

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°48'59", long 104°49'20", in NE¹/₄SW¹/₄ sec.19, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank 10 ft downstream from Cheyenne Creek, 31 ft upstream from Nevada Avenue bridge at Colorado Springs, and 1.3 mi downstream from Monument Creek.

DRAINAGE AREA.--392 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to September 1924, January 1976 to current year. Monthly discharge only for some periods, published in WSP 1311. Statistical summary computed for 1976 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105500

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,900 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for Oct. 1-4 and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	22	16	18	16	39	29	52	112	19	14	55
2	81	36	17	15	14	e39	30	54	37	17	20	56
3	23	26	16	19	15	e25	26	52	32	15	22	115
4	17	21	15	18	e14	e14	22	51	118	14	38	47
5	14	19	14	17	19	e13	33	49	162	13	13	30
6	11	19	14	17	14	e16	61	44	51	14	11	38
7	11	18	16	16	14	19	27	44	51	13	11	62
8	13	16	19	17	14	22	28	42	33	12	12	42
9	13	15	15	16	14	15	29	43	44	11	48	25
10	13	17	16	e12	19	14	28	67	42	9.4	16	28
11	12	18	19	16	21	14	26	37	33	9.7	15	26
12	11	19	19	18	24	14	25	39	38	12	20	26
13	12	19	17	16	24	15	25	38	50	13	11	28
14	13	19	18	15	28	15	26	37	52	10	10	31
15	12	18	18	14	18	13	33	46	30	19	9.9	22
16	11	18	19	e12	16	11	42	56	31	17	10	18
17	13	18	18	16	17	16	37	36	236	13	10	17
18	16	17	17	e14	19	93	33	33	74	10	13	16
19	14	16	15	17	56	46	36	33	269	19	15	18
20	15	16	e11	16	25	78	36	35	158	35	13	18
21	14	17	17	13	18	46	36	34	53	9.2	13	18
22	16	17	17	12	16	32	128	31	32	9.3	12	19
23	24	16	17	e13	14	32	156	42	26	11	13	19
24	19	16	18	14	e10	93	144	32	25	10	13	18
25	16	17	14	14	e12	69	56	89	43	8.7	20	16
26	38	16	14	15	18	26	45	50	184	9.6	15	19
27	138	17	19	14	20	29	34	30	32	38	90	18
28	31	18	21	13	30	28	36	22	29	62	31	16
29	23	18	20	13	---	26	66	26	43	25	122	18
30	21	17	18	15	---	26	55	24	31	14	163	19
31	21	---	17	15	---	28	---	87	---	13	622	---
TOTAL	713	556	521	470	539	966	1,388	1,355	2,151	504.9	1,445.9	898
MEAN	23.0	18.5	16.8	15.2	19.2	31.2	46.3	43.7	71.7	16.3	46.6	29.9
MAX	138	36	21	19	56	93	156	89	269	62	622	115
MIN	11	15	11	12	10	11	22	22	25	8.7	9.9	16
AC-FT	1,410	1,100	1,030	932	1,070	1,920	2,750	2,690	4,270	1,000	2,870	1,780

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

MEAN	46.0	40.4	32.7	30.2	28.5	39.6	89.2	192	126	77.1	86.4	46.8
MAX	212	143	81.3	68.1	57.8	92.6	486	944	555	268	341	116
(WY)	(1985)	(1985)	(1985)	(2000)	(2000)	(1998)	(1999)	(1999)	(1997)	(1995)	(1999)	(1999)
MIN	10.6	11.4	11.8	5.12	6.27	11.4	14.8	23.5	16.3	12.9	9.54	7.98
(WY)	(1978)	(1979)	(1979)	(1979)	(1979)	(1976)	(1978)	(1976)	(1976)	(1976)	(2002)	(1978)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1976 - 2003
ANNUAL TOTAL	9,157.0	11,507.8	
ANNUAL MEAN	25.1	31.5	71.4
HIGHEST ANNUAL MEAN			228 1999
LOWEST ANNUAL MEAN			23.2 1978
HIGHEST DAILY MEAN	761 Jul 5	622 Aug 31	7,510 Apr 30, 1999
LOWEST DAILY MEAN	5.1 Sep 7	8.7 Jul 25	2.0 Aug 19, 1978
ANNUAL SEVEN-DAY MINIMUM	7.1 Jul 27	11 Jul 8	3.3 Jan 3, 1979
MAXIMUM PEAK FLOW		3,540 Aug 31	a10,100 Sep 2, 1994
MAXIMUM PEAK STAGE		6.19 Aug 31	b12.12 Sep 2, 1994
ANNUAL RUNOFF (AC-FT)	18,160	22,830	51,710
10 PERCENT EXCEEDS	27	53	147
50 PERCENT EXCEEDS	19	19	36
90 PERCENT EXCEEDS	9.7	13	15

e Estimated.

a From slope-area measurement of peak flow.

b From floodmark.

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1975 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105500

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: August 1995 to September 1997 (seasonal peaks only), April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

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

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,640 mg/L, Apr. 29, 1999; minimum daily mean, 11 mg/L, July 11, 2003.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 275,000 tons (estimated), Apr. 30, 1999; minimum daily, 0.29 ton, July 11, 2003.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,730 mg/L, Aug. 31; minimum daily mean, 11 mg/L, July 11.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 15,700 tons, Aug. 31; minimum daily, 0.29 ton, July 11.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 05...	1115	19	10.2	8.2	936	6.0	88	23.1	1.40	210	0.021	2.60	0.08
DEC 03...	1000	17	11.7	8.0	883	1.5	95.4	22.0	1.30	190	E.014	3.15	0.12
FEB 12...	1445	26	11.1	8.4	932	3.0	88	21	1.2	192	E.009	3.24	0.17
APR 30...	1330	56	7.8	8.2	482	17.0	--	--	1.58	94.4	E.011	1.29	0.22
JUN 24...	1810	23	6.6	7.9	566	22.5	57.4	12.9	1.52	95.1	--	--	--
JUL 22...	1415	9.6	6.1	8.0	1,010	28.5	101	25.8	1.53	275	E.011	1.76	0.08

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

Date	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, modif. m-TEC, col/100 mL (90902)	E coli, MF, col/100 mL (31633)	Fecal coliform, M-FC, col/100 mL (31625)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd, ug/L (01002)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recoverable, ug/L (01022)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd, ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recoverable, ug/L (01034)
NOV 05...	0.180	<2.0	--	350	260	1.6	2.8	108	117	0.27	0.69	2.6	2.7
DEC 03...	0.191	<2.0	--	160	E120	1.7	2.2	112	104	<0.10	0.40	2.6	2.6
FEB 12...	0.465	--	--	140	52	1.29	3.3	106	102	0.201	0.415	<0.8	1.4
APR 30...	0.541	--	65	--	92	--	--	--	--	--	--	--	--
JUN 24...	--	--	E940	--	E1100	--	<2.0	79	71	--	--	--	--
JUL 22...	0.093	--	E160	--	500	--	E1.0	122	134	--	--	--	--

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

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Cyanide water unfltrd mg/L (00720)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)
NOV 05...	1.9	6.7	<0.01	<10.0	2,510	0.20	11	348	583	<0.018	<0.018	6.3	7.6
DEC 03...	2.6	5.7	<0.01	<10.0	1,600	E.22	3.0	84.0	137	<0.018	<0.018	4.3	4.8
FEB 12...	2.44	10.1	<0.009	<10.0	5,350	0.09	8.20	90.9	316	<0.018	0.020	4.54	9.58
APR 30...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN 24...	1.67	3.14	--	--	--	--	1.89	8.27	40.9	--	--	--	3.06
JUL 22...	2.50	3.02	--	--	--	--	0.30	26.5	26.5	--	--	--	4.16

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

Date	Selen-ium, water, fltrd, ug/L (01145)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
NOV 05...	8.2	8.9	<0.04	0.06	101	164	96	4.9
DEC 03...	9.9	9.3	<0.04	<0.04	31	51	116	5.3
FEB 12...	7.92	6.92	<0.20	<0.16	39.0	124	513	36
APR 30...	--	--	--	--	--	--	--	--
JUN 24...	4.23	4.04	--	--	3.5	13.3	45	2.8
JUL 22...	7.75	7.04	--	--	6.3	7.6	--	--

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

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

Date	Time	Instan-taneous dis-charge, cfs (00061)	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conduc-tance, wat un f uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Fluor-ide, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)
APR 23...	1830	457	9.9	7.4	286	6.5	29	5.0	0.49	45.8	0.117	1.04	0.09
JUL 25...	0945	9.3	7.2	7.9	1,000	23.0	--	--	--	--	--	--	--
JUL 28...	1420	91	6.3	8.0	337	21.5	33.0	6.60	0.53	65.7	0.296	1.31	0.02

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

Date	Phos-phorus, water, unfltrd mg/L (00665)	E coli, modif. m-TEC, col/ 100 mL (90902)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Arsenic water unfltrd ug/L (01002)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover-able, ug/L (01022)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selen-ium, water, fltrd, ug/L (01145)
APR 23...	2.43	1,300	1,800	9.5	31	35	1.78	51.5	82.2	4.06	1,220	32.1	2.53
JUL 25...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL 28...	0.663	E24000	>12000	3.0	40	46	2.44	24.7	37.1	21.6	346	8.73	2.26

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO—Continued

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

Date	Selenium, water, unfltrd ug/L (01147)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	9H-Fluorene, water, unfltrd ug/L (34381)	Ace-naphth-ene, water, unfltrd ug/L (34205)	Ace-naphth-ylene, water, unfltrd ug/L (34200)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Anthra-cene, water, unfltrd ug/L (34220)	Atra-zine, water, fltrd, ug/L (39632)
APR 23...	5.04	3.2	297	<0.006	<0.0060	E.2	E.08	E.2	<0.010	<0.004	<0.0046	E.2	0.0098
JUL 25...	--	--	--	<0.006	<0.006	<2	<2	<2	<0.006	<0.004	<0.0046	E.0131	<0.007
28...	2.48	7.3	212	<0.006	<0.006	E.1110	E.0752	<2	<0.006	<0.004	<0.0046	E.3800	0.0138

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

Date	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benzo-[a]-anthra-cene, water, unfltrd ug/L (34526)	Benzo-[a]-pyrene, water, unfltrd ug/L (34247)	Benzo-[b]-fluor-anthene, water, unfltrd ug/L (34230)	Benzo-[g,h,i]-per-ylene, water, unfltrd ug/L (34521)	Benzo-[k]-fluor-anthene, water, unfltrd ug/L (34242)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyri-fos water, fltrd, ug/L (38933)	Chrys-ene, water, unfltrd ug/L (34320)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)
APR 23...	<0.0500	<0.0100	E.4	E.6	E.8	E.4	E.4	<0.002	E.448	<0.0200	<0.0050	E.6	<0.0060
JUL 25...	<0.05	<0.010	<2	E.0297	<2	<3	<2	<0.002	<0.041	<0.020	<0.005	E.0177	<0.006
28...	<0.05	<0.010	E2	E3	5	E2	E2	<0.002	E.354	<0.020	<0.005	4	<0.006

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

Date	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Di-benzo-[a,h]-anthra-cene, wat unf ug/L (34556)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Desulf-inyl fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)
APR 23...	<0.0180	<0.0030	<0.0040	0.0450	E.2	<0.0048	<0.0210	<0.0020	<0.0090	<0.0050	<0.0090	<0.0050	<0.0050
JUL 25...	<0.018	<0.0030	<0.004	<0.005	<3	<0.0048	<0.021	<0.0020	<0.009	<0.005	<0.009	<0.005	<0.005
28...	<0.018	<0.0030	<0.004	<0.005	E.5850	<0.0048	<0.021	<0.0020	<0.009	<0.005	<0.009	<0.005	<0.005

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

Date	Fipro-nil, water, fltrd, ug/L (62166)	Fluor-anthene, water, unfltrd ug/L (34376)	Fonofos, water, fltrd, ug/L (04095)	Indeno-[1,2,3-cd]-pyrene, water, unfltrd ug/L (34403)	Lindane, water, fltrd, ug/L (39341)	Linuron, water, fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl parathion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Nitro-benzene, water, unfltrd ug/L (34447)
APR 23...	<0.0070	E1	<0.0027	E.4	<0.0040	<0.0350	<0.0300	<0.0060	<0.0130	<0.0060	<0.0016	<0.0070	<2
JUL 25...	<0.007	E.0638	<0.0027	<3	<0.0040	<0.035	<0.027	<0.006	<0.013	<0.006	<0.0016	<0.007	<2
28...	<0.007	6	<0.0027	E2	<0.0040	<0.035	<0.027	<0.006	<0.013	<0.006	<0.0016	<0.007	<2

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

Date	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phenan-threne, water, unfltrd ug/L (34461)	Phorate, water, fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Pyrene, water, unfltrd ug/L (34469)	Simaz-ine, water, fltrd, ug/L (04035)
APR 23...	<0.0025	<0.010	<0.004	E.021	E.6	<0.0110	E.0133	<0.0041	<0.0100	<0.0110	<0.0230	E1	<0.005
JUL 25...	<0.0025	<0.010	<0.004	<0.022	E.0301	<0.011	0.0244	<0.0041	<0.010	<0.011	<0.023	E.0563	<0.005
28...	<0.0025	<0.010	<0.004	<0.022	E2	<0.011	0.0258	<0.075	<0.010	<0.011	<0.023	5	<0.005

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO—Continued

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

Date	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Naphth- alene, water, unfltrd ug/L (34696)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
APR 23...	<0.0160	<0.0340	<0.0170	<0.0048	<0.0023	<0.0090	E.09	6,060	7,480
JUL 25...	<0.016	<0.034	<0.017	<0.0048	<0.0023	<0.009	<2	--	--
28...	<0.016	<0.034	<0.017	<0.0048	<0.0023	<0.009	E.1140	623	153

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

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

Date	Time	Instan- taneous dis- charge, cfs (00061)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)
APR 09...	1615	30	788	19.5	E20	E21
MAY 12...	1345	39	580	20.5	51	50
28...	1300	24	732	26.5	120	140
JUN 11...	1015	33	679	18.0	200	290
JUL 08...	1350	13	833	28.5	340	540
AUG 06...	0955	11	807	20.5	420	550
21...	1210	13	834	25.5	240	350
SEP 03...	1930	206	297	16.5	3,300	6,400
18...	1050	17	771	12.0	340	340

E -- Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO—Continued

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT						
03...	1555	22	789	--	--	--
04...	1325	17	892	--	--	--
04...	1330	18	892	17.0	44	2.1
22...	1355	16	808	--	--	--
28...	1455	26	730	--	--	--
28...	1510	29	730	13.0	55	4.3
NOV						
13...	1425	20	878	--	--	--
DEC						
10...	1510	15	924	3.5	--	--
27...	1340	23	934	--	--	--
JAN						
14...	1455	18	866	4.0	--	--
FEB						
13...	1235	25	873	--	--	--
MAR						
06...	1025	13	1,150	--	--	--
31...	1615	31	753	16.5	142	12
31...	1620	31	753	--	--	--
APR						
08...	1425	28	776	16.5	--	--
08...	1430	29	776	16.5	160	13
23...	1645	266	332	7.0	3,940	2,830
29...	1610	64	442	--	--	--
MAY						
14...	1635	37	502	--	--	--
14...	1800	35	502	15.5	92	8.7
JUN						
11...	1535	39	627	--	--	--
11...	1545	38	627	25.0	61	6.3
26...	1200	94	317	20.0	608	154
26...	1225	86	317	--	--	--
JUL						
10...	1515	8.9	971	29.0	10	0.24
AUG						
07...	1245	13	856	27.0	45	1.6
07...	1255	12	856	27.0	--	--
26...	1615	16	724	22.0	54	2.3
26...	1620	17	724	--	--	--
29...	1740	330	195	--	--	--
29...	1745	256	195	16.5	3,720	2,570
SEP						
16...	1415	19	794	--	--	--

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
OCTOBER			NOVEMBER			DECEMBER			
1	27	104	21	22	---	---	16	---	---
2	81	516	199	36	---	---	17	---	---
3	23	83	5.2	26	---	---	16	---	---
4	17	59	2.8	21	---	---	15	---	---
5	14	---	e1.9	19	---	---	14	---	---
6	11	55	1.6	19	---	---	14	---	---
7	11	---	e1.5	18	---	---	16	---	---
8	13	47	1.6	16	---	---	19	---	---
9	13	53	1.9	15	---	---	15	---	---
10	13	---	e2.0	17	---	---	16	---	---
11	12	---	e2.0	18	---	---	19	---	---
12	11	---	e2.0	19	---	---	19	---	---
13	12	---	e2.3	19	---	---	17	---	---
14	13	68	2.4	19	---	---	18	---	---
15	12	51	1.7	18	---	---	18	---	---
16	11	40	1.2	18	---	---	19	---	---
17	13	---	e2.0	18	---	---	18	---	---
18	16	144	5.8	17	---	---	17	---	---
19	14	107	4.1	16	---	---	15	---	---
20	15	---	e3.9	16	---	---	e11	---	---
21	14	88	3.4	17	---	---	17	---	---
22	16	---	e3.9	17	---	---	17	---	---
23	24	258	13	16	---	---	17	---	---
24	19	111	5.0	16	---	---	18	---	---
25	16	101	4.0	17	---	---	14	---	---
26	38	222	81	16	---	---	14	---	---
27	138	766	477	17	---	---	19	---	---
28	31	124	11	18	---	---	21	---	---
29	23	---	e7.7	18	---	---	20	---	---
30	21	200	11	17	---	---	18	---	---
31	21	208	12	---	---	---	17	---	---
TOTAL	713	---	894.9	556	---	---	521	---	---
JANUARY			FEBRUARY			MARCH			
1	18	---	---	16	---	---	39	---	---
2	15	---	---	14	---	---	e39	---	---
3	19	---	---	15	---	---	e25	---	---
4	18	---	---	e14	---	---	e14	---	---
5	17	---	---	19	---	---	e13	---	---
6	17	---	---	14	---	---	e16	---	---
7	16	---	---	14	---	---	19	---	---
8	17	---	---	14	---	---	22	---	---
9	16	---	---	14	---	---	15	---	---
10	e12	---	---	19	---	---	14	---	---
11	16	---	---	21	---	---	14	---	---
12	18	---	---	24	---	---	14	---	---
13	16	---	---	24	---	---	15	---	---
14	15	---	---	28	---	---	15	---	---
15	14	---	---	18	---	---	13	---	---
16	e12	---	---	16	---	---	11	---	---
17	16	---	---	17	---	---	16	---	---
18	e14	---	---	19	---	---	93	---	---
19	17	---	---	56	---	---	46	---	---
20	16	---	---	25	---	---	78	---	---
21	13	---	---	18	---	---	46	---	---
22	12	---	---	16	---	---	32	---	---
23	e13	---	---	14	---	---	32	---	---
24	14	---	---	e10	---	---	93	---	---
25	14	---	---	e12	---	---	69	---	---
26	15	---	---	18	---	---	26	---	---
27	14	---	---	20	---	---	29	---	---
28	13	---	---	30	---	---	28	---	---
29	13	---	---	---	---	---	26	---	---
30	15	---	---	---	---	---	26	---	---
31	15	---	---	---	---	---	28	---	---
TOTAL	470	---	---	539	---	---	966	---	---

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
1	29	---	e12	52	453	64	112	---	e527
2	30	---	e13	54	414	61	37	---	e33
3	26	---	e12	52	---	e52	32	236	25
4	22	---	e11	51	327	45	118	881	671
5	33	231	25	49	311	41	162	711	494
6	61	---	e103	44	303	36	51	---	e47
7	27	123	8.8	44	163	19	51	387	60
8	28	169	13	42	178	20	33	178	16
9	29	240	19	43	189	22	44	346	65
10	28	233	18	67	743	173	42	240	31
11	26	168	12	37	134	13	33	80	7.1
12	25	125	8.4	39	172	18	38	---	e26
13	25	---	e7.8	38	120	12	50	398	60
14	26	148	10	37	95	9.5	52	360	105
15	33	204	19	46	---	e27	30	97	8.3
16	42	540	61	56	380	67	31	---	e5.0
17	37	407	40	36	209	20	236	1,970	4,470
18	33	---	e27	33	124	11	74	1,100	247
19	36	240	24	33	121	11	269	1,700	4,170
20	36	---	e20	35	---	e31	158	1,470	1,020
21	36	178	17	34	321	29	53	605	88
22	128	1,740	1,850	31	190	16	32	308	28
23	156	2,710	1,540	42	---	e69	26	180	13
24	144	2,540	1,210	32	215	19	25	93	6.2
25	56	841	134	89	932	601	43	266	59
26	45	340	41	50	186	27	184	1,130	1,050
27	34	165	16	30	140	13	32	119	11
28	36	---	e20	22	137	8.1	29	257	28
29	66	639	113	26	---	e24	43	449	69
30	55	481	72	24	---	e9.8	31	278	25
31	---	---	---	87	---	e352	---	---	---
TOTAL	1,388	---	5,477.0	1,355	---	1,920.4	2,151	---	13,464.6
		JULY		AUGUST			SEPTEMBER		
1	19	135	7.1	14	105	3.9	55	---	e113
2	17	---	e5.4	20	351	76	56	---	e81
3	15	---	e4.4	22	610	77	115	---	e294
4	14	---	e3.4	38	727	139	47	---	e24
5	13	---	e2.8	13	---	e2.7	30	---	e6.3
6	14	---	e2.4	11	---	e1.7	38	---	e24
7	13	---	e1.9	11	40	1.2	62	---	e56
8	12	---	e1.3	12	---	e3.1	42	---	e15
9	11	---	e0.73	48	915	376	25	---	e7.0
10	9.4	13	0.32	16	238	11	28	134	10
11	9.7	11	0.29	15	---	e6.6	26	---	e11
12	12	14	0.47	20	172	12	26	---	e13
13	13	---	e0.69	11	---	e1.1	28	185	14
14	10	---	e0.74	10	25	0.67	31	---	e13
15	19	67	6.9	9.9	26	0.71	22	---	e7.9
16	17	---	e9.3	10	19	0.52	18	105	5.1
17	13	---	e5.0	10	14	0.39	17	---	e5.2
18	10	---	e2.5	13	---	e1.5	16	130	5.8
19	19	---	e30	15	65	2.6	18	100	4.7
20	35	323	85	13	52	1.8	18	79	3.9
21	9.2	---	e4.0	13	---	e1.3	18	88	4.3
22	9.3	---	e4.0	12	25	0.85	19	---	e4.9
23	11	157	4.5	13	---	e0.67	19	---	e4.6
24	10	---	e4.4	13	---	e1.0	18	---	e4.3
25	8.7	---	e3.6	20	---	e5.6	16	---	e3.7
26	9.6	---	e4.2	15	54	2.2	19	85	4.4
27	38	283	49	90	921	785	18	---	e4.1
28	62	1,080	685	31	394	65	16	---	e3.7
29	25	949	144	122	1,320	1,420	18	---	e4.0
30	14	215	8.0	163	1,920	1,890	19	---	e4.3
31	13	91	3.2	622	3,730	15,700	---	---	---
TOTAL	504.9	---	1,084.54	1,445.9	---	20,591.11	898	---	756.2

e Estimated.

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO

LOCATION.--Lat 38°48'11", long 104°47'43", in NE¹/₄SE¹/₄ sec.29, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank at downstream side of bridge on Janitell Road, 0.1 mi downstream from Spring Creek, and 2.4 mi southeast of courthouse in Colorado Springs.

DRAINAGE AREA.--413 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1989 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105530

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,840 ft above NGVD of 1929, from topographic map. Prior to July 10, 1990, at site 500 ft upstream at datum 2.00 ft higher. July 10, 1990 to May 27, 1999, on right bank at upstream side of bridge on Janitell Road at same datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	80	e43	39	74	133	53	75	160	62	65	107
2	90	94	46	38	74	134	53	76	88	56	73	105
3	47	87	44	42	79	110	51	79	100	54	103	157
4	41	79	39	41	80	85	48	106	216	52	124	101
5	43	78	e34	40	93	80	67	109	229	53	81	86
6	43	77	e32	40	83	82	115	84	92	56	70	108
7	39	77	e35	37	86	63	54	78	99	60	66	118
8	52	77	e36	38	90	65	55	73	67	56	65	100
9	76	79	e34	35	93	57	56	73	89	53	116	84
10	63	81	e31	29	98	68	56	122	73	54	83	76
11	53	84	e40	33	96	75	52	76	63	54	80	78
12	51	70	43	35	95	62	51	72	62	61	93	76
13	53	63	42	33	87	59	54	69	77	62	66	81
14	54	63	45	30	97	54	51	66	205	60	64	83
15	46	61	43	31	77	54	61	97	73	77	60	77
16	41	63	44	28	73	55	69	101	70	71	62	74
17	42	63	43	30	79	64	62	73	262	70	63	71
18	45	56	41	29	77	196	67	69	159	61	70	75
19	45	52	40	29	120	131	83	64	565	115	74	75
20	48	53	41	33	84	146	78	68	254	126	68	72
21	50	47	41	31	78	99	78	67	130	66	67	73
22	53	46	40	33	80	71	175	66	99	60	61	72
23	62	48	39	42	80	68	230	77	85	56	64	68
24	55	47	38	60	68	166	208	71	85	58	80	65
25	55	47	32	82	71	126	88	205	103	54	93	66
26	77	43	33	85	74	59	69	79	312	61	72	70
27	180	45	42	84	83	59	57	65	78	128	173	73
28	75	45	44	78	102	58	64	51	79	360	138	71
29	66	45	42	77	---	57	93	50	98	93	207	71
30	69	44	41	74	---	e55	83	56	82	58	283	73
31	76	---	39	74	---	e53	---	117	---	55	871	---
TOTAL	1,842	1,894	1,227	1,410	2,371	2,644	2,381	2,534	4,154	2,362	3,655	2,506
MEAN	59.4	63.1	39.6	45.5	84.7	85.3	79.4	81.7	138	76.2	118	83.5
MAX	180	94	46	85	120	196	230	205	565	360	871	157
MIN	39	43	31	28	68	53	48	50	62	52	60	65
AC-FT	3,650	3,760	2,430	2,800	4,700	5,240	4,720	5,030	8,240	4,690	7,250	4,970

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

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	102	97.0	76.8	80.0	93.8	106	165	270	222	142	163	110		
MAX	179	150	140	122	139	161	658	1,022	693	319	467	200		
(WY)	(2000)	(2000)	(1998)	(1998)	(2000)	(1998)	(1999)	(1999)	(1997)	(1995)	(1999)	(1999)		
MIN	47.3	48.6	39.5	45.5	56.4	76.4	77.9	78.6	69.4	70.1	68.3	59.7		
(WY)	(1993)	(1990)	(1990)	(2003)	(1990)	(1991)	(2002)	(1993)	(1990)	(1993)	(2002)	(1992)		

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1990 - 2003

ANNUAL TOTAL	26,789	28,980		
ANNUAL MEAN	73.4	79.4		140
HIGHEST ANNUAL MEAN				312
LOWEST ANNUAL MEAN				76.0
HIGHEST DAILY MEAN	662	Jul 5	871	Aug 31
LOWEST DAILY MEAN	31	Dec 10	28	Jan 16
ANNUAL SEVEN-DAY MINIMUM	34	Dec 4	30	Jan 13
MAXIMUM PEAK FLOW			6,320	Aug 31
MAXIMUM PEAK STAGE			7.50	Aug 31
ANNUAL RUNOFF (AC-FT)	53,140	57,480		101,300
10 PERCENT EXCEEDS	104	116		227
50 PERCENT EXCEEDS	68	68		97
90 PERCENT EXCEEDS	43	41		57

e Estimated.

a From rating curve extended above 13,200 ft³/s.

b Maximum gage height, 11.11 ft, Sep 2, 1994.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1975 to June 1976, May 1979 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105530

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: October 1990 to January 1998.

pH: October 1990 to January 1998.

SPECIFIC CONDUCTANCE: October 1990 to January 1998.

WATER TEMPERATURE: October 1990 to January 1998.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 05...	1530	91	8.0	7.9	807	15.5	55.8	19.4	1.70	150	1.5	4.09	1.1
DEC 03...	1115	60	9.5	8.0	793	13.0	54.8	19.1	1.40	150	0.027	3.14	0.98
FEB 13...	0930	107	8.9	7.9	806	11.5	50	17	1.4	156	0.034	3.10	0.71
APR 30...	0940	104	8.8	8.0	593	13.5	43	12	1.59	117	0.032	2.62	0.42
JUL 22...	1615	70	7.0	7.6	732	23.5	43.0	16.4	1.61	152	0.197	4.32	0.08

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

Date	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, modif. m-TEC, water, col/100 mL (90902)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Arsenic water, fltrd, ug/L (01000)	Arsenic water unfltrd ug/L (01002)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, fltrd, ug/L (01025)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recover-able, ug/L (01034)
NOV 05...	1.32	5.0	--	E170	150	2.2	2.4	244	250	0.12	0.21	1.6	2.0
DEC 03...	1.13	4.0	--	180	230	4.0	4.0	264	253	E.10	E.12	2.5	2.1
FEB 13...	1.06	--	--	570	E1100	0.80	<2	212	231	0.163	0.136	E.5	E.6
APR 30...	0.784	--	180	--	360	--	2	150	145	--	--	--	--
JUL 22...	0.328	--	E140	--	700	--	<2	213	245	--	--	--	--

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

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Cyanide water unfltrd mg/L (00720)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)
NOV 05...	2.3	5.9	<0.01	42.0	484	0.58	1.6	78	91	<0.018	<0.018	4.8	5.4
DEC 03...	4.6	7.0	<0.01	45.0	394	0.64	1.3	36	45	<0.018	<0.018	3.5	3.6
FEB 13...	3.82	8.24	<0.009	34	904	0.46	2.00	46.9	80.3	<0.018	E.011	4.88	6.60
APR 30...	3.47	7.86	--	--	--	--	6.52	24.3	143	--	--	--	4.46
JUL 22...	3.84	5.37	--	--	--	--	1.11	39.9	41.4	--	--	--	3.25

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO—Continued

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

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 05...	5.8	5.6	<0.04	0.10	44	51	26	6.4
DEC 03...	6.4	6.5	<0.04	0.11	38	40	20	3.2
FEB 13...	4.83	4.79	<0.20	<0.16	57.3	68.7	--	
APR 30...	3.49	3.12	--	--	27.8	51.9	322	90
JUL 22...	3.21	3.16	--	--	38.0	38.9	18	3.4

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

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)
APR 23...	1945	430	9.7	7.4	353	6.0	30	6.2	0.66	58.0	0.260	1.64	0.18
JUL 28...	1515	810	7.4	8.0	255	20.0	18.9	4.68	0.33	43.7	0.585	1.55	0.06

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

Date	Phosphorus, water, unfltrd mg/L (00665)	E coli, modif. m-TEC, water, col/100 mL (90902)	Fecal coliform, M-FC, 0.7u MF col/100 mL (31625)	Arsenic, water, unfltrd ug/L (01002)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover-able, ug/L (01022)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selenium, water, fltrd, ug/L (01145)
APR 23...	2.31	1,100	1,200	10	54	56	2.14	52.0	81.0	8.19	1,210	30.0	2.09
JUL 28...	1.08	E22000	>6000	4	42	51	1.34	26.5	80.6	26.8	477	14.7	1.53

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

Date	Selenium, water, unfltrd ug/L (01147)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	2,6-Diethyl-aniline, water, fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	9H-Fluorene, water, unfltrd ug/L (34381)	Ace-naphthene, water, unfltrd ug/L (34205)	Ace-naphthylene, water, unfltrd ug/L (34200)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Anthra-cene, water, unfltrd ug/L (34220)	Atra-zine, water, fltrd, ug/L (39632)
APR 23...	4.78	8.1	307	<0.006	<0.0060	E.2	E.1	E.2	<0.006	<0.004	<0.0046	E.3	0.0079
JUL 28...	1.91	7.8	179	<0.006	<0.006	--	--	--	<0.006	<0.004	<0.0046	--	0.0110

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO—Continued

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

Date	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benzo-[a]-anthra-cene, water, unfltrd ug/L (34526)	Benzo-[a]-pyrene, water, unfltrd ug/L (34247)	Benzo-[b]-fluor-anthene, water, unfltrd ug/L (34230)	Benzo-[g,h,i]-per-ylene, water, unfltrd ug/L (34521)	Benzo-[k]-fluor-anthene, water, unfltrd ug/L (34242)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyrifos, water, fltrd, ug/L (38933)	Chrys-ene, water, unfltrd ug/L (34320)	cis-Per-methrin, water, fltrd 0.7u GF ug/L (82687)
APR 23...	<0.0500	<0.0100	E.6	E.8	E1	E.7	E.5	<0.002	E.466	<0.0200	<0.0050	E.9	<0.0060
JUL 28...	<0.05	<0.010	--	--	--	--	--	<0.002	E.421	<0.020	<0.005	--	<0.006

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

Date	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipron-il, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Di-benzo-[a,h]-anthra-cene, wat unf ug/L (34556)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Desulf-inyl-fipron-il amide, wat flt ug/L (62169)	Fipron-il sulfide, water, fltrd, ug/L (62167)	Fipron-il sulfone, water, fltrd, ug/L (62168)
APR 23...	<0.0180	<0.0030	<0.0040	0.0437	E.2	<0.0048	<0.0210	<0.0020	<0.0090	<0.0050	<0.0090	<0.0050	<0.0050
JUL 28...	<0.018	0.0049	<0.004	0.0571	--	<0.0048	<0.021	<0.0020	<0.009	<0.005	<0.009	<0.005	<0.005

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

Date	Fipron-il, water, fltrd, ug/L (62166)	Fluor-anthene, water, unfltrd ug/L (34376)	Fonofos, water, fltrd, ug/L (04095)	Indeno-[1,2,-3-cd]-pyrene, water, unfltrd ug/L (34403)	Lindane, water, fltrd, ug/L (39341)	Linuron, water, fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Nitro-benzene, water, unfltrd ug/L (34447)
APR 23...	E.0050	E2	<0.0027	E.6	<0.0040	<0.0350	<0.0270	<0.0060	<0.0130	<0.0060	<0.0016	<0.0070	<2
JUL 28...	<0.007	--	<0.0027	--	<0.0040	<0.035	0.0385	<0.006	<0.013	<0.006	<0.0016	<0.007	--

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

Date	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phenan-threne, water, unfltrd ug/L (34461)	Phorate, water, fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Pyrene, water, unfltrd ug/L (34469)	Sima-zine, water, fltrd, ug/L (04035)
APR 23...	<0.0025	<0.010	<0.004	E.017	E1	<0.0110	E.0108	<0.0041	<0.0100	<0.0110	<0.0230	E2	<0.005
JUL 28...	<0.0025	<0.010	<0.004	<0.022	--	<0.011	0.0191	<0.0041	<0.010	<0.011	<0.023	--	<0.005

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

Date	Tebu-thiuron, water, fltrd 0.7u GF ug/L (82670)	Terba-cil, water, fltrd 0.7u GF ug/L (82665)	Terbu-fos, water, fltrd 0.7u GF ug/L (82675)	Thio-bencarb, water, fltrd 0.7u GF ug/L (82681)	Tri-allate, water, fltrd 0.7u GF ug/L (82678)	Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661)	Naphth-alene, water, unfltrd ug/L (34696)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
APR 23...	<0.0160	<0.0340	<0.0170	<0.0048	<0.0023	E.0076	E.1	--	--
JUL 28...	<0.016	<0.034	<0.017	<0.0048	<0.0023	E.0016	--	1,180	2,580

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

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO—Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instan- taneous dis- charge, cfs (00061)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)
OCT				
22...	1310	69	731	--
NOV				
13...	1645	62	844	--
DEC				
10...	1335	35	806	13.0
27...	1500	69	799	--
JAN				
14...	1325	47	759	7.0
MAR				
06...	1150	95	843	--
28...	1320	82	748	--
APR				
29...	1435	101	599	--
JUN				
17...	1955	600	360	--
26...	1435	147	508	--
JUL				
17...	1825	73	715	--
AUG				
07...	1505	67	671	--
26...	1445	78	679	--
SEP				
19...	1715	83	739	--

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2001 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105530

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.84 inches, July 5, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.21 inches, June 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.23	---	---	---	---	---	0.00	0.00	0.07	0.01	0.00	0.00
2	0.04	---	---	---	---	---	0.01	0.01	0.00	0.00	0.00	0.08
3	0.02	---	---	---	---	---	0.00	0.01	0.14	0.00	0.12	0.17
4	0.00	---	---	---	---	---	0.00	0.00	0.61	0.00	0.02	0.01
5	0.00	---	---	---	---	---	0.14	0.00	0.38	0.00	0.01	0.02
6	0.00	---	---	---	---	---	0.17	0.01	0.15	0.00	0.00	0.53
7	0.00	---	---	---	---	---	0.00	0.00	0.18	0.00	0.00	0.01
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
9	0.00	---	---	---	---	---	0.00	0.02	0.07	0.00	0.01	0.00
10	0.00	---	---	---	---	---	0.00	0.18	0.00	0.00	0.00	0.00
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.13	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.03	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
14	0.00	---	---	---	---	---	0.00	0.00	0.28	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.02	0.26	0.00	0.13	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.07	0.03	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.07	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.05	0.00
19	0.00	---	---	---	---	---	0.07	0.06	1.21	0.30	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.02	0.01	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	0.01	---	---	---	---	---	0.18	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	---	0.12	0.08	0.00	0.00	0.16	0.00
24	0.05	---	---	---	---	---	0.13	0.01	0.00	0.00	0.00	0.00
25	0.11	---	---	---	---	---	0.00	0.71	0.58	0.00	0.12	0.00
26	0.44	---	---	---	---	---	0.00	0.05	0.02	0.19	0.02	0.00
27	0.25	---	---	---	---	---	0.00	0.01	0.00	0.04	0.05	0.00
28	0.00	---	---	---	---	---	0.00	0.00	0.24	1.07	0.25	0.00
29	0.00	---	---	---	---	---	0.00	0.00	0.03	0.01	0.00	0.00
30	0.00	---	---	---	---	---	0.00	0.01	0.00	0.06	0.43	0.00
31	0.00	---	---	---	---	---	---	0.05	---	0.00	0.22	---
TOTAL	1.15	---	---	---	---	---	0.84	1.49	4.15	1.84	1.60	0.82
MAX	0.44	---	---	---	---	---	0.18	0.71	1.21	1.07	0.43	0.53

07105600 SAND CREEK ABOVE MOUTH AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°47'18", long 104°46'24", in NW¹/₄SW¹/₄ sec.34, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank 0.2 mi upstream from Las Vegas Street bridge at Colorado Springs, 0.7 mi upstream from mouth, and 4.0 mi southeast of courthouse in Colorado Springs.

