	17.6	14.8	9.51	9.30	8.36	12.3	29.0	108	84.9	21.5	16.2	21.1
MAX	22	16	13	13	9.3	17	65	239	196	36	20	38
MIN	14	13	7.6	8.0	7.5	8.4	13	26	39	16	14	14
MED	17	15	8.0	8.9	8.3	13	26	85	70	19	16	18
AC-FT	1,080	881	585	572	465	757	1,730	6,650	5,050	1,320	994	1,260

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

	18.7	16.1	13.0	12.1	12.1	15.3	29.3	101	125	54.0	26.2	21.7
MEAN	18.7	16.1	13.0	12.1	12.1	15.3	29.3	101	125	54.0	26.2	21.7
MAX	28.9	19.8	15.6	15.8	17.8	22.7	42.1	145	263	149	50.7	34.6
(WY)	(1998)	(1999)	(1995)	(1995)	(1995)	(1995)	(2000)	(1996)	(1995)	(1995)	(1999)	(1999)
MIN	14.0	12.7	9.26	8.27	8.36	12.3	22.6	37.3	24.6	13.2	12.9	16.9
(WY)	(1992)	(2002)	(2002)	(2002)	(2003)	(2003)	(1998)	(2002)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	6,364.3		10,760.6			
ANNUAL MEAN	17.4		29.5		37.1	
HIGHEST ANNUAL MEAN					56.3	
LOWEST ANNUAL MEAN					17.0	
HIGHEST DAILY MEAN	50	May 20	239	May 28	385	Jun 16, 1995
LOWEST DAILY MEAN	e7.6	Dec 24	e7.5	Feb 18	a,e7.5	Jan 2, 1992
ANNUAL SEVEN-DAY MINIMUM	7.6	Dec 23	7.6	Dec 23	e7.6	Dec 23, 2002
MAXIMUM PEAK FLOW			300	May 28	471	Jun 14, 1995
MAXIMUM PEAK STAGE			2.26	May 28	2.85	Jun 14, 1995
ANNUAL RUNOFF (AC-FT)	12,620		21,340		26,850	
10 PERCENT EXCEEDS	33		60		95	
50 PERCENT EXCEEDS	14		16		18	
90 PERCENT EXCEEDS	8.2		8.4		11	

e Estimated.

a Also occurred Feb 18, 2003.

09359010 MINERAL CREEK AT SILVERTON, CO

LOCATION.--Lat 37°48'10", long 107°40'20", in NW¹/₄NE¹/₄ sec.19, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on right bank at southwest end of Greene Street at abandoned bridge crossing Mineral Creek, 300 ft downstream from U. S. Highway 550 crossing Mineral Creek, 1,400 ft upstream from mouth, and 0.5 mi southwest of Silverton.

DRAINAGE AREA.--52.5 mi².

PERIOD OF RECORD.--October 1991 to September 1993, October 1994 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09359010

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 9245.98 ft above NGVD of 1929, from San Juan County bench mark.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural regulation by many lakes upstream from station. Diversions upstream from Mineral Creek drainage to Uncompahgre River drainage consists of 100 to 200 acre-feet per year through Red Mountain Ditch and 400 to 500 acre-feet per year through Carbon Lake Ditch. City of Silverton diverts some water from Bear Creek (tributary) for municipal use. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known occurred October 5, 1911. An indirect determination of peak flow for flood of September 5, 1970, was run in very close proximity to present site, discharge, 3,070 ft³/s, gage height not determined.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	31	e24	e16	e14	e14	e25	84	681	126	53	60
2	54	30	e24	e16	e14	e14	e25	82	671	124	51	55
3	55	28	e22	e17	e14	e15	e24	82	597	119	49	51
4	53	27	e22	e17	e14	e15	e23	83	565	111	47	49
5	55	27	e22	e17	e14	e15	e23	70	464	103	44	49
6	55	27	e22	e17	e14	e16	e23	63	370	91	46	54
7	57	27	e21	e17	e15	e16	e22	60	326	86	46	61
8	58	26	e21	e17	e15	e16	e23	56	337	84	47	54
9	57	e27	e21	e17	e15	e16	e24	51	343	81	43	72
10	55	e28	e21	e17	e16	e16	e25	47	337	76	45	102
11	54	e28	e22	e17	e16	e17	31	48	319	73	51	97
12	51	e29	e22	e18	e16	e18	35	66	281	70	52	107
13	48	e29	e21	e19	e16	e18	40	92	225	66	58	127
14	45	e29	e21	e19	e16	e18	52	119	211	63	104	125
15	42	e29	e21	e20	e15	e18	53	151	238	60	78	112
16	40	e29	e21	e20	e14	e17	45	155	211	62	80	105
17	39	e29	e20	e20	e14	e17	44	222	180	62	80	100
18	38	e29	e19	e20	e14	e17	42	229	169	60	71	91
19	36	e28	e18	e20	e14	e17	38	227	180	64	64	82
20	35	e28	e18	e21	e14	e17	38	261	180	59	56	75
21	34	e28	e17	e21	e14	e18	42	318	173	56	53	70
22	34	e28	e17	e21	e14	e18	41	440	189	57	51	65
23	35	e28	e16	e20	e14	e19	38	504	187	54	53	60
24	35	e28	e16	e18	e14	e21	37	483	167	52	57	57
25	32	e27	e16	e18	e14	e22	47	422	149	52	65	54
26	32	e27	e16	e17	e14	e23	65	485	150	50	61	51
27	32	e27	e16	e17	e14	e23	87	725	149	52	62	49
28	31	e26	e16	e16	e14	e23	103	791	143	60	76	47
29	32	e25	e16	e16	---	e23	98	880	135	68	75	45
30	30	e25	e16	e16	---	e23	88	788	130	66	74	44
31	31	---	e16	e15	---	e23	---	681	---	56	68	---
TOTAL	1,333	834	601	557	406	563	1,301	8,765	8,457	2,263	1,860	2,170
MEAN	43.0	27.8	19.4	18.0	14.5	18.2	43.4	283	282	73.0	60.0	72.3
MAX	58	31	24	21	16	23	103	880	681	126	104	127
MIN	30	25	16	15	14	14	22	47	130	50	43	44
AC-FT	2,640	1,650	1,190	1,100	805	1,120	2,580	17,390	16,770	4,490	3,690	4,300

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

	47.8	31.7	24.8	21.2	19.6	23.6	52.1	246	384	209	109	73.6
MEAN	47.8	31.7	24.8	21.2	19.6	23.6	52.1	246	384	209	109	73.6
MAX	96.4	46.9	34.3	27.1	29.5	36.1	77.4	391	635	540	260	147
(WY)	(1998)	(1998)	(2000)	(1995)	(1995)	(1995)	(2000)	(2001)	(1997)	(1995)	(1999)	(1999)
MIN	26.8	18.0	16.9	13.4	14.5	18.2	35.4	96.5	75.0	25.4	21.9	38.1
(WY)	(2002)	(2002)	(2002)	(1992)	(2003)	(2003)	(1998)	(1995)	(2002)	(2002)	(2002)	(2001)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1992 - 2003	
ANNUAL TOTAL	15,340		29,110			
ANNUAL MEAN	42.0		79.8		104	
HIGHEST ANNUAL MEAN					147 1999	
LOWEST ANNUAL MEAN					39.6 2002	
HIGHEST DAILY MEAN	192	May 30	880	May 29	964	Jun 4, 1997
LOWEST DAILY MEAN	e13	Mar 1	e14	Feb 1	10	Mar 16, 2001
ANNUAL SEVEN-DAY MINIMUM	14	Feb 27	14	Feb 16	13	Jan 12, 1992
MAXIMUM PEAK FLOW			1,150	May 27	1,670	Jun 15, 1995
MAXIMUM PEAK STAGE			3.05	May 27	3.41	Jun 15, 1995
ANNUAL RUNOFF (AC-FT)	30,430		57,740		75,150	
10 PERCENT EXCEEDS	99		176		293	
50 PERCENT EXCEEDS	27		40		39	
90 PERCENT EXCEEDS	17		16		18	

e Estimated.

09359020 ANIMAS RIVER BELOW SILVERTON, CO

LOCATION.--Lat 37°47'25", long 107°40'01", in SW¹/₄SW¹/₄ sec.20, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on right bank 500 ft upstream from Durango-Silverton Railroad, crossing Animas River, 0.7 mi downstream from Mineral Creek, and 1.1 mi south of Silverton.

DRAINAGE AREA.--146 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09359020.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,200 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural regulation by many lakes upstream from station. Diversions from Animas River and Mineral Creek drainages through Red Mountain, Carbon Lake and Mineral Point ditches amount to 600 to 1100 acre-feet per year. City of Silverton diverts some water for municipal use from Bear Creek and Boulder Creek, both tributaries upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known occurred October 5, 1911.

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	132	95	68	e49	42	44	67	276	1,630	358	135	145
2	149	97	e67	e50	41	e41	68	274	1,550	363	129	136
3	166	82	64	e52	e36	e43	63	277	1,280	355	123	130
4	154	80	e65	e55	e37	43	63	281	1,140	331	114	124
5	164	78	e66	e57	e39	42	62	248	896	306	108	131
6	157	78	65	57	e41	46	62	225	722	266	109	149
7	161	77	e66	e60	e42	44	60	217	681	246	112	164
8	163	78	e66	e59	e43	e44	61	207	685	242	117	150
9	158	85	e66	e57	e44	e43	66	189	709	231	105	223
10	152	85	e66	47	e46	42	84	175	700	219	106	338
11	149	81	e66	43	e47	43	101	179	678	204	115	297
12	142	83	e66	e67	e46	46	113	246	629	195	116	326
13	133	89	e66	e65	e45	51	126	343	551	186	149	392
14	127	78	e65	60	42	54	161	431	528	177	288	385
15	118	80	e65	e62	e45	52	175	542	569	168	196	356
16	112	83	e64	e60	43	52	146	574	535	173	196	341
17	108	92	60	e61	35	50	146	726	490	170	189	326
18	104	83	e58	67	36	48	143	798	479	162	173	292
19	100	92	e54	e69	37	47	129	823	485	166	156	262
20	97	75	e53	e69	38	47	130	927	484	155	139	233
21	95	80	e52	e67	38	47	147	1,030	476	149	131	210
22	96	85	e52	e67	37	48	147	1,270	492	149	125	194
23	103	85	e52	e63	41	53	138	1,410	493	142	132	182
24	102	86	e53	e62	53	56	134	1,410	474	136	139	171
25	93	77	e51	40	38	58	162	1,300	436	134	145	162
26	91	77	e49	45	37	60	219	1,410	428	135	139	153
27	94	77	e48	e47	37	61	270	1,810	427	137	144	146
28	88	e77	e47	42	39	57	301	2,040	408	154	175	139
29	92	e77	e47	44	---	56	298	2,120	385	160	169	136
30	86	e76	e48	56	---	56	287	1,860	377	159	175	130
31	91	---	e48	42	---	e63	---	1,640	---	141	163	---
TOTAL	3,777	2,468	1,823	1,741	1,145	1,537	4,129	25,258	19,817	6,269	4,512	6,523
MEAN	122	82.3	58.8	56.2	40.9	49.6	138	815	661	202	146	217
MAX	166	97	68	69	53	63	301	2,120	1,630	363	288	392
MIN	86	75	47	40	35	41	60	175	377	134	105	124
AC-FT	7,490	4,900	3,620	3,450	2,270	3,050	8,190	50,100	39,310	12,430	8,950	12,940

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

MEAN	132	88.8	68.3	61.4	56.2	68.0	161	684	1,034	494	247	186
MAX	270	136	92.9	79.8	85.6	105	216	1,002	1,647	1,393	520	336
(WY)	(1998)	(1998)	(1998)	(1998)	(1995)	(1995)	(2000)	(1996)	(1997)	(1995)	(1995)	(1999)
MIN	75.8	46.9	50.3	40.2	40.9	49.1	122	301	232	83.0	70.5	97.5
(WY)	(2002)	(2002)	(2002)	(1992)	(2003)	(2000)	(1993)	(1995)	(2002)	(2002)	(2002)	(2001)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1992 - 2003

ANNUAL TOTAL	44,321	78,999	
ANNUAL MEAN	121	216	274
HIGHEST ANNUAL MEAN			395
LOWEST ANNUAL MEAN			114
HIGHEST DAILY MEAN	443	May 18	2,350
LOWEST DAILY MEAN	e42	Feb 26	35
ANNUAL SEVEN-DAY MINIMUM	42	Feb 26	37
MAXIMUM PEAK FLOW			2,610
MAXIMUM PEAK STAGE			4.27
ANNUAL RUNOFF (AC-FT)	87,910	156,700	198,500
10 PERCENT EXCEEDS	286	487	760
50 PERCENT EXCEEDS	81	112	112
90 PERCENT EXCEEDS	48	44	52

e Estimated.

a Also occurred Nov 21, 2001.

b Maximum gage height, 4.90 ft, Jun 1, 1997.