DRAINAGE AREA.--52.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 2003 (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105600

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,837 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for June 26 to July 7, which are poor. Natural flow of stream affected by several small storage reservoirs, ground-water withdrawals, and flows from sewage-treatment plants.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 3,200 ft³/s, Aug. 31, 2003, gage height, 4.56 ft, from rating curve extended above 304 ft³/s on basis of velocity-area study; minimum daily, 1.2 ft³/s, Aug. 21, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge during period April to September, 3,200 ft³/s, Aug. 31, gage height, 4.56 ft, from rating curve extended above 304 ft³/s on basis of velocity-area study; minimum daily, 1.2 ft³/s, Aug. 21.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	19	2.0	3.3	10	3.8	14
2	---	---	---	---	---	---	17	2.6	2.8	9.6	2.9	18
3	---	---	---	---	---	---	20	2.4	7.8	6.8	5.1	26
4	---	---	---	---	---	---	18	2.6	53	5.4	4.0	7.1
5	---	---	---	---	---	---	27	2.9	34	4.4	2.3	5.3
6	---	---	---	---	---	---	29	2.3	9.4	4.8	2.4	20
7	---	---	---	---	---	---	18	2.3	22	4.2	2.1	4.6
8	---	---	---	---	---	---	13	2.6	3.9	3.7	2.8	3.6
9	---	---	---	---	---	---	11	2.8	5.8	3.6	2.3	3.1
10	---	---	---	---	---	---	8.8	6.5	7.1	3.8	2.6	3.0
11	---	---	---	---	---	---	3.9	3.3	5.2	4.0	18	3.0
12	---	---	---	---	---	---	3.2	3.2	7.5	3.8	5.1	2.9
13	---	---	---	---	---	---	3.9	2.7	9.0	4.3	2.4	5.2
14	---	---	---	---	---	---	3.6	2.9	49	3.9	2.8	3.5
15	---	---	---	---	---	---	3.5	23	6.6	5.0	2.3	4.2
16	---	---	---	---	---	---	2.8	9.0	7.1	4.2	2.0	3.5
17	---	---	---	---	---	---	3.2	3.2	65	3.3	2.0	3.4
18	---	---	---	---	---	---	4.0	2.7	29	3.0	11	3.6
19	---	---	---	---	---	---	4.8	3.0	181	31	2.7	3.2
20	---	---	---	---	---	---	4.4	3.2	45	18	1.5	2.5
21	---	---	---	---	---	---	3.4	2.3	7.1	6.1	1.2	2.7
22	---	---	---	---	---	---	3.6	2.0	5.0	3.7	1.9	2.5
23	---	---	---	---	---	---	31	5.7	5.6	3.3	2.3	2.8
24	---	---	---	---	---	---	51	3.6	7.4	2.4	4.0	2.7
25	---	---	---	---	---	---	4.2	11	67	1.8	24	2.8
26	---	---	---	---	---	---	2.1	3.2	147	3.0	2.7	2.7
27	---	---	---	---	---	---	1.8	3.3	42	13	7.7	3.0
28	---	---	---	---	---	---	2.2	2.9	31	196	18	2.2
29	---	---	---	---	---	---	2.0	2.3	28	83	8.8	2.1
30	---	---	---	---	---	---	2.0	2.9	16	6.2	120	2.4
31	---	---	---	---	---	---	---	3.1	---	3.8	301	---
TOTAL	---	---	---	---	---	---	321.4	127.5	909.6	459.1	571.7	165.6
MEAN	---	---	---	---	---	---	10.7	4.11	30.3	14.8	18.4	5.52
MAX	---	---	---	---	---	---	51	23	181	196	301	26
MIN	---	---	---	---	---	---	1.8	2.0	2.8	1.8	1.2	2.1
AC-FT	---	---	---	---	---	---	637	253	1,800	911	1,130	328

07105600 SAND CREEK ABOVE MOUTH AT COLORADO SPRINGS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105600

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April to September 2003 (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 1,890 mg/L, July 28, 2003; minimum daily mean, 69 mg/L, Apr. 17, 2003.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 3,670 tons (estimated), Aug. 31, 2003; minimum daily, 0.22 ton (estimated), Aug. 21, 2003.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 1,890 mg/L, July 28; minimum daily mean, 69 mg/L, Apr. 17.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 3,670 tons (estimated), Aug. 31; minimum daily, 0.22 ton (estimated), Aug. 21.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Arsenic water unfltrd ug/L (01002)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recover-able, ug/L (01034)	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)
APR 30...	1530	1.7	7.3	8.2	1,350	19.0	3	195	0.13	E.7	8.4	1,370	2.77
JUL 21...	1150	5.5	4.8	8.0	1,170	31.0	3	152	0.06	E.5	5.7	1,500	2.44

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

Date	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selenium, water, unfltrd ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
APR 30...	98.7	<0.02	6.13	5.9	0.35	15	--	--
JUL 21...	79.5	<0.02	5.81	4.8	<0.16	12	94	1.4

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

E -- Estimated laboratory analysis value.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	E coli, modif. m-TEC, water, col/100 mL (90902)	E coli, MF, water, col/100 mL (31633)	Fecal coliform, M-FC, 0.7u MF, col/100 mL (31625)	Arsenic water unfltrd ug/L (01002)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium water, unfltrd ug/L (01027)	Chromium, water, unfltrd recover-able, ug/L (01034)
APR 24...	1130	47	8.6	7.9	423	12.0	--	370	730	5	41	0.64	9.6
JUL 28...	1645	324	7.7	8.1	224	19.5	>8000	--	>6000	13	E34	1.84	19.7

07105600 SAND CREEK ABOVE MOUTH AT COLORADO SPRINGS, CO—Continued

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

Date	Copper, water, unfltrd recover-able, ug/L (01042)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury, water, unfltrd recover-able, ug/L (71900)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selenium, water, unfltrd recover-able, ug/L (01147)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
APR 24...	41.4	28,600	41.8	826	--	18.9	5.3	0.35	177	--	--
JUL 28...	97.4	66,600	125	3,630	0.22	49.7	4.4	0.51	405	8,810	7,710

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

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat un f uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
MAR 27...	1445	42	774	12.5	305	35
APR 08...	1700	14	--	16.5	128	4.8
08...	1705	15	842	--	--	--
17...	1315	3.0	1,410	22.0	66	0.53
23...	1845	102	435	5.5	5,140	1,420
23...	1850	102	435	--	--	--
MAY 12...	1215	3.0	1,360	23.5	77	0.62
13...	1520	2.4	1,380	17.5	--	--
JUN 05...	1415	89	337	16.5	1,680	404
05...	1420	85	344	--	--	--
09...	1315	2.6	1,180	26.0	67	0.47
09...	1505	2.7	1,180	26.0	--	--
18...	1500	7.9	867	--	--	--
JUL 22...	1610	2.2	1,250	--	--	--
AUG 18...	1455	1.9	1,320	--	--	--
26...	1245	1.7	1,080	28.0	112	0.51
SEP 03...	1400	35	475	18.0	2,120	200
03...	1410	39	484	--	--	--
16...	1150	3.1	1,250	--	--	--
16...	1215	3.8	1,200	22.5	110	1.1

07105600 SAND CREEK ABOVE MOUTH AT COLORADO SPRINGS, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	
		APRIL			MAY			JUNE		
1	19	74	4.0	2.0	---	e0.36	3.3	---	e0.65	
2	17	79	3.6	2.6	---	e0.47	2.8	---	e0.52	
3	20	---	e5.0	2.4	---	e0.43	7.8	181	14	
4	18	---	e4.8	2.6	---	e0.46	53	752	248	
5	27	---	e7.7	2.9	---	e0.52	34	858	108	
6	29	---	e8.8	2.3	---	e0.42	9.4	---	e5.4	
7	18	---	e5.9	2.3	---	e0.41	22	184	22	
8	13	127	4.6	2.6	---	e0.47	3.9	---	e0.73	
9	11	---	e3.6	2.8	---	e0.50	5.8	79	1.6	
10	8.8	---	e2.7	6.5	---	e2.3	7.1	---	e1.7	
11	3.9	---	e1.1	3.3	---	e0.71	5.2	---	e1.1	
12	3.2	---	e0.82	3.2	77	0.66	7.5	---	e4.5	
13	3.9	---	e0.89	2.7	---	e0.55	9.0	---	e3.0	
14	3.6	---	e0.75	2.9	---	e0.59	49	412	174	
15	3.5	---	e0.72	23	315	96	6.6	---	e2.2	
16	2.8	---	e0.66	9.0	306	21	7.1	---	e1.8	
17	3.2	69	0.59	3.2	---	e0.76	65	1,600	1,050	
18	4.0	---	e0.73	2.7	---	e0.54	29	1,310	242	
19	4.8	---	e1.0	3.0	---	e0.59	181	780	1,830	
20	4.4	---	e0.82	3.2	---	e0.61	45	---	e130	
21	3.4	---	e0.62	2.3	---	e0.44	7.1	313	6.1	
22	3.6	---	e0.78	2.0	---	e0.37	5.0	---	e2.8	
23	31	1,090	215	5.7	96	5.5	5.6	---	e1.8	
24	51	---	e311	3.6	---	e0.77	7.4	---	e2.2	
25	4.2	---	e0.77	11	144	13	67	397	137	
26	2.1	---	e0.38	3.2	---	e0.64	147	605	468	
27	1.8	---	e0.33	3.3	---	e0.61	42	---	e37	
28	2.2	---	e0.40	2.9	---	e0.53	31	---	e26	
29	2.0	---	e0.36	2.3	---	e0.42	28	---	e19	
30	2.0	---	e0.37	2.9	---	e0.54	16	100	4.6	
31	---	---	---	3.1	---	e0.56	---	---	---	
TOTAL	321.4	---	588.79	127.5	---	151.73	909.6	---	4,545.70	
		JULY			AUGUST			SEPTEMBER		
1	10	83	2.4	3.8	---	e0.69	14	---	e11	
2	9.6	90	2.3	2.9	---	e0.55	18	---	e25	
3	6.8	---	e1.7	5.1	---	e2.3	26	471	100	
4	5.4	---	e1.3	4.0	---	e1.2	7.1	---	e1.9	
5	4.4	---	e1.1	2.3	---	e0.43	5.3	---	e1.2	
6	4.8	---	e1.1	2.4	---	e0.44	20	---	e56	
7	4.2	---	e0.97	2.1	---	e0.38	4.6	---	e0.84	
8	3.7	---	e0.83	2.8	---	e0.50	3.6	---	e0.64	
9	3.6	---	e0.79	2.3	---	e0.42	3.1	---	e0.55	
10	3.8	---	e0.82	2.6	---	e0.47	3.0	---	e0.53	
11	4.0	---	e0.86	18	221	56	3.0	---	e0.52	
12	3.8	---	e0.80	5.1	---	e2.6	2.9	---	e0.51	
13	4.3	---	e0.88	2.4	---	e0.48	5.2	---	e1.5	
14	3.9	---	e0.79	2.8	---	e0.54	3.5	---	e0.75	
15	5.0	---	e1.0	2.3	---	e0.45	4.2	---	e1.1	
16	4.2	---	e0.81	2.0	---	e0.38	3.5	108	1.0	
17	3.3	---	e0.63	2.0	---	e0.37	3.4	---	e0.99	
18	3.0	---	e0.55	11	156	23	3.6	---	e1.0	
19	31	346	94	2.7	---	e0.56	3.2	---	e0.86	
20	18	498	38	1.5	---	e0.28	2.5	---	e0.66	
21	6.1	104	1.8	1.2	---	e0.22	2.7	---	e0.70	
22	3.7	---	e0.85	1.9	---	e0.35	2.5	---	e0.63	
23	3.3	---	e0.66	2.3	---	e0.50	2.8	---	e0.66	
24	2.4	---	e0.46	4.0	---	e2.5	2.7	---	e0.62	
25	1.8	---	e0.33	24	269	75	2.8	---	e0.64	
26	3.0	---	e1.6	2.7	133	1.1	2.7	---	e0.59	
27	13	295	22	7.7	202	18	3.0	---	e0.63	
28	196	1,890	2,280	18	271	32	2.2	---	e0.43	
29	83	1,300	559	8.8	---	e5.3	2.1	---	e0.40	
30	6.2	---	e2.2	120	1,050	449	2.4	---	e0.43	
31	3.8	---	e0.69	301	---	e3,670	---	---	---	
TOTAL	459.1	---	3,021.22	571.7	---	4,346.01	165.6	---	212.28	

e Estimated.

07105800 FOUNTAIN CREEK AT SECURITY, CO

LOCATION (REVISED).--Lat 38°43'46", long 104°44'00", in NE¼SW¼ sec.24, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 20 ft downstream from Carson Road Bridge at Security, 0.9 mi southwest of South Security School, 3.5 mi northeast of Fountain, and 5.5 mi upstream from Jimmy Camp Creek. Prior to Mar. 24, 2003, at site 20 ft upstream on left bank.

DRAINAGE AREA.--495 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105800

REVISED RECORDS.--WDR CO-85-1: 1984 (M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,640 ft above NGVD of 1929, from topographic map.

July 19, 1972 to Feb. 20, 1980, at site 880 ft downstream at datum 1.00 ft higher. Prior to July 19, 1972, and from Feb. 21, 1980 to Mar. 23, 2003, at site 20 ft upstream on left bank; prior to July 19, 1972, and from Feb. 21, 1980 to June 30, 1986, at datum 7.00 ft higher; July 1, 1986 to Feb. 6, 1995, at datum 4.00 ft higher; Feb 7, 1995 to Nov. 29, 1995, at datum 3.00 ft higher; Nov. 30, 1995 to Apr. 4, 2001, at datum 2.00 ft higher; and Apr. 14, 2001 to Mar. 23, 2003, at present datum.

REMARKS.--Records fair except for June 19, Aug. 31, and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage treatment plants.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	97	66	57	86	162	110	107	151	77	70	93
2	110	106	66	55	85	165	111	110	94	68	70	117
3	58	101	65	60	88	130	112	113	102	64	96	171
4	50	92	62	60	87	107	113	131	242	62	116	104
5	46	87	56	57	94	98	134	138	225	61	83	88
6	44	85	55	57	86	96	200	133	75	65	76	123
7	40	84	59	55	85	93	120	131	96	65	73	116
8	44	82	60	57	85	103	111	133	66	60	77	105
9	86	80	58	56	84	96	105	126	88	61	112	93
10	84	79	57	50	88	101	91	171	105	62	92	89
11	79	82	61	51	87	98	77	114	103	62	84	97
12	75	81	65	57	87	97	76	111	82	65	108	e95
13	74	81	63	55	93	98	75	111	111	67	70	e98
14	70	79	65	54	108	98	73	118	270	64	67	e99
15	63	74	64	54	91	99	80	147	149	70	63	e85
16	57	69	62	51	89	102	87	165	140	74	65	76
17	57	69	59	52	91	119	82	111	283	70	66	75
18	59	65	55	52	89	219	86	106	258	61	78	e78
19	57	63	54	53	133	155	103	110	773	100	81	75
20	58	65	53	55	105	155	98	121	385	136	74	74
21	59	60	53	69	96	139	99	116	114	64	76	75
22	62	60	54	90	95	114	169	109	89	62	75	77
23	73	65	53	91	95	110	262	113	79	e65	83	77
24	66	65	56	95	90	159	225	108	78	64	85	74
25	65	68	50	92	93	211	96	225	83	63	125	76
26	72	65	49	92	100	113	78	112	323	65	82	79
27	213	68	57	92	107	103	73	83	129	131	159	83
28	100	68	61	83	133	101	80	64	93	402	159	81
29	81	67	59	81	---	102	107	59	100	157	186	84
30	85	67	57	82	---	104	110	67	97	77	295	86
31	91	---	55	82	---	109	---	112	---	68	913	---
TOTAL	2,240	2,274	1,809	2,047	2,650	3,756	3,343	3,675	4,983	2,632	3,859	2,743
MEAN	72.3	75.8	58.4	66.0	94.6	121	111	119	166	84.9	124	91.4
MAX	213	106	66	95	133	219	262	225	773	402	913	171
MIN	40	60	49	50	84	93	73	59	66	60	63	74
AC-FT	4,440	4,510	3,590	4,060	5,260	7,450	6,630	7,290	9,880	5,220	7,650	5,440

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

	83.6	75.9	64.9	69.2	76.8	88.5	124	211	188	123	136	87.8
MEAN	83.6	75.9	64.9	69.2	76.8	88.5	124	211	188	123	136	87.8
MAX	317	198	168	146	156	195	738	1,131	886	381	561	231
(WY)	(1985)	(2000)	(2000)	(1998)	(2000)	(2000)	(1999)	(1999)	(1997)	(1995)	(1999)	(1999)
MIN	12.6	15.1	17.8	11.9	14.1	21.3	23.7	24.7	17.8	30.1	23.5	13.1
(WY)	(1965)	(1965)	(1976)	(1976)	(1972)	(1965)	(1978)	(1966)	(1968)	(1972)	(1974)	(1968)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1965 - 2003

ANNUAL TOTAL	32,867	36,011	111
ANNUAL MEAN	90.0	98.7	355
HIGHEST ANNUAL MEAN			31.5
LOWEST ANNUAL MEAN			1999
HIGHEST DAILY MEAN	792	913	1968
LOWEST DAILY MEAN	40	40	e11,000
ANNUAL SEVEN-DAY MINIMUM	53	53	1.9
MAXIMUM PEAK FLOW		a7,100	4.2
MAXIMUM PEAK STAGE		7.38	b25,000
ANNUAL RUNOFF (AC-FT)	65,190	71,430	c11.30
10 PERCENT EXCEEDS	113	138	198
50 PERCENT EXCEEDS	83	84	78
90 PERCENT EXCEEDS	60	57	25

e Estimated.

a From rating curve extended above 6,520 ft³/s on basis of slope-area measurement of peak flow at gage height 7.18 ft.

b From slope-area measurement of peak flow. Flood of May 30, 1935, may have been larger.

c From floodmarks, site and datum then in use.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1984 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105800

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: October 1990 to January 1998.

pH: October 1990 to January 1998.

SPECIFIC CONDUCTANCE: October 1990 to January 1998.

WATER TEMPERATURE: October 1990 to January 1998.

SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

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

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 7,410 mg/L, June 24, 1999; minimum daily mean, 21 mg/L, May 15, 2002.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 400,000 tons (estimated), Apr. 30, 1999; minimum daily, 4.2 tons, July 10, 2003.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,400 mg/L, Apr. 23; minimum daily mean, 25 mg/L, July 10.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 15,800 tons, Aug. 31; minimum daily, 4.2 tons, July 10.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Ammonia, water, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 04...	1430	110	8.2	8.4	820	12.5	53.5	17.5	1.40	150	0.228	3.84	0.29
DEC 03...	1200	51	10.4	8.5	994	7.0	77.4	25.6	1.30	220	0.320	4.93	1.0
FEB 12...	1015	61	10.7	8.4	975	5.5	72	23	1.3	198	0.383	4.42	1.1
MAY 01...	1050	91	8.5	8.3	715	13.0	56	16	1.51	149	0.117	3.30	0.54

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

Date	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, modif. m-TEC, water, col/100 mL (90902)	E coli, m-TEC, MF, water, col/100 mL (31633)	Fecal coliform, M-FC, col/100 mL (31625)	Arsenic, water, fltrd, ug/L (01000)	Arsenic, water, unfltrd, ug/L (01002)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium, water, fltrd, ug/L (01025)	Cadmium, water, unfltrd, ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recover-able, ug/L (01034)
NOV 04...	0.486	4.0	--	200	140	2.1	2.9	272	279	E.13	0.28	2.1	2.8
DEC 03...	1.16	2.0	--	E280	50	3.8	3.7	218	209	E.14	E.18	2.3	2.0
FEB 12...	1.37	--	--	E170	80	1.43	<2	211	207	0.109	0.096	<0.8	<0.8
MAY 01...	0.757	--	28	--	110	--	3	130	130	--	--	--	--

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

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Cyanide, water, unfltrd, mg/L (00720)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury, water, fltrd, ug/L (71890)	Mercury, water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)
NOV 04...	3.2	9.0	<0.01	46.0	1,870	0.57	3.6	12	87	<0.018	<0.018	5.1	6.5
DEC 03...	5.6	7.4	<0.01	14.0	329	0.63	0.92	15	26	<0.018	<0.018	5.0	4.8
FEB 12...	3.98	6.73	<0.009	20	770	0.35	1.32	37.5	67.8	<0.018	<0.018	5.60	7.39
MAY 01...	3.07	7.09	--	--	--	--	4.54	9.27	99.5	--	--	--	5.21

07105800 FOUNTAIN CREEK AT SECURITY, CO—Continued

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

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 04...	6.5	6.3	0.16	0.10	40	58	89	26
DEC 03...	9.1	8.8	<0.04	0.05	23	E24	23	3.1
FEB 12...	6.46	5.73	<0.20	<0.16	34.8	41.9	44	7.3
MAY 01...	4.74	4.17	--	--	14.6	32.6	--	--

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

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Fluoride, water, fltrd, mg/L (00950)	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)
APR 23...	2115	406	9.1	7.5	391	7.5	32	7.3	0.67	68.7	0.339	1.79	0.19
JUL 24...	1745	65	6.3	8.4	790	27.5	47.9	15.0	1.53	158	0.153	3.04	0.24
JUL 28...	1745	440	7.0	8.0	298	20.0	25.2	4.98	0.35	51.1	0.432	1.63	0.10

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

Date	Phosphorus, water, unfltrd mg/L (00665)	E coli, modif. m-TEC, col/100 mL (90902)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Arsenic water unfltrd ug/L (01002)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover-able, ug/L (01022)	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Nickel, water, unfltrd recover-able, ug/L (01067)	Selenium, water, fltrd, ug/L (01145)
APR 23...	2.29	1,200	1,600	12	58	62	2.37	55.8	69.3	9.39	1,180	31.6	2.93
JUL 24...	0.386	360	1,000	E1	190	228	4.58	6.14	1.73	6.64	43.7	5.07	3.73
JUL 28...	3.35	E22000	>6000	9	38	49	1.57	69.9	99.0	7.88	1,590	38.1	1.89

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

Date	Selenium, water, unfltrd ug/L (01147)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	2,6-Diethyl-aniline water fltrd 0.7u GF ug/L (82660)	CIAT, water, fltrd, ug/L (04040)	9H-Fluorene, water, unfltrd ug/L (34381)	Ace-naphth-ene, water, unfltrd ug/L (34205)	Ace-naphth-ylene, water, unfltrd ug/L (34200)	Aceto-chlor, water, fltrd, ug/L (49260)	Ala-chlor, water, fltrd, ug/L (46342)	alpha-HCH, water, fltrd, ug/L (34253)	Anthra-cene, water, unfltrd ug/L (34220)	Atra-zine, water, fltrd, ug/L (39632)
APR 23...	5.45	8.3	306	<0.006	<0.0060	E.2	E.10	E.2	<0.006	<0.004	<0.0046	E.3	0.0097
JUL 24...	3.81	25.7	31.9	<0.006	<0.006	<2	<2	<2	<0.006	<0.004	<0.0046	<2	<0.007
JUL 28...	3.51	4.2	328	<0.006	<0.006	E.0331	E.0338	<2	<0.006	<0.004	<0.0046	E.0612	0.0123

07105800 FOUNTAIN CREEK AT SECURITY, CO—Continued

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

Date	Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686)	Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673)	Benzo-[a]-anthra-cene, water, unfltrd ug/L (34526)	Benzo-[a]-pyrene, water, unfltrd ug/L (34247)	Benzo-[b]-fluor-anthene, water, unfltrd ug/L (34230)	Benzo-[g,h,i]-per-ylene, water, unfltrd ug/L (34521)	Benzo-[k]-fluor-anthene, water, unfltrd ug/L (34242)	Butyl-ate, water, fltrd, ug/L (04028)	Car-baryl, water, fltrd 0.7u GF ug/L (82680)	Carbo-furan, water, fltrd 0.7u GF ug/L (82674)	Chlor-pyri-fos water, fltrd, ug/L (38933)	Chrys-ene, water, unfltrd ug/L (34320)	cis-Per-methrin water fltrd 0.7u GF ug/L (82687)
APR 23...	<0.0500	<0.0100	E.5	E.6	E1.0	E.6	E.4	<0.002	E.679	<0.0200	<0.0050	E.8	<0.0060
JUL 24...	<0.05	<0.010	<2	<1	<2	<3	<2	<0.002	E.029	<0.020	<0.005	E.0117	<0.006
28...	<0.05	<0.010	E.1840	E.2280	E.3360	E.1650	E.1410	<0.002	E.371	<0.020	<0.005	E.2120	<0.006

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

Date	Cyana-zine, water, fltrd, ug/L (04041)	DCPA, water, fltrd 0.7u GF ug/L (82682)	Desulf-inyl fipro-nil, water, fltrd, ug/L (62170)	Diazi-non, water, fltrd, ug/L (39572)	Di-benzo-[a,h]-anthra-cene, wat unfltrd ug/L (34556)	Diel-drin, water, fltrd, ug/L (39381)	Disul-foton, water, fltrd 0.7u GF ug/L (82677)	EPTC, water, fltrd 0.7u GF ug/L (82668)	Ethal-flur-alin, water, fltrd 0.7u GF ug/L (82663)	Etho-prop, water, fltrd 0.7u GF ug/L (82672)	Desulf-inyl-fipro-nil amide, wat flt ug/L (62169)	Fipro-nil sulfide water, fltrd, ug/L (62167)	Fipro-nil sulfone water, fltrd, ug/L (62168)
APR 23...	<0.0180	<0.0030	<0.0040	0.0385	E.2	<0.0048	<0.0210	<0.0020	<0.0090	<0.0050	<0.0090	<0.0050	<0.0050
JUL 24...	<0.018	<0.0030	<0.004	0.0767	<3	<0.0048	<0.021	<0.0020	<0.009	<0.005	<0.009	<0.005	<0.005
28...	<0.018	0.0041	<0.004	0.0835	E.0407	<0.0048	<0.021	<0.0020	<0.009	<0.005	<0.009	<0.005	<0.005

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

Date	Fipro-nil, water, fltrd, ug/L (62166)	Fluor-anthene water unfltrd ug/L (34376)	Fonofos water, fltrd, ug/L (04095)	Indeno-[1,2,3-cd]-pyrene, water, unfltrd ug/L (34403)	Lindane water, fltrd, ug/L (39341)	Linuron water fltrd 0.7u GF ug/L (82666)	Malathion, water, fltrd, ug/L (39532)	Methyl para-thion, water, fltrd 0.7u GF ug/L (82667)	Metola-chlor, water, fltrd, ug/L (39415)	Metri-buzin, water, fltrd, ug/L (82630)	Moli-nate, water, fltrd 0.7u GF ug/L (82671)	Naprop-amide, water, fltrd 0.7u GF ug/L (82684)	Nitro-benzene water unfltrd ug/L (34447)
APR 23...	<0.0070	E1	<0.0027	E.5	<0.0040	<0.0350	<0.0270	<0.0060	<0.0130	<0.0060	<0.0016	<0.0070	<2
JUL 24...	<0.007	E.0676	<0.0027	<3	<0.0040	<0.035	<0.027	<0.006	<0.013	<0.006	<0.0016	<0.007	<2
28...	<0.007	E.5140	<0.0027	E.2150	<0.0040	<0.035	0.0278	<0.006	<0.013	<0.006	<0.0016	<0.007	<2

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

Date	p,p'-DDE, water, fltrd, ug/L (34653)	Para-thion, water, fltrd, ug/L (39542)	Peb-ulate, water, fltrd 0.7u GF ug/L (82669)	Pendi-meth-alin, water, fltrd 0.7u GF ug/L (82683)	Phenan-threne, water, unfltrd ug/L (34461)	Phorate water fltrd 0.7u GF ug/L (82664)	Prome-ton, water, fltrd, ug/L (04037)	Pron-amide, water, fltrd 0.7u GF ug/L (82676)	Propa-chlor, water, fltrd, ug/L (04024)	Pro-panil, water, fltrd 0.7u GF ug/L (82679)	Propar-gite, water, fltrd 0.7u GF ug/L (82685)	Pyrene, water, unfltrd ug/L (34469)	Sima-zine, water, fltrd, ug/L (04035)
APR 23...	<0.0025	<0.010	<0.004	<0.022	E.7	<0.0110	E.0149	<0.0041	<0.0100	<0.0110	<0.0230	E1	<0.005
JUL 24...	<0.0025	<0.010	<0.004	<0.022	E.0253	<0.011	E.0112	<0.0041	<0.010	<0.011	<0.023	E.0604	<0.005
28...	<0.0025	<0.010	<0.004	<0.022	E.2160	<0.011	0.0215	<0.0041	<0.010	<0.011	<0.023	E.4350	<0.005

07105800 FOUNTAIN CREEK AT SECURITY, CO—Continued

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

Date	Tebu- thiuron water fltrd 0.7u GF ug/L (82670)	Terba- cil, water, fltrd 0.7u GF ug/L (82665)	Terbu- fos, water, fltrd 0.7u GF ug/L (82675)	Thio- bencarb water fltrd 0.7u GF ug/L (82681)	Tri- allate, water, fltrd 0.7u GF ug/L (82678)	Tri- flur- alin, water, fltrd 0.7u GF ug/L (82661)	Naphth- alene, water, unfltrd ug/L (34696)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
APR 23...	<0.0160	<0.0340	<0.0170	<0.0048	<0.0023	<0.0090	E.1	--	
JUL 24...	<0.016	<0.034	<0.017	<0.0048	<0.0023	<0.009	<2	44	7.7
28...	<0.016	<0.034	<0.017	<0.0048	<0.0023	E.0011	E.0529	4,310	5,120

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

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

Date	Time	Instan- taneous dis- charge, cfs (00061)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Fecal coli- form, M-FC 0.7u MF col/ 100 mL (31625)
APR 09...	1645	115	825	20.0	60	E34
MAY 12...	1415	120	699	20.0	50	48
28...	1425	76	811	27.0	92	100
JUN 11...	1045	86	725	19.5	230	300
25...	1305	74	672	21.5	570	E850
JUL 08...	1415	65	807	28.0	150	390
AUG 06...	1005	53	725	22.5	460	1,100
21...	0945	59	--	15.5	450	580
SEP 03...	2015	260	470	--	6,600	E13000
18...	1020	e78	712	12.0	230	220

E -- Estimated laboratory analysis value
 e -- Estimated.

07105800 FOUNTAIN CREEK AT SECURITY, CO—Continued

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

Date	Time	Instan- taneous dis- charge, cfs (00061)	Specif. conduc- tance, wat unf uS/cm 25 degC (00095)	Temper- ature, water, deg C (00010)	Sus- pended sedi- ment concen- tration mg/L (80154)	Sus- pended sedi- ment load, tons/d (80155)
OCT						
03...	1305	74	945	--	--	--
04...	1310	62	950	17.5	79	13
22...	1530	76	807	--	--	--
28...	1645	97	762	--	--	--
28...	1700	97	766	14.5	40	10
NOV						
04...	1430	110	820	12.5	89	26
12...	1610	93	860	--	--	--
DEC						
03...	1200	51	994	7.0	23	3.1
09...	1405	65	888	8.5	--	--
31...	1455	58	962	--	--	--
JAN						
14...	1705	60	878	8.5	--	--
FEB						
12...	1015	61	975	5.5	44	7.3
13...	1530	121	1,070	--	--	--
MAR						
06...	1355	112	953	--	--	--
31...	1350	131	809	--	--	--
APR						
11...	1150	62	902	16.0	--	--
11...	1215	80	902	16.5	60	13
29...	1250	121	656	--	--	--
MAY						
13...	1320	108	704	--	--	--
13...	1330	118	704	16.0	144	46
JUN						
03...	1730	91	731	19.5	120	29
04...	1715	742	413	15.5	2,870	5,750
04...	1720	705	413	--	--	--
26...	1640	193	522	--	--	--
26...	1700	174	522	23.5	372	175
JUL						
09...	1700	76	774	27.5	43	8.8
22...	1745	76	762	--	--	--
24...	1745	65	790	27.5	44	7.7
25...	1530	74	748	26.0	48	9.6
28...	1745	440	298	20.0	4,310	5,120
29...	1345	104	662	--	--	--
AUG						
07...	1630	76	659	26.0	104	21
07...	1640	83	659	--	--	--
25...	1500	92	694	--	--	--
25...	1530	93	694	25.0	116	29
SEP						
02...	1415	118	734	25.5	134	43
02...	1425	123	734	--	--	--
11...	1455	107	759	--	--	--
16...	1820	81	773	--	--	--

07105800 FOUNTAIN CREEK AT SECURITY, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
OCTOBER			NOVEMBER			DECEMBER			
1	62	---	e8.9	97	---	---	66	---	---
2	110	---	e145	106	---	---	66	---	---
3	58	---	e20.0	101	---	---	65	---	---
4	50	93	14	92	---	---	62	---	---
5	46	---	e13.0	87	---	---	56	---	---
6	44	---	e12.0	85	---	---	55	---	---
7	40	---	e10.0	84	---	---	59	---	---
8	44	---	e13.0	82	---	---	60	---	---
9	86	174	42	80	---	---	58	---	---
10	84	---	e37.0	79	---	---	57	---	---
11	79	---	e27.0	82	---	---	61	---	---
12	75	---	e18.0	81	---	---	65	---	---
13	74	51	10	81	---	---	63	---	---
14	70	34	6.6	79	---	---	65	---	---
15	63	---	e5.6	74	---	---	64	---	---
16	57	---	e5.1	69	---	---	62	---	---
17	57	---	e5.2	69	---	---	59	---	---
18	59	---	e5.4	65	---	---	55	---	---
19	57	---	e5.3	63	---	---	54	---	---
20	58	---	e5.4	65	---	---	53	---	---
21	59	---	e5.5	60	---	---	53	---	---
22	62	---	e5.7	60	---	---	54	---	---
23	73	---	e6.7	65	---	---	53	---	---
24	66	---	e6.1	65	---	---	56	---	---
25	65	---	e6.2	68	---	---	50	---	---
26	72	---	e46.0	65	---	---	49	---	---
27	213	1,090	991	68	---	---	57	---	---
28	100	175	62	68	---	---	61	---	---
29	81	---	e17.0	67	---	---	59	---	---
30	85	---	e18.0	67	---	---	57	---	---
31	91	---	e20.0	---	---	---	55	---	---
TOTAL	2,240	---	1,592.7	2,274	---	---	1,809	---	---
JANUARY			FEBRUARY			MARCH			
1	57	---	---	86	---	---	162	---	---
2	55	---	---	85	---	---	165	---	---
3	60	---	---	88	---	---	130	---	---
4	60	---	---	87	---	---	107	---	---
5	57	---	---	94	---	---	98	---	---
6	57	---	---	86	---	---	96	---	---
7	55	---	---	85	---	---	93	---	---
8	57	---	---	85	---	---	103	---	---
9	56	---	---	84	---	---	96	---	---
10	50	---	---	88	---	---	101	---	---
11	51	---	---	87	---	---	98	---	---
12	57	---	---	87	---	---	97	---	---
13	55	---	---	93	---	---	98	---	---
14	54	---	---	108	---	---	98	---	---
15	54	---	---	91	---	---	99	---	---
16	51	---	---	89	---	---	102	---	---
17	52	---	---	91	---	---	119	---	---
18	52	---	---	89	---	---	219	---	---
19	53	---	---	133	---	---	155	---	---
20	55	---	---	105	---	---	155	---	---
21	69	---	---	96	---	---	139	---	---
22	90	---	---	95	---	---	114	---	---
23	91	---	---	95	---	---	110	---	---
24	95	---	---	90	---	---	159	---	---
25	92	---	---	93	---	---	211	---	---
26	92	---	---	100	---	---	113	---	---
27	92	---	---	107	---	---	103	---	---
28	83	---	---	133	---	---	101	---	---
29	81	---	---	---	---	---	102	---	---
30	82	---	---	---	---	---	104	---	---
31	82	---	---	---	---	---	109	---	---
TOTAL	2,047	---	---	2,650	---	---	3,756	---	---

07105800 FOUNTAIN CREEK AT SECURITY, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	
		APRIL			MAY			JUNE		
1	110	---	e39	107	137	40	151	680	423	
2	111	---	e35	110	112	34	94	414	115	
3	112	99	30	113	165	50	102	344	161	
4	113	67	20	131	168	59	242	1,010	1,270	
5	134	---	e24	138	---	e60	225	708	643	
6	200	458	264	133	---	e58	75	226	47	
7	120	157	52	131	---	e58	96	---	e70	
8	111	---	e37	133	---	e74	66	---	e27	
9	105	---	e31	126	170	58	88	189	61	
10	91	---	e23	171	473	273	105	266	75	
11	77	70	14	114	---	e64	103	118	33	
12	76	---	e12	111	131	39	82	75	17	
13	75	---	e11	111	120	37	111	---	e21	
14	73	---	e10	118	124	39	270	695	2,050	
15	80	---	e11	147	179	145	149	---	e125	
16	87	---	e11	165	339	266	140	102	38	
17	82	50	11	111	70	21	283	1,770	3,260	
18	86	---	e16	106	55	16	258	1,200	933	
19	103	---	e25	110	72	21	773	1,270	10,000	
20	98	---	e29	121	68	22	385	---	e1,330	
21	99	121	32	116	---	e19	114	241	75	
22	169	583	785	109	56	17	89	---	e34	
23	262	3,400	2,960	113	---	e81	79	---	e21	
24	225	1,090	725	108	314	111	78	---	e21	
25	96	---	e87	225	969	1,210	83	---	e27	
26	78	162	34	112	397	136	323	655	908	
27	73	---	e31	83	169	39	129	180	65	
28	80	167	36	64	86	15	93	---	e39	
29	107	269	79	59	---	e16	100	165	54	
30	110	---	e71	67	145	26	97	158	44	
31	---	---	---	112	391	207	---	---	---	
TOTAL	3,343	---	5,545	3,675	---	3,311	4,983	---	21,987	
		JULY			AUGUST			SEPTEMBER		
1	77	78	16	70	225	42	93	---	e49	
2	68	---	e12	70	201	38	117	149	49	
3	64	---	e8.5	96	655	176	171	369	226	
4	62	41	6.9	116	358	122	104	288	83	
5	61	---	e7.0	83	158	35	88	213	51	
6	65	---	e7.6	76	70	14	123	273	126	
7	65	---	e7.7	73	84	17	116	---	e82	
8	60	---	e7.3	77	92	19	105	382	109	
9	61	44	7.2	112	568	341	93	247	62	
10	62	25	4.2	92	475	131	89	---	e31	
11	62	---	e4.4	84	143	44	97	69	18	
12	65	35	6.2	108	307	108	e95	---	e16	
13	67	64	12	70	123	23	e98	---	e14	
14	64	67	12	67	---	e15	e99	---	e12	
15	70	91	28	63	81	14	e85	---	e10	
16	74	161	40	65	62	11	76	56	11	
17	70	59	11	66	77	14	75	64	13	
18	61	43	7.0	78	142	35	e78	---	e17	
19	100	218	165	81	---	e25	75	---	e17	
20	136	408	221	74	69	14	74	91	18	
21	64	117	20	76	47	9.8	75	73	15	
22	62	83	14	75	86	17	77	---	e12	
23	e65	---	e9.3	83	109	26	77	---	e10	
24	64	---	e6.9	85	132	36	74	44	8.7	
25	63	43	7.3	125	308	138	76	54	11	
26	65	47	8.3	82	76	18	79	52	11	
27	131	257	111	159	448	673	83	---	e9.9	
28	402	1,150	2,890	159	516	310	81	---	e7.9	
29	157	1,120	600	186	679	797	84	32	7.4	
30	77	---	e85	295	882	1,100	86	46	11	
31	68	314	58	913	1,790	15,800	---	---	---	
TOTAL	2,632	---	4,400.8	3,859	---	20,162.8	2,743	---	1,117.9	

e Estimated.