09359020 ANIMAS RIVER BELOW SILVERTON, CO—Continued

WATER-QUALITY RECORDS

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=09359020

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	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 fltr inc tit field, mg/L as CaCO3 (39086)
DEC 05...	1345	88	10.3	6.3	499	0.7	250	90.7	5.48	0.86	0.1	3.40	5
MAY 02...	1245	263	9.0	6.6	284	6.1	130	45.2	3.16	0.63	0.1	2.15	10
MAY 30...	1130	1,570	9.2	7.0	133	6.2	49	17.2	1.49	0.44	0.1	0.97	12
JUL 11...	0945	209	8.5	6.7	292	8.4	130	45.3	3.19	0.72	0.1	2.06	13

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

Date	Time	Bicarbonate, wat fltr 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)	Residue on evap. at 180degC wat fltr mg/L (70300)	Aluminum, water, fltrd, ug/L (01106)	Aluminum, water, unfltrd recover-able, ug/L (01105)	Cadmium, water, fltrd, ug/L (01025)	Copper, water, fltrd, ug/L (01040)
DEC 05...	6	1.36	0.63	15.3	242	368	0.54	94.7	399	140	2,790	1.7	6.4	
MAY 02...	12	1.22	0.41	9.76	116	187	0.27	139	196	20	1,140	2.3	13.5	
MAY 30...	15	0.36	0.2	5.11	39.9	73	0.11	355	84	25	1,410	0.9	4.1	
JUL 11...	16	0.51	0.4	8.86	114	184	0.26	110	195	20	770	1.5	2.9	

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

Date	Time	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)	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)
DEC 05...	E20	2,880	5,690	<1	1,380	1,300	<0.02	<3	<0.3	531	
MAY 02...	40	1,060	2,840	<1	744	723	<0.02	<3	<0.3	589	
MAY 30...	40	60	4,310	M	220	609	<0.02	<3	<0.3	209	
JUL 11...	10	390	1,040	<1	539	492	<0.02	<3	<0.3	322	

< -- 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	Instantaneous discharge, cfs (00061)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
JAN 23...	1045	63	599	0.3	MAY 23...	1301	1,180	143	7.8
APR 10...	1500	77	515	9.8	JUN 23...	1350	472	203	11.1

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¹/₄SW¹/₄ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at abandoned power plant at Durango, 0.8 mi upstream from Lightner Creek.

DRAINAGE AREA.--692 mi².

PERIOD OF RECORD.--July to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to August 1901 (gage heights and discharge measurements only), April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly 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=09361500

REVISED RECORDS.--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures only).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,501.57 ft above NGVD of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 4,000 acres upstream from station. Natural regulation by many lakes and regulation for power upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

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	305	231	216	e158	165	150	e271	995	3,200	558	293	406
2	333	229	209	e158	146	131	295	953	3,180	538	294	353
3	368	229	216	171	142	128	299	923	2,830	521	299	328
4	389	211	219	176	153	150	282	969	2,480	498	282	312
5	378	216	206	158	147	159	273	892	2,250	474	255	310
6	384	203	206	159	e132	151	243	786	1,900	447	234	325
7	377	197	202	180	e128	150	238	728	1,630	413	226	358
8	380	200	183	171	e128	153	255	677	1,540	390	256	341
9	388	244	176	173	132	140	257	619	1,550	377	291	415
10	379	240	180	179	137	145	286	566	1,520	359	271	1,480
11	367	221	175	184	e149	168	345	517	1,440	339	272	1,260
12	353	216	170	161	157	184	394	552	1,350	325	275	1,020
13	332	208	181	150	182	196	399	777	1,190	310	289	1,060
14	316	215	189	172	179	214	474	900	1,040	296	476	1,020
15	298	207	173	178	168	229	612	1,250	1,060	285	499	908
16	288	198	186	170	143	219	578	1,280	1,060	273	424	811
17	274	195	202	169	140	226	577	1,700	942	268	433	756
18	271	201	197	165	157	229	594	2,030	869	260	423	692
19	253	195	182	148	151	218	561	1,860	858	257	389	e641
20	247	194	e165	155	149	209	508	1,910	923	262	347	580
21	236	198	e159	171	149	210	504	2,150	855	258	316	532
22	229	201	e158	174	151	206	523	2,730	839	250	306	487
23	251	209	154	172	132	197	525	3,240	846	250	302	461
24	257	214	e161	171	127	217	488	3,180	807	246	317	433
25	250	209	e160	172	158	275	499	2,900	736	236	342	411
26	242	235	e160	151	162	283	587	2,680	693	228	344	391
27	258	228	e161	149	157	287	816	3,400	681	243	344	367
28	249	221	e159	166	155	271	1,010	4,100	653	274	381	348
29	241	219	156	162	---	253	1,100	4,160	622	312	458	340
30	239	218	e157	157	---	224	1,020	3,850	594	333	429	337
31	232	---	e158	161	---	e222	---	3,470	---	316	479	---
TOTAL	9,364	6,402	5,576	5,141	4,176	6,194	14,813	56,744	40,138	10,396	10,546	17,483
MEAN	302	213	180	166	149	200	494	1,830	1,338	335	340	583
MAX	389	244	219	184	182	287	1,100	4,160	3,200	558	499	1,480
MIN	229	194	154	148	127	128	238	517	594	228	226	310
AC-FT	18,570	12,700	11,060	10,200	8,280	12,290	29,380	112,600	79,610	20,620	20,920	34,680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 2003, BY WATER YEAR (WY)

	409	285	222	202	205	296	832	2,288	2,825	1,190	587	464
MEAN	409	285	222	202	205	296	832	2,288	2,825	1,190	587	464
MAX	1,866	814	412	326	352	844	1,818	4,791	5,846	3,057	1,806	1,709
(WY)	(1942)	(1942)	(1942)	(1973)	(1920)	(1916)	(1985)	(1920)	(1917)	(1995)	(1999)	(1970)
MIN	162	158	129	103	110	133	246	474	357	154	134	161
(WY)	(1957)	(1935)	(1990)	(1933)	(1933)	(1990)	(1977)	(1977)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1898 - 2003

ANNUAL TOTAL	91,125	186,973	
ANNUAL MEAN	250	512	816
HIGHEST ANNUAL MEAN			1,366
LOWEST ANNUAL MEAN			238
HIGHEST DAILY MEAN	947	Sep 12	4,160
LOWEST DAILY MEAN	116	Aug 28	127
ANNUAL SEVEN-DAY MINIMUM	119	Aug 22	136
MAXIMUM PEAK FLOW			4,680
MAXIMUM PEAK STAGE			5.88
ANNUAL RUNOFF (AC-FT)	180,700	370,900	591,200
10 PERCENT EXCEEDS	463	1,050	2,210
50 PERCENT EXCEEDS	193	271	340
90 PERCENT EXCEEDS	130	157	179

e Estimated.

a Present site and datum, from rating extended above 13,000 ft³/s.

09362800 LEMON RESERVOIR NEAR DURANGO, CO

LOCATION.--Lat 37°22'57", long 107°39'44", in SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.17, T.36 N., R.7 W., LaPlata County, Hydrologic Unit 14080104, in gatehouse at Lemon Dam on Florida River, 2.3 mi upstream from True Creek, and 15 mi northeast of Durango.

DRAINAGE AREA.--68.3 mi².

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=09362800

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,948.00 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. Dam was completed in 1963. Capacity, 40,100 acre-ft, between elevations 7,948.00 ft, sill of outlet gate, and 8,148.00 ft, normal reservoir water surface elevation. Dead storage below elevation 8,005.00 ft, 354 acre-ft. Figures given are total contents.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily mean contents, 40,180 acre-ft, July 3-4, 1997, elevation, 8,148.06 ft; minimum daily mean contents, 3,080 acre-ft, Aug. 3, 2003, elevation, 8,043.00 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily mean contents, 20,330 acre-ft, June 3, daily mean elevation, 8,110.74 ft; minimum daily mean contents, 3,080 acre-ft, Aug. 3, daily mean elevation, 8,043.00 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	8,054.91	4,870	-
Oct. 31	8,059.05	5,580	+710
Nov. 30	8,061.01	5,930	+350
Dec. 31	8,062.52	6,210	+280
CAL YR 2002	-	-	-7,190
Jan. 31	8,062.96	6,290	+80
Feb. 28	8,063.38	6,370	+80
Mar. 31	8,065.54	6,780	+410
Apr. 30	8,078.55	9,620	+2,840
May 31	8,109.94	19,990	+10,370
June 30	8,091.90	13,330	-6,660
July 31	8,046.08	3,500	-9,830
Aug. 31	8,054.32	4,770	+1,270
Sept. 30	8,076.03	9,010	+4,240
WTR YR 2003	-	-	+4,140

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus, 700 ft downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi², approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09365500

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry and concrete flume. Datum of gage is 8,104.71 ft above NGVD of 1929. Prior to May 1, 1920, nonrecording gage, and May 1, 1920 to May 24, 1927, water-stage recorder, at several sites about 600 ft downstream at different datums. May 25, 1927 to Sept. 30, 1938, water-stage recorder at site 60 ft downstream and Oct. 1, 1938 to Sept. 30, 1941, at present site at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Cherry Creek ditch exports water upstream from station for irrigation of about 2,000 acres in Cherry Creek drainage. The Pine Ridge ditch diverts water upstream from station for irrigation of about 300 acres downstream, and also for irrigation of about 300 acres in each of the Lightner and Basin Creek drainages. The Pine River ditch also diverts up to 1,000 acre-ft for storage in the Lightner Creek drainage.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

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	8.5	12	5.7	6.4	e5.5	21	84	135	20	8.0	25
2	12	8.2	12	e5.0	6.7	5.5	24	82	129	19	8.5	21
3	14	8.2	12	e5.0	7.1	5.4	22	76	111	18	9.0	19
4	13	7.8	12	e5.0	e7.0	5.4	23	80	95	17	9.6	19
5	13	7.4	11	5.0	e6.5	5.4	24	66	80	16	9.8	19
6	13	7.4	11	5.0	e6.0	5.3	25	53	65	15	9.8	20
7	14	7.4	10	e5.0	e6.0	5.4	24	46	54	14	10	33
8	14	7.5	9.9	e5.0	e6.5	5.5	24	41	51	13	12	25
9	15	13	9.4	4.8	e6.5	5.6	25	37	50	13	12	58
10	14	11	8.5	4.8	e7.0	5.9	29	33	48	12	12	156
11	14	10	8.4	4.8	e7.0	6.4	47	29	50	11	12	77
12	13	9.4	8.2	4.6	e7.5	7.4	70	33	51	10	12	60
13	13	8.8	8.2	4.6	8.4	7.6	65	50	44	9.9	12	53
14	13	8.4	8.2	4.6	9.4	6.7	80	57	39	9.6	12	49
15	12	8.2	8.2	4.6	9.0	6.7	81	87	38	9.0	12	41
16	12	8.2	8.1	4.7	8.2	7.2	66	83	38	8.8	11	36
17	12	8.2	6.6	4.7	7.8	8.4	67	140	35	8.5	11	31
18	12	8.2	5.9	e4.8	7.8	8.9	67	138	37	8.0	11	28
19	11	8.2	5.5	4.9	7.6	9.0	59	124	37	8.0	10	25
20	10	7.6	e5.5	5.0	7.3	9.9	51	143	39	7.6	10	23
21	9.5	7.8	5.8	5.0	6.9	12	49	167	34	8.0	10	21
22	9.4	7.8	6.8	5.0	6.7	13	49	195	32	8.1	9.3	19
23	12	7.8	6.7	5.1	6.6	14	46	195	29	7.8	10	17
24	11	8.2	5.6	5.0	6.0	16	42	172	27	7.8	11	16
25	10	8.2	e5.5	5.0	e6.0	16	44	172	25	7.6	11	15
26	11	8.2	e5.5	e5.0	e6.0	16	67	169	24	7.2	11	14
27	11	8.8	e5.5	5.3	5.9	14	91	183	23	7.6	11	14
28	10	9.6	e5.5	5.4	5.9	14	98	194	22	7.7	14	13
29	9.7	10	e5.5	5.8	---	15	99	174	21	7.6	22	12
30	9.3	11	5.5	6.3	---	14	88	163	21	7.4	26	12
31	8.8	---	e5.5	6.4	---	16	---	163	---	7.4	32	---
TOTAL	366.7	259.0	244.0	156.9	195.7	293.1	1,567	3,429	1,484	331.6	381.0	971
MEAN	11.8	8.63	7.87	5.06	6.99	9.45	52.2	111	49.5	10.7	12.3	32.4
MAX	15	13	12	6.4	9.4	16	99	195	135	20	32	156
MIN	8.8	7.4	5.5	4.6	5.9	5.3	21	29	21	7.2	8.0	12
AC-FT	727	514	484	311	388	581	3,110	6,800	2,940	658	756	1,930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2003, BY WATER YEAR (WY)

	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	15.1	10.6	8.20	6.94	7.36	15.5	81.0	169	130	37.3	23.6	20.3																																																																										
MAX	148	54.3	20.4	15.0	18.0	54.2	203	384	421	154	79.1	124																																																																										
(WY)	(1942)	(1942)	(1987)	(1926)	(1971)	(1997)	(1924)	(1941)	(1980)	(1957)	(1999)	(1927)																																																																										
MIN	3.27	3.11	2.94	2.65	3.06	3.83	8.40	19.8	8.78	3.65	3.38	3.73																																																																										
(WY)	(1957)	(1938)	(1938)	(1938)	(1990)	(1977)	(1977)	(1977)	(2002)	(2002)	(2002)	(1956)																																																																										

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1918 - 2003

ANNUAL TOTAL	3,502.3	9,679.0	
ANNUAL MEAN	9.60	26.5	43.8
HIGHEST ANNUAL MEAN			90.5 1941
LOWEST ANNUAL MEAN			8.62 2002
HIGHEST DAILY MEAN	57 Sep 11	195 May 22	934 Jun 28, 1927
LOWEST DAILY MEAN	2.7 Sep 2	4.6 Jan 12	1.0 Feb 22, 1939
ANNUAL SEVEN-DAY MINIMUM	2.8 Aug 31	4.7 Jan 11	1.9 Oct 13, 1917
MAXIMUM PEAK FLOW		232 May 23	a1,880 Sep 22, 1941
MAXIMUM PEAK STAGE		4.81 May 23	b4.30 Sep 22, 1941
ANNUAL RUNOFF (AC-FT)	6,950	19,200	31,740
10 PERCENT EXCEEDS	22	67	125
50 PERCENT EXCEEDS	5.9	11	13
90 PERCENT EXCEEDS	3.3	5.5	5.1

e Estimated.

a Present datum, from rating curve extended above 620 ft³/s, on basis of slope-area measurement of peak flow.

b Maximum gage height for period of record, 5.13 ft, Sep 6, 1970.

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'59", long 108°11'17", in NW¹/₄SE¹/₄ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.5 mi downstream from Johnny Pond Arroyo, and 4.9 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi².

PERIOD OF RECORD.--January 1920 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=09366500

REVISED RECORDS.--WSP 1313: 1934 (M), 1936 (M).

GAGE.--Water-stage recorder with satellite telemetry and concrete flume. Datum of gage is 5,972.03 ft above NGVD of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934. Mar. 17, 1934 to July 1, 1996, water-stage recorder at same site, and at datum 3.12 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 15,000 acres, mostly upstream from station.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	3.0	3.2	e5.0	0.68	4.2	5.3	43	95	3.4	2.9	1.4
2	3.0	2.9	2.8	e4.0	0.70	4.9	6.0	46	75	1.4	0.44	1.1
3	3.3	2.9	2.6	e4.0	0.65	4.4	14	37	69	0.67	0.00	1.1
4	3.2	3.0	2.3	e4.5	0.62	3.6	14	34	65	1.4	0.00	0.98
5	3.0	2.9	1.4	e5.0	0.74	3.9	11	36	57	1.0	0.00	1.3
6	2.7	2.9	1.0	e6.0	0.76	3.7	9.0	33	49	0.79	0.00	0.95
7	2.6	2.9	0.44	6.3	1.0	4.1	8.5	28	37	0.61	0.00	0.99
8	2.5	3.1	0.47	6.0	1.3	4.2	6.4	27	30	0.44	0.00	0.76
9	2.5	5.2	0.56	6.0	1.3	4.4	5.6	24	30	0.27	0.00	382
10	2.6	4.6	0.79	5.9	1.4	4.2	9.1	21	30	0.16	0.00	124
11	2.4	4.1	1.1	5.9	1.4	3.3	14	18	23	0.05	0.00	22
12	2.2	3.8	1.3	5.9	1.0	3.1	23	16	28	0.01	0.00	31
13	2.2	3.6	1.8	5.4	2.1	3.1	24	19	25	0.00	0.00	20
14	2.4	3.6	2.0	5.3	2.4	4.1	21	24	20	0.00	0.00	18
15	2.4	3.6	2.2	5.4	1.2	4.1	30	41	16	0.00	0.00	15
16	2.5	3.3	1.9	5.2	4.2	3.1	36	52	15	0.00	0.00	17
17	2.5	3.5	3.2	5.1	4.2	7.5	24	55	13	0.00	0.00	15
18	2.6	3.4	4.6	4.9	4.3	6.6	26	64	14	0.00	0.00	10
19	2.6	3.4	e2.8	5.0	3.9	4.5	26	e70	17	0.00	0.00	9.4
20	2.6	3.6	3.1	5.1	3.6	3.6	18	e85	19	0.00	0.00	7.6
21	2.6	3.6	5.0	5.2	3.4	3.5	18	e105	16	0.00	0.00	6.0
22	2.6	3.6	e3.0	5.0	3.1	4.2	20	e130	12	0.00	0.00	5.0
23	2.8	3.9	e3.5	5.0	3.0	4.7	21	e105	8.9	0.00	0.00	4.2
24	2.9	3.9	e3.0	5.0	3.2	5.1	22	59	6.0	0.00	5.3	3.5
25	2.8	3.9	e2.5	5.0	3.8	6.1	e25	54	5.0	0.00	14	2.5
26	2.9	3.8	e2.0	5.0	4.6	7.0	e30	82	6.0	0.00	1.5	2.1
27	3.5	3.7	e2.0	5.1	4.1	7.1	e35	66	6.0	0.00	3.3	3.0
28	3.0	3.7	e3.0	4.4	4.0	6.2	43	74	4.3	0.00	5.2	3.2
29	3.0	4.1	e4.0	2.0	---	6.4	46	84	4.2	0.00	2.3	3.2
30	2.9	3.7	e4.0	1.8	---	5.8	47	94	4.4	0.00	2.6	3.1
31	3.1	---	e4.0	1.6	---	5.5	---	133	---	0.00	4.3	---
TOTAL	84.6	107.2	75.56	151.0	66.65	146.2	637.9	1,759	799.8	10.20	41.84	715.38
MEAN	2.73	3.57	2.44	4.87	2.38	4.72	21.3	56.7	26.7	0.33	1.35	23.8
MAX	3.5	5.2	5.0	6.3	4.6	7.5	47	133	95	3.4	14	382
MIN	2.2	2.9	0.44	1.6	0.62	3.1	5.3	16	4.2	0.00	0.00	0.76
AC-FT	168	213	150	300	132	290	1,270	3,490	1,590	20	83	1,420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2003, BY WATER YEAR (WY)

MEAN	13.4	11.8	12.1	11.8	16.7	36.7	103	107	65.4	19.5	12.0	11.4
MAX	260	99.2	53.9	38.3	53.9	139	364	506	306	99.4	65.1	126
(WY)	(1942)	(1942)	(1987)	(1942)	(1924)	(1997)	(1980)	(1941)	(1957)	(1957)	(1957)	(1927)
MIN	0.097	0.98	1.24	0.80	2.38	0.63	3.06	5.32	1.94	0.019	0.006	0.000
(WY)	(1935)	(1940)	(1978)	(1930)	(2003)	(1977)	(1977)	(1977)	(1924)	(1922)	(1922)	(1956)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1921 - 2003

ANNUAL TOTAL	1,581.83	4,595.33	
ANNUAL MEAN	4.33	12.6	35.0
HIGHEST ANNUAL MEAN			109
LOWEST ANNUAL MEAN			4.44
HIGHEST DAILY MEAN	17	Apr 8	382
LOWEST DAILY MEAN	0.00	Mar 29	0.00
ANNUAL SEVEN-DAY MINIMUM	0.16	Mar 24	0.00
MAXIMUM PEAK FLOW			1,380
MAXIMUM PEAK STAGE			8.67
ANNUAL RUNOFF (AC-FT)	3,140	9,110	25,380
10 PERCENT EXCEEDS	8.8	33	84
50 PERCENT EXCEEDS	3.0	3.8	12
90 PERCENT EXCEEDS	1.1	0.00	1.7

e Estimated.

a No flow at times in many years.

b From rating curve extended above 750 ft³/s, on basis of slope-area measurement of peak flow, at datum then in use.

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft upstream from bridge on U.S. Highway 666, 2.0 mi north of Colorado-New Mexico State line, 6.0 mi upstream from Aztec Creek, and 12 mi south of Towaoc.

DRAINAGE AREA.--526 mi².

PERIOD OF RECORD.--October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Sediment data available, April to December 1961. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09371000

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only). WDR CO-83-3: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,055.98 ft above NGVD of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Records fair except those for Mar. 14-26, Apr. 12-14 and estimated daily discharges, which are poor. Diversions for irrigation of about 10,000 acres upstream from station. One diversion upstream from station for irrigation of about 100 acres downstream from station. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft since March 1949. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.87	0.00	0.00	e1.4	4.7	e6.3	5.7	1.9	0.00	0.00	23
2	2.4	1.3	0.00	0.00	e1.4	e4.3	7.2	3.5	3.5	0.00	0.00	14
3	5.5	0.92	0.04	0.00	e1.2	e3.9	e13	3.7	2.4	0.00	45	9.3
4	12	0.78	e0.14	0.00	0.76	e4.5	e15	2.9	2.0	0.00	9.4	5.2
5	2.1	0.50	0.11	0.00	0.28	e5.3	10	2.9	1.4	0.00	1.7	6.1
6	0.58	0.47	0.03	0.00	0.06	e5.4	8.5	4.0	0.44	0.00	0.29	3.2
7	0.15	0.18	0.00	0.00	0.01	e3.7	e7.7	3.5	0.15	0.00	0.00	2.8
8	0.02	0.13	0.00	0.09	e0.34	e3.4	e6.9	2.1	0.04	0.00	0.00	20
9	0.00	4.6	e0.09	e0.83	e0.37	e4.4	e5.8	0.91	0.00	0.00	0.00	649
10	0.00	12	e0.06	e1.0	0.19	e6.1	5.6	0.36	0.00	0.00	0.00	1,810
11	0.00	8.5	0.02	e0.94	e0.14	e11	5.7	0.19	0.00	0.00	0.00	83
12	0.00	3.6	0.00	e0.63	0.00	23	17	0.05	0.00	0.00	6.5	33
13	0.00	2.3	0.00	e0.63	1.3	40	44	0.02	0.00	0.00	2.1	19
14	0.00	1.8	0.00	e0.72	18	43	33	0.05	0.00	0.00	0.17	14
15	0.00	1.3	0.00	e0.82	14	32	40	0.00	0.00	0.00	48	10
16	0.00	1.00	0.00	e0.84	6.7	26	33	0.91	0.00	0.00	6.9	7.1
17	0.00	0.32	0.00	e0.64	4.7	34	19	5.8	0.00	0.00	16	5.4
18	0.00	0.23	0.22	e0.70	4.2	41	13	3.1	0.00	0.00	2.1	6.4
19	0.00	0.03	0.02	e0.70	3.9	27	15	4.5	0.00	0.00	1.2	9.4
20	0.00	0.07	0.00	0.44	4.7	22	7.9	1.7	0.00	0.00	0.59	10
21	0.00	e0.11	0.00	e0.95	e3.5	27	5.8	0.94	0.00	0.00	0.17	9.1
22	1.3	e0.16	0.00	e1.3	e3.4	28	3.6	0.67	0.00	0.00	3.6	7.8
23	0.54	e0.17	0.00	e1.6	e3.3	31	1.8	0.58	0.00	0.00	19	7.0
24	0.00	e0.19	0.00	e1.6	e3.4	32	1.2	0.68	0.00	0.00	61	5.2
25	0.42	e0.14	0.00	e1.5	e3.9	23	1.0	2.6	0.00	0.00	4.3	4.2
26	1.3	0.15	0.00	e1.5	5.0	17	0.89	1.8	0.00	0.00	13	3.1
27	15	0.06	0.00	1.6	6.2	e15	1.4	1.1	0.00	0.00	0.99	2.4
28	9.0	0.00	0.00	e1.4	6.4	e11	21	0.61	0.00	0.00	2.0	1.5
29	8.5	0.00	0.00	e1.4	---	e9.4	32	0.16	0.00	0.00	15	0.98
30	1.3	e0.13	0.00	e1.4	---	e3.7	27	0.02	0.00	0.00	43	0.50
31	0.49	---	0.00	e1.4	---	e3.7	---	0.17	---	0.00	38	---
TOTAL	60.60	42.01	0.73	24.63	98.75	545.5	409.29	55.22	11.83	0.00	340.01	2,781.68
MEAN	1.95	1.40	0.024	0.79	3.53	17.6	13.6	1.78	0.39	0.000	11.0	92.7
MAX	15	12	0.22	1.6	18	43	44	5.8	3.5	0.00	61	1,810
MIN	0.00	0.00	0.00	0.00	0.00	3.4	0.89	0.00	0.00	0.00	0.00	0.50
AC-FT	120	83	1.4	49	196	1,080	812	110	23	0.00	674	5,520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2003, BY WATER YEAR (WY)

	26.6	19.4	14.0	13.2	24.8	56.9	121	172	81.9	28.5	28.3	27.0
MEAN	26.6	19.4	14.0	13.2	24.8	56.9	121	172	81.9	28.5	28.3	27.0
MAX	459	113	45.5	45.6	92.1	198	330	642	395	185	364	137
(WY)	(1942)	(1987)	(1942)	(1942)	(1993)	(1993)	(1980)	(1922)	(1957)	(1921)	(1921)	(1970)
MIN	0.11	1.00	0.024	0.31	3.53	5.26	0.15	0.000	0.000	0.000	0.000	0.000
(WY)	(1978)	(1935)	(2003)	(1960)	(2003)	(1977)	(1977)	(1959)	(1951)	(1939)	(1922)	(1922)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1921 - 2003

ANNUAL TOTAL	1,223.98	4,370.25	
ANNUAL MEAN	3.35	12.0	50.4
HIGHEST ANNUAL MEAN			138 1973
LOWEST ANNUAL MEAN			4.28 1959
HIGHEST DAILY MEAN	60 Sep 11	1,810 Sep 10	3,050 Oct 14, 1941
LOWEST DAILY MEAN	0.00 May 2	0.00 Oct 1	a0.00 Jul 12, 1922
ANNUAL SEVEN-DAY MINIMUM	0.00 May 2	0.00 Oct 9	0.00 Jul 12, 1922
MAXIMUM PEAK FLOW		b3,530 Sep 10	e5,300 Oct 14, 1941
MAXIMUM PEAK STAGE		d9.09 Sep 10	f7.30 Oct 14, 1941
ANNUAL RUNOFF (AC-FT)	2,430	8,670	36,510
10 PERCENT EXCEEDS	10	17	138
50 PERCENT EXCEEDS	0.05	0.91	15
90 PERCENT EXCEEDS	0.00	0.00	0.04

e Estimated.

a No flow at times in most years.

b Based on slope-area measurement of peak flow.

c Present site and datum, from rating curve extended above 200 ft³/s, on basis of slope-area measurement of peak flow.

d From floodmarks.

f Maximum gage height, 9.09 ft, Sept. 10, 2003.