07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO

LOCATION.--Lat 38°41'04", long 104°41'17", in NW¼SE¼ sec.5, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on right bank 110 ft downstream of bridge on county road, 0.2 mi east of Fountain, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--65.6 mi².

PERIOD OF RECORD.--January 1976 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105900

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,530 ft above NGVD of 1929, from topographic map. Prior to Aug. 14, 1991, at site 110 ft upstream on downstream side of bridge; Jan. 1976 to Sept. 3, 1986, at datum 4.0 ft higher and Sept. 4, 1986 to Aug. 13, 1991, at present datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 17, 1965, reached an estimated discharge of 124,000 ft³/s, gage height, unknown.

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	0.89	1.5	1.2	0.96	0.90	e1.0	1.3	1.5	2.6	0.52	0.48	0.82
2	0.88	1.5	1.2	0.93	0.91	e1.0	1.3	1.4	2.2	0.45	0.51	0.54
3	1.1	1.4	1.2	0.98	0.91	1.1	1.3	1.3	2.1	0.42	0.47	0.41
4	1.0	1.4	1.2	1.0	e0.91	1.0	1.4	1.4	3.2	0.39	0.46	0.39
5	0.84	1.4	1.1	1.0	e0.90	1.1	1.4	1.4	3.0	0.39	0.43	0.33
6	0.77	1.4	1.1	1.0	e0.90	1.0	1.5	1.6	2.3	0.40	0.43	0.34
7	0.80	1.4	1.1	1.0	e0.91	1.0	1.4	1.5	2.2	0.42	0.42	0.34
8	0.79	1.3	1.1	1.0	e0.93	1.0	1.4	1.3	1.9	0.42	0.40	0.44
9	0.87	1.3	1.2	1.0	e0.95	1.0	1.5	1.3	1.7	0.38	0.36	0.63
10	0.81	1.3	1.2	e1.0	e1.0	1.0	1.4	1.3	1.7	0.35	0.33	0.80
11	0.79	1.2	1.2	1.0	e1.1	1.0	1.6	1.4	1.6	0.29	0.31	0.92
12	0.80	1.2	1.2	0.97	1.1	1.1	1.6	1.4	1.4	0.30	0.32	0.94
13	0.87	1.3	1.2	0.94	1.0	1.0	1.6	1.5	1.5	0.28	0.30	0.96
14	0.91	1.2	1.2	0.98	1.1	1.0	1.7	1.5	1.7	0.23	0.31	0.97
15	0.94	1.2	1.2	1.0	1.0	1.0	1.9	1.9	4.0	0.23	0.31	0.89
16	0.98	2.1	1.2	e1.0	1.0	1.0	1.9	1.4	1.1	0.25	0.30	0.77
17	1.0	1.0	1.2	e0.98	1.0	2.3	1.9	1.4	1.8	0.25	0.30	0.71
18	1.1	1.1	1.1	e1.0	1.0	1.9	2.0	1.4	2.5	0.19	0.33	0.64
19	1.2	1.1	1.1	e1.0	1.2	1.8	2.3	1.4	5.0	0.23	0.33	0.70
20	1.2	1.2	e1.1	1.0	1.0	1.8	1.8	1.5	e30	0.27	0.30	0.57
21	1.3	1.3	1.1	0.94	1.0	1.7	1.9	1.5	2.8	0.27	0.28	0.49
22	1.3	1.2	e1.1	0.91	1.1	1.5	1.9	1.4	0.95	0.22	0.28	0.47
23	1.4	1.2	1.0	0.90	1.0	1.5	2.1	1.4	0.71	0.25	0.27	0.45
24	1.4	1.2	1.2	0.90	e1.0	1.8	1.8	1.5	0.59	0.21	0.29	0.40
25	1.4	1.2	e1.1	0.89	e1.0	1.5	1.8	1.7	0.56	0.16	0.29	0.42
26	1.9	1.2	e1.1	e0.90	1.0	1.3	2.0	1.9	0.56	0.52	0.29	0.40
27	1.9	1.2	e1.1	0.90	1.0	1.3	2.1	1.4	0.56	0.31	0.27	0.41
28	1.3	1.2	1.1	0.90	e1.0	1.3	2.0	1.5	0.82	0.53	0.29	0.44
29	1.5	1.2	1.1	0.90	---	1.2	1.8	1.5	0.89	0.75	0.33	0.43
30	1.4	1.1	1.0	0.90	---	1.2	1.7	1.6	0.63	0.47	0.51	0.41
31	1.4	---	1.1	0.90	---	1.3	---	2.1	---	0.43	2.9	---
TOTAL	34.74	38.5	35.3	29.68	27.82	39.7	51.3	46.3	82.57	10.78	13.40	17.43
MEAN	1.12	1.28	1.14	0.96	0.99	1.28	1.71	1.49	2.75	0.35	0.43	0.58
MAX	1.9	2.1	1.2	1.0	1.2	2.3	2.3	2.1	30	0.75	2.9	0.97
MIN	0.77	1.0	1.0	0.89	0.90	1.0	1.3	1.3	0.56	0.16	0.27	0.33
AC-FT	69	76	70	59	55	79	102	92	164	21	27	35

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

	2003	2003	1988	2003	1990	1990	1990	1986	1989	2003	2002	2003
MEAN	2.05	2.22	1.79	1.67	1.61	1.73	2.05	2.59	3.53	3.50	4.34	1.76
MAX	3.55	6.49	3.17	2.74	2.39	3.54	9.33	10.1	27.8	27.9	13.4	5.12
(WY)	(1985)	(1982)	(1995)	(1986)	(1977)	(1980)	(1999)	(1995)	(1995)	(1985)	(1984)	(1994)
MIN	1.12	1.28	0.87	0.96	0.79	1.05	0.56	0.91	0.98	0.35	0.33	0.58
(WY)	(2003)	(2003)	(1988)	(2003)	(1990)	(1990)	(1990)	(1986)	(1989)	(2003)	(2002)	(2003)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1976 - 2003

ANNUAL TOTAL	471.60	427.52	
ANNUAL MEAN	1.29	1.17	
HIGHEST ANNUAL MEAN			2.40
LOWEST ANNUAL MEAN			5.12
HIGHEST DAILY MEAN	3.8	Apr 1	30
LOWEST DAILY MEAN	0.23	Aug 17	0.16
ANNUAL SEVEN-DAY MINIMUM	0.25	Aug 12	0.23
MAXIMUM PEAK FLOW			233
MAXIMUM PEAK STAGE			c6.31
ANNUAL RUNOFF (AC-FT)	935	848	1,740
10 PERCENT EXCEEDS	1.9		1.8
50 PERCENT EXCEEDS	1.3		1.0
90 PERCENT EXCEEDS	0.39		0.33

e Estimated.

a Also occurred Apr 13, 15, 1990.

b From contracted-opening measurement of peak flow.

c From floodmarks.

ARKANSAS RIVER BASIN

07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105900

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	E coli, modif. m-TEC, water, col/100 mL (90902)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)
MAY 01...	1255	1.5	14.0	8.3	2,920	16.5	0.079	0.19	<0.02	E.03	--	100	170
JUL 21...	1430	0.25	6.9	8.0	3,240	24.5	0.084	0.15	<0.02	E.03	E910	--	1,500

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

Date	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
MAY 01...	7	0.03
JUL 21...	8	0.01

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

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat 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)
OCT 04...	1200	1.1	2,880	12.5	MAY 01...	1535	1.4	2,890	17.5
NOV 12...	1355	1.3	2,840	8.5	JUN 20...	1305	18	753	--
DEC 09...	1410	1.2	2,780	7.0	JUL 11...	1235	0.28	3,280	20.0
FEB 13...	1625	1.0	2,960	9.5	AUG 06...	1310	0.40	2,990	23.5
MAR 26...	1605	1.3	3,020	17.0	SEP 19...	1450	0.65	3,200	19.0

07105945 ROCK CREEK ABOVE FORT CARSON RESERVATION, CO

LOCATION.--Lat 38°42'27", long 104°50'46", in NW¹/₄NW¹/₄ sec.36, T.15 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank 20 ft upstream from county road bridge, 0.6 mi northwest of Rock Creek Park, 1.2 mi upstream from State Highway 115, and 3.2 mi southwest of Fort Carson Military Reservation.

DRAINAGE AREA.--6.79 mi².

PERIOD OF RECORD.--May 1978 to current year. Water-quality data available, April 1978 to August 1979. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07105945

REVISED RECORDS.--WDR CO-85-1: 1982 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,390 ft above NGVD of 1929, from topographic map. Prior to Oct. 10, 1997, at site 50 ft downstream.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.02	0.15	e0.21	0.13	0.13	0.24	3.3	3.0	1.5	0.66	0.22	1.4
2	0.01	0.15	e0.22	0.13	0.15	0.21	5.5	2.8	1.5	0.57	0.21	0.93
3	0.02	0.17	e0.23	0.14	0.14	0.23	6.1	2.6	1.2	0.50	0.23	0.84
4	0.04	0.16	e0.24	0.16	0.12	0.26	5.3	2.5	1.2	0.47	0.33	0.80
5	0.06	0.16	e0.25	0.17	0.15	0.26	4.6	2.3	1.4	0.41	0.25	0.62
6	0.06	0.14	e0.26	0.17	e0.10	0.31	4.0	2.1	1.6	0.37	0.23	0.59
7	0.06	0.15	e0.26	0.17	e0.10	0.39	3.6	1.9	1.4	0.35	0.18	1.2
8	0.06	0.20	0.26	0.13	e0.10	0.46	3.1	1.8	1.3	0.31	0.16	0.84
9	0.04	0.32	0.26	0.07	e0.11	0.55	3.1	1.7	1.1	0.28	0.24	0.71
10	0.03	0.30	0.26	0.05	e0.11	0.65	3.4	1.7	1.1	0.25	0.20	0.57
11	0.03	0.29	0.26	0.07	0.13	0.78	3.8	1.5	1.0	0.23	0.20	0.50
12	0.02	0.29	0.25	0.08	0.15	0.90	4.5	1.3	0.93	0.22	0.71	0.43
13	0.02	0.24	0.24	0.08	0.18	0.98	5.5	1.2	1.1	0.21	0.35	0.38
14	0.02	0.20	0.23	0.08	0.23	1.2	5.9	1.1	1.3	0.20	0.26	0.42
15	0.02	0.22	0.20	0.07	0.26	1.3	5.8	1.1	1.2	e0.50	0.22	0.33
16	0.02	0.22	0.20	0.07	0.24	1.4	5.3	1.1	1.1	e0.40	0.18	0.23
17	0.02	0.21	0.20	0.08	0.25	1.4	4.8	1.0	1.1	0.26	0.15	0.20
18	0.02	0.19	0.19	0.07	0.27	2.0	4.3	0.88	0.99	0.18	0.14	0.18
19	0.01	0.20	0.19	0.07	0.25	1.7	4.0	0.82	1.1	0.14	0.16	0.16
20	0.00	0.20	0.13	0.08	0.25	1.7	3.6	0.90	1.8	0.15	0.11	0.15
21	0.00	0.17	0.20	0.08	0.29	1.9	3.3	0.82	1.5	0.13	0.09	0.12
22	0.00	0.17	0.17	0.09	0.28	2.0	3.1	0.76	1.2	0.11	0.08	0.11
23	0.02	0.19	0.16	0.08	e0.25	2.6	3.2	0.76	1.1	0.11	0.07	0.09
24	0.02	0.20	e0.12	0.09	e0.10	3.5	3.2	1.1	0.99	0.09	0.06	0.07
25	0.04	0.20	e0.10	0.10	e0.15	4.1	3.1	7.2	0.94	0.07	0.05	0.07
26	0.06	0.19	e0.12	0.10	0.26	5.0	3.0	2.6	1.0	0.05	0.03	0.05
27	0.17	e0.18	0.14	0.12	0.25	6.0	3.1	2.2	0.88	0.04	0.01	0.04
28	0.24	e0.18	0.14	0.12	0.26	4.4	3.2	1.8	0.78	0.09	0.00	0.03
29	0.22	e0.18	0.16	0.12	---	2.9	3.3	1.4	0.79	0.23	0.00	0.02
30	0.24	e0.20	0.15	0.12	---	2.8	3.3	1.2	0.72	0.31	0.05	0.02
31	0.19	---	0.14	0.12	---	2.7	---	1.2	---	0.27	2.5	---
TOTAL	1.78	6.02	6.14	3.21	5.26	54.82	121.3	54.34	34.82	8.16	7.67	12.10
MEAN	0.057	0.20	0.20	0.10	0.19	1.77	4.04	1.75	1.16	0.26	0.25	0.40
MAX	0.24	0.32	0.26	0.17	0.29	6.0	6.1	7.2	1.8	0.66	2.5	1.4
MIN	0.00	0.14	0.10	0.05	0.10	0.21	3.0	0.76	0.72	0.04	0.00	0.02
AC-FT	3.5	12	12	6.4	10	109	241	108	69	16	15	24

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

	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	1.39	0.93	0.48	0.45	0.47	1.00	4.65	10.1	4.97	1.79	3.04	1.18														
MAX	20.7	10.7	2.25	1.42	1.33	2.56	20.7	39.1	32.7	7.23	18.1	7.75														
(WY)	(1985)	(1985)	(1985)	(1985)	(1985)	(1998)	(1999)	(1995)	(1997)	(1985)	(1999)	(1982)														
MIN	0.000	0.028	0.051	0.073	0.12	0.27	0.26	0.095	0.015	0.010	0.000	0.000														
(WY)	(1979)	(1979)	(1979)	(1979)	(1979)	(2002)	(2002)	(2002)	(2002)	(1978)	(1978)	(1978)														

SUMMARY STATISTICS FOR 2002 CALENDAR YEAR FOR 2003 WATER YEAR WATER YEARS 1978 - 2003

ANNUAL TOTAL	48.94	315.62	
ANNUAL MEAN	0.13	0.86	2.58
HIGHEST ANNUAL MEAN			7.70 1985
LOWEST ANNUAL MEAN			0.14 2002
HIGHEST DAILY MEAN	3.2 Jul 3	7.2 May 25	397 Apr 30, 1999
LOWEST DAILY MEAN	0.00 Jun 13	0.00 Oct 20	a0.00 Jul 6, 1978
ANNUAL SEVEN-DAY MINIMUM	0.00 Jun 13	0.01 Oct 16	0.00 Jul 6, 1978
MAXIMUM PEAK FLOW		40 May 25	b770 Jun 10, 1997
MAXIMUM PEAK STAGE		3.38 May 25	c9.71 Jun 10, 1997
ANNUAL RUNOFF (AC-FT)	97	626	1,870
10 PERCENT EXCEEDS	0.28	3.0	5.4
50 PERCENT EXCEEDS	0.11	0.24	0.62
90 PERCENT EXCEEDS	0.00	0.06	0.14

e Estimated.

a No flow on many days during many years.

b From rating curve extended above 133 ft³/s on basis of width-contraction measurement of peak flow at gage height 5.28 ft.

c From floodmark, site then in use.

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO

LOCATION (REVISED).--Lat 38°36'06", long 104°40'11", in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.4, T.17 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on left bank 10 ft downstream from Old Pueblo Road bridge, 190 ft downstream from Denver & Rio Grande Railroad bridge, 0.9 mi downstream from Little Fountain Creek, and 5.6 mi south of Fountain. Prior to October 31, 2002, at site 90 ft upstream on right bank.

DRAINAGE AREA.--681 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to February 1940 (monthly records only), March 1940 to September 1954; July 1985 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07106000

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,355 ft above NGVD of 1929, from topographic map. Sept. 18, 1938 to Mar. 1, 1940, nonrecording gage at site 40 ft upstream on right bank at different datum. Mar. 2, 1940 to Sept. 30, 1954, at site 290 ft upstream on right bank at different datum. July 2, 1985 to Sept. 2, 1987, at site 590 ft upstream on right bank at different datum. Sept. 3, 1987 to Mar. 12, 1990, at site 1,190 ft upstream on right bank at different datum. March 13, 1990 to October 30, 2002, at site 90 ft upstream on right bank.

REMARKS.--Records fair except for estimated daily discharges and those above 1,000 ft³/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, transmountain diversions, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 14.4 ft, at different datum, May 30, 1935, discharge undetermined. Floods of May 1935 and June 1965 probably exceeded flood of May 1940.

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	61	88	87	90	105	150	90	82	161	80	63	e140
2	103	94	89	89	105	165	87	85	144	72	68	108
3	35	102	88	89	112	151	89	80	97	67	97	170
4	41	87	90	90	108	134	86	75	319	64	132	144
5	50	85	79	85	114	113	96	98	431	63	82	100
6	49	83	68	77	113	113	146	82	147	62	65	117
7	49	94	67	74	108	110	103	80	150	64	60	143
8	44	110	71	78	107	112	90	82	106	54	64	116
9	66	102	77	78	104	103	82	83	96	59	75	90
10	63	101	74	70	117	101	74	133	138	74	131	82
11	58	e107	76	70	117	101	48	93	124	74	84	86
12	60	e110	80	79	110	95	33	81	97	76	108	87
13	65	e112	76	80	114	100	34	78	126	81	69	85
14	63	111	74	80	119	99	35	71	356	79	66	97
15	66	110	75	82	119	101	41	74	169	73	64	91
16	63	93	85	80	106	104	52	177	90	87	65	89
17	62	85	87	78	98	138	45	98	242	67	62	89
18	58	83	81	78	100	230	49	87	295	72	71	93
19	53	70	78	78	126	171	74	86	726	86	95	100
20	55	78	79	80	133	152	78	78	935	207	76	103
21	54	76	74	87	112	156	71	81	152	68	61	100
22	56	e78	80	114	111	116	77	76	126	51	69	e98
23	75	e82	79	104	115	109	276	74	124	55	65	e94
24	71	e81	83	107	115	112	280	113	130	67	66	89
25	76	e85	86	112	114	311	114	205	137	70	114	90
26	64	87	87	118	118	100	79	172	518	86	116	89
27	246	87	91	129	120	98	70	102	155	151	78	90
28	121	90	100	118	128	99	68	70	127	628	210	91
29	66	87	97	114	---	91	83	61	132	310	163	85
30	63	88	94	105	---	93	87	62	115	107	457	83
31	72	---	91	103	---	94	---	79	---	70	1,390	---
TOTAL	2,128	2,746	2,543	2,816	3,168	3,922	2,637	2,898	6,665	3,224	4,386	3,039
MEAN	68.6	91.5	82.0	90.8	113	127	87.9	93.5	222	104	141	101
MAX	246	112	100	129	133	311	280	205	935	628	1,390	170
MIN	35	70	67	70	98	91	33	61	90	51	60	82
AC-FT	4,220	5,450	5,040	5,590	6,280	7,780	5,230	5,750	13,220	6,390	8,700	6,030

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

MEAN	73.0	89.4	74.8	76.2	80.6	90.7	130	230	178	116	145	73.8
MAX	266	253	231	214	201	224	787	1,602	1,080	432	713	242
(WY)	(2000)	(2000)	(2000)	(2000)	(2000)	(2000)	(1999)	(1999)	(1997)	(1995)	(1999)	(1999)
MIN	3.70	10.0	5.14	6.99	6.07	6.39	4.30	9.78	4.50	3.47	3.15	1.31
(WY)	(1954)	(1940)	(1953)	(1952)	(1941)	(1941)	(1954)	(1950)	(1953)	(1952)	(1954)	(1939)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1939 - 2003	
ANNUAL TOTAL	36,324		40,172			
ANNUAL MEAN	99.5		110		113	
HIGHEST ANNUAL MEAN					430	
LOWEST ANNUAL MEAN					10.3	
HIGHEST DAILY MEAN	829	Jul 6	1,390	Aug 31	13,200	Apr 30, 1999
LOWEST DAILY MEAN	35	Oct 3	33	Apr 12	a0.00	Sep 24, 1939
ANNUAL SEVEN-DAY MINIMUM	48	Oct 3	41	Apr 11	0.27	Jul 18, 1939
MAXIMUM PEAK FLOW			8,060	Aug 31	b22,100	May 28, 1940
MAXIMUM PEAK STAGE			8.09	Aug 31	c9.19	May 28, 1940
ANNUAL RUNOFF (AC-FT)	72,050		79,680		81,840	
10 PERCENT EXCEEDS	141		148		222	
50 PERCENT EXCEEDS	88		89		70	
90 PERCENT EXCEEDS	61		63		7.6	

e Estimated.

a Also occurred Sep 30, 1939.

b From contracted-opening and slope-area measurement of peak flow.

c Site and datum then in use; maximum gage height, 12.06 ft, Apr 30, 1999, from floodmarks.

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO—Continued

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

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Cyanide water unfltrd mg/L (00720)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)
NOV 04...	2.9	8.2	<0.01	16.0	1,630	0.48	3.1	E5.0	73	<0.018	<0.018	6.6	8.1
DEC 02...	4.0	6.1	<0.01	<10.0	616	E.34	1.4	E4.0	34	<0.018	<0.018	6.5	6.8
FEB 11...	--	--	--	--	--	--	--	10.1	106	--	--	--	--
APR 29...	--	--	--	--	--	--	--	4.04	61.7	--	--	--	--
JUL 23...	--	--	--	--	--	--	--	6.83	33.2	--	--	--	--

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

Date	Selen-ium, water, fltrd, ug/L (01145)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Sus-pended sedi-ment concen-tration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
NOV 04...	7.7	7.5	0.08	0.06	27	32	105	22
DEC 02...	8.0	7.4	<0.04	<0.04	E19	E21	58	11
FEB 11...	5.87	5.38	--	--	--	--	157	48
APR 29...	6.35	5.79	--	--	--	--	186	34
JUL 23...	5.43	4.91	--	--	--	--	38	4.5

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

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.4	8.2	8.3	8.1	8.1	8.1	8.2	8.1	8.1	8.3	8.2	8.2
2	8.2	8.1	8.2	8.1	8.0	8.1	8.2	8.0	8.1	8.3	8.1	8.2
3	8.2	8.1	8.2	8.1	7.9	8.0	8.2	8.1	8.1	8.3	8.2	8.2
4	8.3	8.2	8.2	8.1	8.0	8.0	8.2	8.1	8.1	8.3	8.2	8.2
5	8.3	8.1	8.2	8.1	8.0	8.0	8.2	8.0	8.1	8.3	8.2	8.2
6	8.2	8.1	8.1	8.1	8.0	8.1	8.2	8.0	8.1	8.3	8.2	8.2
7	8.2	8.0	8.1	8.2	8.0	8.1	8.2	8.0	8.1	8.2	8.1	8.2
8	8.2	7.9	8.0	8.2	8.1	8.1	8.2	8.0	8.1	8.2	8.1	8.2
9	8.2	7.9	8.0	8.2	8.1	8.1	8.2	8.0	8.1	8.2	8.1	8.1
10	8.1	8.0	8.0	8.1	8.0	8.1	8.2	8.0	8.1	8.2	8.0	8.1
11	8.1	7.9	8.0	8.2	8.0	8.1	8.2	8.0	8.0	8.2	8.1	8.2
12	8.1	8.0	8.0	8.2	8.0	8.1	8.2	8.0	8.0	8.3	8.1	8.2
13	8.1	7.9	8.0	8.2	8.1	8.1	8.2	7.9	8.1	8.4	8.1	8.2
14	8.1	7.9	8.0	8.2	8.1	8.1	8.2	8.0	8.1	8.4	8.2	8.3
15	8.1	7.9	8.0	8.2	8.0	8.1	8.2	8.0	8.1	8.5	8.2	8.3
16	8.2	8.0	8.0	8.1	7.9	8.0	8.2	8.0	8.1	8.4	8.2	8.3
17	8.1	8.0	8.0	8.1	8.0	8.1	8.3	8.1	8.1	8.3	8.1	8.2
18	8.1	8.0	8.0	8.1	8.0	8.1	8.2	8.0	8.1	8.3	8.1	8.2
19	8.2	8.0	8.0	8.1	8.0	8.0	8.2	8.0	8.1	8.4	8.1	8.3
20	8.2	8.0	8.1	8.1	8.0	8.1	8.2	7.9	8.0	8.4	8.1	8.3
21	8.1	8.0	8.1	8.2	8.0	8.1	8.2	8.0	8.1	8.3	8.2	8.2
22	8.2	8.0	8.1	8.2	8.0	8.2	8.2	8.0	8.1	8.3	8.2	8.2
23	8.1	8.0	8.1	8.3	8.1	8.2	8.2	8.0	8.1	8.3	8.1	8.2
24	8.2	8.0	8.1	8.2	8.1	8.2	8.2	8.0	8.1	8.3	8.1	8.2
25	8.2	8.0	8.1	8.2	8.1	8.1	8.2	7.9	8.1	8.3	8.1	8.2
26	8.2	8.0	8.1	8.2	8.1	8.1	8.2	8.0	8.0	8.3	8.1	8.2
27	8.1	7.8	7.8	8.2	8.0	8.1	8.2	8.0	8.1	8.3	8.1	8.2
28	8.1	7.8	7.9	8.2	8.0	8.2	8.2	8.1	8.1	8.3	8.1	8.2
29	8.2	7.9	8.1	8.2	8.1	8.2	8.2	8.1	8.2	8.3	8.1	8.2
30	8.1	8.0	8.1	8.2	8.1	8.2	8.2	8.1	8.1	8.2	8.1	8.1
31	8.1	8.0	8.1	---	---	---	8.3	8.0	8.2	8.3	8.1	8.2
MAX	8.4	8.2	8.3	8.3	8.1	8.2	8.3	8.1	8.2	8.5	8.2	8.3
MIN	8.1	7.8	7.8	8.1	7.9	8.0	8.2	7.9	8.0	8.2	8.0	8.1
	FEBRUARY			MARCH			APRIL			MAY		
1	8.2	8.1	8.1	8.0	7.8	7.9	8.2	8.0	8.1	8.3	8.2	8.2
2	8.3	8.1	8.1	7.9	7.7	7.8	8.2	8.0	8.1	8.3	8.2	8.2
3	8.2	8.0	8.1	7.9	7.8	7.9	8.3	8.1	8.1	8.3	8.2	8.2
4	8.2	8.0	8.1	7.9	7.8	7.9	8.2	8.1	8.1	8.3	8.1	8.2
5	8.1	7.9	8.0	8.0	7.8	7.9	8.2	8.0	8.1	8.2	8.0	8.1
6	8.1	7.9	8.0	8.0	7.9	7.9	8.1	7.9	8.0	8.2	8.1	8.1
7	8.1	7.8	7.9	8.1	7.9	8.0	8.1	8.0	8.0	8.2	8.0	8.1
8	8.1	7.8	8.0	8.1	8.0	8.0	8.2	8.0	8.1	8.1	7.9	8.0
9	8.1	7.8	8.0	8.0	8.0	8.0	8.2	8.1	8.1	8.1	7.9	8.0
10	8.1	7.8	8.0	8.0	7.9	8.0	8.3	8.1	8.1	7.9	7.7	7.8
11	8.1	7.8	8.0	8.1	8.0	8.0	8.2	8.0	8.1	8.0	7.8	7.9
12	8.1	7.8	7.9	8.2	8.0	8.1	8.1	8.0	8.1	8.0	7.9	7.9
13	8.1	7.9	8.0	8.2	8.0	8.1	8.2	8.1	8.1	8.0	7.9	8.0
14	8.1	7.9	8.0	8.2	8.0	8.1	8.2	8.1	8.1	8.0	7.9	8.0
15	8.0	7.8	7.9	8.1	8.0	8.1	8.2	8.1	8.1	8.0	7.9	7.9
16	8.0	7.9	7.9	8.0	7.9	8.0	8.3	8.0	8.1	7.9	7.7	7.8
17	8.0	7.8	7.9	8.0	7.8	8.0	8.2	8.1	8.2	8.0	7.6	7.7
18	7.9	7.8	7.9	7.9	7.8	7.9	8.3	8.1	8.2	8.0	7.9	8.0
19	8.0	7.8	7.9	8.0	7.8	7.9	8.2	8.1	8.1	8.0	7.9	8.0
20	8.2	7.7	7.8	8.0	7.9	8.0	8.3	8.1	8.1	8.0	7.9	8.0
21	8.0	7.8	7.9	8.0	7.9	8.0	8.3	8.1	8.2	8.1	7.9	8.0
22	8.0	7.8	7.9	8.1	8.0	8.0	8.4	8.0	8.2	8.1	8.0	8.0
23	7.9	7.8	7.9	8.1	8.0	8.0	8.0	7.8	8.0	8.1	7.9	8.0
24	7.9	7.7	7.8	8.1	7.9	8.0	8.0	7.8	7.9	8.0	7.9	7.9
25	8.0	7.7	7.9	8.0	7.7	7.8	8.1	8.0	8.1	8.0	7.6	7.8
26	8.0	7.8	7.9	8.1	7.9	8.0	8.1	8.0	8.1	---	---	---
27	8.0	7.8	7.9	8.1	8.0	8.0	8.2	8.1	8.1	---	---	---
28	8.0	7.9	7.9	8.1	7.9	8.0	8.2	8.1	8.1	8.2	8.1	8.1
29	---	---	---	8.0	7.9	8.0	8.3	8.1	8.2	8.2	8.1	8.2
30	---	---	---	8.1	7.9	8.0	8.3	8.1	8.2	8.2	8.1	8.2
31	---	---	---	8.1	7.9	8.0	---	---	---	8.2	8.1	8.2
MAX	8.3	8.1	8.1	8.2	8.0	8.1	8.4	8.1	8.2	---	---	---
MIN	7.9	7.7	7.8	7.9	7.7	7.8	8.0	7.8	7.9	---	---	---

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.1	7.7	7.9	8.1	7.7	8.1	8.0	7.7	7.9	8.1	8.0	8.0
2	7.9	7.6	7.8	8.2	8.0	8.1	7.9	7.8	7.9	8.2	8.0	8.1
3	8.1	7.8	8.0	8.2	8.1	8.1	7.9	7.8	7.9	8.1	7.9	8.1
4	8.1	7.8	7.9	8.2	8.1	8.2	7.9	7.8	7.8	8.1	7.9	8.0
5	7.9	7.7	7.8	8.2	8.1	8.2	8.0	7.9	7.9	8.1	8.0	8.1
6	8.1	7.9	8.0	8.2	8.1	8.2	8.0	7.9	7.9	8.1	8.0	8.0
7	8.0	7.7	8.0	8.3	8.1	8.2	8.0	7.9	8.0	8.2	8.0	8.1
8	8.1	8.0	8.0	8.3	8.1	8.2	8.0	7.9	8.0	8.2	8.1	8.1
9	8.1	8.0	8.1	8.4	8.2	8.3	8.1	7.9	8.0	8.1	8.0	8.1
10	8.0	7.9	8.0	8.3	8.1	8.2	8.0	7.8	7.9	8.1	7.9	8.0
11	8.0	7.9	8.0	8.3	8.1	8.3	8.1	8.0	8.0	8.0	7.9	7.9
12	8.0	7.9	8.0	8.3	8.1	8.3	8.0	7.8	8.0	8.0	7.9	7.9
13	8.0	7.9	8.0	8.3	8.1	8.2	8.1	7.9	8.0	8.1	7.9	8.0
14	8.0	7.6	7.9	8.3	8.0	8.2	8.1	8.0	8.0	8.1	7.9	8.0
15	7.9	7.6	7.8	8.2	8.0	8.1	8.1	8.0	8.1	8.2	7.9	8.1
16	8.0	7.8	7.9	8.1	7.9	8.1	8.2	8.0	8.1	8.3	8.0	8.1
17	8.0	7.7	7.9	8.2	8.0	8.1	8.1	8.0	8.1	8.3	8.1	8.2
18	7.9	7.7	7.8	8.2	8.0	8.1	8.1	8.0	8.1	8.4	8.0	8.1
19	7.9	7.5	7.6	8.2	8.0	8.1	8.2	7.9	8.1	8.4	8.1	8.2
20	7.9	7.6	7.8	8.0	7.8	7.9	8.2	8.0	8.1	8.3	8.1	8.2
21	8.0	7.9	8.0	8.1	7.8	8.1	8.3	8.1	8.2	8.3	8.1	8.2
22	8.0	8.0	8.0	8.2	8.0	8.1	8.3	8.1	8.2	8.4	8.0	8.1
23	8.1	7.9	8.0	8.2	8.0	8.1	8.3	8.1	8.2	8.4	8.1	8.2
24	8.1	8.0	8.0	8.2	8.0	8.1	8.2	8.1	8.2	8.3	8.0	8.1
25	8.1	8.0	8.0	8.2	8.0	8.1	8.2	8.0	8.1	8.2	7.9	8.0
26	8.0	7.8	7.9	8.2	7.9	8.1	8.2	8.0	8.1	8.3	7.9	8.0
27	8.0	7.9	7.9	8.0	7.9	7.9	8.2	8.0	8.1	8.2	7.9	8.0
28	8.0	7.8	7.9	8.2	7.6	7.9	8.0	7.8	7.9	8.2	7.9	8.0
29	8.0	7.9	8.0	8.0	7.6	7.8	8.0	7.7	7.8	8.2	7.9	8.0
30	8.0	7.6	7.9	---	---	---	8.0	7.9	7.9	8.3	8.0	8.1
31	---	---	---	7.9	7.6	7.7	8.3	7.9	8.0	---	---	---
MAX	8.1	8.0	8.1	---	---	---	8.3	8.1	8.2	8.4	8.1	8.2
MIN	7.9	7.5	7.6	---	---	---	7.9	7.7	7.8	8.0	7.9	7.9