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO

LOCATION.--Lat 37°18'46", long 108°39'38", in SW¹/₄SW¹/₄ sec.6, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 1 mi upstream from mouth and 4.5 mi southwest of Cortez.

DRAINAGE AREA.--33.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to September 1986, August 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=09371492

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,765 ft above NGVD of 1929, from topographic map. Prior to Aug. 25, 1993, gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges and discharges above 40 ft³/s, which are poor. Some small diversions upstream from station for irrigation. Most of flow is from diversion of water from Dolores River through Dolores Project and Montezuma Valley Irrigation Company.

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	0.83	0.81	1.1	1.1	e0.95	2.1	0.92	0.65	9.8	12	12	21
2	1.4	0.81	1.0	0.91	1.0	2.0	0.90	0.67	11	13	17	20
3	3.3	0.70	1.0	0.93	e1.0	1.8	0.88	0.71	11	13	16	19
4	1.5	0.77	0.92	0.97	e0.99	1.6	0.84	0.77	11	12	14	20
5	0.95	0.76	0.81	1.1	e0.95	1.6	0.88	0.84	11	11	12	20
6	0.79	0.70	0.81	1.1	e0.90	1.6	0.92	0.83	9.4	11	10	22
7	0.74	0.75	0.89	1.2	0.85	1.5	0.89	1.1	9.5	11	11	21
8	0.75	0.85	0.82	e1.1	e0.88	1.8	0.73	2.7	11	11	11	21
9	0.67	1.8	0.84	1.0	0.75	1.6	0.75	4.5	10	11	9.6	64
10	0.68	1.9	0.93	1.1	0.61	1.4	0.79	4.0	9.8	11	8.7	77
11	0.70	1.4	0.87	e1.1	0.59	1.4	0.83	4.5	11	10	7.7	22
12	0.83	1.1	0.87	e1.0	0.67	1.4	0.81	4.7	10	10	9.3	8.6
13	0.82	1.2	e0.90	e1.0	3.2	1.2	0.78	4.7	11	9.1	12	22
14	0.73	1.0	e0.92	e1.0	8.0	1.0	0.75	7.6	15	9.5	10	21
15	0.66	0.87	0.95	e0.98	1.6	1.2	0.81	7.0	12	8.4	20	19
16	0.66	0.74	1.3	e0.97	1.1	1.9	0.81	7.0	12	9.8	22	17
17	0.67	0.77	1.5	e0.95	1.1	4.6	0.79	8.1	12	11	22	14
18	0.70	0.77	e1.8	e0.96	1.6	3.3	0.80	8.9	12	11	22	8.7
19	0.69	0.74	e1.3	e0.97	1.5	1.8	0.82	9.0	14	11	21	7.8
20	0.62	0.77	e0.98	e0.97	1.2	1.4	0.79	6.6	15	9.6	18	8.9
21	0.66	0.76	0.87	e0.94	1.0	1.7	0.71	6.2	14	10	16	9.4
22	0.69	0.80	e0.88	e0.93	0.82	1.3	0.77	6.4	13	17	16	10
23	0.95	0.81	0.81	e0.93	0.78	1.2	0.75	6.8	13	13	17	10
24	0.88	0.81	0.90	e0.93	0.99	1.3	0.75	6.5	13	11	21	10
25	0.81	0.81	0.88	e0.94	1.4	1.2	0.70	8.4	12	11	23	10
26	1.1	0.75	0.90	e0.94	2.5	1.3	0.69	8.0	14	11	21	11
27	2.0	0.69	e0.88	e0.95	2.3	1.2	0.68	7.3	13	9.9	20	10
28	1.0	0.69	0.84	e0.95	e2.2	1.5	0.72	7.7	20	11	20	12
29	1.2	0.73	1.1	e0.95	---	1.3	0.72	8.7	13	13	21	13
30	1.0	0.85	1.2	e0.94	---	0.74	0.68	8.6	12	12	21	13
31	0.87	---	1.00	e0.95	---	0.83	---	9.1	---	11	22	---
TOTAL	29.85	26.91	30.77	30.76	41.43	49.77	23.66	168.57	364.5	345.3	503.3	562.4
MEAN	0.96	0.90	0.99	0.99	1.48	1.61	0.79	5.44	12.2	11.1	16.2	18.7
MAX	3.3	1.9	1.8	1.2	8.0	4.6	0.92	9.1	20	17	23	77
MIN	0.62	0.69	0.81	0.91	0.59	0.74	0.68	0.65	9.4	8.4	7.7	7.8
AC-FT	59	53	61	61	82	99	47	334	723	685	998	1,120

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

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	7.95	2.88	2.40	2.06	2.63	3.00	2.68	9.42	13.5	14.5	15.1	13.1											
MAX	17.5	5.94	6.00	3.86	7.99	10.3	5.60	13.1	18.1	18.0	21.5	20.1											
(WY)	(1994)	(1994)	(1985)	(1997)	(1983)	(1983)	(1994)	(1982)	(1985)	(1986)	(1983)	(2001)											
MIN	0.96	0.78	0.47	0.85	1.07	1.11	0.79	5.44	6.83	9.95	4.04	1.12											
(WY)	(2003)	(2000)	(2000)	(2000)	(2002)	(1998)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)											

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1982 - 2003

ANNUAL TOTAL	1,106.97	2,177.22	
ANNUAL MEAN	3.03	5.96	7.49
HIGHEST ANNUAL MEAN			9.47 1985
LOWEST ANNUAL MEAN			3.80 2002
HIGHEST DAILY MEAN	17 Aug 2	77 Sep 10	77 Sep 10, 2003
LOWEST DAILY MEAN	0.27 Aug 28	0.59 Feb 11	0.27 Aug 28, 2002
ANNUAL SEVEN-DAY MINIMUM	0.59 Aug 31	0.67 Oct 15	0.41 Dec 15, 1999
MAXIMUM PEAK FLOW		274 Sep 9	a598 Aug 24, 1982
MAXIMUM PEAK STAGE		5.68 Sep 9	8.53 Aug 24, 1982
ANNUAL RUNOFF (AC-FT)	2,200	4,320	5,430
10 PERCENT EXCEEDS	9.8	15	16
50 PERCENT EXCEEDS	1.1	1.4	4.5
90 PERCENT EXCEEDS	0.75	0.75	1.0

e Estimated.

a From rating curve extended above 26 ft³/s, on basis of slope-area measurement of peak flow.

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 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=09371492

PERIOD OF DAILY RECORD.

SPECIFIC CONDUCTANCE: September 1993 to current year.

WATER TEMPERATURE: September 1993 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1993.

REMARKS.--Daily records of specific conductance are good except June 16-25, July 7-12, Aug. 25 to Sep. 1, Sep. 16, 17 which are fair, July 13-24 and Sept. 1-4, 18-25, which are poor. Daily records of water temperature are good. Daily data that are not published are due to probes being isolated by ice and severe fouling.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 12,000 microsiemens/cm, Apr. 25, 1999; minimum, 580 microsiemens/cm, Sept. 10, 2002.

WATER TEMPERATURE: Maximum, 26.3°C, July 25, 2003; minimum, -0.6°C, Nov. 7, 2002, Jan. 12, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 11,900 microsiemens/cm, Mar. 6; minimum, 699 microsiemens/cm, Sept. 9.

WATER TEMPERATURE: Maximum, 26.3°C, July 25; minimum, -0.6°C, Nov. 7, Jan. 12.

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

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfiltered 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, water flt fxd end lab, mg/L as CaCO3 (29801)	Chloride, water, fltrd, mg/L (00940)
OCT 29...	1130	1.2	8.3	5,160	5.5	2,400	395	335	8.05	5	544	340	89.1
DEC 18...	1300	1.4	8.4	5,440	0.9	2,400	348	363	7.52	6	665	E312	92.8
FEB 06...	1530	0.69	8.3	5,380	-0.2	2,600	420	370	9.29	5	596	391	80.8
APR 09...	1600	0.83	8.2	5,760	12.6	2,700	414	395	8.00	6	687	325	90.2
APR 30...	1030	0.70	8.2	5,860	7.5	2,600	402	388	9.12	6	695	366	96.4
MAY 22...	1530	6.3	8.2	2,290	21.2	1,100	250	127	8.40	2	159	238	33.0
JUN 25...	1515	12	8.3	1,630	19.7	840	207	78.2	4.87	1	69.5	201	17.4
JUL 24...	1500	11	8.2	1,600	24.7	830	212	73.0	5.33	0.9	62.8	199	17.8
SEP 04...	1615	20	8.3	1,560	19.7	740	192	64.1	4.61	0.9	53.3	195	17.1

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

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/acre-ft (70303)	Residue water, fltrd, tons/d (70302)
OCT 29...	0.48	8.6	2,900	4,490	6.10	14.5
DEC 18...	0.45	8.8	3,130	--	--	--
FEB 06...	0.57	9.4	2,990	4,710	6.40	8.77
APR 09...	0.49	4.2	3,340	5,140	6.99	11.5
APR 30...	0.47	3.2	3,460	5,270	7.17	9.96
MAY 22...	0.4	11.1	1,130	1,860	2.53	31.8
JUN 25...	0.3	8.2	696	1,200	1.63	37.6
JUL 24...	0.4	10.8	673	1,170	1.60	34.3
SEP 04...	0.4	11.2	651	1,110	1.51	60.6

E -- Estimated laboratory analysis value.

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, 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	4,700	4,530	4,610	---	---	---	---	---	---	---	---	---
2	5,300	3,300	4,360	---	---	---	---	---	---	---	---	---
3	6,740	3,600	4,480	---	---	---	---	---	---	---	---	---
4	4,380	3,980	4,190	---	---	---	---	---	---	---	---	---
5	4,920	4,220	4,620	---	---	---	---	---	---	---	---	---
6	5,010	4,880	4,950	---	---	---	---	---	---	---	---	---
7	5,050	4,860	4,980	---	---	---	---	---	---	---	---	---
8	5,030	4,870	4,950	---	---	---	---	---	---	---	---	---
9	5,120	4,880	5,050	10,500	4,630	6,930	---	---	---	---	---	---
10	5,480	4,950	5,100	10,500	5,120	6,340	---	---	---	---	---	---
11	5,090	4,980	5,030	7,920	5,020	5,560	---	---	---	9,150	5,220	5,770
12	5,080	4,600	4,820	7,880	---	---	---	---	---	9,820	5,360	7,240
13	4,660	4,570	4,610	---	4,620	---	---	---	---	6,050	4,960	5,380
14	5,120	4,570	4,810	---	---	---	---	---	---	5,870	4,880	5,230
15	5,320	5,120	5,200	---	---	---	---	---	---	5,640	4,930	5,190
16	5,300	5,220	5,260	---	---	---	---	---	---	5,950	4,980	5,240
17	5,330	5,230	5,280	---	---	---	---	---	---	5,910	4,930	5,270
18	5,270	5,190	5,230	---	---	---	---	---	---	6,020	4,560	5,180
19	5,270	5,180	5,230	---	---	---	6,420	5,150	5,590	5,760	4,240	5,020
20	5,300	5,110	5,230	---	---	---	5,720	5,300	5,550	5,690	4,070	4,900
21	5,760	5,210	5,340	---	---	---	5,380	5,000	5,200	5,520	4,520	5,020
22	5,290	5,180	5,230	---	---	---	5,350	5,040	5,250	5,680	4,660	5,080
23	5,450	4,980	5,170	---	---	---	---	---	---	5,790	4,820	5,130
24	5,120	4,960	5,060	---	---	---	---	---	---	5,780	4,800	5,110
25	5,120	4,910	5,030	---	---	---	---	---	---	5,770	4,920	5,130
26	5,130	4,730	4,990	---	---	---	---	---	---	5,810	4,890	5,220
27	6,480	4,650	5,360	---	---	---	---	---	---	5,790	4,800	5,190
28	5,120	4,650	4,940	---	---	---	---	---	---	5,720	4,860	5,170
29	6,890	4,980	5,390	---	---	---	---	---	---	5,720	4,890	5,160
30	---	---	---	---	---	---	---	---	---	5,720	4,850	5,190
31	---	---	---	---	---	---	---	---	---	5,780	4,850	5,120
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	5,630	4,870	5,140	10,700	6,220	7,930	5,700	5,570	5,630	5,930	5,640	5,800
2	5,270	5,140	5,200	11,600	6,140	8,200	5,740	5,620	5,670	5,700	5,280	5,550
3	5,710	5,010	5,230	7,880	6,140	6,820	5,840	5,640	5,720	6,850	5,600	6,180
4	5,760	4,920	5,350	8,510	6,310	7,630	5,750	5,500	5,660	6,820	6,100	6,300
5	5,950	5,080	5,430	10,800	6,410	7,120	5,850	5,620	5,710	6,130	5,810	5,940
6	5,640	4,920	5,310	11,900	6,600	8,940	5,800	5,460	5,550	6,010	5,280	5,550
7	5,820	5,050	5,380	7,420	6,290	6,780	5,690	5,480	5,600	6,010	5,250	5,730
8	---	---	---	7,660	6,070	6,660	5,750	5,560	5,670	5,250	2,480	4,010
9	---	---	---	6,110	5,300	5,600	5,910	5,660	5,760	2,480	2,190	2,280
10	---	---	---	5,830	5,300	5,500	5,930	5,750	5,860	2,190	1,920	2,090
11	---	---	---	5,530	5,270	5,370	6,080	5,760	5,890	1,980	1,810	1,900
12	---	---	---	5,420	5,230	5,310	5,900	5,750	5,830	1,850	1,600	1,770
13	---	---	---	5,500	5,280	5,400	5,860	5,690	5,800	1,600	1,480	1,530
14	---	---	---	5,570	5,450	5,500	5,930	5,750	5,850	---	---	---
15	6,200	4,870	5,360	5,610	5,460	5,540	5,900	5,730	5,820	---	---	---
16	5,660	5,200	5,380	9,960	5,320	6,330	5,810	5,630	5,720	---	---	---
17	5,400	5,250	5,330	10,700	6,560	7,740	5,860	5,700	5,770	---	---	---
18	9,950	5,060	6,190	6,660	6,010	6,300	5,870	5,730	5,810	---	---	---
19	9,220	5,400	6,410	6,300	5,760	5,890	5,950	5,650	5,770	---	---	---
20	5,470	5,300	5,400	5,790	5,320	5,640	5,980	5,560	5,690	---	---	---
21	5,680	5,320	5,480	7,050	5,410	6,370	5,910	5,700	5,790	---	---	---
22	6,020	5,570	5,720	6,450	5,780	5,990	5,870	5,730	5,790	---	---	---
23	6,140	5,670	5,840	5,860	5,600	5,720	5,860	5,690	5,770	---	---	---
24	5,930	5,050	5,460	5,780	5,040	5,360	5,780	5,620	5,710	---	---	---
25	8,010	4,540	5,090	5,160	4,960	5,080	5,780	5,620	5,710	---	---	---
26	11,800	8,010	9,580	5,190	4,800	4,910	5,780	5,630	5,720	---	---	---
27	9,670	6,850	8,390	5,040	4,900	4,960	5,850	5,690	5,770	---	---	---
28	10,700	6,380	8,360	5,310	3,890	4,190	5,920	5,620	5,780	---	---	---
29	---	---	---	4,400	3,720	3,900	5,700	5,220	5,500	---	---	---
30	---	---	---	5,620	4,400	5,330	6,020	5,690	5,850	---	---	---
31	---	---	---	5,710	5,570	5,640	---	---	---	2,020	1,870	1,940
MONTH	---	---	---	11,900	3,720	6,050	6,080	5,220	5,740	---	---	---

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO—Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1,960	1,750	1,910	1,460	1,370	1,420	1,470	1,370	1,410	1,590	1,540	1,570
2	1,780	1,710	1,750	1,500	1,380	1,440	1,410	1,190	1,360	1,630	1,560	1,590
3	1,980	1,690	1,850	1,470	1,380	1,420	1,350	1,300	1,330	1,610	1,570	1,590
4	1,870	1,710	1,810	1,440	1,370	1,410	1,330	1,280	1,300	1,590	1,540	1,560
5	1,850	1,690	1,770	1,400	1,360	1,380	1,360	1,280	1,330	1,590	1,540	1,570
6	1,860	1,780	1,810	1,550	1,370	1,470	1,390	1,350	1,380	1,930	1,360	1,560
7	1,830	1,740	1,780	1,510	1,400	1,460	1,390	1,340	1,360	1,600	1,550	1,570
8	1,840	1,610	1,760	1,570	1,400	1,510	1,590	1,380	1,460	1,600	1,530	1,570
9	1,740	1,580	1,660	1,550	1,450	1,510	1,530	1,410	1,500	2,110	699	1,580
10	1,760	1,670	1,730	1,450	1,420	1,440	1,420	1,310	1,370	2,140	1,450	1,930
11	1,730	1,660	1,700	1,520	1,440	1,450	1,410	1,300	1,350	2,130	1,800	2,020
12	1,820	1,680	1,760	1,450	1,410	1,430	1,940	1,390	1,510	1,810	1,640	1,740
13	1,840	1,620	1,720	1,640	1,410	1,460	1,520	1,450	1,480	1,700	1,630	1,670
14	1,740	1,440	1,550	1,880	1,530	1,660	1,540	1,480	1,510	2,020	1,650	1,900
15	1,560	1,460	1,530	1,560	1,520	1,540	1,640	1,140	1,500	1,960	1,790	1,870
16	1,620	1,490	1,550	1,550	1,490	1,530	1,560	1,440	1,480	1,960	1,840	1,920
17	1,760	1,620	1,700	1,520	1,490	1,510	1,470	1,360	1,450	1,960	1,890	1,920
18	1,710	1,600	1,670	1,510	1,470	1,490	1,540	1,430	1,490	1,910	1,800	1,840
19	1,680	1,580	1,620	1,640	1,500	1,540	1,530	1,480	1,500	1,890	1,800	1,840
20	1,650	1,570	1,600	1,680	1,580	1,620	1,650	1,500	1,580	1,890	1,810	1,850
21	1,700	1,550	1,620	1,610	1,560	1,590	1,670	1,600	1,630	1,810	1,780	1,790
22	1,630	1,550	1,590	1,880	1,500	1,680	1,700	1,580	1,650	1,790	1,760	1,770
23	1,630	1,550	1,590	1,600	1,540	1,570	1,640	1,540	1,590	1,790	1,750	1,770
24	1,650	1,540	1,600	1,630	1,540	1,590	1,600	1,430	1,570	1,800	1,770	1,780
25	1,640	1,470	1,590	1,550	1,480	1,510	1,660	1,420	1,520	1,810	1,780	1,790
26	1,540	1,470	1,500	1,550	1,440	1,490	1,660	1,550	1,630	---	---	---
27	1,620	1,530	1,580	1,550	1,410	1,510	1,670	1,620	1,650	---	---	---
28	1,600	1,040	1,320	1,440	1,380	1,410	1,700	1,400	1,670	---	---	---
29	1,520	1,060	1,350	1,420	1,380	1,400	1,750	1,400	1,650	---	---	---
30	1,470	1,400	1,440	1,460	1,380	1,400	1,620	1,560	1,600	---	---	---
31	---	---	---	1,560	1,420	1,520	1,590	1,560	1,570	---	---	---
MONTH	1,980	1,040	1,650	1,880	1,360	1,500	1,940	1,140	1,500	---	---	---

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.4	7.3	9.8	7.3	3.6	5.6	---	---	---	---	---	---
2	11.7	10.2	10.9	7.8	4.7	6.3	---	---	---	---	---	---
3	11.2	7.8	8.9	4.7	1.6	3.2	---	---	---	---	---	---
4	10.3	5.5	7.9	5.5	2.1	3.6	---	---	---	---	---	---
5	11.3	6.9	9.1	4.1	0.7	2.5	---	---	---	---	---	---
6	11.3	6.5	9.0	3.8	-0.3	1.7	---	---	---	---	---	---
7	11.6	6.7	9.1	3.9	-0.6	1.9	---	---	---	---	---	---
8	11.6	6.8	9.2	5.2	3.7	4.4	---	---	---	---	---	---
9	11.1	6.4	8.8	7.7	5.2	6.4	---	---	---	0.6	-0.4	0.1
10	10.9	5.8	8.4	6.4	4.1	4.9	---	---	---	1.2	0.3	0.6
11	10.8	6.5	8.7	5.3	3.0	4.1	---	---	---	1.3	-0.1	0.4
12	10.8	7.0	8.9	3.8	1.1	2.5	---	---	---	0.9	-0.6	0.0
13	10.8	6.2	8.5	3.7	0.7	2.2	---	---	---	1.0	-0.4	0.1
14	10.3	5.8	8.1	3.9	0.9	2.4	---	---	---	1.4	-0.5	0.2
15	9.6	4.8	7.2	3.5	---	---	---	---	---	1.7	-0.4	0.5
16	8.8	3.6	6.2	---	---	---	---	---	---	1.2	-0.4	0.2
17	8.1	3.6	6.1	---	---	---	---	---	---	0.8	-0.4	-0.1
18	10.3	7.1	8.5	---	---	---	0.8	---	---	0.2	-0.4	-0.3
19	9.3	4.8	7.1	---	---	---	-0.2	-0.4	-0.4	-0.2	-0.4	-0.4
20	8.2	3.6	5.9	---	---	---	-0.3	-0.4	-0.4	-0.3	-0.4	-0.4
21	8.0	3.2	5.7	---	---	---	-0.4	-0.4	-0.4	0.0	-0.4	-0.3
22	9.5	4.9	7.2	---	---	---	-0.3	-0.4	-0.4	1.2	-0.4	0.1
23	9.6	7.2	8.4	---	---	---	---	-0.4	---	1.6	-0.4	0.3
24	9.4	7.2	8.2	---	---	---	---	---	---	2.7	-0.4	0.8
25	8.6	4.9	6.7	---	---	---	---	---	---	1.8	-0.4	0.5
26	7.3	5.2	6.3	---	---	---	---	---	---	1.2	-0.4	0.1
27	7.9	6.0	6.8	---	---	---	---	---	---	1.7	-0.5	0.2
28	6.7	3.5	5.3	---	---	---	---	---	---	2.1	-0.4	0.5
29	6.8	5.2	5.9	---	---	---	---	---	---	1.7	-0.5	0.3
30	6.8	3.8	5.3	---	---	---	---	---	---	1.8	-0.5	0.3
31	7.4	4.4	5.8	---	---	---	---	---	---	3.0	-0.4	0.9
MONTH	11.7	3.2	7.7	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.2	-0.4	1.3	1.8	-0.4	0.6	10.8	3.4	7.0	14.1	4.3	9.2
2	3.0	0.7	1.8	1.6	-0.5	0.1	7.4	4.0	5.9	16.3	6.8	11.2
3	2.4	-0.4	1.0	3.1	-0.4	0.9	6.9	3.1	5.0	16.3	8.5	12.0
4	-0.1	-0.4	-0.3	2.6	0.5	1.6	9.2	1.3	5.2	12.9	8.3	10.3
5	-0.1	-0.4	-0.3	4.8	0.1	2.2	8.0	2.2	5.3	13.5	5.6	9.2
6	-0.2	-0.4	-0.3	4.8	-0.5	2.0	8.9	3.1	5.8	14.1	5.2	9.5
7	-0.2	-0.4	-0.3	6.1	0.2	3.0	9.9	3.2	6.3	14.7	6.5	10.3
8	---	---	---	6.9	0.6	3.7	10.4	1.1	5.8	13.2	7.7	10.0
9	---	---	---	7.5	0.8	4.0	12.8	2.2	7.1	13.7	7.5	10.2
10	---	---	---	7.9	1.1	4.5	13.3	3.3	8.0	15.8	5.5	10.2
11	---	---	---	8.9	1.8	5.2	14.1	4.0	8.7	17.2	6.4	11.5
12	---	---	---	10.1	3.1	6.4	10.8	4.9	8.0	17.9	7.9	12.6
13	---	---	---	10.0	3.0	6.5	14.3	3.9	8.7	14.9	10.0	12.4
14	1.1	---	---	8.0	3.8	6.0	12.7	5.3	9.1	14.4	9.3	12.2
15	3.4	-0.5	1.1	7.6	3.2	5.5	10.0	6.9	8.6	15.9	11.8	13.4
16	3.6	-0.3	1.4	7.2	5.4	6.2	13.7	3.7	8.2	19.8	10.5	14.9
17	4.7	0.9	2.7	6.5	4.2	5.0	12.5	3.9	8.1	16.4	12.6	14.8
18	5.1	2.1	3.4	7.9	3.5	5.6	9.6	6.1	7.8	17.1	13.1	14.8
19	4.3	0.4	2.4	8.0	3.6	5.8	10.2	4.7	7.2	18.3	11.9	15.1
20	4.7	0.8	2.6	6.9	3.5	5.3	14.0	3.1	8.2	20.4	12.5	16.3
21	5.0	0.1	2.3	9.1	3.9	6.3	12.7	6.7	9.6	21.6	12.9	17.1
22	4.1	-0.3	1.6	10.3	3.1	6.5	11.6	8.1	9.7	21.7	13.0	17.2
23	3.1	-0.3	0.8	11.1	3.6	7.2	11.0	5.1	7.8	20.7	13.7	17.1
24	4.0	-0.3	1.5	9.9	4.1	7.1	15.5	5.4	9.9	21.2	13.6	17.4
25	3.3	0.9	2.3	11.6	4.5	7.8	15.9	5.4	10.5	22.4	15.5	18.2
26	4.3	1.4	2.6	8.4	4.1	6.4	16.8	7.2	11.6	22.5	14.6	18.4
27	2.5	0.9	1.6	8.3	4.2	6.0	15.9	6.6	11.1	23.3	16.3	19.7
28	1.8	0.2	0.8	5.3	1.2	3.6	16.2	7.1	11.6	24.6	16.7	20.6
29	---	---	---	7.6	0.2	3.9	12.5	7.2	10.4	24.1	17.8	20.9
30	---	---	---	9.5	1.2	5.3	14.6	6.1	10.1	24.2	17.0	20.5
31	---	---	---	11.5	2.7	6.9	---	---	---	23.0	18.0	20.3
MONTH	---	---	---	11.6	-0.5	4.7	16.8	1.1	8.2	24.6	4.3	14.4