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO—Continued

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1,100	919	1,040	1,040	936	987	1,080	1,000	1,040	1,060	955	1,010
2	1,040	786	907	1,060	953	1,000	1,090	998	1,040	1,060	976	1,020
3	1,150	987	1,070	1,080	964	1,040	1,080	1,020	1,050	1,070	994	1,030
4	1,130	1,050	1,100	1,060	965	997	1,090	1,030	1,050	1,070	976	1,020
5	1,140	1,050	1,090	1,040	966	995	1,120	1,040	1,080	1,080	998	1,030
6	1,150	1,070	1,100	1,060	975	1,010	1,150	1,070	1,100	1,110	1,000	1,040
7	1,150	1,050	1,100	1,030	953	992	1,150	1,070	1,100	1,090	984	1,040
8	1,160	1,060	1,110	1,010	945	969	1,140	1,040	1,090	1,100	1,000	1,050
9	1,100	998	1,040	1,020	947	979	1,140	1,040	1,090	1,080	1,010	1,040
10	1,080	993	1,030	1,010	928	967	1,140	1,050	1,090	1,110	1,020	1,060
11	1,110	1,030	1,050	1,000	922	956	1,100	1,030	1,080	1,130	1,020	1,080
12	1,120	1,030	1,070	1,020	929	975	1,090	1,030	1,060	1,120	1,040	1,080
13	1,100	1,020	1,060	1,050	970	998	1,120	1,020	1,070	1,120	1,010	1,060
14	1,110	1,000	1,050	---	---	---	1,120	1,050	1,090	1,120	1,050	1,080
15	1,100	1,000	1,050	1,060	976	1,020	1,080	1,010	1,040	1,130	1,060	1,090
16	1,140	1,030	1,080	1,060	976	1,030	1,060	982	1,020	1,130	1,050	1,090
17	1,150	1,060	1,090	1,090	1,020	1,060	1,050	992	1,020	1,130	1,020	1,080
18	1,160	1,050	1,090	1,100	1,020	1,060	1,050	989	1,010	1,140	1,050	1,100
19	1,190	1,040	1,110	1,110	1,050	1,080	1,060	992	1,020	1,130	1,030	1,090
20	1,150	1,030	1,080	1,120	1,060	1,090	1,130	976	1,020	1,120	1,030	1,070
21	1,160	1,040	1,070	1,180	1,070	1,110	1,070	978	1,030	1,110	1,010	1,060
22	1,110	1,010	1,070	1,110	1,020	1,060	1,050	997	1,030	1,020	957	986
23	1,060	987	1,020	1,080	993	1,040	1,040	969	1,000	1,030	930	985
24	1,080	960	1,020	1,080	993	1,030	1,140	969	1,030	1,020	964	994
25	1,090	948	1,030	1,060	1,000	1,030	1,060	1,000	1,040	1,040	947	982
26	1,120	924	1,050	1,110	1,020	1,070	---	---	---	1,040	942	975
27	924	533	686	1,100	1,020	1,070	1,050	974	1,020	1,020	921	958
28	1,040	596	755	1,100	1,020	1,060	1,050	969	1,000	1,020	930	960
29	1,040	955	998	1,090	1,000	1,050	1,040	964	1,000	1,020	929	967
30	1,070	969	1,010	1,080	1,020	1,050	1,040	969	998	997	929	959
31	1,120	967	1,030	---	---	---	1,070	968	1,010	1,030	923	962
MONTH	1,190	533	1,030	---	---	---	---	---	---	1,140	921	1,030
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	989	935	954	1,460	1,120	1,250	1,010	918	964	1,020	922	961
2	1,020	925	968	1,620	1,110	1,280	1,040	949	986	1,090	932	976
3	1,010	925	961	1,620	1,070	1,250	1,040	953	993	1,080	939	994
4	1,080	974	1,020	1,140	1,020	1,080	1,030	953	977	1,080	901	999
5	1,000	904	957	1,120	1,020	1,080	1,050	935	970	1,000	888	926
6	1,080	929	1,020	1,160	1,060	1,110	944	782	859	1,010	906	948
7	1,030	928	981	1,140	1,060	1,090	960	846	903	1,020	905	958
8	1,070	971	1,040	1,110	995	1,070	993	885	938	1,090	909	963
9	1,030	934	995	1,120	996	1,060	1,030	911	953	998	934	957
10	997	919	961	1,100	1,000	1,040	1,020	907	955	1,020	764	859
11	1,020	944	989	1,110	1,010	1,050	1,140	962	1,020	1,000	829	924
12	1,000	926	965	1,100	1,020	1,050	1,160	1,040	1,090	1,000	888	934
13	1,010	910	954	1,100	1,030	1,050	1,160	1,050	1,090	973	880	913
14	993	847	938	1,110	1,030	1,060	1,180	998	1,100	945	875	903
15	1,040	854	977	1,100	1,020	1,060	1,170	952	1,090	942	818	883
16	998	902	951	1,100	1,020	1,050	1,120	926	1,020	825	622	694
17	1,020	902	951	1,070	709	963	1,110	984	1,060	---	---	---
18	1,020	919	966	1,100	855	993	1,120	922	1,030	923	812	859
19	1,210	918	1,000	1,200	905	1,010	1,020	912	964	955	830	882
20	1,240	1,020	1,090	1,260	995	1,120	1,040	922	963	973	852	906
21	1,080	1,000	1,040	1,030	937	982	1,100	933	997	976	844	907
22	1,090	999	1,040	1,070	996	1,020	1,080	896	1,020	981	887	924
23	1,060	991	1,020	1,060	988	1,020	896	377	638	1,100	808	969
24	1,070	973	1,020	1,060	835	1,000	670	490	577	1,080	734	933
25	1,080	981	1,020	868	559	724	844	670	768	906	547	728
26	1,090	975	1,040	1,040	868	978	---	---	---	---	---	---
27	1,090	974	1,030	1,040	945	993	1,060	873	978	---	---	---
28	1,300	1,020	1,080	1,020	947	969	1,100	963	1,020	1,260	1,100	1,160
29	---	---	---	1,010	951	976	965	907	942	1,280	1,100	1,200
30	---	---	---	1,040	949	975	1,020	888	935	1,280	1,070	1,170
31	---	---	---	1,040	914	969	---	---	---	1,260	857	1,160
MONTH	1,300	847	997	1,620	559	1,040	---	---	---	---	---	---

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, 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	1,030	683	886	---	---	---	1,170	907	991	842	631	768
2	1,010	664	848	---	---	---	1,040	926	976	937	832	883
3	1,130	779	1,030	1,100	1,000	1,030	1,020	886	955	900	581	789
4	1,060	443	844	1,120	1,000	1,040	933	750	853	812	516	683
5	714	437	569	1,120	1,010	1,050	1,010	883	949	959	812	890
6	862	510	760	1,120	972	1,050	1,080	948	1,000	972	675	911
7	880	740	826	1,090	1,000	1,030	1,090	986	1,020	861	675	794
8	1,060	843	986	1,140	1,010	1,070	1,110	964	1,030	912	714	869
9	1,070	992	1,040	1,130	1,020	1,070	1,040	881	1,000	1,000	885	938
10	998	843	902	1,100	990	1,030	954	638	846	988	922	953
11	1,020	872	956	1,060	984	1,020	1,030	905	962	1,020	950	981
12	1,070	990	1,020	1,050	968	1,000	966	803	906	1,030	949	986
13	990	893	947	1,040	941	981	1,100	942	1,010	980	905	952
14	981	433	844	1,050	957	991	1,120	991	1,030	994	904	948
15	953	464	763	1,080	926	1,000	1,120	991	1,040	967	883	916
16	1,090	904	987	1,060	914	986	1,100	987	1,030	976	893	927
17	1,060	461	932	1,080	961	1,010	1,090	966	1,030	987	917	943
18	766	457	662	1,060	961	1,010	1,070	957	1,010	1,010	914	956
19	828	295	732	1,070	824	994	1,080	856	967	1,020	931	963
20	763	295	524	953	635	795	1,090	940	1,010	1,010	923	963
21	838	669	790	1,060	882	986	1,090	988	1,030	992	911	951
22	---	---	---	1,120	998	1,040	1,080	932	997	1,010	900	938
23	---	---	---	1,100	994	1,050	1,070	935	1,010	1,020	930	960
24	---	---	---	1,070	983	1,020	1,070	912	1,000	1,030	950	973
25	984	912	937	1,000	871	945	992	828	930	1,030	953	977
26	925	388	608	922	576	849	1,020	720	903	1,030	937	968
27	---	---	---	767	420	587	1,060	931	995	1,020	931	969
28	---	---	---	553	324	456	999	539	712	1,040	916	962
29	---	---	---	453	329	380	957	429	801	1,040	899	967
30	---	---	---	---	---	---	666	374	498	1,020	925	962
31	---	---	---	1,130	801	957	634	248	449	---	---	---
MONTH	---	---	---	---	---	---	1,170	248	934	1,040	516	921

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.3	10.1	14.0	6.1	2.6	4.0	9.5	1.3	4.7	4.6	1.2	2.8
2	14.2	10.9	12.1	8.7	3.9	5.9	9.6	2.3	5.4	7.0	0.0	2.7
3	17.3	10.2	12.3	11.4	4.8	7.1	5.4	3.4	4.2	8.1	0.7	3.9
4	18.6	7.9	12.3	10.9	4.3	6.9	6.4	3.4	4.6	8.4	2.2	4.7
5	18.5	8.3	12.7	12.6	3.7	7.3	8.6	2.5	4.9	5.5	2.2	4.1
6	18.8	8.7	12.9	13.5	3.8	7.7	9.0	1.7	4.4	9.3	3.4	5.5
7	20.4	8.4	13.5	12.3	3.9	7.9	8.1	1.0	3.9	9.5	1.3	4.7
8	20.8	9.5	14.3	12.5	6.2	8.9	8.0	1.8	3.9	10.3	1.4	5.1
9	21.0	11.5	15.4	13.5	6.8	9.4	8.2	0.3	3.5	7.4	1.2	3.6
10	21.0	10.8	14.9	11.8	4.4	7.5	8.2	0.0	3.3	5.6	0.0	1.6
11	19.9	9.7	14.1	9.2	4.1	6.2	7.2	0.9	3.5	5.0	0.0	2.0
12	16.4	9.5	12.0	10.7	2.3	5.9	7.2	0.7	3.2	8.7	2.2	4.2
13	17.9	7.0	11.6	12.2	5.1	8.1	8.5	0.3	3.7	8.9	0.6	4.1
14	17.6	7.3	11.8	11.2	6.4	8.5	8.5	0.9	4.6	7.4	1.3	3.7
15	17.2	6.7	11.2	8.9	3.7	6.2	5.8	1.6	3.5	8.7	0.6	3.4
16	16.8	6.2	10.7	10.3	1.9	5.6	7.4	0.6	3.6	6.3	0.0	2.0
17	16.9	5.9	10.6	11.1	4.0	6.8	9.0	1.9	4.7	6.9	0.0	2.3
18	17.9	7.1	11.4	11.0	4.8	7.2	6.5	0.8	3.5	6.1	0.0	1.8
19	16.4	6.9	10.9	12.0	3.3	6.7	6.5	0.1	2.6	9.5	0.0	3.4
20	17.7	6.5	11.0	12.2	3.4	7.0	5.2	0.0	1.4	9.8	0.2	4.1
21	16.5	6.9	10.8	12.9	4.2	7.7	5.7	0.0	1.8	6.7	0.5	3.2
22	15.9	6.8	10.0	13.1	4.0	7.9	6.0	0.0	1.7	2.9	0.4	1.4
23	8.2	5.7	6.9	11.0	4.9	7.2	3.5	0.1	1.4	6.2	0.0	2.1
24	8.5	4.9	6.5	4.9	2.8	4.1	4.8	0.0	1.4	6.9	1.3	3.8
25	14.2	5.9	9.2	5.1	2.0	3.2	4.9	0.0	1.2	8.0	1.6	4.5
26	14.3	6.1	9.7	6.0	0.8	2.9	3.6	0.0	0.8	9.4	1.0	4.8
27	13.6	8.0	10.1	8.2	0.0	3.3	6.1	0.0	2.1	10.0	3.7	6.3
28	15.4	8.6	10.9	9.4	1.0	4.5	7.7	0.7	3.6	10.2	3.8	6.6
29	9.8	2.5	6.4	10.4	3.2	6.1	7.5	1.9	3.8	11.1	4.7	7.1
30	6.0	2.6	3.8	8.5	2.5	4.7	7.4	1.3	3.6	8.3	2.7	5.3
31	5.9	2.3	3.9	---	---	---	7.0	0.0	3.1	10.0	3.8	6.4
MONTH	21.0	2.3	10.9	13.5	0.0	6.4	9.6	0.0	3.3	11.1	0.0	3.9
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.8	4.9	7.1	10.2	2.3	5.0	18.9	6.7	12.4	18.5	9.1	13.4
2	10.0	2.8	6.2	9.9	1.6	4.8	16.8	8.0	11.6	21.2	9.7	13.8
3	8.2	0.8	3.6	12.7	1.5	6.6	15.4	6.0	10.4	20.7	9.5	14.0
4	9.7	0.0	3.9	7.4	0.9	4.6	14.5	5.8	9.9	18.2	8.4	12.6
5	5.5	0.0	2.9	9.3	0.0	3.9	11.3	6.1	8.3	20.3	8.0	13.6
6	5.2	0.0	1.5	12.7	1.7	6.8	11.3	5.5	8.1	17.1	9.4	12.8
7	5.9	0.0	1.4	13.8	3.2	8.0	11.4	6.4	8.7	20.3	10.1	14.0
8	6.4	0.0	1.7	14.7	3.6	8.6	17.9	5.1	10.9	19.5	9.9	13.9
9	6.3	0.0	1.8	14.9	3.6	8.6	19.8	5.7	12.5	21.5	8.8	13.7
10	9.4	0.0	3.5	14.5	4.1	9.1	21.0	8.1	14.0	15.7	8.1	11.4
11	8.3	0.1	3.9	16.1	4.9	9.9	20.3	9.0	13.6	20.8	6.8	13.1
12	10.4	0.5	5.3	16.1	5.6	10.6	19.9	7.8	13.5	22.2	8.4	14.9
13	10.1	4.8	7.2	16.7	5.7	10.8	22.2	7.9	14.1	20.2	9.6	14.5
14	8.7	5.3	7.0	16.3	6.0	11.2	18.3	8.8	13.0	24.7	10.3	16.8
15	8.9	4.3	5.7	18.3	8.4	12.3	17.5	8.7	12.2	21.7	12.0	15.0
16	7.6	3.5	5.0	13.6	6.5	9.8	21.0	7.4	13.5	23.5	12.3	17.3
17	12.1	2.9	7.0	9.4	5.4	7.7	20.8	8.0	13.2	24.2	12.5	17.9
18	7.8	4.9	6.2	7.9	2.2	4.6	19.5	7.5	13.1	20.4	13.2	16.7
19	11.1	2.2	6.1	7.1	2.0	4.2	11.3	7.6	9.4	18.8	11.2	14.6
20	10.0	2.1	5.5	12.3	3.4	7.8	18.7	7.1	12.2	19.0	9.9	13.1
21	10.4	2.5	6.1	10.1	6.4	7.8	20.4	8.7	14.1	23.8	9.1	16.2
22	9.8	2.9	6.2	15.8	4.4	9.6	20.5	10.0	13.6	25.3	11.5	18.1
23	7.1	0.3	3.5	15.4	5.5	10.4	12.8	8.6	10.7	25.8	12.9	18.0
24	6.2	0.0	1.1	16.2	6.5	10.6	14.6	6.1	10.1	23.2	13.3	17.1
25	7.3	0.0	2.5	14.9	6.9	10.3	20.3	7.4	13.1	20.7	14.0	16.2
26	6.9	1.4	3.8	16.0	6.0	10.8	21.1	8.5	14.2	---	---	---
27	11.1	1.7	5.6	11.4	2.9	7.4	21.1	8.3	14.1	27.3	---	---
28	9.8	2.2	5.2	10.8	1.1	5.5	22.4	11.3	15.3	27.7	15.6	20.5
29	---	---	---	10.1	1.7	5.9	21.7	10.1	15.2	28.3	14.6	20.0
30	---	---	---	15.9	2.0	8.5	21.3	10.2	14.7	28.7	15.1	19.6
31	---	---	---	18.1	5.2	11.1	---	---	---	26.4	15.2	18.9
MONTH	12.1	0.0	4.5	18.3	0.0	8.2	22.4	5.1	12.3	---	---	---

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, 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	22.5	15.4	18.4	26.7	17.0	21.8	27.6	16.6	21.0	25.0	15.5	19.2
2	25.8	13.9	19.2	29.5	16.5	22.2	29.2	16.6	22.0	26.5	15.5	20.3
3	24.4	13.2	18.4	29.4	16.6	22.5	29.2	18.2	22.6	20.0	16.3	18.1
4	19.8	14.9	16.4	29.3	16.9	22.1	29.5	18.2	22.8	25.1	14.0	18.7
5	15.9	12.7	14.2	28.8	16.7	21.8	29.3	17.9	23.0	26.2	15.1	20.0
6	22.0	11.7	16.3	28.6	16.4	21.0	29.0	17.7	22.1	22.8	16.8	18.8
7	19.0	12.2	14.9	27.2	15.9	20.2	28.8	17.7	22.1	21.5	15.9	17.9
8	24.7	11.5	17.7	28.4	15.7	21.4	27.0	18.3	21.2	24.9	15.3	19.2
9	24.8	13.2	17.7	28.4	14.8	21.3	26.9	17.3	21.0	20.5	15.2	17.5
10	25.1	14.0	17.9	29.8	16.0	22.4	28.0	16.9	22.4	22.7	13.3	17.0
11	25.0	13.4	18.8	28.2	16.6	21.9	29.6	18.2	23.0	22.3	12.0	16.4
12	26.4	14.2	19.1	26.9	17.5	22.1	29.1	17.9	22.6	23.2	11.6	17.0
13	21.3	14.6	17.1	28.9	17.8	22.9	28.5	17.0	22.0	15.1	10.3	12.2
14	24.5	13.4	18.0	28.7	17.1	22.3	28.0	16.0	21.5	20.8	9.0	14.1
15	26.2	13.3	19.2	28.9	17.3	21.7	27.8	16.3	21.3	22.9	10.1	15.9
16	26.6	15.6	20.0	29.8	17.6	22.3	28.1	16.2	21.4	22.1	11.7	16.6
17	25.8	14.5	18.6	29.5	17.0	23.1	27.0	16.2	20.8	21.3	11.3	15.6
18	20.3	13.9	16.9	30.2	17.5	23.3	26.5	16.7	20.4	19.1	9.9	13.7
19	24.9	14.9	18.7	30.5	18.4	22.3	27.9	16.0	21.2	21.0	9.2	14.5
20	21.8	15.6	18.0	29.6	19.0	22.3	28.7	16.8	22.2	21.2	11.0	15.8
21	24.2	13.8	18.6	30.6	17.8	23.6	28.2	17.0	22.0	21.2	11.6	16.0
22	25.9	14.4	19.8	29.4	18.0	22.8	28.2	17.2	21.8	21.1	10.7	15.3
23	26.4	14.9	20.0	30.1	18.0	22.8	26.1	16.6	21.0	22.0	11.2	16.3
24	25.3	15.0	19.5	31.3	17.5	23.6	28.5	16.5	21.6	21.4	11.7	16.0
25	25.2	13.2	18.5	30.9	18.5	22.8	27.3	17.3	21.2	22.0	10.7	16.0
26	23.9	15.4	19.0	30.1	18.3	22.7	27.4	17.9	21.2	22.5	11.5	16.5
27	27.3	14.9	20.6	26.1	18.9	21.7	28.3	16.7	21.1	21.1	11.4	15.7
28	27.7	15.3	20.3	24.2	17.8	19.7	21.7	18.3	19.7	20.4	10.6	15.0
29	26.3	15.8	19.9	25.7	17.5	20.2	26.6	15.7	20.1	20.9	10.4	15.1
30	28.0	16.2	21.5	27.9	---	---	19.3	16.5	17.6	20.3	12.1	15.2
31	---	---	---	28.9	16.8	21.0	16.7	14.4	15.5	---	---	---
MONTH	28.0	11.5	18.4	31.3	---	---	29.6	14.4	21.3	26.5	9.0	16.5

383347104373401 WILLIAMS CREEK AT THE MOUTH NEAR WIGWAM, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°33'47", long 104°37'34", in NW¹/₄NW¹/₄ sec.24, T.17 S., R.65 W., El Paso County, Hydrologic Unit 11020003, 0.3 mi upstream from mouth, 1.7 mi northeast of Wigwam, and 9.3 mi southeast of Fountain. Elevation of gage is 5,240 ft above NGVD of 1929, from topographic map.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--May to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=383347104373401

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 unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Ortho-phosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	E coli, m-TEC MF, water, col/ 100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)
MAY 01...	1400	0.18	9.5	8.0	1,940	16.5	0.196	0.15	0.02	0.07	--	E4	78
JUL 21...	1610	0.49	4.4	7.8	1,590	28.0	0.087	E.05	0.24	0.49	E160	--	144

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

Date	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
MAY 01...	24	0.01
JUL 21...	20	0.03

E -- Estimated laboratory analysis value.

382625104353701 SUTHERLAND DITCH AT MOUTH NEAR PINON, CO

WATER-QUALITY RECORD

LOCATION.--Lat 38°26'25", long 104°35'37", in NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec.31, T.18 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, at the mouth 0.5 mi south of Pinon Road bridge on Fountain Creek, and 0.9 mi northeast of Pinon. Elevation of gage is 4,980 ft above NGVD of 1929, from topographic map.

DRAINAGE AREA.--Indeterminate.

PERIOD OF RECORD.--February to September 2003. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=382625104353701

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)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd, mg/L (00665)	E coli, modif. m-TEC, water, col/100 mL (90902)
FEB 11...	1240	2.5	12.4	8.5	1,160	10.0	1.88	314	0.024	1.85	0.08	0.06	--
APR 29...	1400	3.1	12.6	8.5	1,180	16.5	2.15	296	0.023	1.04	0.05	0.07	10
JUL 23...	1400	2.3	6.1	7.6	1,210	19.0	2.1	301	0.046	0.58	0.06	0.11	66

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

Date	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC 0.7u MF col/100 mL (31625)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recoverable, ug/L (01055)	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd, ug/L (01147)	Suspended sediment concentration, mg/L (80154)	Suspended sediment load, tons/d (80155)
FEB 11...	E1	E2	12.7	16.0	7.2	6.1	9	0.06
APR 29...	--	7	4.0	4.9	7.1	5.9	7	0.06
JUL 23...	--	73	6.7	21.9	4.0	3.6	10	0.06

E -- Estimated laboratory analysis value.

07106300 FOUNTAIN CREEK NEAR PINON, CO

LOCATION.--Lat 38°26'23", long 104°35'35", in NW¹/₄SE¹/₄ sec.31, T.18 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on right bank 0.5 mi below Pinon Road bridge, 0.9 mi northeast of Pinon, and 2.7 mi upstream from Steele Hollow Creek.

DRAINAGE AREA.--849 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1973 to current year. Low-flow records may not be equivalent prior to October 1995, as a result of varying underflow (diversion system) entering between the sites. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07106300

REVISED RECORDS.--WDR CO-80-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,990 ft above NGVD of 1929, from topographic map. Apr. 10, 1973 to Apr. 22, 1976, non-recording gage, and Apr. 23, 1976 to Sept. 30, 1995, water-stage recorder at site 0.5 mi upstream at different datum. Oct. 1, 1995 to present at various locations within 70 ft downstream from underflow mouth (see district office for location history).

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	76	66	92	90	120	115	50	60	69	46	322
2	54	88	65	93	94	151	111	47	105	51	46	153
3	45	95	65	98	94	157	107	48	50	43	57	137
4	20	85	67	96	94	133	104	42	61	38	76	190
5	e33	89	65	89	94	106	108	52	328	31	63	108
6	e35	89	58	84	104	103	159	56	261	22	45	87
7	e35	85	59	76	87	97	142	58	131	20	39	129
8	27	99	62	73	88	94	111	56	118	17	40	115
9	38	106	63	69	87	102	102	62	87	14	51	86
10	48	107	61	63	89	94	91	87	96	21	88	68
11	46	109	60	60	108	91	66	93	86	27	62	63
12	38	105	e65	68	107	87	40	71	67	34	69	64
13	39	108	e66	69	114	87	36	67	74	39	49	64
14	43	100	69	71	115	83	34	66	77	39	39	73
15	47	93	67	65	121	82	33	57	278	38	40	66
16	54	77	67	62	98	82	37	121	98	50	43	65
17	50	60	75	60	91	96	35	77	86	32	47	64
18	50	50	73	61	91	195	33	62	310	35	47	63
19	48	46	74	64	100	258	54	58	164	38	50	68
20	48	51	73	62	131	182	61	47	1,430	224	36	68
21	49	46	75	61	98	196	53	45	302	72	33	65
22	44	50	75	72	94	150	49	42	171	39	39	68
23	64	63	80	94	92	127	171	40	122	30	37	69
24	e65	69	87	100	89	129	297	54	96	34	41	67
25	81	70	82	101	86	369	181	139	82	35	49	65
26	78	74	76	103	94	165	88	142	332	34	59	63
27	215	66	80	106	98	131	64	87	139	70	38	65
28	187	69	90	101	102	128	48	57	104	145	101	68
29	77	70	96	96	---	117	45	36	108	425	79	70
30	69	68	93	95	---	115	51	20	91	177	285	64
31	68	---	88	94	---	118	---	20	---	79	1,290	---
TOTAL	1,823	2,363	2,242	2,498	2,750	4,145	2,626	1,959	5,514	2,022	3,084	2,717
MEAN	58.8	78.8	72.3	80.6	98.2	134	87.5	63.2	184	65.2	99.5	90.6
MAX	215	109	96	106	131	369	297	142	1,430	425	1,290	322
MIN	20	46	58	60	86	82	33	20	50	14	33	63
AC-FT	3,620	4,690	4,450	4,950	5,450	8,220	5,210	3,890	10,940	4,010	6,120	5,390

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

MEAN	83.7	105	94.5	102	109	118	137	277	191	108	152	78.4
MAX	457	289	201	174	180	229	664	1,599	1,083	365	794	241
(WY)	(1985)	(1985)	(2000)	(1996)	(2000)	(1998)	(1999)	(1999)	(1997)	(1985)	(1999)	(1999)
MIN	0.81	5.77	30.0	19.0	35.2	20.0	3.36	0.96	8.39	4.34	3.87	0.000
(WY)	(1976)	(1979)	(1977)	(1979)	(1978)	(1978)	(1975)	(1975)	(1978)	(1976)	(1974)	(1975)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1973 - 2003

ANNUAL TOTAL	28,294	33,743	
ANNUAL MEAN	77.5	92.4	129
HIGHEST ANNUAL MEAN			438 1999
LOWEST ANNUAL MEAN			29.4 1978
HIGHEST DAILY MEAN	859 Jul 6	1,430 Jun 20	11,000 Apr 30, 1999
LOWEST DAILY MEAN	20 Oct 4	14 Jul 9	a0.00 Jul 6, 1973
ANNUAL SEVEN-DAY MINIMUM	31 May 6	22 Jul 5	0.00 Aug 18, 1973
MAXIMUM PEAK FLOW		3,230 Jun 20	b19,100 Apr 30, 1999
MAXIMUM PEAK STAGE		4.40 Jun 20	c9.80 Apr 30, 1999
ANNUAL RUNOFF (AC-FT)	56,120	66,930	93,590
10 PERCENT EXCEEDS	138	139	234
50 PERCENT EXCEEDS	62	72	87
90 PERCENT EXCEEDS	39	38	7.0

e Estimated.

a No flow at times many years.

b From rating curve extended above 9,590 ft³/s.

c From floodmark.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1976 to December 1983, December 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=07106300

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to September 1979.

WATER TEMPERATURE: October 1976 to September 1979.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium, water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Fluoride, water, fltrd, mg/L (00950)	Sulfate, water, fltrd, mg/L (00945)	Ammonia, water, fltrd, mg/L as N (00608)	Nitrite + nitrate, water, fltrd, mg/L as N (00631)	Orthophosphate, water, fltrd, mg/L as P (00671)
NOV 05...	0915	85	11.3	8.3	1,120	4.5	86.4	28.2	1.60	290	E.014	3.31	0.30
DEC 02...	1405	80	9.6	8.4	1,120	9.5	90.4	29.1	1.60	290	0.039	3.49	0.41
FEB 11...	1110	126	11.5	8.3	1,110	2.5	--	--	1.4	265	0.126	3.86	0.58
APR 29...	1140	45	7.8	8.4	1,150	19.0	--	--	1.82	302	0.016	2.51	0.30
JUL 23...	1230	28	6.4	8.2	1,130	28.0	--	--	1.88	295	0.017	1.79	0.20

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

Date	Phosphorus, water, unfltrd mg/L (00665)	BOD, water, unfltrd 5 day, 20 degC mg/L (00310)	E coli, modif. m-TEC, water, col/100 mL (90902)	E coli, m-TEC MF, water, col/100 mL (31633)	Fecal coliform, M-FC, 0.7u MF col/100 mL (31625)	Arsenic, water, fltrd, ug/L (01000)	Arsenic, water, unfltrd, ug/L (01002)	Boron, water, fltrd, ug/L (01020)	Boron, water, unfltrd recover-able, ug/L (01022)	Cadmium, water, fltrd, ug/L (01025)	Cadmium, water, unfltrd, ug/L (01027)	Chromium, water, fltrd, ug/L (01030)	Chromium, water, unfltrd recover-able, ug/L (01034)
NOV 05...	0.560	<2.0	--	E120	140	2.8	3.9	232	233	<0.10	0.42	2.0	3.6
DEC 02...	0.652	<2.0	--	E33	<72	2.9	3.7	227	217	--	E.21	3.5	4.1
FEB 11...	1.52	--	--	84	52	--	--	--	--	--	--	--	--
APR 29...	0.410	--	E12	--	E16	--	--	--	--	--	--	--	--
JUL 23...	0.308	--	240	--	E400	--	--	--	--	--	--	--	--

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

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Cyanide, water, unfltrd, mg/L (00720)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Manganese, water, fltrd, ug/L (01056)	Manganese, water, unfltrd recover-able, ug/L (01055)	Mercury, water, fltrd, ug/L (71890)	Mercury, water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)
NOV 05...	2.7	9.8	<0.01	<10.0	3,500	0.34	6.2	E4.0	164	<0.018	E.010	7.1	9.6
DEC 02...	4.2	10	<0.01	<10.0	2,640	E.28	4.3	E3.0	126	<0.018	<0.018	6.6	8.2
FEB 11...	--	--	--	--	--	--	--	3.43	462	--	--	--	--
APR 29...	--	--	--	--	--	--	--	3.08	63.6	--	--	--	--
JUL 23...	--	--	--	--	--	--	--	4.05	50.2	--	--	--	--

07106300 FOUNTAIN CREEK NEAR PINON, CO—Continued

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

Date	Selenium, water, fltrd, ug/L (01145)	Selenium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
NOV 05...	8.4	8.5	<0.04	0.08	12	34	169	39
DEC 02...	8.3	8.5	<0.04	0.05	E13	E27	130	28
FEB 11...	6.34	6.13	--	--	--	--	828	282
APR 29...	2.72	6.58	--	--	--	--	88	11
JUL 23...	5.75	5.15	--	--	--	--	77	5.8

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

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unflab, uS/cm 25 degC (90095)	Specif. conductance, wat unfl uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
JAN 02...	1115	89	--	1,130	1.0
MAY 06...	1215	62	--	1,090	18.5
JUN 05...	1015	345	--	647	13.5
JUN 09...	1245	83	1,080	--	--
JUL 08...	1100	20	1,160	--	--
AUG 05...	1100	70	1,030	--	--
SEP 05...	1030	112	946	--	--

07106300 FOUNTAIN CREEK NEAR PINON, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2001 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07106300

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

REMARKS.--Estimated daily precipitation records are less accurate than the rest of the published records.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.51 inches, Apr. 19, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.51 inches, Apr. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.03	---	---	---	---	---	0.00	0.00	0.17	0.00	0.00	0.00
2	0.19	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
3	0.09	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.35
4	0.00	---	---	---	---	---	0.00	0.00	0.04	0.00	0.00	0.01
5	e0.00	---	---	---	---	---	0.00	0.00	0.27	0.00	0.00	0.00
6	e0.00	---	---	---	---	---	0.01	0.01	0.00	0.00	0.00	0.00
7	e0.00	---	---	---	---	---	0.07	0.00	0.04	0.00	0.00	0.05
8	0.08	---	---	---	---	---	0.00	0.00	0.00	0.00	0.07	0.00
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.07
10	0.00	---	---	---	---	---	0.00	0.06	0.21	0.00	0.00	0.01
11	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	0.28	0.00	0.00	0.15
14	0.00	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.01
15	0.00	---	---	---	---	---	0.36	1.23	0.00	0.12	0.00	0.00
16	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.14	0.00	0.06	0.00
18	0.00	---	---	---	---	---	0.00	0.14	0.06	0.00	0.01	0.00
19	0.00	---	---	---	---	---	1.51	0.01	0.14	0.20	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.39	0.00	0.00	0.00
21	0.00	---	---	---	---	---	0.05	0.00	0.00	0.00	0.00	0.00
22	0.01	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.01	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
24	0.00	---	---	---	---	---	0.02	0.00	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.63	0.00	0.00	0.07	0.00
26	0.18	---	---	---	---	---	0.00	0.01	0.00	0.19	0.00	0.00
27	0.22	---	---	---	---	---	0.00	0.00	0.00	0.06	0.00	0.00
28	0.00	---	---	---	---	---	0.01	0.00	0.27	0.07	0.14	0.00
29	0.14	---	---	---	---	---	0.00	0.00	0.00	0.23	0.01	0.00
30	0.00	---	---	---	---	---	0.00	0.06	0.00	0.00	0.25	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	0.95	---	---	---	---	---	2.03	2.16	2.04	0.87	0.63	0.65
MAX	0.22	---	---	---	---	---	1.51	1.23	0.39	0.23	0.25	0.35

e Estimated.

07106500 FOUNTAIN CREEK AT PUEBLO, CO

LOCATION.--Lat 38°17'16", long 104°36'02", in SE¹/₄SW¹/₄ sec.19, T.20 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on left bank at upstream side of bridge on U.S. Highway 50 at Pueblo and 2.6 mi upstream from mouth.

DRAINAGE AREA.--926 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1922 to September 1925, October 1940 to September 1965, February 1971 to current year. Monthly discharge only for some periods, published in WSP 1311. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07106500

REVISED RECORDS.--WDR CO-79-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 4,705 ft above NGVD of 1929, from topographic map. See WSP 1711 or 1731 for history of changes prior to Oct. 1, 1940, and WSP 1921 for changes Oct. 2, 1940 to Sept. 30, 1965. Feb. 1, 1971 to Sept. 30, 1976, water-stage recorder at site 1.4 mi upstream at datum 4,725.30 ft above sea level (unadjusted).