SAN JUAN RIVER BASIN

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO—Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.6	17.1	19.3	23.2	16.9	20.1	23.2	20.1	21.5	19.6	15.8	18.1
2	22.2	15.7	19.0	23.0	16.9	20.1	23.4	20.2	21.8	20.2	16.7	18.7
3	22.2	16.5	19.3	23.0	17.0	20.1	23.6	20.1	21.8	19.8	18.0	18.9
4	21.4	15.2	18.4	23.3	16.4	19.9	23.9	18.8	21.4	20.0	17.8	18.9
5	20.8	14.8	17.9	23.3	16.8	20.2	23.8	18.2	21.1	19.5	17.4	18.5
6	19.9	13.6	16.9	23.5	17.8	20.5	23.5	18.1	20.8	18.8	16.6	17.4
7	19.2	13.1	16.3	23.2	16.6	20.0	23.7	19.6	21.5	18.6	15.0	16.7
8	20.7	13.4	17.0	23.3	16.3	19.9	23.9	19.4	21.7	17.9	15.3	16.8
9	20.4	15.0	17.9	23.5	16.6	20.1	24.6	20.2	22.3	17.5	12.0	15.2
10	21.5	15.8	18.6	23.5	16.2	19.9	23.9	19.1	21.5	15.4	11.9	13.5
11	21.1	14.7	18.0	23.9	16.5	20.2	23.9	19.3	21.6	16.3	12.9	14.6
12	20.3	14.3	17.5	24.1	17.2	20.6	23.9	19.9	22.0	17.6	12.5	14.8
13	20.9	15.0	18.0	24.3	17.0	20.6	23.7	20.1	21.9	16.6	13.7	15.2
14	20.0	15.1	17.8	24.5	17.4	20.9	22.7	18.9	20.8	15.3	12.1	14.1
15	22.2	15.8	19.1	25.6	19.3	22.2	21.5	18.9	20.2	15.8	12.3	14.2
16	22.6	17.5	19.9	24.0	20.3	21.9	21.3	18.5	19.8	16.5	12.8	14.7
17	21.0	17.6	19.3	25.0	18.9	21.8	20.6	17.2	19.1	16.7	13.7	15.2
18	21.3	16.0	18.5	25.7	19.9	22.7	20.6	17.8	19.3	15.7	11.7	13.7
19	21.2	17.2	19.1	25.7	20.4	23.0	21.9	18.2	20.3	15.6	10.6	13.0
20	19.3	16.5	18.0	25.5	20.3	22.7	22.8	18.8	21.0	16.0	11.5	13.6
21	19.9	14.3	17.2	24.6	20.4	22.3	22.3	18.7	20.7	15.5	11.1	13.3
22	20.6	14.9	17.8	24.2	18.7	21.6	22.7	19.3	20.8	15.4	10.9	13.1
23	20.3	15.0	17.7	23.5	21.0	22.0	22.5	19.4	21.0	15.8	11.5	13.6
24	19.9	15.3	17.5	25.5	19.6	22.4	22.3	19.4	21.0	15.4	12.0	13.7
25	20.4	14.1	17.3	26.3	21.0	23.4	21.8	18.9	20.6	16.6	12.3	14.3
26	20.6	14.4	17.6	25.7	21.0	23.1	21.6	18.1	20.2	15.8	11.8	13.9
27	21.5	14.8	18.3	24.7	20.4	22.2	21.4	19.4	20.4	16.1	12.1	14.1
28	20.3	16.3	18.5	23.3	19.2	21.4	21.4	19.2	20.4	16.0	12.2	14.1
29	22.0	15.9	18.9	23.5	20.1	21.8	21.7	18.3	20.1	15.8	12.2	14.1
30	23.0	16.8	19.7	23.8	19.4	21.8	20.4	17.6	18.9	15.8	12.2	14.1
31	---	---	---	24.2	20.5	22.0	20.4	17.2	18.9	---	---	---
MONTH	23.0	13.1	18.2	26.3	16.2	21.3	24.6	17.2	20.8	20.2	10.6	15.1

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°19'36", long 108°42'00", in NE¼NE¼ sec.3, T.35 N., R.17 W., Montezuma County, Hydrologic Unit 14080202, on left bank adjacent to abandoned gravel pit 1.5 mi downstream from Mud Creek, 1.9 mi upstream from Trail Canyon, and 5.5 mi south of Cortez.

DRAINAGE AREA.--234 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 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=09371520

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,690 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those for Oct. 1-4, July 20-24, estimated daily discharges and discharges above 1,000 ft³/s which are poor. A few small diversions upstream from station. Most of flow comes from diversions through the Dolores Project and Montezuma Valley Irrigation Company (water imported from Dolores River Basin).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 9, 1927 at location 1.5 mi upstream was determined to be 5,560 ft³/s, gage height, 5.72 ft, site and datum then in use. Feb. 20, 1993, 890 ft³/s, gage height, 7.57 ft, present datum, on basis of slope-area measurement at site 1 mi upstream.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	9.7	9.0	e13	e10	25	11	7.0	33	33	35	51
2	19	12	13	e13	e11	20	13	7.6	33	30	45	49
3	39	12	11	e12	e10	20	12	12	27	30	44	48
4	18	12	10	e12	e8.6	20	16	9.6	30	27	41	50
5	e17	12	e10	e12	e8.6	20	15	11	30	27	42	46
6	e15	12	e9.8	e12	e8.4	20	14	17	32	27	38	54
7	e13	13	e9.7	e12	e8.4	20	13	26	32	27	32	58
8	e12	15	e9.7	e12	e8.4	25	11	27	28	28	33	58
9	e12	32	e9.7	e12	8.3	29	11	24	32	27	35	167
10	e12	38	e9.6	e12	8.5	31	11	21	27	27	35	976
11	e11	25	e9.6	e12	8.9	30	11	18	26	31	35	174
12	e9.2	19	e9.7	e12	11	30	9.1	16	30	27	38	104
13	e6.7	26	9.6	e12	18	25	9.2	19	37	24	34	67
14	e6.2	28	e10	e11	37	21	9.1	24	42	27	34	47
15	e7.4	25	e11	e11	18	19	11	27	36	25	50	41
16	e7.2	28	11	e10	14	22	11	34	37	26	48	38
17	e11	25	12	e10	13	64	12	29	38	26	52	32
18	e10	23	e14	e9.9	15	67	10	23	31	29	50	18
19	e8.0	9.2	e13	e9.8	19	37	9.9	27	37	29	42	16
20	e8.2	3.2	e13	e9.8	14	26	9.1	25	37	25	34	26
21	e6.2	2.7	e12	e9.7	13	30	8.4	28	27	31	37	28
22	e9.2	2.7	11	e9.7	11	24	8.2	28	27	42	52	30
23	e18	3.1	e12	e9.7	9.7	20	7.9	30	27	33	47	31
24	e13	3.3	e12	e9.7	9.7	18	8.2	30	26	33	65	29
25	e14	3.3	e12	e9.7	12	16	8.2	33	25	26	87	31
26	e19	3.7	11	e9.6	24	16	7.0	35	34	27	60	33
27	e20	5.5	e13	e9.6	27	17	5.6	28	36	29	58	33
28	e18	7.3	e14	e9.6	27	16	4.4	29	44	36	58	32
29	e19	11	e14	e9.6	---	15	7.1	32	31	37	61	32
30	15	14	e13	e9.6	---	13	6.7	37	31	40	61	32
31	12	---	e13	e9.8	---	e12	---	33	---	37	60	---
TOTAL	422.3	435.7	351.4	335.8	391.5	768	300.1	747.2	963	923	1,443	2,431
MEAN	13.6	14.5	11.3	10.8	14.0	24.8	10.0	24.1	32.1	29.8	46.5	81.0
MAX	39	38	14	13	37	67	16	37	44	42	87	976
MIN	6.2	2.7	9.0	9.6	8.3	12	4.4	7.0	25	24	32	16
AC-FT	838	864	697	666	777	1,520	595	1,480	1,910	1,830	2,860	4,820

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

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	76.6	48.8	31.3	31.0	35.2	37.0	28.8	54.6	69.1	78.9	93.3	93.5
MAX	125	89.1	42.9	58.8	62.5	87.4	82.8	83.0	100	108	125	126
(WY)	(1994)	(1999)	(1999)	(1997)	(1994)	(1995)	(1997)	(1998)	(1997)	(1997)	(1995)	(1997)
MIN	13.6	14.5	11.3	10.8	14.0	14.4	5.85	22.7	23.3	29.8	8.86	14.9
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2003)	(2002)	(2002)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1993 - 2003

ANNUAL TOTAL	6,108.6	9,512.0	
ANNUAL MEAN	16.7	26.1	
HIGHEST ANNUAL MEAN			56.4
LOWEST ANNUAL MEAN			78.8
HIGHEST DAILY MEAN	64	Sep 11	976
LOWEST DAILY MEAN	2.7	Nov 21	2.7
ANNUAL SEVEN-DAY MINIMUM	3.1	Nov 20	3.1
MAXIMUM PEAK FLOW			b1,790
MAXIMUM PEAK STAGE			c9.44
ANNUAL RUNOFF (AC-FT)	12,120	18,870	40,850
10 PERCENT EXCEEDS	32	42	108
50 PERCENT EXCEEDS	14	19	43
90 PERCENT EXCEEDS	5.1	9.0	17

e Estimated.

a Also occurred Nov 22, 2002.

b Based on slope area measurement of peak flow.

c From floodmarks.

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1990 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09371520

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1990 to current year.

WATER TEMPERATURES: October 1990 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1990.

REMARKS.--Daily water temperature data are good. Daily specific conductance data are good except Oct. 1-9, Jan. 29 to Feb. 14, Apr. 28 to May 6, June 4-10 and July 7-17, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 4,970 microsiemens/cm, Apr. 25, 2002; minimum, 947 microsiemens/cm, June 20, 2000.

WATER TEMPERATURE: Maximum, 28.0°C, July 25, 2003; minimum, -0.4°C during winter months most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,700 microsiemens/cm, Apr. 29; minimum, 1,060 microsiemens/cm, June 27.

WATER TEMPERATURE: Maximum, 28.0°C, July 25; minimum, -0.4°C, Jan. 17, 18, 19.

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

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd 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)	Chloride, water, fltrd, mg/L (00940)
OCT 29...	1400	19	8.5	2,710	7.5	1,500	326	157	5.78	2	165	201	37.1
DEC 18...	1145	14	8.5	3,440	0.6	1,600	315	208	5.16	3	275	E234	49.6
FEB 06...	1345	8.4	8.5	3,300	0.2	1,700	346	206	4.93	3	239	277	41.7
APR 09...	1400	12	8.6	3,030	13.0	1,600	309	195	4.99	2	209	173	39.0
APR 30...	1430	7.1	8.5	3,220	15.4	1,600	303	203	5.74	3	251	197	52.8
MAY 22...	1345	29	8.3	1,410	20.5	670	157	68.5	6.41	1	76.3	207	20.4
JUN 25...	1330	27	8.4	1,400	20.0	680	162	66.8	4.71	1	63.0	194	19.1
JUL 24...	1330	33	8.3	1,150	24.5	550	139	49.4	4.42	0.9	46.9	201	16.6
SEP 04...	1445	51	8.4	1,410	20.4	650	164	58.5	4.65	0.8	48.9	187	17.1

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

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)
OCT 29...	0.39	8.3	1,470	2,290	3.11	117
DEC 18...	0.34	7.8	1,850	--	--	--
FEB 06...	0.44	7.3	1,830	2,840	3.86	64.8
APR 09...	0.31	1.5	1,690	2,550	3.47	79.2
APR 30...	0.32	0.7	1,860	2,800	3.80	53.8
MAY 22...	0.3	10.8	580	1,040	1.42	81.0
JUN 25...	0.3	8.3	557	998	1.36	71.9
JUL 24...	0.3	10.3	400	789	1.07	70.9
SEP 04...	0.4	12.5	539	957	1.30	132

E -- Estimated laboratory analysis value.