REMARKS.--Records fair except for estimated daily discharges and those above 1,000 ft³/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, transmountain diversions, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 4, 1921, reached a discharge of 34,000 ft³/s, on basis of slope-area measurement of peak flow, gage height unknown. Flood of May 30, 1935, reached a discharge of 35,000 ft³/s, on basis of slope-area measurement of peak flow, gage height unknown.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	87	61	107	105	158	124	53	35	73	54	410
2	53	84	69	110	131	180	118	56	62	64	44	103
3	72	110	86	100	136	175	115	49	57	50	40	111
4	38	97	83	102	131	169	109	49	52	26	50	177
5	28	92	72	99	132	143	97	55	194	24	60	135
6	27	82	69	102	140	127	152	64	264	23	46	94
7	30	97	68	94	134	121	181	74	101	19	32	124
8	28	110	65	88	e132	119	136	71	100	16	34	112
9	34	103	72	83	133	125	132	75	98	13	42	104
10	43	92	72	72	132	118	112	69	198	13	69	93
11	51	88	72	71	128	108	99	77	111	17	70	82
12	44	83	70	70	122	103	59	78	90	35	51	70
13	44	79	66	72	145	100	51	83	135	45	49	71
14	59	92	75	72	138	99	47	66	139	37	30	81
15	52	108	80	69	151	88	48	101	279	38	23	86
16	58	80	76	62	138	91	43	108	133	43	26	83
17	54	68	74	64	138	99	42	98	137	34	29	75
18	53	64	90	65	146	180	38	72	337	27	94	75
19	63	54	105	74	147	260	129	69	181	27	50	77
20	50	63	90	92	167	183	88	62	1,810	144	e43	73
21	45	65	92	77	149	172	63	59	390	98	28	74
22	36	64	94	77	128	142	43	49	228	51	30	69
23	48	58	95	98	122	115	97	46	145	29	39	76
24	e80	59	109	93	121	130	189	49	128	26	31	69
25	89	64	109	93	111	310	179	130	116	29	38	68
26	84	72	103	101	130	137	85	150	285	29	63	65
27	178	84	95	96	147	110	59	66	148	52	44	65
28	184	65	106	99	142	100	46	48	95	117	88	62
29	138	67	106	102	---	96	46	41	101	478	106	56
30	83	61	107	87	---	96	50	29	75	133	285	53
31	84	---	104	101	---	111	---	27	---	88	1,270	---
TOTAL	1,963	2,392	2,635	2,692	3,776	4,265	2,777	2,123	6,224	1,898	2,958	2,893
MEAN	63.3	79.7	85.0	86.8	135	138	92.6	68.5	207	61.2	95.4	96.4
MAX	184	110	109	110	167	310	189	150	1,810	478	1,270	410
MIN	27	54	61	62	105	88	38	27	35	13	23	53
AC-FT	3,890	4,740	5,230	5,340	7,490	8,460	5,510	4,210	12,350	3,760	5,870	5,740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2003, BY WATER YEAR (WY)

MEAN	58.5	74.3	69.4	71.5	77.7	77.0	94.9	197	146	85.2	129	52.8
MAX	513	303	225	193	190	260	677	1,504	1,104	429	852	242
(WY)	(1985)	(1985)	(2000)	(2000)	(2000)	(2000)	(1999)	(1999)	(1997)	(1995)	(1999)	(1999)
MIN	0.61	0.90	1.10	1.90	1.40	1.00	1.10	0.28	0.71	0.96	0.71	0.37
(WY)	(1963)	(1955)	(1955)	(1954)	(1954)	(1954)	(1955)	(1950)	(1963)	(1964)	(1960)	(1978)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1922 - 2003
ANNUAL TOTAL	29,540	36,596	
ANNUAL MEAN	80.9	100	96.3
HIGHEST ANNUAL MEAN			440 1999
LOWEST ANNUAL MEAN			4.42 1953
HIGHEST DAILY MEAN	983 Jul 6	1,810 Jun 20	11,400 Apr 30, 1999
LOWEST DAILY MEAN	e14 Jul 2	13 Jul 9	a0.00 May 12, 1923
ANNUAL SEVEN-DAY MINIMUM	24 Jun 27	18 Jul 5	0.00 Sep 9, 1945
MAXIMUM PEAK FLOW		3,580 Jun 20	b47,000 Jun 17, 1965
MAXIMUM PEAK STAGE		5.90 Jun 20	c19.00 Jun 17, 1965
ANNUAL RUNOFF (AC-FT)	58,590	72,590	69,800
10 PERCENT EXCEEDS	139	147	198
50 PERCENT EXCEEDS	65	83	44
90 PERCENT EXCEEDS	33	38	1.1

e Estimated.

a No flow at times many years.

b From contracted-opening measurement of peak flow.

c From floodmarks, site and datum then in use.

07106500 FOUNTAIN CREEK AT PUEBLO, CO—Continued

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

Date	Copper, water, fltrd, ug/L (01040)	Copper, water, unfltrd recover-able, ug/L (01042)	Cyanide water unfltrd mg/L (00720)	Iron, water, fltrd, ug/L (01046)	Iron, water, unfltrd recover-able, ug/L (01045)	Lead, water, fltrd, ug/L (01049)	Lead, water, unfltrd recover-able, ug/L (01051)	Mangan-ese, water, fltrd, ug/L (01056)	Mangan-ese, water, unfltrd recover-able, ug/L (01055)	Mercury water, fltrd, ug/L (71890)	Mercury water, unfltrd recover-able, ug/L (71900)	Nickel, water, fltrd, ug/L (01065)	Nickel, water, unfltrd recover-able, ug/L (01067)
NOV 04...	3.3	16	<0.01	<10.0	7,660	E.20	12	E3.0	322	<0.018	0.021	9.0	14
DEC 02...	--	12	<0.01	<10.0	3,720	E.21	5.4	E3.0	151	<0.018	E.014	7.0	10
FEB 11...	--	--	--	--	--	--	--	4.12	471	--	--	--	--
APR 29...	--	--	--	--	--	--	--	3.98	46.8	--	--	--	--
JUL 24...	--	--	--	--	--	--	--	11.7	36.4	--	--	--	--

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

Date	Selen-ium, water, fltrd, ug/L (01145)	Selen-ium, water, unfltrd ug/L (01147)	Silver, water, fltrd, ug/L (01075)	Silver, water, unfltrd recover-able, ug/L (01077)	Zinc, water, fltrd, ug/L (01090)	Zinc, water, unfltrd recover-able, ug/L (01092)	Sus-pended sedi-ment concentration mg/L (80154)	Sus-pended sedi-ment load, tons/d (80155)
NOV 04...	18	18	<0.04	0.11	E6.0	49	372	110
DEC 02...	24	24	<0.04	0.07	E7.0	E25	190	38
FEB 11...	12.7	11.3	--	--	--	--	757	260
APR 29...	28.6	24.9	--	--	--	--	69	8.8
JUL 24...	30.6	28.6	--	--	--	--	38	2.5

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

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

Date	Time	Instan-taneous dis-charge, cfs (00061)	Dis-solved oxygen, mg/L (00300)	pH, water, unfltrd std units (00400)	Specif. conduc-tance, wat un f uS/cm 25 degC (00095)	Temper-ature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnes-ium, water, fltrd, mg/L (00925)	Potas-sium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat un f fixed end pt, lab, mg/L as CaCO3 (90410)	Chlor-ide, water, fltrd, mg/L (00940)	Fluor-ide, water, fltrd, mg/L (00950)
DEC 02...	1146	75	10.7	8.5	1,310	7.0	108	40.8	5.10	128	206	61.4	1.57
MAR 10...	1415	116	8.8	8.4	1,280	14.0	93.7	35.1	6.09	126	186	79.5	1.75
MAY 28...	1315	48	6.5	8.4	1,280	26.0	93.7	33.0	6.18	116	195	62.4	1.9
AUG 26...	1315	75	6.3	8.4	1,270	27.5	108	41.1	8.27	133	260	63.8	2.0

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

Date	Sulfate water, fltrd, mg/L (00945)
DEC 02...	391
MAR 10...	334
MAY 28...	365
AUG 26...	372

07106500 FOUNTAIN CREEK AT PUEBLO, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1,410	1,370	1,400	1,270	1,250	1,260	1,280	1,230	1,270	1,220	1,200	1,210
2	1,960	1,270	1,480	1,260	1,240	1,250	1,290	1,240	1,250	1,250	1,170	1,210
3	1,400	1,210	1,310	1,260	1,230	1,250	1,260	1,200	1,230	1,240	1,190	1,220
4	1,500	1,400	1,450	1,250	1,230	1,240	1,240	1,210	1,220	1,240	1,210	1,230
5	1,540	1,440	1,500	1,270	1,210	1,240	1,260	1,230	1,250	1,240	1,170	1,220
6	1,530	1,460	1,490	1,260	1,200	1,220	1,260	1,240	1,250	1,200	1,170	1,200
7	1,500	1,440	1,470	1,230	1,190	1,210	1,260	1,250	1,250	1,210	1,190	1,210
8	1,520	1,420	1,460	1,250	1,210	1,220	1,280	1,260	1,270	1,220	1,210	1,220
9	1,730	1,210	1,390	1,240	1,180	1,220	1,280	1,270	1,270	1,220	1,210	1,220
10	1,360	1,310	1,340	1,270	1,200	1,230	1,280	1,270	1,280	1,240	1,200	1,220
11	1,350	1,310	1,340	1,210	1,180	1,200	1,290	1,230	1,280	1,250	1,210	1,230
12	1,360	1,340	1,350	1,210	1,150	1,180	1,280	1,270	1,280	1,240	1,220	1,230
13	1,380	1,340	1,360	1,210	1,170	1,190	1,280	1,260	1,270	1,250	1,230	1,240
14	1,370	1,320	1,350	1,210	1,160	1,180	1,270	1,260	1,260	1,240	1,230	1,240
15	1,380	1,330	1,360	1,210	1,180	1,190	1,300	1,240	1,290	1,240	1,230	1,240
16	1,360	1,330	1,350	1,240	1,190	1,200	1,310	1,270	1,290	1,240	1,220	1,230
17	1,340	1,330	1,340	1,280	1,210	1,230	1,310	1,260	1,280	1,260	1,220	1,250
18	1,360	1,320	1,350	1,290	1,230	1,250	1,290	1,220	1,270	1,270	1,250	1,260
19	1,390	1,330	1,360	1,370	1,260	1,290	1,240	1,220	1,240	1,290	1,230	1,260
20	1,420	1,340	1,380	1,350	1,280	1,300	1,300	1,210	1,250	1,300	1,230	1,260
21	1,410	1,320	1,370	1,300	1,280	1,280	1,260	1,200	1,240	1,300	1,250	1,270
22	1,430	1,370	1,400	1,330	1,280	1,290	1,310	1,210	1,240	1,330	1,230	1,280
23	1,400	1,320	1,350	1,310	1,250	1,280	1,240	1,160	1,220	1,290	1,230	1,260
24	---	---	---	1,280	1,250	1,270	1,250	1,170	1,220	1,250	1,200	1,230
25	1,290	1,250	1,270	1,280	1,240	1,250	1,330	1,180	1,250	1,220	1,130	1,180
26	1,250	1,210	1,230	1,260	1,210	1,240	1,360	1,200	1,270	1,190	1,140	1,170
27	1,360	912	1,170	1,280	1,160	1,230	1,320	1,200	1,250	1,180	1,150	1,170
28	1,020	905	951	1,260	1,220	1,240	1,240	1,200	1,220	1,170	1,150	1,170
29	1,160	999	1,110	1,270	1,240	1,250	1,230	1,210	1,220	1,170	1,150	1,160
30	1,320	1,160	1,230	1,280	1,240	1,250	1,250	1,200	1,220	1,170	1,160	1,170
31	1,320	1,270	1,290	---	---	---	1,240	1,180	1,210	1,180	1,160	1,170
MONTH	---	---	---	1,370	1,150	1,240	1,360	1,160	1,250	1,330	1,130	1,220
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1,200	1,150	1,180	1,280	1,190	1,220	1,180	1,130	1,150	1,330	1,280	1,310
2	1,210	1,160	1,180	1,380	1,200	1,290	1,180	1,160	1,180	1,340	1,270	1,300
3	1,190	1,150	1,170	1,430	1,250	1,330	1,180	1,160	1,180	1,310	1,280	1,300
4	1,200	1,150	1,170	1,360	1,220	1,290	1,180	1,130	1,160	1,340	1,290	1,310
5	1,200	1,110	1,180	1,260	1,200	1,230	1,170	1,130	1,160	---	---	---
6	1,210	1,110	1,170	1,270	1,230	1,250	1,190	1,140	1,150	1,280	1,270	1,270
7	1,340	1,120	1,240	1,270	1,200	1,240	1,190	1,100	1,140	1,330	1,270	1,290
8	1,280	1,100	1,190	1,220	1,210	1,220	1,200	1,120	1,160	1,300	1,270	1,280
9	1,320	1,120	1,220	1,230	1,180	1,210	1,190	1,160	1,180	1,290	1,230	1,250
10	1,290	1,170	1,230	1,210	1,190	1,210	1,230	1,180	1,200	1,240	1,170	1,220
11	1,200	1,160	1,180	1,210	1,200	1,210	1,240	1,200	1,220	1,200	1,100	1,150
12	1,200	1,180	1,190	1,210	1,200	1,200	1,330	1,230	1,290	1,210	1,150	1,180
13	1,220	1,170	1,190	1,220	1,200	1,210	1,370	1,320	1,340	1,220	1,180	1,200
14	1,180	1,150	1,170	1,230	1,200	1,210	1,390	1,300	1,350	1,230	1,200	1,220
15	1,190	1,120	1,160	1,230	1,200	1,220	1,420	1,360	1,390	1,280	923	1,210
16	1,200	1,160	1,180	1,220	1,200	1,210	1,480	1,370	1,430	1,280	1,020	1,180
17	1,180	1,160	1,170	1,360	1,180	1,220	1,420	1,380	1,400	1,140	1,020	1,090
18	1,180	1,140	1,160	1,320	1,070	1,170	1,420	1,400	1,410	1,180	1,130	1,160
19	1,510	1,130	1,210	1,190	1,070	1,110	1,580	783	1,280	1,200	1,160	1,180
20	1,220	1,120	1,170	1,240	1,140	1,180	1,340	1,330	1,340	1,210	1,170	1,190
21	1,190	1,160	1,170	1,240	1,130	1,180	1,360	1,330	1,340	1,220	1,190	1,210
22	1,190	1,160	1,180	1,200	1,150	1,170	1,400	1,340	1,360	1,240	1,220	1,230
23	---	---	---	1,240	1,190	1,210	1,370	1,120	1,300	1,280	1,240	1,260
24	---	---	---	1,230	1,190	1,210	---	1,120	---	1,280	1,170	1,240
25	---	---	---	1,270	827	1,060	---	---	---	1,240	966	1,180
26	---	---	---	1,100	838	980	---	---	---	1,170	916	1,030
27	1,200	1,170	1,180	1,140	1,100	1,120	---	---	---	1,170	1,060	1,120
28	1,220	1,170	1,190	1,150	1,130	1,140	---	---	---	1,230	1,140	1,180
29	---	---	---	1,140	1,130	1,140	1,360	1,310	---	1,380	1,200	1,290
30	---	---	---	1,140	1,130	1,140	1,350	1,310	1,330	1,520	1,380	1,420
31	---	---	---	1,150	1,140	1,140	---	---	---	1,530	1,440	1,490
MONTH	---	---	---	1,430	827	1,190	---	---	---	---	---	---

07106500 FOUNTAIN CREEK AT PUEBLO, 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	1,480	1,210	1,370	1,220	1,160	1,190	1,270	1,170	1,230	889	635	763
2	1,300	1,060	1,180	1,270	1,210	1,240	1,350	1,270	1,320	1,100	847	965
3	1,320	1,140	1,250	1,330	1,270	1,310	1,400	1,330	1,370	1,250	1,070	1,120
4	1,340	1,200	1,280	1,390	1,330	1,360	1,360	1,320	1,340	1,120	901	996
5	1,260	826	1,060	1,440	1,380	1,410	1,320	1,200	1,270	1,130	996	1,080
6	1,060	733	868	1,520	1,440	1,490	1,270	1,190	1,210	1,160	1,120	1,140
7	1,110	986	1,080	1,580	1,510	1,550	1,280	1,210	1,240	1,180	1,010	1,110
8	1,140	1,050	1,100	1,620	1,560	1,590	1,300	1,100	1,250	1,130	1,060	1,090
9	1,210	1,140	1,180	1,700	1,620	1,660	1,230	1,150	1,190	1,140	1,090	1,120
10	1,450	812	1,220	1,740	1,620	1,700	1,180	975	1,100	1,250	1,140	1,210
11	1,310	1,200	1,230	1,620	1,450	1,560	1,170	1,040	1,100	1,240	1,200	1,220
12	1,260	1,220	1,240	1,540	1,420	1,490	1,240	1,160	1,210	1,260	1,220	1,240
13	1,290	689	1,220	1,470	1,370	1,420	1,300	1,170	1,260	1,280	1,240	1,260
14	1,270	1,190	1,220	1,430	1,360	1,390	1,420	1,300	1,370	1,260	1,200	1,230
15	1,260	783	1,030	1,450	1,370	1,400	1,500	1,410	1,440	1,260	1,200	1,230
16	1,190	1,030	1,090	1,420	1,280	1,360	1,490	1,400	1,430	1,260	1,210	1,240
17	1,260	840	1,190	1,420	1,290	1,360	1,470	1,350	1,400	1,280	1,240	1,250
18	1,260	469	962	1,480	1,400	1,430	1,660	503	1,340	1,290	1,200	1,210
19	1,020	908	982	1,500	1,420	1,440	1,680	1,300	1,460	1,250	1,190	1,210
20	1,120	505	786	1,470	704	1,050	1,360	1,330	1,340	1,310	1,190	1,230
21	1,020	820	906	1,140	979	1,080	1,460	1,360	1,420	1,320	1,220	1,260
22	1,080	1,020	1,050	1,340	1,140	1,220	1,480	1,380	1,420	1,260	1,210	1,230
23	1,120	1,080	1,100	1,470	1,340	1,400	1,540	1,360	1,420	1,270	1,210	1,240
24	1,180	1,120	1,160	1,490	1,390	1,450	1,560	1,360	1,470	1,250	1,230	1,240
25	1,200	1,170	1,190	1,470	1,390	1,420	1,510	1,310	1,420	1,260	1,230	1,250
26	1,210	672	1,030	1,460	1,400	1,420	1,440	1,220	1,320	1,310	1,250	1,280
27	1,020	734	906	1,420	1,380	1,410	1,380	1,290	1,340	1,320	1,280	1,300
28	1,110	1,000	1,060	1,410	1,250	1,320	1,530	915	1,260	1,310	1,280	1,300
29	1,170	1,090	1,130	1,250	684	857	1,280	992	1,150	1,310	1,260	1,290
30	1,170	1,120	1,150	1,070	823	977	1,230	824	1,060	1,310	1,260	1,280
31	---	---	---	1,170	1,000	1,050	824	537	599	---	---	---
MONTH	1,480	469	1,110	1,740	684	1,350	1,680	503	1,280	1,320	635	1,190

07106500 FOUNTAIN CREEK AT PUEBLO, CO—Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.0	15.9	19.4	26.7	18.5	22.2	29.5	17.2	23.1	23.6	15.7	19.2
2	26.1	15.1	20.0	29.6	17.5	23.4	31.0	18.3	24.0	24.8	17.6	20.8
3	27.0	14.8	20.3	30.6	17.2	23.4	31.3	19.3	24.2	22.0	16.8	19.1
4	25.8	16.0	19.1	31.0	17.4	23.4	31.4	19.5	24.5	22.5	14.8	18.5
5	16.3	14.2	15.2	31.7	17.5	23.7	30.3	20.8	24.7	26.7	15.9	20.8
6	19.4	12.7	15.9	30.4	17.5	22.5	30.4	18.9	23.9	22.1	17.9	19.7
7	17.7	13.8	15.5	30.3	16.5	22.1	32.1	18.5	24.1	20.7	17.4	19.0
8	23.3	14.1	17.6	30.8	17.0	23.0	29.8	20.4	23.7	23.7	17.1	19.5
9	25.3	14.4	18.7	29.3	16.1	22.1	30.6	18.4	23.1	19.8	16.9	18.4
10	22.3	15.1	17.9	31.0	16.8	23.0	29.6	17.3	23.2	20.0	17.4	18.5
11	26.7	---	---	31.7	16.9	23.4	29.9	18.8	23.7	21.4	15.7	18.4
12	25.5	15.6	19.8	30.9	18.0	23.8	29.8	18.8	23.7	24.1	12.1	18.5
13	26.8	15.1	19.0	30.8	19.1	24.4	30.0	17.6	22.9	16.7	11.5	13.6
14	23.7	14.5	18.3	30.6	17.9	23.7	30.0	16.3	22.3	21.1	9.1	14.8
15	20.6	14.3	17.9	31.1	18.0	23.4	30.0	16.7	22.2	23.1	10.8	16.5
16	---	---	---	31.0	18.9	24.2	30.2	16.3	22.1	23.2	12.2	17.2
17	27.4	14.9	19.8	31.8	19.0	24.5	29.4	16.2	21.8	18.5	14.0	16.4
18	22.0	17.1	19.5	32.5	18.1	24.6	25.1	18.4	21.0	18.9	13.9	15.7
19	19.5	17.9	18.8	32.7	19.8	24.6	30.2	16.8	22.3	20.5	10.6	15.4
20	20.9	14.0	17.4	24.5	18.4	22.0	30.7	---	---	19.5	12.7	16.1
21	23.1	15.1	18.2	31.4	19.3	25.1	29.7	17.9	22.8	19.6	13.4	16.7
22	24.2	15.6	20.0	31.4	19.8	24.9	31.2	18.4	23.1	19.9	14.4	16.8
23	---	---	---	28.6	20.0	23.6	32.2	18.4	24.1	20.6	14.8	17.1
24	26.3	---	---	32.9	18.0	24.5	31.0	19.5	24.5	19.7	13.2	17.0
25	24.3	14.6	19.3	32.5	18.8	24.5	32.0	20.0	23.6	19.4	13.3	16.9
26	25.0	15.7	20.2	30.8	19.5	24.4	28.6	18.8	22.6	22.8	15.3	18.4
27	24.7	16.4	20.8	24.5	20.3	22.6	29.8	17.2	22.5	20.0	11.0	15.4
28	26.9	18.3	21.4	23.8	22.2	22.8	22.6	19.1	20.6	17.4	13.3	15.0
29	25.6	17.3	20.9	24.9	19.6	22.1	21.9	17.5	20.1	18.4	13.0	15.2
30	25.1	18.5	20.9	28.3	21.0	23.6	21.4	17.6	19.7	18.1	12.5	14.3
31	---	---	---	25.6	19.4	21.8	19.6	16.8	17.9	---	---	---
MONTH	---	---	---	32.9	16.1	23.5	32.2	---	---	26.7	9.1	17.3

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO—Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

Date	Time	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT					
03...	1300	56	16.0	344	52
NOV					
04...	1200	110	6.5	372	110
04...	1330	100	8.5	363	98
DEC					
02...	1145	75	7.0	190	38
FEB					
11...	1430	127	6.0	757	260
MAR					
31...	1030	113	10.0	431	131
APR					
02...	1045	123	12.5	358	119
16...	1100	36	14.0	41	4.0
29...	1600	47	23.5	69	8.8
MAY					
06...	0830	66	11.0	303	54
29...	1415	36	30.0	61	5.9
JUN					
11...	1100	110	20.0	1,100	327
23...	1330	116	21.5	334	105
27...	0800	220	16.5	836	497
JUL					
11...	1030	16	24.5	28	1.2
23...	1145	28	27.0	43	3.3
24...	1020	24	24.5	38	2.5
29...	1045	495	20.0	4,250	5,680
AUG					
13...	1030	52	22.0	426	60
28...	1000	25	21.0	103	7.0
SEP					
12...	1330	64	22.0	238	41

07106500 FOUNTAIN CREEK AT PUEBLO, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
OCTOBER			NOVEMBER			DECEMBER			
1	33	---	e16.0	87	---	---	61	---	---
2	53	---	e61.0	84	---	---	69	---	---
3	72	428	93	110	---	---	86	---	---
4	38	---	e16.0	97	---	---	83	---	---
5	28	---	e10.0	92	---	---	72	---	---
6	27	---	e8.6	82	---	---	69	---	---
7	30	101	8.2	97	---	---	68	---	---
8	28	101	7.5	110	---	---	65	---	---
9	34	---	e24.0	103	---	---	72	---	---
10	43	361	42	92	---	---	72	---	---
11	51	377	52	88	---	---	72	---	---
12	44	348	41	83	---	---	70	---	---
13	44	297	35	79	---	---	66	---	---
14	59	---	e41.0	92	---	---	75	---	---
15	52	262	36	108	---	---	80	---	---
16	58	295	45	80	---	---	76	---	---
17	54	194	28	68	---	---	74	---	---
18	53	179	27	64	---	---	90	---	---
19	63	---	e28.0	54	---	---	105	---	---
20	50	127	18	63	---	---	90	---	---
21	45	---	e17.0	65	---	---	92	---	---
22	36	130	14	64	---	---	94	---	---
23	48	---	e35.0	58	---	---	95	---	---
24	e80	---	e83.0	59	---	---	109	---	---
25	89	337	88	64	---	---	109	---	---
26	84	296	74	72	---	---	103	---	---
27	178	1,810	1,440	84	---	---	95	---	---
28	184	---	e611	65	---	---	106	---	---
29	138	561	207	67	---	---	106	---	---
30	83	237	50	61	---	---	107	---	---
31	84	171	35	---	---	---	104	---	---
TOTAL	1,963	---	3,291.3	2,392	---	---	2,635	---	---
JANUARY			FEBRUARY			MARCH			
1	107	---	---	105	---	---	158	---	---
2	110	---	---	131	---	---	180	---	---
3	100	---	---	136	---	---	175	---	---
4	102	---	---	131	---	---	169	---	---
5	99	---	---	132	---	---	143	---	---
6	102	---	---	140	---	---	127	---	---
7	94	---	---	134	---	---	121	---	---
8	88	---	---	e132	---	---	119	---	---
9	83	---	---	133	---	---	125	---	---
10	72	---	---	132	---	---	118	---	---
11	71	---	---	128	---	---	108	---	---
12	70	---	---	122	---	---	103	---	---
13	72	---	---	145	---	---	100	---	---
14	72	---	---	138	---	---	99	---	---
15	69	---	---	151	---	---	88	---	---
16	62	---	---	138	---	---	91	---	---
17	64	---	---	138	---	---	99	---	---
18	65	---	---	146	---	---	180	---	---
19	74	---	---	147	---	---	260	---	---
20	92	---	---	167	---	---	183	---	---
21	77	---	---	149	---	---	172	---	---
22	77	---	---	128	---	---	142	---	---
23	98	---	---	122	---	---	115	---	---
24	93	---	---	121	---	---	130	---	---
25	93	---	---	111	---	---	310	---	---
26	101	---	---	130	---	---	137	---	---
27	96	---	---	147	---	---	110	---	---
28	99	---	---	142	---	---	100	---	---
29	102	---	---	---	---	---	96	---	---
30	87	---	---	---	---	---	96	---	---
31	101	---	---	---	---	---	111	---	---
TOTAL	2,692	---	---	3,776	---	---	4,265	---	---

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
1	124	---	e131	53	106	15	35	240	30
2	118	355	113	56	98	15	62	1,140	212
3	115	---	e82	49	133	18	57	939	148
4	109	164	48	49	166	22	52	---	e123
5	97	---	e37	55	---	e41	194	1,500	1,090
6	152	485	220	64	284	49	264	2,010	1,960
7	181	604	300	74	195	39	101	1,020	279
8	136	258	95	71	250	48	100	407	115
9	132	175	63	75	357	72	98	---	e41
10	112	---	e42	69	---	e109	198	3,490	4,780
11	99	125	33	77	619	139	111	2,040	705
12	59	123	20	78	---	e75	90	531	128
13	51	87	12	83	---	e79	135	905	451
14	47	56	7.1	66	---	e62	139	---	e414
15	48	---	e7.4	101	---	e340	279	3,040	3,570
16	43	47	5.5	108	---	e166	133	1,240	450
17	42	37	4.2	98	---	e111	137	975	442
18	38	26	2.7	72	---	e70	337	3,930	5,150
19	129	1,820	908	69	309	58	181	---	e631
20	88	---	e126	62	---	e33	1,810	6,650	42,600
21	63	218	37	59	144	23	390	---	e1,620
22	43	152	18	49	140	19	228	---	e655
23	97	1,800	711	46	138	17	145	414	162
24	189	2,400	1,400	49	286	43	128	---	e92
25	179	---	e692	130	---	e1,140	116	206	65
26	85	491	113	150	2,370	1,790	285	1,120	1,550
27	59	274	45	66	428	78	148	724	319
28	46	102	13	48	172	22	95	244	63
29	46	70	8.7	41	72	8.2	101	---	e48
30	50	---	e13	29	---	e3.6	75	170	34
31	---	---	---	27	38	2.8	---	---	---
TOTAL	2,777	---	5,307.6	2,123	---	4,707.6	6,224	---	67,927
		JULY			AUGUST			SEPTEMBER	
1	73	137	27	54	181	28	410	1,520	2,040
2	64	159	27	44	167	20	103	477	136
3	50	86	12	40	---	e62	111	285	94
4	26	---	e5.4	50	895	122	177	999	541
5	24	74	4.8	60	---	e151	135	349	139
6	23	43	2.7	46	941	118	94	---	e42
7	19	26	1.4	32	---	e73	124	370	149
8	16	26	1.1	34	---	e65	112	284	86
9	13	22	0.77	42	---	e68	104	484	136
10	13	25	0.88	69	798	165	93	322	82
11	17	29	1.3	70	928	178	82	---	e50
12	35	38	3.8	51	910	130	70	221	42
13	45	76	9.0	49	482	66	71	198	39
14	37	---	e11	30	132	11	81	488	108
15	38	132	14	23	70	4.3	86	325	76
16	43	136	16	26	76	5.3	83	---	e38
17	34	102	9.3	29	89	7.0	75	288	59
18	27	106	7.7	94	---	e877	75	774	158
19	27	---	e8.2	50	---	e43	77	358	75
20	144	1,880	915	e43	---	e85	73	228	45
21	98	754	207	28	---	e47	74	---	e33
22	51	189	29	30	---	e48	69	170	31
23	29	49	3.9	39	570	63	76	246	51
24	26	53	3.9	31	---	e47	69	270	50
25	29	84	6.5	38	475	49	68	303	56
26	29	69	5.4	63	532	92	65	---	e47
27	52	1,250	216	44	---	e55	65	211	37
28	117	4,210	3,060	88	997	399	62	223	37
29	478	4,980	9,360	106	1,070	317	56	342	52
30	133	795	285	285	3,360	3,680	53	269	38
31	88	537	130	1,270	5,550	24,300	---	---	---
TOTAL	1,898	---	14,385.05	2,958	---	31,375.6	2,893	---	4,567

e Estimated.

07108900 ST. CHARLES RIVER AT VINELAND, CO

LOCATION.--Lat 38°14'44", long 104°29'09", in NE¹/₄SW¹/₄ sec.6, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on left bank at left downstream end of downstream bridge on U.S. Highway 50 Business, 1.6 mi west of Vineland, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--474 mi².

PERIOD OF RECORD.--October 1978 to current year. Records for October 1967 to September 1974 (discharge measurements only prior to March 1968), published as St. Charles River near Vineland (station 07108800) at site 2.6 mi upstream, are not equivalent because of tributary inflow. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07108900

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 4,581.58 ft above NGVD of 1929, (Colorado Division of Highways benchmark). Prior to May 10, 2001, on right bank at same datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1901, 56,000 ft³/s, June 3, 1921, gage height unknown, at site 5.0 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	4.2	4.9	4.1	6.2	3.9	e4.0	3.7	36	83	7.8	3.3	6.2
2	6.2	5.1	4.3	6.1	3.7	3.9	3.7	45	79	6.4	3.1	5.5
3	6.6	4.9	4.7	5.9	3.6	3.8	3.1	42	72	4.6	3.1	4.9
4	4.6	4.8	4.7	6.1	3.9	3.6	34	39	68	4.2	3.2	4.7
5	5.0	4.6	4.5	6.4	3.8	3.9	46	39	77	3.9	3.1	3.4
6	6.1	4.6	4.4	6.3	3.6	3.9	42	39	86	3.6	3.1	3.2
7	5.6	4.6	4.1	11	e3.4	3.6	31	39	78	3.7	3.0	3.8
8	5.2	4.1	4.5	13	e3.4	3.6	21	36	75	3.4	3.1	3.4
9	4.9	4.4	4.4	12	e3.7	3.6	17	36	69	3.4	3.2	3.5
10	4.7	4.0	4.3	10	e4.0	3.7	14	34	51	3.6	161	3.3
11	4.3	4.3	4.5	11	3.8	4.0	8.0	34	45	3.5	8.7	3.2
12	5.2	3.3	4.1	11	3.8	3.9	7.6	31	42	3.0	3.8	3.2
13	5.2	3.2	4.7	9.1	3.9	3.7	5.2	32	44	3.0	3.0	3.2
14	5.0	4.1	5.4	8.2	4.2	3.4	5.0	35	41	3.3	3.7	3.6
15	4.3	6.6	6.0	8.3	3.7	6.1	3.7	41	34	3.4	3.2	3.3
16	5.2	4.3	5.8	5.2	3.6	3.1	15	51	33	3.4	3.3	3.1
17	5.2	4.2	6.1	4.1	3.3	3.3	20	48	33	3.2	2.9	3.1
18	5.3	4.1	5.6	e3.8	3.7	3.8	19	44	35	3.1	3.0	3.2
19	5.2	3.9	e5.5	e3.9	4.3	4.1	29	47	69	2.6	3.0	3.2
20	5.9	4.1	e5.4	3.9	3.9	2.9	35	50	115	3.0	2.8	3.2
21	4.8	4.1	e5.8	3.9	3.6	2.9	31	49	69	3.2	2.8	3.2
22	5.2	3.9	e6.3	3.9	4.4	2.8	25	44	60	3.0	2.8	3.2
23	6.0	3.4	6.6	e3.8	e4.0	3.1	22	44	52	3.1	2.8	3.2
24	6.5	4.2	e6.2	e3.9	e3.5	3.2	24	52	37	3.0	2.8	3.3
25	6.5	3.8	e6.0	3.8	e3.5	3.0	24	70	28	2.9	2.6	3.3
26	5.9	3.8	e5.8	3.1	e4.0	2.7	23	136	20	3.0	2.9	2.9
27	7.0	e3.8	e6.0	3.4	e4.5	6.2	22	87	13	3.0	2.9	2.8
28	73	4.0	e6.3	3.9	e4.2	12	23	81	11	3.1	3.1	3.0
29	9.8	4.2	6.5	3.7	---	9.0	22	73	9.8	3.2	3.4	3.1
30	5.1	4.4	6.3	4.1	---	5.8	23	71	8.4	3.1	18	3.2
31	5.3	---	6.4	3.7	---	e4.7	---	84	---	3.2	10	---
TOTAL	239.0	127.7	165.3	192.7	106.9	131.3	602.0	1,589	1,537.2	109.9	280.7	105.4
MEAN	7.71	4.26	5.33	6.22	3.82	4.24	20.1	51.3	51.2	3.55	9.05	3.51
MAX	73	6.6	6.6	13	4.5	12	46	136	115	7.8	161	6.2
MIN	4.2	3.2	4.1	3.1	3.3	2.7	3.1	31	8.4	2.6	2.6	2.8
AC-FT	474	253	328	382	212	260	1,190	3,150	3,050	218	557	209

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

	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	14.3	15.6	12.7	12.5	13.0	20.7	66.2	152	77.2	34.2	43.1	18.6													
MAX	39.5	32.3	24.3	22.6	25.1	127	306	484	358	108	207	120													
(WY)	(1983)	(1999)	(1998)	(1998)	(1998)	(1998)	(1987)	(1980)	(1983)	(1995)	(1982)	(1982)													
MIN	3.50	4.26	5.33	6.22	3.82	4.24	4.99	3.17	2.09	1.82	2.02	3.51													
(WY)	(1979)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(2002)	(2003)													

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1979 - 2003

ANNUAL TOTAL	1,856.43	5,187.1	
ANNUAL MEAN	5.09	14.2	
HIGHEST ANNUAL MEAN			40.2
LOWEST ANNUAL MEAN			88.4 1987
HIGHEST DAILY MEAN	130 Sep 14	161 Aug 10	5.75 2002
LOWEST DAILY MEAN	0.61 Aug 19	2.6 Jul 19	0.25 Apr 25, 1979
ANNUAL SEVEN-DAY MINIMUM	0.69 Aug 16	2.8 Aug 20	0.69 Aug 16, 2002
MAXIMUM PEAK FLOW		1,580 Aug 10	a7,560 Aug 11, 1982
MAXIMUM PEAK STAGE		8.09 Aug 10	b12.70 Aug 11, 1982
ANNUAL RUNOFF (AC-FT)	3,680	10,290	29,120
10 PERCENT EXCEEDS	7.6	44	83
50 PERCENT EXCEEDS	4.4	4.4	14
90 PERCENT EXCEEDS	1.3	3.1	5.9

e Estimated.

a From rating curve extended above 1,750 ft³/s.

b Maximum gage height, 13.68 ft, Apr 30, 1999.

07109500 ARKANSAS RIVER NEAR AVONDALE, CO

LOCATION.--Lat 38°14'53", long 104°23'55", in NE¼SW¼ sec.1, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on right bank 15 ft downstream from bridge on Nyberg Road (revised), 0.3 mi upstream from Sixmile Creek, and 2.6 mi west of Avondale.

DRAINAGE AREA.--6,327 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1951, February 1965 to current year. Statistical summary computed for 1975 to current year, subsequent to partial regulation by Pueblo Reservoir. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07109500

REVISED RECORDS.--WSP 1087: 1942. WSP 1311: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,509.53 ft above NGVD of 1929. Prior to Feb. 1, 1965, at site 550 ft downstream at datum 0.37 ft lower. Feb. 1, 1965 to Sept. 30, 1991, at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transbasin and transmountain diversions, storage reservoirs, power development, ground-water withdrawals, diversions for irrigation and municipal use, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Pueblo Reservoir (station 07099350) 21 mi upstream since Jan. 9, 1974.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	115	245	145	179	198	242	235	385	3,780	958	395	892
2	150	244	149	172	193	257	314	375	4,720	888	483	522
3	196	252	156	174	186	268	385	360	4,960	769	495	347
4	225	e265	163	180	182	259	489	345	4,720	702	482	325
5	217	282	165	179	186	251	537	336	3,900	716	515	307
6	214	278	165	178	e180	226	580	371	3,040	753	492	281
7	213	277	160	171	e170	212	627	376	1,920	755	487	292
8	218	290	156	173	e180	192	584	356	1,650	761	425	325
9	212	299	148	168	e190	197	475	250	1,330	752	260	359
10	186	294	148	163	e195	202	442	250	1,280	743	390	422
11	182	294	153	161	215	205	415	280	1,500	710	280	466
12	170	308	152	162	225	204	364	251	1,830	603	260	468
13	153	317	157	161	219	202	332	254	1,910	601	246	516
14	146	318	161	164	231	200	321	454	2,050	597	234	512
15	155	271	158	166	238	213	301	496	2,060	663	223	520
16	167	197	157	158	228	211	306	704	2,000	620	227	505
17	174	170	170	162	211	220	330	746	2,030	637	218	457
18	161	148	175	157	205	309	307	790	2,060	556	252	349
19	146	146	179	153	230	459	660	780	2,040	523	386	270
20	144	145	175	152	255	447	504	895	2,630	544	263	278
21	144	143	174	153	248	477	425	1,040	2,170	493	236	300
22	150	135	173	158	233	486	396	1,210	1,960	425	223	276
23	160	133	177	e165	222	429	437	1,200	1,780	398	225	265
24	181	e135	177	e190	e210	398	574	1,370	1,450	384	241	239
25	197	e145	e170	219	e210	403	614	1,600	1,340	331	225	221
26	200	152	e165	219	e215	453	462	2,260	1,240	302	282	207
27	206	155	e175	215	230	343	369	2,260	1,200	289	309	183
28	369	155	181	216	233	339	331	2,180	1,070	324	296	175
29	262	144	183	208	---	293	311	2,170	1,050	582	428	178
30	238	138	180	203	---	277	307	2,470	1,030	571	633	188
31	244	---	181	203	---	249	---	3,070	---	488	961	---
TOTAL	5,895	6,475	5,128	5,482	5,918	9,123	12,734	29,884	65,700	18,438	11,072	10,645
MEAN	190	216	165	177	211	294	424	964	2,190	595	357	355
MAX	369	318	183	219	255	486	660	3,070	4,960	958	961	892
MIN	115	133	145	152	170	192	235	250	1,030	289	218	175
AC-FT	11,690	12,840	10,170	10,870	11,740	18,100	25,260	59,270	130,300	36,570	21,960	21,110

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

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	514	467	354	375	412	534	843	1,600	2,603	1,784	1,273	610																		
MAX	1,631	985	718	770	1,103	994	1,884	4,170	4,971	4,432	3,210	1,511																		
(WY)	(1985)	(1985)	(1987)	(1985)	(1985)	(1985)	(1987)	(1980)	(1997)	(1995)	(1984)	(1982)																		
MIN	187	170	165	177	211	219	220	460	426	352	120	138																		
(WY)	(1979)	(1979)	(2003)	(2003)	(2003)	(1978)	(1978)	(2002)	(2002)	(2002)	(2002)	(2002)																		

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1975 - 2003

ANNUAL TOTAL	103,745	186,494		
ANNUAL MEAN	284	511	a949	
HIGHEST ANNUAL MEAN			1,626	1985
LOWEST ANNUAL MEAN			324	2002
HIGHEST DAILY MEAN	899	Jul 7	4,960	Jun 3
LOWEST DAILY MEAN	87	Sep 7	115	Oct 1
ANNUAL SEVEN-DAY MINIMUM	90	Sep 3	140	Nov 19
MAXIMUM PEAK FLOW			5,000	Jun 2
MAXIMUM PEAK STAGE			5.32	Jun 2
ANNUAL RUNOFF (AC-FT)	205,800	369,900	687,800	
10 PERCENT EXCEEDS	443	1,200	2,180	
50 PERCENT EXCEEDS	281	265	577	
90 PERCENT EXCEEDS	120	158	264	

e Estimated.

a Average discharge for 20 years (water years 1940-51, 1966-73), 867 ft³/s; 628,100 acre-ft/yr, prior to completion of Pueblo Dam.

b Minimum daily discharge for period of record, 50 ft³/s, Apr 2, 1940.

c From rating curve extended above 11,500 ft³/s on basis of velocity-area study. Maximum discharge and stage for period of record, about 50,000 ft³/s.

June 18, 1965, gage height, 9.77 ft, datum then in use, from rating curve extended above 6,700 ft³/s, on basis of records for station near Pueblo and indirect measurements of peak flow on Fountain Creek at Pueblo, Chico Creek near North Avondale, and Arkansas River near Avondale.

d From floodmark.

07109500 ARKANSAS RIVER NEAR AVONDALE, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April to September 1976, April 1979 to September 1980, December 1985 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07109500

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: July 1979 to September 1980, August 1988 to current year.
 pH: July 1979 to September 1980, September 1988 to current year.
 SPECIFIC CONDUCTANCE: July 1979 to September 1980, December 1985 to current year.
 WATER TEMPERATURE: July 1979 to September 1980, December 1985 to current year.

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

REMARKS.--Daily dissolved-oxygen records are poor. Daily pH records are fair except for Oct. 1, 8, which are poor. Daily specific-conductance records are good except for Feb. 7-10 and Mar. 5-25, which are fair. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality. Daily mean pH records are available from the district office.

EXTREMES FOR PERIOD OF RECORD.--

DISSOLVED OXYGEN: Maximum, 14.0 mg/L, Feb. 16, 1996; minimum, 2.6 mg/L, July 14, 1992.
 pH: Maximum, 9.2 units, Apr. 19, 2002; minimum, 7.2 units, on many days in 1992, 1995-96.
 SPECIFIC CONDUCTANCE: Maximum, 1,800 microsiemens/cm, Sept. 14, 2002; minimum, 246 microsiemens/cm, June 16, 1980.
 WATER TEMPERATURE: Maximum, 31.5°C, Aug. 6, 1980; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 13.1 mg/L, Dec. 18, 22; minimum, 3.9 mg/L, May 14.
 pH: Maximum, 8.9 units, Oct. 1, Sept. 29; minimum, 7.4 units, May 13-14, 16.
 SPECIFIC CONDUCTANCE: Maximum, 1,400 microsiemens/cm, Aug. 10; minimum, 472 microsiemens/cm, June 4.
 WATER TEMPERATURE: Maximum, 30.3° C, July 25; minimum, 0.0° C, on many days.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
DEC 17...	1500	163	12.7	8.6	1,270	7.5	119	46.3	4.92	100	E173	43.7	1.26
MAR 10...	1545	196	9.9	8.4	1,240	14.0	110	40.6	5.00	101	168	53.8	1.34
MAY 28...	1115	2,200	7.6	8.2	712	17.0	69.0	22.3	3.42	39.4	150	15.8	0.7
AUG 26...	1630	285	7.3	8.4	795	27.5	76.5	28.6	4.22	56.9	130	23.8	0.9

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

Date	Sulfate water, fltrd, mg/L (00945)
DEC 17...	424
MAR 10...	377
MAY 28...	206
AUG 26...	240

E -- Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.0	4.8	8.0	12.2	10.8	11.6	11.9	8.5	10.2	11.2	8.7	9.6
2	9.7	6.3	7.3	11.6	9.1	10.5	11.9	8.3	9.9	12.0	8.5	10.1
3	8.4	6.5	7.5	10.3	8.7	9.5	11.8	8.7	10.1	11.8	8.0	9.9
4	8.8	7.0	7.9	10.3	8.6	9.5	12.3	9.1	10.6	11.5	8.1	9.4
5	9.4	6.8	8.1	10.5	8.5	9.5	12.3	9.1	10.2	10.9	8.2	9.5
6	9.8	7.0	8.4	10.4	8.3	9.5	12.7	8.6	10.5	11.9	7.8	9.3
7	9.7	7.1	8.4	10.3	8.0	9.2	12.1	8.5	10.1	11.6	7.5	9.4
8	9.8	7.0	8.4	10.1	8.1	9.1	12.6	8.7	10.3	11.9	7.0	9.2
9	9.5	6.8	7.9	9.4	7.3	8.4	12.8	8.7	10.6	11.9	7.5	9.4
10	9.3	6.4	7.6	10.2	7.8	9.0	12.9	8.5	10.4	12.5	8.5	10.0
11	9.8	6.5	7.8	10.4	8.2	9.3	12.4	8.6	10.2	11.7	8.3	9.9
12	10.3	6.9	8.3	10.7	8.5	9.6	13.0	8.7	10.4	12.1	7.6	9.5
13	10.3	6.7	8.5	10.4	8.6	9.4	12.7	8.1	10.2	12.2	7.1	9.4
14	10.2	6.9	8.3	10.2	8.2	9.0	12.4	8.0	9.9	11.9	7.3	9.1
15	10.6	7.0	8.6	10.6	8.5	9.3	11.6	8.5	9.8	11.7	7.7	9.2
16	10.6	6.8	8.4	10.2	8.1	9.2	12.7	8.1	10.1	12.1	7.9	9.6
17	10.2	6.2	8.0	9.5	7.5	8.7	12.7	7.8	9.5	12.0	7.5	9.5
18	10.2	6.2	7.9	9.2	7.6	8.5	13.1	8.4	10.2	12.1	7.7	9.6
19	10.6	6.3	8.2	9.3	7.7	8.6	12.7	8.8	10.5	11.9	6.7	9.3
20	10.9	6.3	8.5	9.5	7.4	8.6	---	---	---	11.2	6.4	8.5
21	11.8	6.9	8.9	9.8	7.5	8.7	12.7	9.2	10.7	11.4	6.6	8.6
22	12.4	7.8	9.6	9.8	7.4	8.7	13.1	8.9	10.9	11.1	7.7	9.5
23	12.2	8.1	10.4	10.0	7.9	9.1	12.8	9.3	10.8	11.9	8.3	9.6
24	---	---	---	---	---	---	12.6	9.3	10.8	11.4	7.9	9.7
25	---	---	---	---	---	---	12.3	8.5	9.9	10.5	7.7	9.2
26	---	---	---	---	---	---	12.1	8.7	9.9	11.7	8.0	9.7
27	---	---	---	12.0	9.1	10.5	12.1	8.7	9.9	11.1	7.1	9.1
28	---	---	---	11.3	8.5	10.0	11.3	8.8	9.9	10.8	7.1	8.7
29	11.1	10.4	10.8	10.9	8.4	9.6	11.3	8.3	9.7	11.8	7.6	9.4
30	11.6	10.2	11.0	11.6	8.8	10.0	11.8	8.5	9.7	12.0	7.9	9.7
31	12.0	10.9	11.3	---	---	---	11.7	8.6	10.0	12.1	7.6	9.5
MONTH	---	---	---	---	---	---	---	---	---	12.5	6.4	9.4
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.3	6.9	8.8	11.1	7.9	9.7	8.6	6.3	7.5	9.3	7.5	8.3
2	11.2	7.3	8.9	11.5	7.9	9.8	8.8	6.9	7.8	9.9	6.9	8.4
3	12.0	7.9	9.4	10.5	7.1	9.0	9.2	7.4	8.0	9.8	6.3	8.1
4	11.8	7.9	9.8	10.6	7.7	9.5	9.7	7.4	8.4	9.1	6.2	7.7
5	11.8	8.4	9.8	11.4	7.9	10.1	9.3	7.8	8.4	9.7	6.4	7.9
6	12.2	9.1	10.6	10.1	6.9	8.8	9.8	8.4	8.9	10.0	6.7	8.0
7	11.8	8.4	9.8	10.3	6.9	8.7	9.7	8.5	9.1	9.8	5.8	7.7
8	11.3	8.4	9.6	9.9	6.5	8.3	10.0	7.5	8.6	9.9	5.9	7.5
9	11.6	8.6	9.9	10.6	7.0	8.8	9.6	7.4	8.5	9.9	5.1	7.4
10	11.7	8.3	9.6	10.5	6.8	8.6	9.4	7.1	8.3	9.8	5.3	7.4
11	11.1	8.8	10.0	10.0	5.9	8.0	9.4	7.3	8.2	9.0	5.2	7.2
12	11.3	7.9	9.9	10.2	6.2	8.0	9.4	7.0	8.2	9.5	5.3	7.2
13	10.2	7.6	8.8	9.7	5.5	7.7	9.5	6.7	8.1	8.8	4.0	6.6
14	10.2	7.4	8.5	9.9	5.8	7.7	9.5	6.9	8.1	7.2	3.9	5.5
15	10.4	7.6	8.9	9.9	5.5	7.5	9.3	7.3	8.1	7.0	4.2	5.7
16	10.6	8.6	9.4	10.1	6.0	7.9	10.1	6.9	8.4	6.4	4.5	5.4
17	10.4	7.4	9.2	9.9	6.4	8.0	10.5	6.8	8.2	6.9	4.9	5.9
18	10.6	7.6	8.9	9.0	6.8	8.1	10.6	6.6	8.3	7.6	5.5	6.6
19	11.6	7.6	9.4	10.0	8.6	9.3	8.2	6.7	7.7	8.1	6.3	7.3
20	10.8	8.1	9.3	9.4	7.3	8.5	8.6	7.0	7.7	8.5	6.9	7.7
21	10.3	7.2	9.1	9.6	8.3	8.9	8.5	6.3	7.5	8.3	6.8	7.5
22	9.8	6.9	8.5	9.7	7.1	8.7	8.0	6.3	7.1	8.0	6.4	7.2
23	11.1	7.4	9.5	9.6	7.3	8.5	8.0	6.5	7.3	7.9	6.3	7.1
24	12.2	9.5	10.9	9.6	7.6	8.5	8.7	6.9	7.8	8.1	6.6	7.4
25	12.3	9.1	10.3	8.7	6.7	7.8	8.5	6.9	7.7	8.3	7.2	7.7
26	12.0	9.6	10.8	8.6	6.9	7.8	8.0	6.4	7.3	7.8	7.2	7.4
27	11.4	8.2	10.0	8.9	7.1	8.1	8.6	6.6	7.7	8.1	7.2	7.7
28	11.5	8.7	10.2	10.3	8.5	9.4	8.6	6.8	7.7	8.0	7.3	7.7
29	---	---	---	9.8	7.8	8.9	8.9	6.6	7.6	8.0	7.2	7.7
30	---	---	---	9.9	7.3	8.8	9.2	6.9	8.0	8.0	7.0	7.6
31	---	---	---	9.2	6.6	8.1	---	---	---	7.9	7.1	7.5
MONTH	12.3	6.9	9.6	11.5	5.5	8.6	10.6	6.3	8.0	10.0	3.9	7.3

07109500 ARKANSAS RIVER NEAR AVONDALE, CO—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	7.0	7.4	7.3	5.9	6.6	7.4	6.0	6.6	6.9	5.4	6.3
2	7.8	7.0	7.4	7.4	5.9	6.6	7.2	6.0	6.6	6.3	5.1	5.7
3	7.6	7.1	7.4	7.4	6.0	6.7	7.3	5.5	6.6	6.0	5.3	5.6
4	7.5	7.1	7.4	7.5	6.1	6.7	7.0	5.4	6.1	6.3	5.0	5.8
5	7.6	7.4	7.5	7.6	6.1	6.8	7.1	5.1	6.0	6.9	5.1	5.9
6	7.8	6.6	7.3	7.4	6.0	6.7	7.0	5.3	6.1	7.2	5.5	6.3
7	7.8	6.9	7.4	7.7	6.0	6.8	7.6	5.4	6.4	7.2	5.7	6.4
8	7.7	6.5	7.2	7.8	6.0	6.9	7.5	5.1	6.1	7.4	5.9	6.6
9	7.6	6.6	7.1	8.0	6.2	7.0	6.9	4.5	5.7	7.6	6.2	6.8
10	7.6	6.8	7.3	8.0	6.0	7.0	---	---	---	7.7	6.5	6.9
11	---	---	---	7.8	6.0	6.9	---	---	---	8.1	6.0	7.1
12	---	---	---	8.0	5.9	7.0	---	---	---	7.9	6.0	6.9
13	7.4	6.5	7.1	7.9	6.0	6.9	---	---	---	8.5	6.4	7.6
14	7.5	6.6	7.1	8.1	6.0	7.0	8.1	5.6	6.7	8.6	6.5	7.7
15	7.6	6.5	7.1	7.9	6.1	7.1	8.8	5.4	7.0	8.6	6.3	7.3
16	7.5	6.7	7.1	---	---	---	8.6	5.1	6.7	8.2	6.0	7.0
17	7.6	6.6	7.1	---	---	---	8.6	4.5	6.4	7.8	6.0	6.8
18	7.4	6.7	7.0	7.8	5.7	6.8	7.9	4.4	5.9	8.3	6.2	7.2
19	7.6	6.7	7.2	7.3	5.5	6.7	---	---	---	8.1	5.6	6.9
20	7.3	6.2	7.0	---	---	---	---	---	---	8.3	5.9	6.9
21	7.5	6.6	7.1	---	---	---	---	---	---	8.6	5.7	6.9
22	7.7	6.6	7.2	---	---	---	---	---	---	8.6	5.7	7.1
23	7.6	6.3	7.0	---	---	---	7.8	5.1	6.2	9.1	5.6	7.1
24	7.4	6.4	6.9	7.6	5.4	6.7	7.7	4.5	5.8	10.1	5.6	7.5
25	7.7	6.5	7.1	7.5	5.8	6.5	6.3	4.1	5.1	11.1	6.5	8.3
26	7.6	6.5	7.1	7.7	5.6	6.7	7.2	4.6	5.5	11.5	6.4	8.5
27	7.5	6.3	6.9	---	---	---	7.2	5.0	5.9	11.9	6.4	8.6
28	7.5	6.4	6.9	---	---	---	6.7	5.1	5.8	12.3	6.3	8.8
29	7.5	6.5	7.0	---	---	---	---	---	---	12.6	5.9	8.6
30	7.3	6.1	6.7	---	---	---	---	---	---	11.2	5.9	7.7
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	12.6	5.0	7.1

07109500 ARKANSAS RIVER NEAR AVONDALE, CO—Continued

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

DAY	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN	MAX	MIN	MEDIAN
1	8.9	8.1	8.6	8.4	7.9	8.2	8.4	8.1	8.3	8.6	8.3	8.3
2	8.5	8.0	8.1	8.4	8.0	8.3	8.5	8.1	8.2	8.6	8.3	8.4
3	8.3	7.9	8.1	8.2	7.9	8.1	8.5	8.1	8.3	8.6	8.2	8.4
4	8.4	7.9	8.1	8.3	7.9	8.1	8.5	8.1	8.3	8.6	8.2	8.3
5	8.4	8.0	8.0	8.3	7.9	8.1	8.5	8.1	8.2	8.5	8.2	8.3
6	8.5	7.9	8.0	8.2	7.9	8.1	8.5	8.1	8.2	8.6	8.2	8.2
7	8.6	7.9	8.1	8.2	8.0	8.1	8.5	8.1	8.2	8.6	8.1	8.3
8	8.7	8.0	8.2	8.3	8.0	8.2	8.6	8.1	8.2	8.7	8.1	8.3
9	8.7	8.1	8.2	8.2	7.8	8.0	8.5	8.1	8.2	8.6	8.1	8.3
10	8.7	8.0	8.2	8.3	7.8	8.1	8.6	8.1	8.3	8.7	8.2	8.4
11	8.2	7.6	8.0	8.3	7.8	8.0	8.6	8.1	8.2	8.6	8.2	8.4
12	8.1	7.5	7.6	8.2	7.8	8.0	8.6	8.1	8.2	8.7	8.1	8.3
13	8.2	7.5	7.8	8.2	8.0	8.1	8.6	8.1	8.3	8.7	8.1	8.3
14	8.2	7.6	7.8	8.2	8.0	8.0	8.6	8.1	8.2	8.6	8.1	8.2
15	8.3	7.6	7.8	8.2	7.9	8.1	8.4	8.1	8.2	8.6	8.1	8.2
16	8.2	7.6	7.7	8.2	7.9	8.1	8.6	8.1	8.2	8.5	8.1	8.3
17	8.2	7.6	7.7	8.1	7.9	8.1	8.7	8.1	8.2	8.5	8.1	8.2
18	8.3	7.7	7.8	8.1	7.9	8.0	8.7	8.1	8.3	8.5	8.1	8.3
19	8.4	7.7	7.8	8.1	8.0	8.1	8.6	8.2	8.3	8.6	8.0	8.3
20	8.5	7.7	7.9	8.1	7.9	8.1	8.7	8.3	8.4	8.7	8.0	8.2
21	8.6	7.8	7.8	8.2	8.0	8.0	8.6	8.3	8.4	8.6	8.0	8.2
22	8.7	7.8	8.1	8.2	7.9	8.1	8.6	8.2	8.4	8.5	8.2	8.3
23	8.5	7.8	8.0	8.3	8.0	8.1	8.7	8.3	8.3	8.5	8.2	8.3
24	---	---	---	---	---	---	8.6	8.3	8.4	8.4	8.1	8.3
25	8.5	7.8	8.0	---	---	---	8.6	8.3	8.4	8.3	8.1	8.2
26	8.4	7.8	7.8	8.4	8.2	8.2	8.5	8.3	8.4	8.4	8.1	8.3
27	---	---	---	8.4	8.2	8.4	8.5	8.2	8.4	8.5	8.0	8.2
28	---	---	---	8.3	8.1	8.3	8.5	8.2	8.3	8.3	7.8	8.1
29	---	7.8	8.0	8.4	8.1	8.2	8.5	8.2	8.3	8.5	8.0	8.2
30	8.2	7.9	8.0	8.4	8.1	8.2	8.6	8.2	8.3	8.5	8.1	8.2
31	8.2	7.8	8.0	---	---	---	8.6	8.3	8.4	8.7	8.1	8.2
MAX	---	---	---	---	---	---	8.7	8.3	8.4	8.7	8.3	8.4
MIN	---	---	---	---	---	---	8.4	8.1	8.2	8.3	7.8	8.1
	FEBRUARY			MARCH			APRIL			MAY		
1	8.6	7.9	8.2	8.4	8.1	8.3	8.2	7.9	7.9	8.3	8.0	8.1
2	8.7	8.1	8.3	8.4	8.2	8.3	8.2	7.9	8.1	8.4	7.9	8.0
3	8.7	8.2	8.3	8.3	8.1	8.2	8.2	8.0	8.1	8.2	7.9	7.9
4	8.5	8.1	8.4	8.4	8.1	8.3	8.3	8.1	8.2	8.3	7.9	8.0
5	8.6	8.1	8.3	8.4	8.1	8.3	8.3	8.1	8.1	8.4	7.9	8.0
6	8.6	8.3	8.4	8.3	8.1	8.3	8.4	8.2	8.3	8.4	7.8	7.9
7	8.6	8.3	8.4	8.3	8.0	8.2	8.3	8.2	8.3	8.4	7.8	7.9
8	8.6	8.3	8.4	8.3	8.0	8.2	8.3	8.2	8.2	8.4	7.8	7.9
9	8.6	8.3	8.5	8.4	8.0	8.2	8.3	8.2	8.2	8.3	7.6	7.8
10	8.5	8.3	8.4	8.4	8.0	8.2	8.3	8.2	8.2	8.3	7.6	7.7
11	8.4	8.2	8.4	8.3	7.9	8.1	8.4	8.1	8.2	8.2	7.5	7.7
12	8.5	8.2	8.4	8.3	7.9	8.1	8.4	8.1	8.2	8.3	7.5	7.8
13	8.4	8.2	8.2	8.2	7.9	8.0	8.4	8.1	8.2	8.2	7.4	7.7
14	8.4	8.1	8.2	8.3	7.9	8.0	8.5	8.1	8.2	7.8	7.4	7.6
15	8.5	8.2	8.3	8.2	7.9	8.0	8.4	8.1	8.2	7.9	7.5	7.6
16	8.5	8.2	8.3	8.3	7.9	8.0	8.5	8.0	8.2	7.6	7.4	7.5
17	8.5	8.2	8.3	8.1	7.8	8.0	8.6	8.1	8.2	7.7	7.5	7.5
18	8.5	8.2	8.3	7.9	7.7	7.8	8.7	8.1	8.2	7.8	7.6	7.7
19	8.6	8.2	8.3	8.0	7.8	7.9	8.1	8.0	8.1	8.0	7.7	7.9
20	8.4	8.2	8.3	7.9	7.7	7.8	8.3	8.0	8.1	8.0	7.8	7.9
21	8.4	8.1	8.3	7.9	7.8	7.8	8.2	8.0	8.1	7.9	7.7	7.9
22	8.3	8.0	8.1	7.9	7.7	7.8	8.3	8.0	8.1	7.9	7.8	7.9
23	8.4	8.0	8.3	7.9	7.8	7.9	8.2	7.9	8.1	8.0	7.8	7.9
24	8.5	8.2	8.4	7.9	7.8	7.8	8.1	8.0	8.1	8.0	7.8	7.9
25	8.5	8.2	8.3	8.0	7.7	7.8	8.1	8.0	8.1	8.1	7.9	7.9
26	8.5	8.3	8.4	8.0	7.8	7.9	8.3	8.0	8.1	8.1	7.8	8.0
27	8.4	8.2	8.3	8.1	7.9	8.0	8.2	8.0	8.1	8.2	8.0	8.1
28	8.5	8.2	8.3	8.2	8.0	8.2	8.2	7.9	8.0	8.2	8.0	8.1
29	---	---	---	8.1	7.9	8.0	8.3	7.8	8.0	8.2	8.0	8.1
30	---	---	---	8.1	8.0	8.1	8.3	7.9	8.1	8.2	8.1	8.1
31	---	---	---	8.2	7.9	8.0	---	---	---	8.1	8.1	8.1
MAX	8.7	8.3	8.5	8.4	8.2	8.3	8.7	8.2	8.3	8.4	8.1	8.1
MIN	8.3	7.9	8.1	7.9	7.7	7.8	8.1	7.8	7.9	7.6	7.4	7.5

07109500 ARKANSAS RIVER NEAR AVONDALE, CO—Continued

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

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

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1,250	1,200	1,220	1,130	1,100	1,120	---	---	---	1,320	1,300	1,310
2	1,320	1,170	1,240	1,140	1,100	1,120	---	---	---	1,320	1,300	1,310
3	1,300	1,180	1,220	1,140	1,110	1,120	---	---	---	1,330	1,290	1,310
4	1,220	1,100	1,150	1,140	1,100	1,120	---	---	---	1,330	1,300	1,310
5	1,100	1,050	1,070	1,140	1,080	1,110	---	---	---	1,330	1,290	1,300
6	1,070	1,020	1,040	1,110	1,080	1,100	---	---	---	1,320	1,290	1,300
7	1,050	1,010	1,030	1,100	1,080	1,090	1,320	1,280	1,300	1,370	1,300	1,320
8	1,080	1,000	1,040	1,100	1,070	1,080	1,320	1,280	1,300	1,390	1,290	1,340
9	1,090	1,060	1,070	1,110	1,080	1,090	1,330	1,300	1,310	1,360	1,300	1,320
10	1,120	1,080	1,100	1,110	1,070	1,080	1,340	1,280	1,310	1,340	1,300	1,310
11	1,140	1,100	1,120	1,100	1,070	1,090	1,320	1,280	1,300	1,340	1,290	1,310
12	1,170	1,120	1,140	1,100	1,050	1,070	1,300	1,260	1,280	1,330	1,300	1,310
13	1,190	1,160	1,170	1,090	1,060	1,070	1,280	1,260	1,270	1,320	1,290	1,300
14	1,190	1,160	1,180	1,100	1,070	1,090	1,290	1,260	1,270	1,340	1,300	1,310
15	1,180	1,130	1,160	1,250	1,090	1,130	1,300	1,270	1,280	1,330	1,280	1,300
16	1,160	1,120	1,140	1,240	1,190	1,210	1,300	1,280	1,290	1,320	1,280	1,310
17	1,140	1,080	1,120	1,240	1,190	1,210	1,300	1,260	1,280	1,310	1,270	1,290
18	1,170	1,110	1,140	1,260	1,230	1,240	1,300	1,260	1,280	1,340	1,270	1,290
19	1,190	1,140	1,160	1,260	1,230	1,250	1,300	1,260	1,280	1,340	1,280	1,300
20	1,190	1,120	1,170	1,250	1,240	1,240	1,300	1,260	1,280	1,320	1,290	1,300
21	1,200	1,150	1,190	1,290	1,240	1,260	1,310	1,270	1,290	1,320	1,280	1,300
22	1,240	1,200	1,220	1,300	1,270	1,280	1,300	1,240	1,280	1,310	1,260	1,280
23	1,240	1,200	1,220	1,300	1,270	1,290	1,300	1,250	1,270	1,290	1,240	1,250
24	---	---	---	---	---	---	1,290	1,270	1,280	1,260	1,230	1,240
25	1,220	1,190	1,200	---	---	---	1,290	1,260	1,280	1,260	1,230	1,240
26	1,220	1,180	1,210	---	---	---	1,300	1,260	1,290	1,260	1,230	1,240
27	---	---	---	1,280	1,250	1,270	1,320	1,280	1,300	1,250	1,230	1,240
28	---	---	---	1,310	1,260	1,280	1,320	1,290	1,300	1,250	1,220	1,230
29	---	---	---	1,330	1,290	1,300	1,310	1,280	1,290	1,250	1,220	1,230
30	1,210	1,140	1,170	---	---	---	1,340	1,290	1,310	1,240	1,220	1,230
31	1,150	1,100	1,130	---	---	---	1,340	1,300	1,320	1,270	1,230	1,240
MONTH	---	---	---	---	---	---	---	---	---	1,390	1,220	1,290
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1,270	1,250	1,260	1,190	1,170	1,180	1,180	1,140	1,150	1,050	990	1,010
2	1,280	1,220	1,250	1,220	1,190	1,210	1,170	1,020	1,090	1,000	963	980
3	1,250	1,220	1,230	1,250	1,210	1,240	1,020	980	1,010	1,030	983	997
4	1,250	1,230	1,240	1,280	1,240	1,260	1,200	944	1,020	1,020	972	993
5	1,240	1,230	1,240	1,280	1,240	1,250	976	899	933	1,040	953	993
6	1,240	1,210	1,220	1,280	1,260	1,270	934	908	921	1,020	984	1,000
7	1,240	1,200	1,220	1,320	1,270	1,290	941	905	920	1,020	984	1,000
8	1,270	1,170	1,210	1,300	1,230	1,250	957	904	924	1,060	974	1,000
9	1,260	1,200	1,220	1,260	1,240	1,250	980	949	963	1,140	1,060	1,100
10	1,240	1,180	1,190	1,260	1,240	1,240	984	962	973	1,140	1,070	1,110
11	1,180	1,170	1,180	1,290	1,260	1,270	978	952	967	1,120	1,070	1,090
12	1,190	1,160	1,180	1,290	1,270	1,280	997	960	975	1,130	1,090	1,110
13	1,190	1,170	1,180	1,290	1,240	1,270	995	961	977	1,140	1,080	1,110
14	1,200	1,160	1,180	1,270	1,160	1,230	994	966	978	1,200	931	982
15	1,200	1,180	1,180	1,210	1,140	1,170	999	979	989	950	859	920
16	1,200	1,170	1,190	1,260	1,210	1,230	1,080	990	1,020	961	825	920
17	1,200	1,170	1,180	1,270	1,240	1,260	1,060	963	991	967	859	884
18	1,200	1,180	1,190	1,330	1,170	1,250	1,030	944	982	864	833	847
19	1,180	1,140	1,160	1,220	1,150	1,200	1,030	857	936	856	829	843
20	1,210	1,150	1,180	1,200	1,120	1,140	981	943	961	839	816	830
21	1,190	1,160	1,180	1,120	1,030	1,070	1,020	971	987	816	788	806
22	1,190	1,170	1,180	1,030	1,000	1,010	1,030	992	1,010	795	772	784
23	1,250	1,180	1,190	1,020	987	1,000	1,050	982	1,000	790	774	782
24	1,250	1,190	1,210	1,090	1,020	1,030	1,010	914	956	777	752	770
25	1,220	1,150	1,180	1,150	1,000	1,090	946	892	917	770	735	761
26	1,190	1,150	1,170	1,070	943	1,000	1,050	946	1,000	838	750	772
27	1,190	1,170	1,180	1,120	1,070	1,090	1,070	1,030	1,040	753	739	745
28	1,180	1,160	1,170	1,140	1,090	1,110	1,070	1,040	1,060	748	736	741
29	---	---	---	1,160	1,110	1,140	1,070	1,030	1,050	738	722	731
30	---	---	---	1,150	1,110	1,130	1,070	1,030	1,050	727	705	719
31	---	---	---	1,170	1,130	1,150	---	---	---	725	665	713
MONTH	1,280	1,140	1,200	1,330	943	1,180	1,200	857	992	1,200	665	905

07109500 ARKANSAS RIVER NEAR AVONDALE, 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	715	626	667	561	542	552	785	733	749	764	597	679
2	680	531	630	554	539	547	791	621	664	764	745	757
3	535	491	512	569	525	552	641	596	617	809	758	792
4	534	472	499	584	557	565	664	632	646	884	808	842
5	561	482	523	574	518	544	692	650	674	839	803	821
6	618	510	564	519	508	515	676	651	664	840	818	828
7	589	527	565	516	501	508	659	618	633	853	820	830
8	637	544	596	524	507	513	778	598	648	879	811	834
9	626	588	609	516	503	510	843	778	811	873	833	845
10	926	586	641	516	506	510	1,400	836	967	841	782	804
11	861	552	659	544	505	519	909	854	879	807	735	758
12	565	517	542	564	529	541	909	843	870	774	730	752
13	576	499	527	571	556	563	896	846	877	747	705	721
14	582	527	545	586	568	577	891	829	853	760	729	739
15	566	496	521	586	545	561	879	819	846	757	735	746
16	517	498	509	---	---	---	868	806	836	765	729	742
17	597	473	511	---	---	---	863	807	837	826	741	763
18	597	504	537	602	584	595	929	821	838	882	824	840
19	574	496	523	606	579	599	---	---	---	970	882	931
20	640	494	546	726	598	636	---	---	---	967	897	928
21	640	506	561	742	705	721	870	828	846	932	869	889
22	519	476	502	723	704	712	856	825	835	937	875	901
23	536	484	502	721	696	705	846	814	832	938	895	919
24	532	514	526	709	683	693	857	809	835	958	916	938
25	569	503	523	743	709	732	846	811	834	991	956	971
26	654	527	550	808	739	762	857	800	823	1,020	960	983
27	617	544	558	850	774	808	857	810	833	1,060	1,000	1,020
28	560	545	554	863	826	850	864	772	808	1,080	1,030	1,050
29	557	538	547	1,040	668	782	870	752	777	1,090	1,040	1,070
30	562	537	549	749	693	726	855	616	730	1,100	1,050	1,080
31	---	---	---	749	721	732	746	595	663	---	---	---
MONTH	926	472	553	---	---	---	---	---	---	1,100	597	859