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, 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	2,440	2,360	2,400	3,030	2,980	3,000	2,800	2,640	2,690	2,990	2,880	2,920
2	2,490	2,220	2,310	2,990	2,900	2,930	3,400	2,660	2,780	3,100	2,900	2,970
3	2,940	1,860	2,350	2,990	2,920	2,950	2,800	2,660	2,720	3,070	2,920	3,010
4	1,900	1,820	1,860	3,000	2,940	2,960	2,870	2,660	2,770	3,080	2,900	2,980
5	2,000	1,880	1,940	2,990	2,870	2,920	2,920	2,670	2,780	2,980	2,840	2,930
6	2,160	1,970	2,060	2,980	2,880	2,920	2,880	2,680	2,780	2,920	2,750	2,850
7	2,280	2,130	2,200	2,990	2,860	2,920	2,900	2,640	2,750	2,900	2,730	2,800
8	2,350	2,230	2,280	2,940	2,850	2,890	2,880	2,670	2,770	3,000	2,760	2,870
9	2,380	2,270	2,330	3,010	2,720	2,830	3,000	2,660	2,760	2,970	2,790	2,860
10	---	---	---	3,000	2,620	2,770	3,090	2,660	2,830	2,900	2,790	2,850
11	---	---	---	2,670	2,440	2,540	3,210	2,590	2,870	2,900	2,780	2,830
12	---	---	---	2,770	2,560	2,710	3,110	2,580	2,910	3,470	2,900	3,050
13	---	---	---	2,750	2,390	2,630	3,120	2,610	2,890	3,120	2,840	2,950
14	---	---	---	2,390	1,980	2,090	3,040	2,620	2,850	3,060	2,850	2,980
15	---	---	---	2,050	1,980	2,020	3,000	2,600	2,750	3,060	2,840	2,980
16	---	---	---	2,060	1,700	1,830	2,960	2,570	2,740	3,120	2,920	3,040
17	---	---	---	1,990	1,650	1,810	2,720	2,520	2,630	3,160	2,970	3,050
18	---	---	---	2,110	1,780	1,960	3,180	2,670	2,940	3,230	2,950	3,060
19	---	---	---	2,600	1,960	2,290	3,140	2,750	2,940	3,250	2,980	3,070
20	---	---	---	2,760	2,500	2,620	3,260	2,880	3,080	3,190	2,930	3,050
21	---	---	---	2,780	2,670	2,730	3,120	2,880	3,010	3,130	2,920	3,030
22	---	---	---	2,860	2,680	2,770	3,110	3,010	3,060	3,160	2,900	3,040
23	---	---	---	2,820	2,690	2,750	3,170	2,970	3,050	3,160	2,900	3,050
24	---	---	---	2,800	2,660	2,730	2,980	2,840	2,890	3,170	2,920	3,040
25	---	---	---	2,780	2,680	2,730	2,880	2,780	2,820	3,140	2,940	3,040
26	---	---	---	2,780	2,670	2,740	3,010	2,870	2,930	3,270	2,940	3,070
27	---	---	---	2,850	2,660	2,740	3,240	3,010	3,110	3,180	2,880	3,050
28	---	---	---	2,970	2,630	2,720	3,170	3,060	3,120	3,240	2,900	3,080
29	---	---	---	2,840	2,630	2,740	3,120	2,900	3,000	3,300	2,920	3,090
30	---	---	---	2,940	2,650	2,740	2,990	2,830	2,890	3,280	2,910	3,110
31	3,050	2,970	3,010	---	---	---	2,980	2,900	2,920	3,250	2,910	3,090
MONTH	---	---	---	3,030	1,650	2,630	3,400	2,520	2,870	3,470	2,730	2,990
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3,200	2,960	3,080	---	---	---	---	---	---	3,370	3,220	3,300
2	3,140	3,030	3,080	---	---	---	---	---	---	3,310	3,200	3,250
3	3,130	2,960	3,060	---	---	---	---	---	---	3,390	3,010	3,200
4	3,220	2,950	3,100	---	---	---	---	---	---	3,280	2,980	3,120
5	3,340	2,880	3,100	---	---	---	---	---	---	3,380	3,060	3,200
6	3,460	2,940	3,210	---	---	---	---	---	---	3,220	2,910	3,060
7	3,540	3,000	3,240	---	---	---	---	---	---	3,500	2,200	2,710
8	3,450	2,950	3,220	---	---	---	---	---	---	2,280	1,870	2,010
9	3,390	2,940	3,130	---	---	---	---	---	---	2,320	2,030	2,120
10	3,320	2,810	3,050	---	---	---	3,230	3,120	3,170	2,100	1,860	1,990
11	3,230	2,810	2,970	---	---	---	3,240	3,140	3,180	2,170	1,960	2,100
12	3,060	2,610	2,860	---	---	---	3,310	3,120	3,190	2,150	1,940	2,050
13	2,760	2,300	2,520	---	---	---	3,360	3,110	3,200	1,940	1,660	1,770
14	2,670	2,260	2,420	---	---	---	3,310	3,100	3,210	2,040	1,540	1,650
15	---	---	---	---	---	---	3,330	3,080	3,220	1,860	1,550	1,670
16	---	---	---	---	---	---	3,380	3,120	3,220	1,690	1,540	1,610
17	---	---	---	---	---	---	3,190	2,700	2,980	1,950	1,530	1,790
18	---	---	---	---	---	---	3,160	2,820	2,960	1,840	1,680	1,760
19	---	---	---	---	---	---	3,230	3,110	3,160	1,700	1,520	1,620
20	---	---	---	---	---	---	3,230	3,070	3,130	1,870	1,510	1,640
21	---	---	---	---	---	---	3,180	3,080	3,130	1,820	1,490	1,690
22	---	---	---	---	---	---	3,240	3,140	3,200	1,490	1,400	1,430
23	---	---	---	---	---	---	3,310	3,190	3,250	1,470	1,350	1,420
24	---	---	---	---	---	---	3,310	3,190	3,240	1,500	1,340	1,400
25	---	---	---	---	---	---	3,280	3,170	3,230	2,000	1,350	1,510
26	---	---	---	---	---	---	3,330	3,190	3,250	1,920	1,300	1,410
27	---	---	---	---	---	---	3,460	3,300	3,380	1,450	1,300	1,380
28	---	---	---	---	---	---	3,510	3,290	3,410	1,420	1,300	1,370
29	---	---	---	---	---	---	3,700	3,210	3,390	1,370	1,250	1,340
30	---	---	---	---	---	---	3,340	3,260	3,290	1,280	1,140	1,220
31	---	---	---	---	---	---	---	---	---	1,300	1,150	1,250
MONTH	---	---	---	---	---	---	---	---	---	3,500	1,140	1,970

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO—Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1,320	1,180	1,250	1,230	1,150	1,200	1,270	1,230	1,250	1,430	1,340	1,380
2	1,380	1,240	1,320	1,300	1,210	1,260	1,280	1,190	1,230	1,360	1,340	1,350
3	1,380	1,250	1,340	1,300	1,170	1,240	1,300	1,220	1,250	1,370	1,350	1,360
4	1,390	1,270	1,360	1,310	1,170	1,230	1,610	1,210	1,380	1,390	1,350	1,370
5	1,330	1,190	1,270	1,220	1,170	1,190	1,270	1,210	1,250	1,430	1,390	1,420
6	1,290	1,160	1,240	1,180	1,130	1,160	1,240	1,140	1,210	1,480	1,370	1,420
7	1,310	1,150	1,240	1,240	1,150	1,190	1,240	1,160	1,190	1,430	1,380	1,410
8	1,600	1,240	1,350	1,210	1,150	1,180	1,210	1,160	1,180	1,410	1,390	1,400
9	1,530	1,140	1,260	1,170	1,100	1,140	1,270	1,210	1,240	1,530	1,250	1,380
10	1,270	1,140	1,230	1,210	1,110	1,150	1,250	1,180	1,210	1,510	1,190	1,350
11	---	---	---	1,300	1,080	1,200	1,250	1,200	1,230	1,560	1,430	1,500
12	---	---	---	1,240	1,160	1,200	1,210	1,120	1,170	1,440	1,310	1,370
13	---	---	---	1,210	1,140	1,180	1,270	1,160	1,230	1,400	1,280	1,320
14	---	---	---	1,310	1,190	1,240	1,320	1,240	1,260	1,480	1,400	1,450
15	---	---	---	1,230	1,170	1,190	1,920	1,240	1,440	1,660	1,470	1,540
16	---	---	---	1,280	1,080	1,210	1,530	1,350	1,410	2,080	1,610	1,730
17	---	---	---	1,220	1,090	1,160	1,420	1,370	1,390	2,090	2,040	2,060
18	---	---	---	---	---	---	1,420	1,360	1,390	2,230	2,060	2,160
19	---	---	---	---	---	---	1,430	1,400	1,420	2,320	2,220	2,280
20	---	---	---	---	---	---	1,470	1,420	1,450	2,310	2,130	2,250
21	---	---	---	---	---	---	1,490	1,400	1,460	2,130	1,950	2,040
22	---	---	---	---	---	---	2,200	1,310	1,580	1,950	1,910	1,930
23	---	---	---	---	---	---	1,530	1,350	1,410	1,940	1,880	1,910
24	---	---	---	---	---	---	1,480	1,300	1,400	1,950	1,880	1,910
25	---	---	---	1,350	1,210	1,300	1,630	1,280	1,410	1,920	1,790	1,880
26	1,230	1,110	1,190	1,330	1,240	1,290	1,410	1,330	1,380	1,820	1,740	1,790
27	1,130	1,060	1,090	1,310	1,230	1,260	1,400	1,350	1,380	1,770	1,720	1,760
28	1,330	1,070	1,200	1,310	1,240	1,280	1,410	1,360	1,390	1,770	1,730	1,760
29	1,220	1,080	1,160	1,300	1,170	1,250	1,420	1,300	1,380	1,780	1,670	1,760
30	1,260	1,160	1,210	1,260	1,110	1,200	1,690	1,290	1,380	1,820	1,680	1,750
31	---	---	---	1,340	1,220	1,290	1,560	1,360	1,410	---	---	---
MONTH	---	---	---	---	---	---	2,200	1,120	1,330	2,320	1,190	1,670

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	13.9	9.0	11.8	9.5	4.4	6.9	2.5	-0.3	0.8	-0.2	-0.3	-0.3
2	13.1	10.5	11.7	9.8	5.7	7.5	2.1	-0.3	0.7	-0.2	-0.3	-0.3
3	11.6	8.6	9.7	6.6	2.3	4.5	3.3	0.9	1.9	0.0	-0.3	-0.3
4	11.6	7.1	9.2	6.2	2.9	4.1	2.4	-0.3	0.8	-0.1	-0.3	-0.3
5	13.1	8.6	10.8	6.1	0.9	3.3	1.7	-0.3	0.3	-0.2	-0.3	-0.3
6	13.7	8.8	11.2	6.1	0.7	3.2	0.7	-0.3	0.0	-0.2	-0.3	-0.2
7	13.9	9.4	11.6	5.5	0.6	3.2	0.5	-0.3	0.0	-0.2	-0.3	-0.3
8	13.8	9.6	11.6	5.2	3.8	4.6	0.9	-0.3	0.0	-0.2	-0.3	-0.3
9	13.3	9.5	11.5	8.5	5.2	6.8	0.3	-0.3	-0.1	-0.2	-0.3	-0.3
10	13.4	9.0	11.2	6.8	4.4	5.7	0.2	-0.3	-0.2	-0.1	-0.3	-0.2
11	12.5	9.4	11.0	6.4	2.8	4.6	-0.1	-0.3	-0.2	0.4	-0.3	-0.1
12	12.4	9.6	11.0	5.4	1.4	3.3	-0.2	-0.3	-0.3	0.4	-0.3	-0.2
13	12.8	8.4	10.5	4.5	1.3	2.8	-0.2	-0.3	-0.3	0.9	-0.3	-0.1
14	12.3	8.0	10.4	5.1	1.4	3.0	-0.2	-0.3	-0.3	1.0	-0.3	0.1
15	12.0	7.4	9.9	4.6	1.4	2.8	-0.2	-0.3	-0.3	2.4	-0.3	0.6
16	10.9	6.0	8.8	2.6	-0.3	1.3	0.0	-0.3	-0.2	2.1	-0.3	0.4
17	10.3	5.7	8.3	3.6	-0.3	1.5	0.3	-0.3	-0.2	1.6	-0.4	0.2
18	12.0	8.3	9.9	3.7	-0.3	1.6	1.1	-0.3	0.0	0.9	-0.4	0.0
19	11.9	7.0	9.4	3.6	-0.3	1.3	0.1	-0.3	-0.2	0.8	-0.4	-0.1
20	10.3	6.0	8.3	4.4	-0.2	1.8	-0.1	-0.3	-0.3	0.5	-0.3	-0.1
21	10.3	5.8	8.2	4.5	-0.2	1.9	-0.2	-0.3	-0.3	1.4	-0.3	0.2
22	11.4	7.0	9.3	4.7	0.0	2.1	-0.2	-0.3	-0.3	3.0	-0.3	0.7
23	10.7	8.4	9.8	4.4	0.6	2.3	-0.2	-0.3	-0.3	3.5	-0.3	1.0
24	11.0	8.4	9.5	4.4	-0.1	2.0	-0.2	-0.3	-0.3	4.7	-0.3	1.9
25	10.5	6.5	8.5	4.1	1.5	2.5	-0.2	-0.3	-0.3	3.1	-0.2	1.5
26	8.8	6.9	7.9	3.0	-0.3	1.0	-0.2	-0.3	-0.3	3.3	-0.3	1.1
27	8.9	7.1	7.9	1.6	-0.3	0.3	-0.2	-0.3	-0.3	3.9	-0.3	1.3
28	8.1	6.7	7.4	0.8	-0.3	0.1	-0.2	-0.3	-0.3	4.6	-0.3	1.6
29	7.5	5.7	6.9	0.9	-0.3	0.0	-0.2	-0.3	-0.2	4.1	-0.3	1.5
30	9.1	4.5	6.5	0.5	-0.3	0.0	-0.2	-0.3	-0.3	4.2	-0.3	1.5
31	9.5	5.2	7.1	---	---	---	-0.2	-0.3	-0.3	5.9	-0.3	2.4
MONTH	13.9	4.5	9.6	9.8	-0.3	2.9	3.3	-0.3	0.0	5.9	-0.4	0.4
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.7	0.5	3.0	3.2	0.2	1.6	14.2	5.5	9.9	16.5	7.3	12.3
2	4.5	2.0	3.1	5.6	-0.3	1.5	9.9	6.1	8.0	18.5	9.5	14.3
3	4.1	-0.1	1.9	6.6	-0.3	2.5	8.8	3.9	6.2	18.3	11.0	14.6
4	1.9	-0.3	0.5	4.0	2.0	2.9	11.4	2.3	6.6	16.4	9.8	12.9
5	0.5	-0.3	0.0	7.3	0.5	3.6	10.0	4.0	7.2	16.9	8.3	12.7
6	0.1	-0.3	-0.2	7.5	-0.3	3.5	11.4	3.5	7.3	17.4	8.2	12.9
7	-0.1	-0.3	-0.2	9.0	1.3	5.0	12.3	4.4	8.1	16.1	9.5	12.9
8	-0.2	-0.3	-0.3	9.6	2.1	5.7	14.1	3.3	8.6	13.6	9.6	11.4
9	-0.1	-0.3	-0.3	9.8	2.6	6.1	16.1	4.8	10.3	15.5	7.9	11.3
10	0.0	-0.3	-0.2	9.9	2.9	6.4	16.2	6.1	11.2	17.1	6.5	11.6
11	-0.1	-0.3	-0.3	10.9	3.6	7.2	17.0	6.9	11.9	18.8	7.4	13.1
12	0.0	-0.3	-0.2	12.2	5.0	8.4	13.6	7.7	11.0	19.7	8.9	14.3
13	0.4	-0.2	0.0	12.9	4.9	8.9	17.4	6.4	11.8	15.9	10.7	13.4
14	3.8	-0.2	1.5	10.2	5.8	8.1	15.3	8.2	12.1	16.7	10.1	13.5
15	6.3	0.6	3.2	9.7	4.5	7.4	12.8	8.9	10.9	16.3	11.9	13.6
16	5.5	1.1	3.1	9.2	6.7	7.7	15.9	5.2	10.4	21.0	10.5	15.4
17	6.0	2.0	4.0	7.3	5.4	6.1	15.2	6.5	10.8	17.1	12.6	15.3
18	7.4	2.9	4.9	8.4	4.7	6.4	11.9	7.8	9.7	17.5	13.0	14.9
19	6.2	1.7	3.9	9.3	4.5	6.7	12.4	5.7	8.9	20.0	11.4	15.5
20	6.6	2.0	4.1	8.3	4.4	6.5	16.3	4.9	10.4	22.1	12.2	17.0
21	7.2	1.0	3.8	10.6	4.7	7.6	14.8	8.5	11.9	22.5	13.1	17.8
22	6.4	0.4	3.1	12.5	4.3	8.3	13.6	9.8	11.6	22.8	13.1	17.9
23	5.5	-0.3	2.2	13.9	5.2	9.4	13.8	6.5	10	22.0	13.9	17.9
24	6.6	-0.2	3.0	11.5	6.1	9.0	17.7	7.1	12.2	22.2	14.0	18.2
25	5.0	1.6	3.6	14.2	6.2	9.9	18.9	8.3	13.7	23.2	15.6	19.1
26	6.1	2.6	3.9	10.5	5.9	8.2	19.4	10.0	14.8	23.3	14.8	19.0
27	3.5	1.2	2.5	11.6	5.3	7.7	18.8	9.8	14.6	24.7	16.0	20.3
28	3.0	0.5	1.6	7.9	2.3	4.8	18.5	10.2	14.7	25.4	16.7	21.1
29	---	---	---	10.3	1.0	5.4	15.0	9.8	13.1	24.1	17.3	20.9
30	---	---	---	12.4	2.4	7.2	16.1	7.8	12.2	25.3	16.8	20.9
31	---	---	---	---	4.6	---	---	---	---	23.6	17.6	20.5
MONTH	7.4	-0.3	2.0	---	-0.3	---	19.4	2.3	10.7	25.4	6.5	15.7