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.5	12.5	15.3	5.9	4.3	5.2	7.4	1.8	4.8	5.4	3.1	4.1
2	15.0	12.6	13.6	7.1	5.2	6.2	8.2	3.3	5.9	5.6	1.0	3.5
3	15.6	11.5	13.1	10.5	5.8	7.9	6.2	3.2	4.4	6.5	1.3	4.0
4	17.8	9.9	13.7	9.4	5.3	7.3	5.5	3.1	4.3	6.4	2.9	4.8
5	20.0	10.8	15.2	10.5	4.8	7.7	6.5	4.2	5.3	5.2	2.8	4.2
6	18.8	11.9	15.3	10.8	4.7	7.8	6.5	1.9	4.3	8.2	4.3	6.1
7	19.5	11.3	15.3	11.0	5.3	8.3	6.7	2.3	4.7	7.5	2.6	5.2
8	20.1	12.0	16.0	11.4	6.6	9.1	7.1	3.4	5.1	8.0	2.3	5.3
9	21.0	14.5	17.4	12.7	7.8	10.2	6.8	1.7	4.3	6.3	2.5	4.5
10	21.5	14.6	17.6	10.2	6.8	8.6	6.5	1.4	4.1	4.4	0.4	2.5
11	20.3	12.6	16.5	10.0	5.2	7.5	6.4	1.9	4.3	3.6	1.1	2.3
12	16.7	12.5	14.6	9.2	4.0	6.7	6.3	2.1	4.2	7.4	2.5	4.6
13	17.9	9.5	13.6	9.4	5.4	7.4	6.6	1.3	4.1	7.4	1.6	4.6
14	17.6	9.8	13.7	10.4	7.5	8.8	7.0	2.1	4.7	6.8	2.3	4.6
15	16.9	9.0	13.0	8.8	6.1	7.3	5.9	2.3	4.4	7.1	1.8	4.1
16	16.4	9.1	12.7	8.6	3.5	6.3	5.7	1.9	4.1	5.5	0.6	3.0
17	16.5	8.4	12.5	9.6	4.2	6.9	7.4	3.1	5.3	6.0	1.0	3.4
18	16.9	9.5	13.2	10.3	5.6	7.9	5.9	2.2	4.3	5.1	0.0	2.6
19	16.1	9.2	12.7	10.1	4.6	7.4	5.6	2.1	3.8	7.2	0.1	3.7
20	17.0	8.4	12.7	10.5	4.3	7.5	3.6	0.0	1.6	8.8	2.6	5.7
21	16.3	9.6	11.8	10.9	5.1	8.1	4.6	0.4	2.3	6.0	2.8	4.3
22	15.2	9.0	12.0	10.5	5.0	8.0	4.0	0.0	1.9	3.1	0.4	1.2
23	10.8	7.9	8.6	10.2	5.4	7.6	2.7	1.4	1.9	3.4	0.0	1.4
24	---	---	---	---	---	---	3.2	0.1	1.5	4.8	0.0	2.4
25	13.5	7.8	10.7	---	---	---	1.8	0.0	0.5	6.5	1.2	3.9
26	13.0	7.6	10.4	---	---	---	1.1	0.0	0.2	7.0	0.9	4.1
27	---	---	---	5.9	0.1	3.2	3.1	0.0	1.3	9.5	3.0	6.3
28	---	---	---	7.0	1.2	4.3	5.7	1.9	3.7	8.8	4.6	6.9
29	---	---	---	8.4	3.6	5.9	5.7	2.0	3.8	8.9	3.8	6.4
30	8.8	5.2	6.8	7.3	3.0	5.2	6.3	2.7	4.4	6.9	2.7	4.9
31	6.0	4.8	5.4	---	---	---	4.7	0.8	3.0	8.6	4.4	6.7
MONTH	---	---	---	---	---	---	8.2	0.0	3.6	9.5	0.0	4.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.7	5.0	7.3	9.6	3.2	6.1	18.1	8.5	13.4	18.7	12.8	15.6
2	9.2	4.8	6.8	10.7	3.6	6.9	16.6	9.3	12.8	19.6	12.7	15.6
3	7.9	3.2	5.3	11.2	3.2	7.2	15.0	8.6	11.5	20.3	12.9	16.1
4	7.4	0.7	4.1	7.5	2.4	4.8	14.8	8.3	11.2	18.5	11.8	14.8
5	5.4	1.9	3.7	8.4	1.0	4.4	11.9	8.3	10	21.0	11.0	15.6
6	4.0	0.6	2.2	11.0	2.7	6.8	11.6	7.7	9.5	19.8	12.9	16.0
7	2.3	0.0	0.5	13.0	4.1	8.6	10.5	7.0	8.8	21.2	13.1	16.8
8	2.1	0.0	0.5	13.6	5.3	9.4	14.8	6.8	10.4	20.4	13.2	16.5
9	2.5	0.0	0.7	13.7	4.6	9.3	16.8	7.7	12.0	20.7	11.7	15.9
10	4.8	0.0	2.0	14.2	5.1	9.7	18.0	9.6	13.5	20.0	12.3	15.9
11	5.2	0.5	3.0	15.0	6.1	10.6	18.3	10.4	14.1	20.7	10.7	15.4
12	7.9	1.0	4.6	15.8	7.2	11.4	18.3	10.6	14.3	22.4	11.7	16.9
13	8.6	4.6	6.6	17.0	7.4	12.2	20.1	10.5	14.9	19.9	13.2	16.8
14	8.9	5.2	7.1	16.7	7.9	12.5	18.4	11.2	14.7	23.0	13.9	18.2
15	7.8	4.9	6.4	17.5	9.5	13.3	15.2	10.9	13.1	19.9	15.1	17.3
16	6.8	3.7	5.1	15.1	8.3	11.9	18.9	9.2	13.5	22.9	14.6	18.2
17	10.1	2.9	6.6	11.6	8.1	9.7	18.5	10.5	14.3	21.1	15.8	18.5
18	8.1	5.7	6.6	9.0	5.0	7.6	18.0	10.4	14.2	19.9	14.9	17.4
19	6.9	4.1	5.5	5.5	3.5	4.6	14.1	9.0	10.4	17.9	14.0	16.0
20	7.0	2.9	5.1	12.0	5.0	8.4	17.8	9.5	13.0	17.2	12.4	14.6
21	9.8	2.6	6.3	9.5	7.5	8.3	19.4	11.6	15.1	19.8	12.5	16.1
22	10.0	4.1	7.1	13.6	5.6	9.5	18.9	12.5	15.4	21.0	13.5	17.2
23	7.2	2.4	4.9	15.2	7.4	11.2	14.4	10.2	12.7	21.4	14.5	17.9
24	2.4	0.0	1.0	14.1	8.5	11.2	15.6	8.4	11.5	19.7	14.4	17.3
25	3.3	0.0	1.3	16.2	9.3	12.3	18.0	10.4	13.9	18.3	14.7	16.4
26	5.4	0.9	3.2	14.6	8.8	11.8	20.9	11.7	15.8	18.4	14.6	16.5
27	8.5	1.9	5.3	11.6	6.3	9.6	20.4	12.5	16.3	20.3	14.5	17.2
28	6.6	2.9	5.1	10.4	4.6	7.2	21.4	13.7	17.1	20.7	15.4	17.8
29	---	---	---	12.5	4.3	8.3	22.9	13.4	17.6	20.8	15.0	17.6
30	---	---	---	15.2	4.8	9.9	21.1	13.6	17.0	20.5	15.1	17.6
31	---	---	---	17.3	7.0	12.0	---	---	---	18.8	15.9	17.1
MONTH	10.1	0.0	4.4	17.5	1.0	9.2	22.9	6.8	13.4	23.0	10.7	16.7

07109500 ARKANSAS RIVER NEAR AVONDALE, CO—Continued

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

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	15.8	17.2	25.9	18.9	22.4	27.6	20.0	23.6	23.8	18.0	20.5
2	20.0	16.2	18.0	26.0	19.0	22.6	28.0	20.8	24.1	25.7	19.0	22.2
3	19.5	16.2	17.7	26.8	19.2	23.0	28.2	21.5	24.7	22.8	19.6	21.2
4	19.2	16.5	17.6	26.4	19.7	23.0	29.1	21.4	24.7	25.8	17.0	21.2
5	17.0	16.1	16.6	26.6	19.6	23.1	28.6	21.8	24.9	26.3	18.6	22.4
6	20.4	15.6	17.8	25.1	19.1	22.2	28.4	21.4	24.6	23.5	19.0	21.1
7	17.9	14.7	16.3	25.4	18.6	21.8	28.5	21.5	24.8	22.9	18.6	20.5
8	21.2	14.8	17.8	26.6	18.9	22.6	26.6	21.8	24.0	25.1	17.7	21.2
9	20.5	15.5	18.1	25.7	18.8	22.3	29.2	20.6	24.3	21.4	18.4	20.1
10	21.1	15.7	18.1	26.8	18.9	22.8	28.2	14.9	22.6	23.3	17.6	20.0
11	22.2	15.6	18.7	27.5	19.3	23.2	29.3	21.3	25.0	23.3	16.3	19.4
12	20.8	16.1	18.7	26.7	19.7	23.2	29.4	21.1	24.9	23.6	16.1	19.8
13	20.4	16.4	18.2	27.6	20.7	24.0	28.7	19.9	24.0	20.3	15.1	16.7
14	21.6	16.2	18.6	26.8	20.0	23.4	28.6	19.4	23.7	21.1	13.4	17.0
15	22.4	16.3	19.2	26.9	19.9	22.9	28.5	19.3	23.5	22.6	14.8	18.4
16	21.5	17.1	19.3	---	---	---	28.3	19.3	23.6	23.1	15.8	19.3
17	22.7	16.8	19.3	---	---	---	28.4	19.0	23.3	19.8	15.5	17.9
18	21.5	17.2	19.3	---	---	---	26.5	20.0	23.0	19.5	13.1	15.9
19	21.6	17.3	19.2	28.5	21.2	24.5	---	---	---	20.6	12.2	16.3
20	20.4	17.2	18.5	27.0	21.3	24.0	28.8	20.1	24.4	21.4	13.4	17.2
21	22.6	16.7	19.3	29.1	21.1	24.8	28.8	20.2	24.5	22.1	14.5	18.2
22	22.7	17.0	19.9	28.2	21.5	24.8	28.3	20.1	23.7	21.6	13.5	17.5
23	23.2	17.1	20.1	28.1	21.5	24.7	27.8	19.5	23.1	22.9	14.1	18.4
24	23.0	17.3	20.3	29.8	20.6	24.9	29.2	19.5	23.9	21.5	14.4	17.9
25	22.6	16.5	19.7	30.3	21.4	25.4	29.0	20.0	23.8	22.0	13.6	17.7
26	23.5	17.3	20.4	29.2	21.6	25.2	27.7	20.6	23.8	22.5	13.7	18.0
27	24.4	17.9	21.1	25.9	22.2	24.0	28.7	20.3	24.2	21.5	13.7	17.7
28	24.2	17.7	21.0	27.0	21.5	23.9	24.1	21.1	22.2	21.0	12.9	17.0
29	23.0	17.7	20.5	25.7	19.9	22.7	24.4	19.4	21.7	21.1	13.1	17.1
30	25.1	18.0	21.5	27.5	20.9	24.0	22.3	19.7	20.8	19.0	14.5	16.3
31	---	---	---	25.7	20.9	23.4	22.1	18.8	20.0	---	---	---
MONTH	25.1	14.7	18.9	---	---	---	---	---	---	26.3	12.2	18.8

07116500 HUERFANO RIVER NEAR BOONE, CO

LOCATION.--Lat 38°13'30", long 104°15'37", in NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.18, T.21 S., R.61 W., Pueblo County, Hydrologic Unit 11020006, at right upstream end of bridge on U.S. Highway 50, 0.8 mi upstream from mouth, and 1.6 mi south of Boone.

DRAINAGE AREA.--1,875 mi².

PERIOD OF RECORD.--January 1922 to September 1925 (monthly and annual discharge only, published in WSP 1311 as "near Nepesta"), October 1979 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07116500.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Datum of gage is 4,443.74 ft above NGVD of 1929. Jan. 1922 to Sept. 1925, at different datum.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.1	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.4	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.9	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.9	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.3	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	14	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.8	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.9	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.6	8.0	0.00	0.00	0.00
16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.4	8.0	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	1.7	0.00	2.4	5.1	0.00	0.00	0.00
18	0.00	0.00	0.00	0.00	0.00	0.17	0.00	1.2	4.6	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	19	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	22	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.2	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.4	0.00	0.00	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.2	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.9	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	0.68	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.2	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	---	0.00	0.00	0.63	0.00	0.00	0.00	0.00
30	0.00	0.00	0.00	0.00	---	0.00	0.00	3.1	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	16	---	0.00	0.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	1.87	0.01	37.17	208.66	0.00	0.00	0.00
MEAN	0.000	0.000	0.000	0.000	0.000	0.060	0.000	1.20	6.96	0.000	0.000	0.000
MAX	0.00	0.00	0.00	0.00	0.00	1.7	0.01	16	22	0.00	0.00	0.00
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	0.00	0.00	0.00	0.00	3.7	0.02	74	414	0.00	0.00	0.00

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

	9.72	15.6	14.9	19.7	22.8	20.5	31.3	144	92.3	23.2	26.9	5.83
MEAN	9.72	15.6	14.9	19.7	22.8	20.5	31.3	144	92.3	23.2	26.9	5.83
MAX	46.7	46.0	40.2	65.1	65.2	129	224	1,113	667	226	254	26.5
(WY)	(1985)	(1986)	(1998)	(1984)	(1998)	(1984)	(1998)	(1987)	(1983)	(1995)	(1981)	(1995)
MIN	0.000	0.000	0.000	0.000	0.000	0.060	0.000	0.47	0.000	0.000	0.000	0.000
(WY)	(1990)	(1990)	(1990)	(1990)	(2003)	(2003)	(2003)	(2002)	(2002)	(1989)	(2002)	(1980)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1980 - 2003

ANNUAL TOTAL	254.69	247.71	
ANNUAL MEAN	0.70	0.68	
HIGHEST ANNUAL MEAN			35.7
LOWEST ANNUAL MEAN			153
HIGHEST DAILY MEAN			0.68
LOWEST DAILY MEAN	21	Mar 17	2,900
ANNUAL SEVEN-DAY MINIMUM	0.00	May 30	a0.00
MAXIMUM PEAK FLOW	0.00	May 30	0.00
MAXIMUM PEAK STAGE			82
ANNUAL RUNOFF (AC-FT)	505		8.44
10 PERCENT EXCEEDS	2.0		0.07
50 PERCENT EXCEEDS	0.00		0.00
90 PERCENT EXCEEDS	0.00		0.00

a No flow on many days during most years.

b From rating curve extended above 1,130 ft³/s. Maximum discharge for period of record, 19,400 ft³/s, Aug 1, 1923, from slope-area measurement of peak flow, gage height, 9.4 ft, datum then in use.

c From flood marks. Maximum gage height for period of record, 11.75 ft, Jul 19, 1995.

07119500 APISHAPA RIVER NEAR FOWLER, CO

LOCATION.--Lat 38°05'28", long 103°58'52", in SE¹/₄NW¹/₄ sec.35, T.22 S., R.59 W., Otero Country, Hydrologic Unit 11020007, on left bank on downstream side of bridge on county road HH.5, 3.5 mi southeast of Fowler, and 5.4 mi upstream from mouth.

DRAINAGE AREA.--1,125 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1922 to September 1925, May 1939 to current year. Monthly discharge only for some periods, published in WSP 1311. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07119500

REVISED RECORDS.--WSP 957: 1939, 1941. WSP 1117: Drainage area. WSP 1241: 1923(M). WRD Colo. 1974: 1973(M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,317.05 ft above NGVD of 1929. See WSP 1711 or 1731 for history of changes prior to May 27, 1939. May 27, 1939 to July 30, 1940, at different datum. July 30, 1940 to Sept. 30, 1985, at site on right bank at datum 2.0 ft higher. Sept. 30, 1985 to July 2, 2002, at site on right bank at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, return flows from irrigated areas, and waste-water flows from Oxford Farmers Co. and Rocky Ford Highline canals. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	4.0	3.2	2.3	2.3	2.2	2.6	2.7	93	105	8.5	10
2	3.3	5.2	2.7	2.3	2.5	2.1	2.7	2.8	55	15	5.8	4.1
3	3.1	4.7	2.8	2.3	3.0	2.1	2.6	3.0	25	4.6	5.3	3.4
4	3.0	3.9	2.8	2.6	2.2	2.1	2.5	2.7	5.8	2.8	5.3	3.2
5	3.2	3.1	2.8	2.4	2.1	2.1	2.4	2.6	5.9	2.7	9.8	3.3
6	2.9	3.2	2.7	2.3	2.3	2.0	2.6	2.8	3.6	2.7	2.8	3.0
7	2.9	3.5	2.7	2.3	2.3	2.1	2.6	2.7	5.1	3.0	2.7	2.9
8	e2.9	2.9	2.6	2.3	2.3	2.1	2.7	2.8	9.0	2.7	2.7	2.7
9	e2.9	2.9	2.6	2.2	2.3	2.1	2.4	2.9	6.2	2.6	254	2.6
10	2.9	3.0	2.6	2.1	2.2	2.2	2.6	2.9	5.9	3.0	57	2.5
11	2.9	2.9	2.5	2.1	2.2	2.1	2.6	3.3	7.3	2.7	19	2.5
12	2.9	2.9	2.4	2.2	2.1	2.1	2.5	3.5	5.5	2.8	6.5	2.6
13	3.3	3.1	2.5	2.3	2.2	2.1	2.8	3.3	6.5	2.9	3.3	2.6
14	3.2	7.8	e2.6	2.3	2.3	2.1	3.1	3.1	6.1	3.1	2.9	2.7
15	3.2	28	e2.6	2.3	2.3	2.3	3.0	3.0	5.5	3.1	2.8	2.6
16	3.5	5.9	e2.5	2.3	2.2	4.7	3.4	3.0	4.2	3.2	2.8	2.6
17	3.5	3.6	2.5	2.3	2.2	2.2	3.1	3.0	4.2	2.9	2.8	2.5
18	3.5	3.3	2.8	2.3	2.3	2.4	3.4	2.9	4.8	2.9	2.8	2.6
19	3.3	3.2	2.6	2.3	2.3	2.6	5.7	2.7	306	2.8	2.9	2.7
20	3.5	3.1	2.5	2.4	2.3	4.2	4.3	2.5	36	3.1	2.9	2.7
21	3.5	3.1	2.5	2.3	2.2	4.5	3.7	2.7	8.9	3.3	2.8	2.8
22	3.5	3.3	2.4	2.3	2.1	2.8	3.3	2.7	3.5	2.9	2.9	2.8
23	3.4	3.1	2.6	2.3	2.2	5.8	3.2	2.8	4.8	3.0	3.1	2.8
24	3.4	3.2	2.5	2.2	2.1	4.4	3.1	168	5.0	2.9	3.4	2.7
25	3.5	3.2	2.4	2.2	2.0	3.5	3.6	266	3.0	2.9	3.5	2.6
26	3.6	3.1	2.3	2.2	2.1	3.0	3.3	133	3.8	3.0	3.6	2.5
27	3.4	3.1	2.3	2.2	2.1	3.7	3.2	30	3.0	3.1	3.8	2.4
28	3.5	3.0	2.4	2.2	2.2	3.2	3.1	8.7	2.5	3.3	3.7	2.4
29	3.4	3.1	2.5	2.2	---	3.3	3.0	5.1	2.3	895	4.0	2.4
30	3.3	3.1	2.4	2.2	---	2.5	2.7	3.9	2.8	91	4.6	2.6
31	3.6	---	2.2	2.7	---	2.6	---	29	---	19	14	---
TOTAL	100.6	131.5	79.5	70.9	62.9	87.2	91.8	710.1	640.2	1,203.0	452.0	89.8
MEAN	3.25	4.38	2.56	2.29	2.25	2.81	3.06	22.9	21.3	38.8	14.6	2.99
MAX	3.6	28	3.2	2.7	3.0	5.8	5.7	266	306	895	254	10
MIN	2.6	2.9	2.2	2.1	2.0	2.0	2.4	2.5	2.3	2.6	2.7	2.4
AC-FT	200	261	158	141	125	173	182	1,410	1,270	2,390	897	178

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2003, BY WATER YEAR (WY)

MEAN	15.3	16.2	10.6	6.82	8.93	11.2	21.3	42.4	43.7	51.5	62.1	18.8
MAX	87.2	83.1	54.7	30.4	54.0	59.6	530	576	290	306	628	154
(WY)	(1924)	(1966)	(1966)	(1966)	(1971)	(1924)	(1942)	(1955)	(1948)	(1958)	(1923)	(1940)
MIN	1.06	0.90	1.33	2.29	1.85	1.35	0.94	1.65	1.13	1.53	1.56	1.07
(WY)	(1965)	(1940)	(1955)	(2003)	(1976)	(1955)	(1955)	(1975)	(1954)	(1974)	(1974)	(1956)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1922 - 2003

ANNUAL TOTAL	1,596.0	3,719.5	
ANNUAL MEAN	4.37	10.2	25.9
HIGHEST ANNUAL MEAN			105
LOWEST ANNUAL MEAN			4.94
HIGHEST DAILY MEAN	360	Aug 30	895
LOWEST DAILY MEAN	1.7	Aug 17	2.0
ANNUAL SEVEN-DAY MINIMUM	1.8	Aug 16	2.1
MAXIMUM PEAK FLOW			a3,080
MAXIMUM PEAK STAGE			13.42
ANNUAL RUNOFF (AC-FT)	3,170	7,380	18,790
10 PERCENT EXCEEDS	3.7	5.8	42
50 PERCENT EXCEEDS	2.9	2.9	6.6
90 PERCENT EXCEEDS	2.2	2.2	2.0

e Estimated.

a From rating curve extended above 2,920 ft³/s.

b From slope-area measurement of peak flow at site 2 mi upstream from present site, caused by failure of Apishapa Dam 31 mi upstream.

c Site and datum then in use. Peak stage for flood of Aug 22, 1923, unknown.

ARKANSAS RIVER BASIN

07119500 APISHAPA RIVER NEAR FOWLER, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2003 (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07119500

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.84 inches, Apr. 19, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation during period April to September, 1.84 inches, Apr. 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.07	0.24	0.00	0.00	0.00
2	---	---	---	---	---	---	0.00	0.00	0.16	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.08	0.21
4	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.55	0.00
5	---	---	---	---	---	---	0.15	0.00	0.39	0.00	0.00	0.00
6	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.26
7	---	---	---	---	---	---	0.21	0.00	0.02	0.00	0.00	0.03
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.09
10	---	---	---	---	---	---	0.00	0.00	0.34	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.35
14	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
15	---	---	---	---	---	---	0.42	0.19	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.07	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.62	0.00	0.00	0.00
19	---	---	---	---	---	---	1.84	0.00	0.04	0.02	0.00	0.00
20	---	---	---	---	---	---	0.00	0.01	0.10	0.45	0.00	0.00
21	---	---	---	---	---	---	0.01	0.00	0.00	0.01	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.01	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00	0.00
30	---	---	---	---	---	---	0.00	0.06	0.00	0.00	0.10	0.00
31	---	---	---	---	---	---	---	0.17	---	0.00	0.01	---
TOTAL	---	---	---	---	---	---	2.63	0.51	2.05	0.50	0.75	0.95
MAX	---	---	---	---	---	---	1.84	0.19	0.62	0.45	0.55	0.35

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO

LOCATION.--Lat 38°07'33", long 103°54'41", in NE¹/₄NE¹/₄ sec.20, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020005, on right bank at Catlin Canal flume gage, 2.2 mi downstream from diversion dam for Catlin Canal, 2.3 mi downstream from Apishapa River, and 6.0 mi east of Fowler.

DRAINAGE AREA.--10,901 mi², of which 54 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year. Statistical summary computed for 1975 to current year, subsequent to completion of Pueblo Reservoir. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07119700

GAGE.--Water-stage recorder with satellite telemetry on river; water-stage recorder with satellite telemetry and Parshall flume on Catlin Canal. Datum of gage on river is 4,245.92 ft and on canal is 4,257.87 ft above NGVD of 1929. Prior to May 13, 1971, gage on river at site 2.2 mi upstream at datum 24.08 ft higher, and gage on canal at site 1.7 mi upstream at datum 3.26 ft higher.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Discharge computed by combining discharge of river downstream from canal with that of Catlin Canal. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Pueblo Reservoir (station 07099350) about 69 mi upstream since Jan. 9, 1974.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	157	30	94	27	81	196	261	2,210	942	319	673
2	41	184	39	74	28	73	152	334	2,870	838	234	552
3	39	189	40	73	35	58	195	319	3,450	765	263	381
4	65	171	50	73	30	26	265	281	3,530	640	270	268
5	87	197	47	72	29	24	317	264	3,170	577	275	217
6	110	198	46	67	32	33	370	255	2,650	570	278	205
7	e110	207	48	51	e30	34	416	283	1,410	595	270	192
8	115	209	46	29	e30	27	453	282	1,100	589	271	187
9	107	199	42	23	e40	27	448	246	1,420	586	511	213
10	96	218	45	22	e60	29	382	166	1,170	584	255	242
11	89	220	44	28	e75	29	378	113	1,210	565	207	270
12	79	228	31	51	e77	22	356	111	1,340	520	139	304
13	88	231	30	66	e75	15	328	93	1,520	437	125	312
14	88	256	30	93	78	62	297	73	1,660	428	112	340
15	77	231	32	74	74	97	276	172	1,680	417	100	313
16	80	67	27	65	73	148	260	311	1,750	390	95	312
17	88	36	25	68	74	152	231	516	1,660	346	97	298
18	96	29	22	63	65	166	239	507	1,980	315	96	268
19	92	14	23	64	30	237	330	567	1,730	248	96	205
20	79	15	e22	56	32	298	535	546	1,520	234	175	154
21	75	34	e20	30	29	326	466	647	2,220	310	97	135
22	90	34	e45	e21	29	351	420	808	1,640	338	69	134
23	83	32	e60	e22	e32	363	363	956	1,630	270	58	127
24	90	30	e80	e22	e35	334	411	1,060	1,370	241	46	119
25	101	25	e62	e26	e40	325	531	1,230	1,210	230	49	106
26	105	26	e56	e31	e50	297	597	1,550	1,100	187	39	96
27	92	36	e55	32	e70	315	468	1,950	1,040	165	59	88
28	81	37	e75	27	e75	278	356	1,880	1,010	155	90	78
29	147	37	e85	26	---	273	305	1,840	935	1,050	95	68
30	156	29	98	26	---	252	278	1,980	914	381	132	57
31	136	---	82	26	---	227	---	2,290	---	400	310	---
TOTAL	2,814	3,576	1,437	1,495	1,354	4,979	10,619	21,891	52,099	14,313	5,232	6,914
MEAN	90.8	119	46.4	48.2	48.4	161	354	706	1,737	462	169	230
MAX	156	256	98	94	78	363	597	2,290	3,530	1,050	511	673
MIN	32	14	20	21	27	15	152	73	914	155	39	57
AC-FT	5,580	7,090	2,850	2,970	2,690	9,880	21,060	43,420	103,300	28,390	10,380	13,710

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

	401	436	385	408	376	412	599	1,266	2,038	1,316	964	430
MEAN	401	436	385	408	376	412	599	1,266	2,038	1,316	964	430
MAX	1,234	925	804	854	1,249	912	1,526	3,901	4,420	4,108	2,384	1,209
(WY)	(1985)	(1985)	(2000)	(1985)	(1985)	(1998)	(1987)	(1999)	(1995)	(1995)	(1984)	(1982)
MIN	90.8	119	46.4	48.2	48.4	161	86.6	212	280	176	25.2	34.7
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1978)	(1981)	(2002)	(2002)	(2002)	(2002)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1975 - 2003

ANNUAL TOTAL	52,623.54		126,723			
ANNUAL MEAN	144		347			
HIGHEST ANNUAL MEAN					a,754	
LOWEST ANNUAL MEAN					1,327	1995
HIGHEST DAILY MEAN	686	Jun 11	3,530	Jun 4	206	2002
LOWEST DAILY MEAN	0.00	Sep 11	14	Nov 19	e,b,16,300	May 1, 1999
ANNUAL SEVEN-DAY MINIMUM	1.2	Sep 5	24	Dec 15	c,0.00	Sep 11, 2002
MAXIMUM PEAK FLOW			d,3,610	Jun 4	1.2	Sep 5, 2002
MAXIMUM PEAK STAGE			g,5.41	Jun 4	e,d,f,26,000	May 1, 1999
ANNUAL RUNOFF (AC-FT)	104,400		251,400		11.30	May 1, 1999
10 PERCENT EXCEEDS	302		1,020		546,200	
50 PERCENT EXCEEDS	105		148		1,620	
90 PERCENT EXCEEDS	22		29		450	
					175	

e Estimated.

a Average discharge for 9 years (water years 1965-73), 636 ft³/s, 460,800 acre-ft/yr, prior to completion of Pueblo Dam.

b Maximum daily discharge for period of record, 18,300 ft³/s, Jun 18, 1965.

c Also minimum daily discharge for period of record.

d Maximum combined instantaneous discharge.

f Maximum discharge and gage height for period of record, 43,200 ft³/s, Jun 18, 1965, gage height, 7.95 ft, site and datum then in use, from rating curve extended above 13,000 ft³/s on basis of flow-over-dam computation of peak flow.

g Gage height at Arkansas River gage.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 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=07119700

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1990 to current year.

WATER TEMPERATURE: May 1990 to current year.

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

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,150 microsiemens/cm, Aug. 30, 2002; minimum, 244 microsiemens/cm, May 25, 1993.

WATER TEMPERATURE: Maximum, 33.9°C, Aug. 11, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,960 microsiemens/cm, Aug. 9; minimum, 587 microsiemens/cm, June 18-19.

WATER TEMPERATURE: Maximum, 31.9°C, July 19, 24; minimum, 0.0°C, on many days.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd fixed end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
DEC 18...	1500	22	11.0	8.5	1,840	9.0	213	75.3	3.40	129	E175	34.9	1.08
MAR 11...	1150	30	11.5	8.4	1,840	15.5	187	72.1	3.80	126	166	41.3	1.05
MAY 29...	0915	1,520	7.2	8.2	757	20.5	72.2	23.5	3.52	42.0	171	17.2	0.8
AUG 27...	0945	62	8.0	8.3	1,240	22.5	133	51.5	4.58	91.0	164	30.1	1.1

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

Date	Sulfate water, fltrd, mg/L (00945)
DEC 18...	812
MAR 11...	761
MAY 29...	222
AUG 27...	483

E -- Estimated laboratory analysis value.

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1,780	1,550	1,720	1,440	1,420	1,430	1,830	1,770	1,810	1,650	1,590	1,610
2	1,730	1,540	1,670	1,420	1,390	1,400	1,820	1,730	1,760	1,690	1,640	1,670
3	1,640	1,590	1,620	1,400	1,350	1,380	1,800	1,750	1,770	1,680	1,630	1,660
4	1,670	1,570	1,600	1,390	1,320	1,360	1,750	1,700	1,730	1,660	1,630	1,650
5	1,580	1,490	1,530	1,400	1,350	1,370	1,760	1,720	1,740	1,680	1,640	1,660
6	1,500	1,390	1,440	1,380	1,320	1,360	1,790	1,730	1,760	1,930	1,620	1,670
7	1,390	1,370	1,380	1,350	1,320	1,340	1,770	1,730	1,750	1,770	1,660	1,700
8	1,390	1,340	1,370	1,340	1,300	1,320	1,780	1,720	1,750	1,840	1,770	1,810
9	1,370	1,330	1,360	1,360	1,300	1,330	1,810	1,740	1,780	1,880	1,830	1,850
10	1,380	1,350	1,370	1,310	1,300	1,300	1,830	1,750	1,790	1,910	1,820	1,870
11	1,440	1,380	1,400	1,330	1,300	1,320	1,840	1,730	1,780	1,920	1,760	1,870
12	1,490	1,440	1,470	1,330	1,290	1,310	1,860	1,820	1,840	1,760	1,670	1,730
13	1,470	1,430	1,450	1,300	1,280	1,290	1,880	1,800	1,840	1,900	1,560	1,710
14	1,480	1,430	1,460	---	---	---	1,880	1,800	1,840	1,650	1,610	1,620
15	1,520	1,470	1,500	1,510	1,320	1,400	1,910	1,800	1,850	1,680	1,630	1,650
16	1,530	1,500	1,510	1,540	1,350	1,470	1,890	1,810	1,850	1,710	1,640	1,680
17	1,520	1,480	1,500	1,760	1,540	1,590	1,860	1,790	1,830	1,700	1,630	1,670
18	1,500	1,460	1,480	1,700	1,590	1,600	1,870	1,810	1,840	1,730	1,630	1,690
19	1,490	1,460	1,470	1,760	1,730	1,740	1,880	1,830	1,850	1,720	1,610	1,680
20	1,510	1,470	1,490	1,790	1,730	1,750	1,900	1,770	1,850	1,840	1,620	1,690
21	1,530	1,510	1,520	1,740	1,640	1,680	1,930	1,800	1,860	1,890	1,820	1,850
22	1,590	1,510	1,530	1,660	1,620	1,640	1,910	1,660	1,790	1,930	1,880	1,900
23	1,560	1,530	1,540	1,680	1,640	1,660	1,660	1,630	1,650	1,950	1,850	1,920
24	---	---	---	1,740	1,680	1,700	1,720	1,640	1,660	1,950	1,710	1,860
25	1,500	1,470	1,480	1,770	1,730	1,750	1,810	1,720	1,780	1,830	1,570	1,700
26	1,490	1,400	1,450	1,810	1,640	1,760	1,920	1,770	1,830	1,790	1,640	1,680
27	1,510	1,390	1,470	1,840	1,630	1,720	1,930	1,720	1,830	1,790	1,740	1,760
28	1,500	1,490	1,500	1,780	1,630	1,720	1,740	1,560	1,650	1,790	1,750	1,770
29	1,570	1,480	1,520	1,760	1,690	1,730	1,600	1,530	1,580	1,790	1,730	1,760
30	1,500	1,400	1,430	1,810	1,760	1,790	1,620	1,540	1,590	1,780	1,720	1,750
31	1,440	1,420	1,440	---	---	---	1,670	1,570	1,630	1,760	1,690	1,730
MONTH	---	---	---	---	---	---	1,930	1,530	1,770	1,950	1,560	1,740
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1,780	1,680	1,730	1,650	1,600	1,630	1,360	1,280	1,330	1,330	1,280	1,320
2	1,750	1,660	1,720	1,670	1,610	1,640	1,460	1,290	1,380	1,280	1,200	1,250
3	1,710	1,660	1,690	1,810	1,600	1,660	1,460	1,300	1,400	1,250	1,210	1,230
4	1,760	1,680	1,720	1,920	1,810	1,880	1,350	1,240	1,280	1,280	1,250	1,270
5	1,740	1,670	1,700	1,930	1,810	1,890	1,260	1,190	1,230	1,290	1,260	1,270
6	1,740	1,650	1,690	1,900	1,750	1,800	1,270	1,140	1,210	1,280	1,260	1,270
7	1,790	1,630	1,700	1,800	1,720	1,740	1,160	1,120	1,140	1,270	1,230	1,250
8	1,840	1,580	1,700	1,810	1,780	1,790	1,140	1,060	1,100	1,260	1,220	1,240
9	1,800	1,600	1,700	1,810	1,770	1,790	1,100	1,070	1,080	1,260	1,220	1,240
10	1,740	1,500	1,630	1,800	1,760	1,780	1,160	1,100	1,130	1,370	1,230	1,310
11	1,580	1,520	1,550	1,790	1,650	1,750	1,200	1,080	1,190	1,480	1,370	1,440
12	1,640	1,550	1,600	---	1,660	---	1,210	1,060	1,180	1,460	1,420	1,450
13	1,630	1,600	1,610	---	1,740	---	1,210	1,180	1,200	1,560	1,420	1,470
14	1,650	1,600	1,630	1,810	1,610	1,720	1,230	1,200	1,220	1,570	1,490	1,510
15	1,650	1,620	1,630	1,660	1,530	1,570	1,250	1,190	1,230	1,620	1,140	1,340
16	1,670	1,630	1,650	1,580	1,490	1,530	1,230	1,200	1,210	1,140	1,050	1,090
17	1,680	1,620	1,650	1,540	1,440	1,510	1,260	1,220	1,240	1,080	1,020	1,060
18	1,810	1,630	1,660	1,520	1,420	1,470	1,290	1,220	1,260	1,090	989	1,040
19	1,870	1,810	1,840	1,450	1,360	1,390	1,230	1,030	1,110	1,000	964	982
20	1,890	1,780	1,840	1,400	1,340	1,380	1,170	1,060	1,100	984	949	973
21	1,880	1,800	1,840	1,370	1,280	1,320	1,200	1,060	1,150	966	921	940
22	1,880	1,820	1,850	1,290	1,240	1,270	1,230	1,200	1,220	927	891	908
23	1,890	1,800	1,840	1,260	1,220	1,240	1,270	1,220	1,250	891	844	868
24	1,930	1,790	1,840	1,260	1,210	1,240	1,270	1,220	1,250	1,430	833	883
25	1,880	1,660	1,790	1,230	1,200	1,210	1,220	1,140	1,180	966	761	831
26	1,690	1,550	1,620	1,290	1,220	1,270	1,150	1,100	1,120	825	786	815
27	1,600	1,530	1,570	1,270	1,170	1,210	1,230	1,110	1,180	840	789	806
28	1,640	1,580	1,620	1,280	1,240	1,270	1,300	1,230	1,280	789	778	782
29	---	---	---	1,310	1,280	1,290	1,330	1,290	1,310	787	775	781
30	---	---	---	1,330	1,290	1,320	1,340	1,310	1,330	784	756	771
31	---	---	---	1,330	1,320	1,320	---	---	---	764	750	757
MONTH	1,930	1,500	1,700	---	1,170	---	1,460	1,030	1,220	1,620	750	1,100