SAN JUAN RIVER BASIN

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO—Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.8	16.9	19.6	25.5	16.1	20.7	24.5	20.0	22.0	21.9	15.0	18.2
2	23.7	15.2	19.3	24.9	16.2	20.6	25.0	19.5	22.1	21.4	16.0	18.8
3	24.1	16.1	20.0	25.2	16.2	20.6	25.5	19.8	22.4	20.7	17.6	18.9
4	23.1	14.4	18.7	25.4	15.6	20.5	25.3	17.9	21.4	20.9	17.1	18.9
5	22.5	14.2	18.3	25.0	16.2	20.7	24.8	17.8	21.2	20.6	16.7	18.6
6	20.7	13.0	17.1	24.9	17.3	20.9	24.1	17.5	21.0	18.6	15.6	17.0
7	20.6	12.7	16.8	25.2	15.9	20.5	25.4	19.3	21.9	20.3	14.2	16.9
8	23.0	13.2	18.1	25.1	15.8	20.5	26.2	18.9	22.3	18.7	14.7	16.8
9	22.4	14.9	18.8	25.5	16.1	20.7	26.6	19.8	22.9	17.2	12.9	15.2
10	23.8	15.7	19.5	25.5	15.4	20.5	26.0	18.4	22.1	14.8	12.3	13.4
11	23.6	14.3	18.8	25.6	16.1	20.9	26.4	18.8	22.3	16.4	12.7	14.5
12	22.3	13.5	18.0	25.9	16.6	21.2	25.4	19.4	22.4	17.1	12.6	14.8
13	23.8	14.8	18.9	26.0	16.7	21.4	25.5	19.8	22.3	17.8	13.4	15.5
14	22.5	14.3	18.3	26.6	17.5	22.0	25.3	18.5	21.3	16.7	11.8	14.4
15	22.8	15.0	19.1	27.1	19.1	22.8	23.0	18.6	20.6	17.2	11.9	14.6
16	23.4	16.5	19.7	26.0	20.2	22.7	22.9	17.7	20.0	17.9	12.6	15.2
17	25.1	17.2	19.6	27.1	18.5	22.6	22.5	17.0	19.6	18.2	13.9	15.8
18	22.6	15.5	18.8	27.0	19.2	23.2	22.8	17.3	19.9	16.4	11.7	14.0
19	21.4	16.8	18.9	27.7	19.8	23.6	24.3	17.8	20.9	16.4	10.4	13.5
20	20.4	16.1	18.4	27.0	19.9	23.4	25.2	18.5	21.6	16.8	11.5	14.1
21	22.6	13.8	18.1	25.4	20.2	22.6	23.9	18.3	21.2	16.0	11.1	13.7
22	23.6	14.5	18.8	26.7	19.3	22.8	23.8	19.1	21.2	16.1	10.7	13.5
23	23.1	14.1	18.5	24.7	20.6	22.4	23.1	19.2	21.3	16.5	11.4	14.0
24	22.2	14.4	17.9	27.7	19.4	23.3	24.0	18.6	21.1	16.0	11.8	14.0
25	22.3	13.7	17.9	28.0	20.8	24.2	23.2	18.3	20.7	17.2	12.1	14.7
26	22.6	13.5	18.1	27.2	20.7	23.6	23.0	17.9	20.5	16.5	11.6	14.3
27	23.3	14.2	18.8	25.9	20.3	22.7	21.6	18.9	20.4	16.7	11.9	14.4
28	23.3	14.7	19.1	25.4	18.9	22.1	23.2	19.1	20.8	16.9	11.9	14.5
29	24.0	15.3	19.7	25.8	19.8	22.5	22.7	18.0	20.2	16.6	12.0	14.4
30	24.7	16.1	20.4	26.1	18.8	22.3	21.3	16.9	19.1	16.5	11.8	14.3
31	---	---	---	25.6	20.2	22.4	21.9	16.7	19.1	---	---	---
MONTH	25.1	12.7	18.7	28.0	15.4	22.0	26.6	16.7	21.2	21.9	10.4	15.4

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE $\frac{1}{4}$ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi upstream from Colorado-Utah State line, 2.0 mi upstream from Yellowjacket Creek, and 2.0 mi west of former town of McElmo.

DRAINAGE AREA.--346 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1951 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09372000

REVISED RECORDS.--WSP 1925: 1951-52 (M), 1957 (M). WRD CO-1972: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,890 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,780 acres upstream from station. One diversion upstream from station for irrigation of about 60 acres downstream from station. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin).

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	11	e16	e15	e12	25	12	0.54	3.3	4.5	20	40
2	10	9.4	19	e15	13	19	13	0.48	5.5	6.6	24	36
3	17	10	19	e15	13	18	13	0.46	5.4	6.3	23	33
4	32	12	18	e14	12	18	13	0.65	2.4	7.2	26	31
5	21	12	e15	e14	10	19	15	1.1	2.6	4.5	23	30
6	16	12	e15	e14	10	19	15	0.72	4.3	5.3	20	29
7	14	11	e14	e14	9.9	18	14	0.80	3.8	5.3	15	40
8	11	11	e14	14	e11	19	13	1.9	3.9	7.0	15	38
9	11	18	e14	e14	e11	23	12	2.4	3.2	5.6	16	301
10	10	33	e13	e14	e11	25	11	2.8	3.0	5.0	15	e1,010
11	10	28	e14	e14	e11	26	10	2.6	4.0	4.2	13	270
12	9.9	23	e14	e15	e11	26	10	2.5	3.4	5.7	14	123
13	7.7	22	e15	e14	16	24	8.7	1.7	4.0	4.5	14	88
14	5.1	26	e15	e14	26	21	7.1	1.3	7.1	4.7	44	62
15	4.7	25	e16	e14	24	19	7.2	2.0	14	4.0	76	52
16	6.0	26	15	e13	16	19	6.8	5.7	9.4	7.6	70	45
17	5.7	26	20	e12	14	45	5.3	5.2	6.2	6.0	52	40
18	9.0	25	e17	e12	14	66	5.1	2.1	7.3	4.6	50	31
19	8.9	22	e14	e11	17	41	3.3	1.8	7.5	3.8	42	24
20	6.6	19	e14	e12	16	29	4.0	1.2	11	4.3	33	24
21	6.7	18	e15	e12	14	25	2.5	0.76	6.1	3.6	29	26
22	4.5	18	e16	e12	13	26	2.4	2.8	4.9	9.3	35	27
23	7.7	18	e16	e12	12	20	2.3	3.3	3.8	12	39	28
24	17	18	e15	e12	11	18	2.1	2.9	3.9	8.2	58	28
25	12	18	e15	e12	12	17	1.8	3.3	2.6	8.7	64	28
26	12	17	15	e12	17	14	1.2	4.4	3.5	6.7	58	28
27	17	e15	e15	e12	23	17	1.2	3.1	4.9	7.3	46	29
28	18	e14	e16	e12	28	17	1.0	2.4	6.1	9.5	43	29
29	17	e15	e17	e12	---	16	0.80	1.9	9.6	33	43	28
30	17	e15	e16	e12	---	15	0.66	3.6	3.5	23	47	28
31	13	---	e15	e12	---	14	---	4.9	---	24	48	---
TOTAL	367.2	547.4	482	406	407.9	718	214.46	71.31	160.2	252.0	1,115	2,626
MEAN	11.8	18.2	15.5	13.1	14.6	23.2	7.15	2.30	5.34	8.13	36.0	87.5
MAX	32	33	20	15	28	66	15	5.7	14	33	76	1,010
MIN	4.5	9.4	13	11	9.9	14	0.66	0.46	2.4	3.6	13	24
AC-FT	728	1,090	956	805	809	1,420	425	141	318	500	2,210	5,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

	59.8	50.5	38.8	33.0	47.0	56.4	39.2	45.5	53.5	52.1	64.7	61.9
MEAN	59.8	50.5	38.8	33.0	47.0	56.4	39.2	45.5	53.5	52.1	64.7	61.9
MAX	161	122	95.4	68.4	192	197	148	108	105	132	160	226
(WY)	(1973)	(1988)	(1966)	(1969)	(1993)	(1973)	(1973)	(1992)	(1969)	(1957)	(1967)	(1986)
MIN	1.84	14.0	13.5	13.1	14.6	15.7	2.23	2.30	2.60	1.19	2.45	0.43
(WY)	(1957)	(1957)	(1978)	(2003)	(2003)	(1951)	(1977)	(2003)	(1977)	(1951)	(2002)	(1956)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1951 - 2003

ANNUAL TOTAL	4,048.84	7,367.47	
ANNUAL MEAN	11.1	20.2	50.6
HIGHEST ANNUAL MEAN			94.6 1973
LOWEST ANNUAL MEAN			16.2 1977
HIGHEST DAILY MEAN	67 Sep 11	e1,010 Sep 10	1,200 Aug 7, 1967
LOWEST DAILY MEAN	0.96 Jun 25	0.46 May 3	0.08 Sep 9, 1977
ANNUAL SEVEN-DAY MINIMUM	1.1 Jun 21	0.66 Apr 28	0.14 Sep 21, 1956
MAXIMUM PEAK FLOW		1,670 Sep 9	a3,040 Aug 7, 1967
MAXIMUM PEAK STAGE		7.64 Sep 9	b,c7.58 Aug 7, 1967
ANNUAL RUNOFF (AC-FT)	8,030	14,610	36,670
10 PERCENT EXCEEDS	21	32	97
50 PERCENT EXCEEDS	11	14	38
90 PERCENT EXCEEDS	1.4	3.0	12

e Estimated.

a From rating curve extended above 2,100 ft³/s.

b From floodmark in gage well.

c Maximum gage height, 8.21 ft, Sep 21, 1997.

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1981, August 1987 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09372000

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

Date	Time	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd 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)	Chloride, water, fltrd, mg/L (00940)
OCT 28...	1230	18	8.3	2,790	10.2	1,500	310	164	5.76	2	183	210	37.5
DEC 17...	1330	19	8.4	2,360	4.3	1,400	292	162	4.80	2	172	E166	32.1
FEB 06...	1145	11	8.4	3,010	1.0	1,600	308	191	4.82	2	211	260	34.7
APR 09...	1200	12	8.4	2,940	11.0	1,500	292	191	5.11	2	209	201	36.3
APR 30...	1230	0.96	8.2	3,320	17.8	1,700	326	219	7.35	3	259	282	46.6
MAY 22...	1200	3.5	8.1	3,200	22.5	1,900	379	234	11.2	3	287	272	45.5
JUN 25...	1145	2.7	8.1	2,770	21.6	1,400	294	170	8.73	2	195	279	36.8
JUL 24...	1100	8.8	8.1	2,220	23.5	990	216	110	6.08	2	117	229	31.2
SEP 04...	1300	32	8.3	1,750	20.1	790	185	79.6	5.30	1	78.6	196	23.7

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

Date	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)	Residue water, fltrd, tons/ acre-ft (70303)	Residue water, fltrd, tons/d (70302)
OCT 28...	0.38	6.9	1,480	2,310	3.15	112
DEC 17...	0.37	7.8	1,470	--	--	--
FEB 06...	0.44	5.6	1,620	2,530	3.44	75.8
APR 09...	0.36	1.3	1,570	2,430	3.30	80.6
APR 30...	0.43	1.0	1,930	2,960	4.03	7.68
MAY 22...	0.5	11.8	1,740	2,870	3.90	27.0
JUN 25...	0.5	12.0	1,360	2,240	3.05	16.3
JUL 24...	0.5	13.0	1,020	1,650	2.25	39.4
SEP 04...	0.4	13.5	729	1,230	1.68	106

E -- Estimated laboratory analysis value.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
APR 24...	1236	2.3	3,400	16.7