ARKANSAS RIVER BASIN

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, 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	891	753	772	723	696	707	1,140	1,100	1,130	1,280	885	1,030
2	838	736	776	711	696	704	1,210	1,140	1,180	989	904	951
3	777	690	747	714	702	706	---	---	---	1,080	989	1,040
4	709	595	648	758	703	734	---	---	---	1,180	1,080	1,140
5	637	595	624	776	756	763	979	905	930	1,240	1,180	1,210
6	644	598	625	787	722	757	952	906	927	1,230	1,210	1,220
7	735	626	663	724	702	712	979	952	968	1,220	1,180	1,200
8	791	690	716	705	687	697	989	956	971	1,200	1,160	1,180
9	737	681	702	697	690	693	1,960	963	1,100	1,160	1,130	1,150
10	738	676	721	698	688	692	1,240	1,070	1,160	1,140	1,100	1,120
11	751	642	703	697	689	694	1,380	1,190	1,300	1,140	1,090	1,110
12	815	638	727	745	690	703	1,390	1,360	1,380	1,090	1,040	1,060
13	652	640	649	777	745	768	1,410	1,370	1,390	1,050	1,020	1,040
14	653	636	646	807	777	796	1,430	1,380	1,400	1,020	940	988
15	649	643	646	814	801	805	1,470	1,410	1,440	1,000	957	982
16	644	627	636	837	771	806	1,490	1,440	1,460	1,010	976	988
17	633	611	623	908	778	846	1,470	1,440	1,450	1,000	978	990
18	619	587	598	1,020	794	891	1,500	1,440	1,470	1,060	991	1,030
19	1,000	587	648	957	876	894	1,480	1,430	1,460	1,170	1,060	1,130
20	650	613	634	1,060	779	970	1,430	1,260	1,310	1,270	1,160	1,220
21	642	621	631	1,080	917	1,000	1,420	1,320	1,370	1,290	1,260	1,270
22	653	636	643	1,070	935	1,020	1,460	1,400	1,430	1,280	1,240	1,260
23	648	626	636	1,130	1,060	1,100	1,500	1,440	1,470	1,280	1,240	1,260
24	626	611	621	1,140	1,100	1,120	1,510	1,450	1,480	1,290	1,270	1,280
25	646	622	634	1,150	1,120	1,130	1,450	1,410	1,420	1,320	1,280	1,300
26	671	645	651	1,190	1,120	1,160	1,510	1,420	1,470	1,360	1,310	1,330
27	680	664	673	---	---	---	1,460	1,310	1,400	1,360	1,330	1,350
28	695	674	688	---	---	---	1,330	1,280	1,310	1,420	1,360	1,400
29	701	692	697	1,790	921	1,200	1,370	1,270	1,310	1,460	1,410	1,440
30	701	691	697	1,410	1,120	1,320	1,300	1,180	1,240	1,490	1,450	1,470
31	---	---	---	1,120	1,070	1,090	1,280	1,050	1,160	---	---	---
MONTH	1,000	587	669	---	---	---	---	---	---	1,490	885	1,170

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, 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	22.3	10.8	15.4	2.8	0.5	1.7	9.8	0.9	4.4	5.4	2.0	3.4
2	13.7	10.6	12.3	5.9	2.3	3.8	10.3	1.9	5.5	7.3	0.0	3.2
3	16.4	9.4	11.7	9.7	3.0	5.6	5.3	2.2	3.5	8.1	0.5	3.9
4	17.9	7.8	12.5	9.0	3.2	5.5	6.5	2.1	4.2	9.3	1.9	4.9
5	19.6	8.6	14.2	9.2	3.1	6.1	8.8	3.4	5.6	7.7	2.6	5.1
6	18.6	10.4	14.4	9.0	2.6	6.0	9.4	1.3	4.6	10.5	3.6	6.4
7	19.3	10.4	14.8	9.0	3.3	6.5	8.9	1.6	4.7	9.8	1.8	4.9
8	19.8	10.5	15.1	10.4	5.3	8.0	8.9	2.4	4.9	10.8	1.2	5.1
9	21.6	13.9	17.2	12.4	6.7	9.5	8.9	1.2	4.1	8.3	1.5	4.0
10	22.3	14.1	17.6	10.6	6.4	8.6	8.7	0.7	3.7	4.2	0.7	2.0
11	20.1	11.9	15.7	8.3	4.2	6.3	8.4	1.1	4.0	3.1	1.1	2.1
12	16.5	10.3	12.8	7.7	2.3	5.0	8.0	1.6	4.1	8.2	0.2	3.5
13	16.5	7.2	11.9	7.5	2.8	5.2	9.3	1.3	4.2	9.1	0.8	3.6
14	16.1	7.8	12.1	8.9	5.6	6.2	9.5	1.5	4.4	7.7	1.0	4.0
15	16.1	6.8	11.4	8.3	3.8	6.6	8.4	1.3	4.5	8.3	0.9	3.4
16	15.6	6.9	11.1	9.8	1.0	5.0	7.9	1.4	4.2	6.6	0.0	2.3
17	15.3	5.9	10.7	10.2	2.2	5.8	9.8	2.9	5.7	7.6	0.0	2.9
18	15.2	7.3	11.3	---	3.3	---	9.2	2.5	5.3	6.1	0.0	2.0
19	14.9	7.4	10.8	11.6	---	---	7.8	1.1	4.3	8.6	0.0	3.1
20	15.9	6.4	11.0	12.0	2.2	6.3	4.1	0.0	1.8	10.2	0.0	4.4
21	15.0	7.7	10.7	12.3	2.8	7.0	5.5	0.6	2.9	5.8	0.7	2.8
22	14.0	7.7	9.9	12.6	3.2	7.3	3.7	0.0	1.7	1.5	0.0	0.8
23	7.7	4.5	6.0	11.1	4.2	7.0	1.7	0.0	0.9	2.2	1.0	1.5
24	---	---	---	5.5	3.2	4.5	1.9	0.0	0.5	3.3	1.1	2.0
25	14.3	5.0	9.4	5.7	1.0	3.1	2.0	0.0	0.4	7.5	0.1	2.9
26	13.5	5.6	9.6	7.1	0.0	2.3	1.3	0.0	0.5	9.5	0.0	3.9
27	15.6	8.6	11.3	6.9	0.0	2.3	2.2	0.5	1.1	12.3	2.1	6.3
28	16.3	9.1	11.6	8.7	0.0	3.4	2.1	0.7	1.2	11.8	4.5	7.4
29	10.0	3.7	7.6	10.4	2.6	5.6	1.6	0.8	1.1	12.1	3.4	6.8
30	6.4	2.2	3.8	9.3	1.7	4.8	3.9	0.7	2.0	9.2	2.6	5.6
31	3.2	1.0	2.0	---	---	---	5.2	0.0	2.0	12.6	3.0	7.1
MONTH	---	---	---	---	---	---	10.3	0.0	3.3	12.6	0.0	3.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.4	5.2	7.7	11.4	1.4	5.7	20.4	9.8	15.0	19.5	12.2	15.8
2	11.2	3.1	7.2	13.5	2.8	6.9	17.5	10.4	13.6	19.5	12.4	15.0
3	10.7	2.8	5.6	15.2	1.4	7.3	16.3	7.6	11.8	21.2	12.9	16.2
4	10.3	1.4	4.7	5.5	0.7	3.1	16.7	8.1	12.0	18.8	10.9	14.6
5	7.5	1.6	4.2	11.7	0.0	4.0	14.4	7.6	10.7	23.2	11.4	16.9
6	7.2	1.5	3.5	14.4	0.8	6.4	13.0	6.5	9.2	21.8	13.4	17.1
7	4.3	0.0	1.5	17.1	2.4	8.7	9.6	6.6	8.4	22.4	12.6	16.7
8	4.4	0.0	2.1	17.5	3.6	9.4	14.7	6.0	10	20.4	13.0	16.1
9	3.5	0.5	1.7	18.3	4.4	9.5	17.6	8.8	13.0	20.6	10.7	15.0
10	3.9	0.5	1.8	17.5	3.0	9.1	19.9	10.9	15.1	19.6	11.3	15.0
11	4.7	0.0	1.9	18.6	3.9	10.2	20.2	11.6	15.7	22.3	9.7	15.1
12	9.7	0.0	4.1	---	5.5	---	20.1	11.9	16.0	23.4	10.2	16.2
13	10.5	4.1	6.7	19.4	---	---	21.9	12.2	16.8	20.7	11.9	16.4
14	9.4	3.7	6.5	18.8	7.1	12.2	21.5	13.1	17.2	25.4	11.9	18.5
15	8.5	3.4	5.5	18.5	9.1	13.1	19.1	11.9	15.2	24.4	15.3	18.1
16	9.6	1.7	4.9	16.3	8.6	12.2	19.9	9.7	14.4	24.3	14.2	18.8
17	12.0	1.4	6.1	14.4	8.3	11.1	20.6	11.5	15.6	23.8	17.4	20.4
18	9.2	4.5	6.5	10.6	5.9	8.8	19.9	10.0	14.9	20.9	17.1	19.0
19	10.3	3.9	6.5	5.9	3.0	4.2	15.3	9.0	10.8	20.7	16.3	18.1
20	13.3	2.6	6.5	12.4	4.4	8.1	16.4	9.3	12.7	20.0	14.3	16.7
21	13.6	1.7	6.6	9.6	6.9	8.2	20.3	12.3	15.8	22.2	14.3	18.2
22	13.3	3.0	7.4	14.7	5.1	9.8	19.7	13.3	16.0	23.6	16.6	20.0
23	10.3	0.0	4.2	16.8	8.3	12.3	15.8	11.0	13.2	24.3	18.7	21.3
24	2.0	0.0	0.9	15.6	10.1	12.6	13.4	8.8	10.9	23.1	19.1	20.9
25	2.3	0.5	1.2	17.7	9.7	13.2	18.8	9.6	13.6	21.8	16.5	19.7
26	2.8	0.0	1.3	16.3	9.6	13.0	20.7	11.7	15.6	21.6	17.3	19.4
27	10.7	0.1	4.2	12.6	6.3	10.2	21.5	12.5	16.7	21.9	17.4	19.7
28	6.2	0.7	3.4	9.7	4.1	6.8	22.2	14.3	17.3	23.7	19.2	21.5
29	---	---	---	12.1	3.8	7.7	23.4	13.5	18.0	24.2	19.7	22.0
30	---	---	---	15.0	4.9	9.8	23.1	14.3	17.9	23.5	19.4	21.5
31	---	---	---	18.0	7.5	10.6	---	---	---	21.6	19.2	20.3
MONTH	13.6	0.0	4.4	---	---	---	23.4	6.0	14.1	25.4	9.7	18.1

ARKANSAS RIVER BASIN

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.3	18.4	19.4	27.2	21.9	24.5	28.5	19.6	23.9	23.5	17.8	20.6
2	21.4	18.0	20.0	28.6	22.2	25.4	29.9	20.1	24.5	25.3	18.9	21.9
3	20.7	17.8	19.4	28.6	22.8	25.9	---	---	---	23.9	19.5	21.4
4	19.8	18.4	19.0	28.6	23.1	25.8	---	---	---	26.6	17.1	21.3
5	18.4	16.1	17.3	29.6	22.7	25.8	30.7	22.4	27.8	28.2	18.3	22.8
6	19.7	15.2	17.3	28.7	21.2	24.2	29.9	22.6	25.9	23.1	18.7	20.7
7	19.2	15.9	17.7	27.0	20.7	23.8	31.1	21.7	26.0	23.5	17.9	20.0
8	21.2	14.8	19.3	29.0	20.8	24.7	28.0	21.9	24.7	25.9	17.2	20.9
9	22.2	17.7	20.0	28.1	21.3	24.7	28.4	21.2	23.3	22.1	18.1	20.0
10	22.9	18.1	20.3	29.4	21.6	25.3	29.5	18.8	24.0	21.2	15.9	18.3
11	23.9	18.5	21.1	29.3	22.0	25.6	29.9	20.9	24.4	22.8	13.7	17.8
12	23.4	19.1	21.2	28.6	21.3	24.9	29.5	19.2	23.5	23.7	14.3	18.7
13	22.5	18.9	20.8	29.7	22.1	25.5	28.8	17.8	22.5	18.8	13.4	15.5
14	22.5	17.7	20.2	28.7	21.1	24.7	28.4	17.0	21.9	19.8	11.3	15.4
15	23.6	18.5	21.1	29.2	21.8	24.9	28.1	16.7	21.6	22.3	13.0	17.5
16	23.7	19.8	21.7	30.0	21.1	24.9	28.3	16.7	21.9	22.7	14.7	18.5
17	23.9	19.3	21.6	30.6	22.2	26.1	28.9	17.5	22.8	18.4	13.6	16.9
18	22.1	19.8	20.7	31.2	22.2	25.8	28.5	18.3	22.8	18.8	11.5	14.5
19	22.1	19.0	20.3	31.9	22.9	28.0	30.7	17.4	23.4	20.6	10.7	15.3
20	22.7	19.6	21.2	30.8	21.4	25.2	30.6	19.7	24.4	21.6	12.2	16.5
21	21.7	18.5	20.2	30.6	20.4	25.4	29.2	18.6	23.6	23.1	13.2	17.6
22	23.3	18.4	20.9	29.1	21.5	25.1	29.1	18.5	23.1	22.3	12.6	17.0
23	24.6	19.6	22.1	31.3	20.8	25.5	28.8	18.1	22.9	23.8	12.9	17.9
24	24.5	19.6	22.1	31.9	20.7	25.9	29.7	17.3	23.1	21.9	12.9	17.1
25	23.6	18.8	21.3	31.8	21.3	26.3	30.4	18.2	23.3	23.2	12.1	17.1
26	24.5	19.2	21.8	31.6	21.3	26.2	29.7	18.3	23.5	23.3	12.1	17.2
27	25.5	19.7	22.6	26.4	21.6	23.8	30.6	18.3	24.0	22.4	12.1	16.9
28	25.7	20.9	23.2	26.7	19.9	22.5	26.6	20.1	22.6	21.2	11.4	15.9
29	24.9	20.0	22.5	22.5	18.5	19.9	23.9	18.8	20.7	21.1	11.0	15.7
30	26.5	20.7	23.5	27.5	19.2	23.1	22.6	17.6	19.6	15.1	11.8	13.6
31	---	---	---	28.4	20.8	24.1	22.8	17.5	19.6	---	---	---
MONTH	26.5	14.8	20.7	31.9	18.5	25.0	---	---	---	28.2	10.7	18.0

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°08'53", long 103°44'49". in NW¹/₄SW¹/₄ sec.12, T.22 S., R.57 W., Crowley County, Hydrologic Unit 11020005, on right wingwall 5 ft upstream from Lake Meredith outlet gate, 200 ft upstream from State Highway 71, 0.7 mi downstream from Lake Meredith, and 4.6 mi south of Ordway.

DRAINAGE AREA.--Undetermined.

PERIOD OF RECORD.--November 2001 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07120480

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 2001 to current year.

WATER TEMPERATURE: November 2001 to current year.

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

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are good. Daily data that are not published are either missing, of unacceptable quality, or occurred during period of canal construction, August 29 to September 30, when canal was dry. Reported values for daily specific conductance and water temperature may not be representative of the lake outflow.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 7,740 microsiemens/cm, Nov. 19, 2002; minimum, 1,270 microsiemens/cm, June 25, 2003.

WATER TEMPERATURE: Maximum, 31.3°C, July 25, 2003; minimum, 0.1°C, Oct. 30, 2003.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 7,740 microsiemens/cm, Nov. 19; minimum, 1,270 microsiemens/cm, June 25.

WATER TEMPERATURE: Maximum, 31.3°C, July 25; minimum, 0.1°C, Oct. 30.

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
DEC 18...	1340	--	19.2	9.0	4,010	5.0	294	166	9.70	475	E107	241	1.64
MAR 11...	1420	--	12.1	9.2	1,740	7.5	118	64.4	5.97	165	70	82.3	1.41
MAY 29...	1300	4.9	6.5	8.0	2,340	22.5	170	94.5	8.37	217	117	108	1.7

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

Date	Sulfate water, fltrd, mg/L (00945)
DEC 18...	1,970
MAR 11...	735
MAY 29...	1,050

E -- Estimated laboratory analysis value.

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, 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	4,490	4,340	4,390	5,090	5,020	5,070	5,720	5,580	5,620	4,030	4,020	4,020
2	4,670	4,470	4,610	5,060	4,890	4,990	5,580	5,470	5,510	4,030	4,020	4,020
3	4,700	4,500	4,590	5,020	4,910	4,970	5,470	5,380	5,410	4,030	4,020	4,020
4	4,550	4,440	4,500	5,040	4,960	5,010	5,380	5,300	5,350	4,020	4,020	4,020
5	4,560	4,450	4,510	5,000	4,870	4,950	5,500	5,260	5,380	4,030	4,020	4,030
6	4,560	4,490	4,530	4,960	4,900	4,910	5,420	5,280	5,360	4,030	4,020	4,030
7	4,740	4,510	4,590	4,940	4,700	4,840	5,280	4,920	5,080	4,030	4,030	4,030
8	4,670	4,560	4,620	4,700	4,460	4,570	4,920	4,820	4,860	4,030	4,030	4,030
9	4,720	4,560	4,650	4,460	4,270	4,360	4,820	4,800	4,810	4,030	4,030	4,030
10	4,750	4,580	4,670	4,290	4,240	4,260	4,800	4,780	4,790	4,030	4,030	4,030
11	4,670	4,580	4,640	4,320	4,180	4,270	4,780	4,760	4,770	4,040	4,030	4,030
12	4,680	4,550	4,630	4,250	4,040	4,180	4,760	4,720	4,740	4,040	4,030	4,040
13	---	---	---	---	---	---	4,720	4,660	4,700	4,040	4,040	4,040
14	---	---	---	4,410	3,890	4,150	4,660	4,590	4,630	4,040	3,960	4,020
15	4,810	4,730	4,770	4,580	4,270	4,450	4,590	4,540	4,560	4,020	4,020	4,020
16	4,810	4,710	4,770	4,580	4,520	4,550	4,540	4,420	4,500	4,020	4,010	4,020
17	4,810	4,680	4,780	4,530	4,370	4,450	4,460	4,120	4,350	4,020	4,000	4,010
18	---	---	---	7,720	4,300	6,510	4,120	4,070	4,090	4,000	3,980	3,990
19	---	---	---	7,740	7,620	7,660	4,100	4,070	4,090	3,980	3,960	3,970
20	---	---	---	7,660	7,640	7,650	4,080	4,060	4,070	3,960	3,910	3,930
21	---	---	---	7,650	7,620	7,640	4,080	4,020	4,040	3,910	3,860	3,890
22	---	---	---	7,660	7,620	7,630	4,040	4,030	4,030	3,860	3,800	3,830
23	5,700	5,060	5,570	7,660	7,620	7,650	4,040	4,030	4,040	3,800	3,730	3,760
24	5,630	5,370	5,500	7,650	7,630	7,640	4,040	4,040	4,040	3,730	3,650	3,690
25	5,380	5,330	5,360	7,640	7,600	7,620	4,040	4,030	4,040	3,650	3,560	3,610
26	5,330	5,090	5,210	7,600	7,520	7,570	4,040	4,030	4,040	3,560	3,450	3,510
27	5,100	4,890	4,990	7,520	7,380	7,450	4,040	4,030	4,030	3,450	3,340	3,400
28	---	---	---	7,380	7,180	7,290	4,030	4,030	4,030	3,340	2,830	3,220
29	---	---	---	7,180	6,680	6,980	4,030	4,020	4,030	3,110	2,830	2,990
30	5,280	4,620	5,140	6,680	5,720	6,130	4,030	4,020	4,030	2,830	2,120	2,600
31	5,210	5,090	5,160	---	---	---	4,030	4,020	4,020	2,390	2,170	2,240
MONTH	---	---	---	---	---	---	5,720	4,020	4,550	4,040	2,120	3,780
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2,180	2,070	2,140	1,850	1,750	1,810	1,590	1,520	1,540	1,790	1,680	1,710
2	2,120	2,060	2,080	1,750	1,750	1,750	1,560	1,540	1,550	1,720	1,640	1,660
3	2,070	2,050	2,050	1,750	1,750	1,750	1,560	1,530	1,550	1,890	1,650	1,700
4	2,060	2,050	2,050	1,750	1,740	1,740	1,580	1,540	1,550	1,730	1,680	1,700
5	2,060	2,020	2,050	1,750	1,740	1,750	1,620	1,570	1,590	1,710	1,680	1,700
6	2,020	1,990	2,000	1,750	1,750	1,750	1,620	1,540	1,580	1,710	1,680	1,690
7	2,010	2,000	2,000	1,760	1,750	1,750	1,590	1,550	1,570	1,760	1,690	1,730
8	2,030	2,010	2,020	1,760	1,750	1,760	1,600	1,540	1,560	1,900	1,750	1,810
9	2,050	2,020	2,030	1,750	1,750	1,750	1,620	1,540	1,580	2,010	1,770	1,820
10	2,060	2,050	2,060	1,760	1,750	1,760	1,640	1,550	1,580	2,010	1,800	1,840
11	2,070	2,060	2,070	1,770	1,760	1,770	1,650	1,560	1,600	1,900	1,810	1,830
12	2,080	2,070	2,080	1,770	1,750	1,760	1,650	1,580	1,620	1,910	1,830	1,850
13	2,080	2,080	2,080	1,750	1,730	1,740	1,640	1,600	1,620	1,980	1,830	1,860
14	2,080	2,060	2,070	1,730	1,720	1,730	1,600	1,570	1,590	1,850	1,810	1,820
15	2,070	1,820	1,920	1,730	1,720	1,720	1,610	1,570	1,590	2,270	1,810	1,920
16	1,860	1,830	1,850	1,730	1,720	1,720	1,620	1,560	1,590	2,210	2,080	2,100
17	1,860	1,830	1,850	1,720	1,710	1,720	1,630	1,590	1,620	2,640	2,060	2,150
18	1,840	1,820	1,830	1,720	1,710	1,710	1,630	1,590	1,610	2,800	1,910	2,320
19	1,840	1,830	1,840	1,710	1,700	1,700	1,660	1,530	1,630	1,930	1,820	1,880
20	1,850	1,840	1,850	1,710	1,700	1,700	1,610	1,480	1,570	1,910	1,820	1,870
21	1,850	1,820	1,830	1,710	1,700	1,710	1,690	1,580	1,640	1,870	1,820	1,840
22	1,840	1,820	1,830	1,820	1,690	1,710	1,650	1,540	1,580	1,900	1,840	1,870
23	1,820	1,820	1,820	1,910	1,720	1,830	1,650	1,540	1,620	1,950	1,880	1,920
24	1,820	1,810	1,820	1,720	1,700	1,710	1,690	1,630	1,660	2,040	1,880	1,950
25	1,840	1,820	1,830	1,720	1,680	1,690	1,660	1,630	1,640	2,070	1,930	2,010
26	1,850	1,840	1,840	1,690	1,680	1,680	1,680	1,640	1,670	2,100	2,070	2,090
27	1,850	1,850	1,850	1,710	1,680	1,700	1,750	1,680	1,700	2,120	2,100	2,110
28	1,850	1,850	1,850	1,770	1,710	1,730	1,720	1,680	1,700	2,320	2,120	2,200
29	---	---	---	1,840	1,540	1,640	1,730	1,690	1,700	2,320	2,290	2,310
30	---	---	---	1,570	1,540	1,560	1,770	1,680	1,720	2,330	2,200	2,310
31	---	---	---	1,530	1,510	1,520	---	---	---	2,330	2,310	2,330
MONTH	2,180	1,810	1,950	1,910	1,510	1,720	1,770	1,480	1,610	2,800	1,640	1,930

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, 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	2,330	2,190	2,290	1,600	1,430	1,500	2,140	2,090	2,110	---	---	---
2	2,260	2,230	2,250	1,640	1,500	1,570	2,210	2,140	2,180	---	---	---
3	2,260	2,160	2,210	1,580	1,500	1,540	2,300	2,200	2,250	---	---	---
4	2,240	1,770	2,130	1,680	1,520	1,580	2,270	2,160	2,240	---	---	---
5	1,920	1,640	1,750	1,600	1,530	1,570	2,190	2,150	2,170	---	---	---
6	1,760	1,570	1,640	1,630	1,550	1,580	2,210	2,180	2,190	---	---	---
7	1,880	1,690	1,770	1,760	1,550	1,590	2,220	2,160	2,200	---	---	---
8	1,860	1,690	1,730	1,620	1,570	1,590	2,240	2,150	2,190	---	---	---
9	2,250	1,860	1,990	1,650	1,590	1,610	2,340	2,240	2,290	---	---	---
10	2,360	2,110	2,180	1,750	1,640	1,670	2,370	2,320	2,350	---	---	---
11	2,360	2,120	2,190	1,750	1,660	1,690	2,390	2,330	2,360	---	---	---
12	2,400	2,150	2,240	1,720	1,660	1,690	2,390	2,340	2,360	---	---	---
13	2,220	1,920	2,110	1,810	1,720	1,770	2,440	2,380	2,400	---	---	---
14	2,410	2,080	2,170	1,850	1,800	1,820	2,460	2,420	2,440	---	---	---
15	2,420	2,090	2,220	1,950	1,810	1,900	2,520	2,460	2,490	---	---	---
16	2,510	1,840	2,140	2,050	1,920	1,970	2,570	2,520	2,550	---	---	---
17	2,140	1,330	1,840	1,920	1,660	1,770	2,660	2,570	2,620	---	---	---
18	1,550	1,340	1,500	1,720	1,660	1,690	2,690	2,650	2,670	---	---	---
19	1,660	1,430	1,590	1,690	1,620	1,650	2,790	2,670	2,730	---	---	---
20	1,710	1,390	1,520	1,680	1,640	1,660	2,810	2,760	2,790	---	---	---
21	1,590	1,490	1,530	1,720	1,650	1,690	2,820	2,800	2,810	---	---	---
22	1,690	1,440	1,580	1,740	1,670	1,700	2,850	2,810	2,830	---	---	---
23	1,680	1,430	1,550	2,120	1,740	1,950	2,900	2,850	2,870	---	---	---
24	1,720	1,340	1,530	2,100	1,840	1,900	3,010	2,900	2,970	---	---	---
25	1,440	1,270	1,360	2,280	2,040	2,150	3,350	3,010	3,130	---	---	---
26	1,550	1,330	1,430	2,170	2,030	2,090	4,040	3,350	3,660	---	---	---
27	1,580	1,430	1,540	2,100	2,080	2,090	4,040	3,930	3,960	---	---	---
28	1,660	1,530	1,580	2,100	2,060	2,090	4,310	3,940	4,160	---	---	---
29	1,700	1,490	1,620	2,070	2,060	2,060	---	---	---	---	---	---
30	1,660	1,480	1,560	2,080	2,070	2,080	---	---	---	---	---	---
31	---	---	---	2,100	2,080	2,080	---	---	---	---	---	---
MONTH	2,510	1,270	1,820	2,280	1,430	1,780	---	---	---	---	---	---

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, 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	20.1	13.7	16.8	1.2	0.2	0.7	4.3	4.0	4.1	3.5	3.2	3.4
2	16.0	11.9	13.5	3.4	1.2	1.9	4.3	4.0	4.1	3.5	3.2	3.4
3	13.3	9.5	11.3	5.8	2.6	4.1	4.2	4.0	4.1	3.5	3.3	3.4
4	17.5	8.3	12.3	6.6	4.3	5.3	4.2	4.0	4.1	3.5	3.4	3.4
5	18.9	10.5	14.1	8.2	2.4	5.9	4.3	4.1	4.2	3.6	3.4	3.5
6	19.9	11.2	15.2	8.1	4.5	6.3	4.2	4.0	4.1	3.7	3.6	3.7
7	21.1	11.4	15.1	7.8	5.0	6.5	4.0	3.9	3.9	3.8	3.7	3.7
8	20.6	10.9	15.3	8.3	5.8	7.1	3.9	2.6	3.8	3.9	3.8	3.8
9	18.8	14.6	15.4	10.2	6.4	8.3	3.9	3.7	3.8	3.9	3.9	3.9
10	18.8	14.7	16.2	9.7	6.7	8.2	3.9	3.7	3.8	4.0	3.9	4.0
11	20.0	14.6	17.4	8.4	3.5	6.3	4.0	3.7	3.9	4.1	4.0	4.1
12	15.9	10.1	13.0	5.6	1.9	4.1	3.8	3.4	3.6	4.3	4.1	4.2
13	---	---	---	---	---	---	3.6	3.4	3.5	4.3	4.2	4.3
14	---	---	---	6.7	4.5	5.8	3.8	3.6	3.7	4.4	4.2	4.3
15	13.5	7.5	10.0	7.2	4.2	6.1	4.1	3.8	4.0	4.4	4.3	4.3
16	12.9	7.5	10.7	6.2	2.9	4.9	4.2	4.1	4.2	4.4	4.2	4.3
17	16.3	9.0	11.4	7.9	3.5	5.2	4.5	4.1	4.3	4.4	4.1	4.3
18	---	---	---	6.8	1.1	4.8	4.3	3.9	4.0	4.3	4.2	4.2
19	---	---	---	6.8	6.1	6.4	4.2	4.0	4.1	4.2	4.2	4.2
20	---	---	---	6.1	5.6	5.8	4.1	3.7	3.9	4.2	4.1	4.2
21	---	---	---	5.7	5.7	5.7	4.0	2.3	3.0	4.2	4.1	4.1
22	---	---	---	5.9	5.7	5.8	2.9	2.6	2.8	4.3	4.1	4.2
23	7.8	5.5	5.9	5.9	5.8	5.9	3.2	2.9	3.1	4.5	4.3	4.4
24	5.9	4.9	5.3	6.0	5.9	5.9	3.4	3.2	3.3	4.6	4.5	4.5
25	7.0	4.7	5.1	6.1	6.0	6.0	3.5	3.4	3.4	4.8	4.6	4.7
26	9.6	6.9	8.0	6.1	6.0	6.1	3.5	3.4	3.5	4.7	4.6	4.7
27	13.2	8.6	10.2	6.1	5.8	5.9	3.6	3.3	3.5	4.8	4.7	4.8
28	---	---	---	5.8	5.4	5.6	3.6	3.3	3.5	5.2	4.8	4.9
29	---	---	---	5.4	5.0	5.2	3.5	3.4	3.5	5.2	5.0	5.1
30	3.9	0.1	2.3	5.0	4.3	4.6	3.6	3.2	3.4	5.0	4.6	4.9
31	3.2	1.0	1.7	---	---	---	3.5	3.2	3.4	4.8	4.6	4.8
MONTH	---	---	---	---	---	---	4.5	2.3	3.7	5.2	3.2	4.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.8	4.7	4.8	4.4	3.6	4.0	13.9	11.0	12.8	18.2	12.7	15.4
2	5.3	4.8	5.0	4.1	3.6	3.8	13.4	12.3	12.9	16.6	12.1	14.0
3	4.8	4.1	4.5	4.0	3.8	3.9	12.3	10.1	10.9	18.8	12.4	15.1
4	4.6	3.7	3.9	4.0	3.2	3.7	11.9	8.4	10.2	17.8	11.7	14.4
5	4.3	3.7	3.9	3.3	2.4	2.9	11.0	8.8	10.2	21.4	11.7	16.1
6	4.1	2.8	3.2	3.9	3.1	3.4	9.0	5.5	7.5	19.7	13.2	16.3
7	3.4	3.1	3.2	4.0	3.5	3.7	9.4	5.6	7.7	19.4	12.2	15.6
8	3.2	3.0	3.1	5.5	3.8	4.4	10.6	5.3	7.1	17.1	12.8	15.0
9	3.6	3.2	3.4	5.4	5.1	5.2	12.8	8.9	10.4	18.5	11.1	14.2
10	3.8	3.6	3.7	5.3	5.1	5.2	16.1	10.9	13.1	14.8	10.1	12.5
11	4.1	3.8	4.0	6.4	5.2	5.4	16.3	13.6	14.9	19.6	9.1	13.7
12	4.2	4.1	4.1	6.5	5.4	5.8	16.4	14.7	15.5	21.6	8.9	15.0
13	4.2	4.2	4.2	8.2	6.5	7.2	17.5	15.0	15.8	18.8	12.9	16.0
14	4.2	3.8	4.1	9.1	8.2	8.8	17.5	15.4	16.3	24.9	13.4	18.5
15	4.8	3.9	4.3	9.8	9.1	9.5	17.1	14.7	15.6	21.9	15.8	18.7
16	4.5	4.4	4.4	10.4	9.7	9.9	16.2	9.4	12.7	19.1	18.2	18.4
17	4.5	3.7	4.2	11.5	10.4	11.1	15.9	12.6	14.0	20.1	18.3	18.9
18	5.2	4.3	4.7	11.3	10.1	10.9	14.8	11.8	13.4	20.3	17.9	19.3
19	4.9	4.8	4.8	10.1	7.4	8.4	14.8	5.9	10.0	20.5	15.7	18.1
20	4.8	4.6	4.7	8.0	7.0	7.5	13.3	6.8	9.4	16.9	13.4	15.1
21	5.6	4.5	5.1	7.8	7.5	7.7	14.9	12.5	13.5	19.7	13.2	15.8
22	5.4	5.0	5.2	7.7	7.3	7.5	14.6	13.3	14.0	23.3	16.9	19.5
23	5.3	4.2	4.7	7.9	7.5	7.7	14.2	11.9	12.8	24.2	20.0	22.2
24	4.2	2.8	3.3	9.6	7.5	8.9	11.9	7.5	9.0	25.4	18.2	21.8
25	3.6	3.2	3.5	10.9	9.6	10.2	13.7	9.6	10.9	25.4	22.5	23.0
26	3.7	3.6	3.6	10.1	9.8	9.9	15.6	10.9	12.9	23.3	20.8	21.8
27	3.8	3.6	3.7	10.4	9.2	10.1	18.3	13.2	15.0	22.2	21.0	21.5
28	3.9	3.8	3.9	9.2	8.2	8.6	18.5	14.4	16.6	24.9	21.5	22.6
29	---	---	---	8.4	4.9	6.5	19.4	13.7	16.3	23.6	21.9	22.6
30	---	---	---	9.1	4.4	5.9	19.8	14.4	17.2	24.2	22.3	23.1
31	---	---	---	11.2	8.2	8.9	---	---	---	23.9	22.7	23.3
MONTH	5.6	2.8	4.1	11.5	2.4	7.0	19.8	5.3	12.6	25.4	8.9	18.0

07120480 LAKE MEREDITH OUTLET AT HIGHWAY 71 NEAR ORDWAY, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.8	21.5	22.4	29.5	21.7	26.0	26.7	23.5	24.3	---	---	---
2	22.8	20.5	21.0	30.2	21.0	26.1	26.5	23.5	24.3	---	---	---
3	22.8	21.5	21.9	30.9	23.2	27.4	24.9	24.1	24.6	---	---	---
4	22.6	19.6	21.3	28.4	21.8	25.7	28.1	24.3	25.2	---	---	---
5	19.6	15.5	16.7	31.2	21.7	26.2	26.5	24.3	25.1	---	---	---
6	22.8	13.5	17.7	28.0	18.8	24.0	25.6	24.8	25.2	---	---	---
7	22.3	14.5	17.7	27.3	19.2	23.5	26.0	24.2	24.8	---	---	---
8	24.0	15.5	19.7	25.0	20.6	22.2	25.6	23.9	24.3	---	---	---
9	24.2	18.0	21.6	25.3	22.7	23.7	25.7	24.2	24.9	---	---	---
10	25.1	17.9	21.7	25.1	22.6	23.6	26.3	24.5	25.5	---	---	---
11	27.1	19.0	23.0	26.6	23.7	25.0	27.3	24.9	25.8	---	---	---
12	26.3	19.9	23.4	26.6	22.7	24.3	27.4	23.7	25.2	---	---	---
13	26.0	18.4	22.2	26.2	24.1	25.0	25.8	22.7	23.9	---	---	---
14	28.0	19.1	23.1	26.3	23.8	25.2	24.9	22.0	23.2	---	---	---
15	29.1	20.5	24.6	25.8	23.3	24.2	23.1	21.6	22.4	---	---	---
16	28.0	18.4	23.3	28.0	22.7	25.0	22.8	21.0	21.9	---	---	---
17	27.9	18.4	22.5	29.3	21.8	26.0	23.0	20.9	21.7	---	---	---
18	22.3	18.0	19.9	29.6	24.3	27.5	24.3	22.4	23.0	---	---	---
19	25.7	20.1	22.5	29.3	26.5	27.8	25.0	22.2	23.1	---	---	---
20	24.2	20.0	22.1	29.1	26.3	27.4	26.1	23.0	24.2	---	---	---
21	23.5	18.1	20.6	29.9	25.4	27.2	26.3	24.1	25.3	---	---	---
22	26.6	21.2	23.3	29.6	23.4	27.4	26.0	22.8	24.0	---	---	---
23	25.5	22.5	24.1	29.1	21.7	26.1	25.1	23.1	24.2	---	---	---
24	23.7	19.3	21.5	30.3	22.0	26.9	25.5	22.6	24.3	---	---	---
25	23.8	16.6	19.6	31.3	23.0	27.6	27.7	23.2	25.1	---	---	---
26	25.4	20.2	22.7	28.8	24.4	25.7	30.6	20.3	24.2	---	---	---
27	27.2	21.4	24.2	26.4	24.9	25.5	25.5	19.9	21.1	---	---	---
28	27.5	22.9	25.4	25.9	24.6	25.2	---	20.3	---	---	---	---
29	25.8	18.8	22.4	25.6	22.5	23.9	---	---	---	---	---	---
30	28.0	20.5	24.5	24.7	23.6	23.9	---	---	---	---	---	---
31	---	---	---	25.0	23.9	24.4	---	---	---	---	---	---
MONTH	29.1	13.5	21.9	31.3	18.8	25.5	---	---	---	---	---	---

07120500 ARKANSAS RIVER NEAR ROCKY FORD, CO

WATER-QUALITY RECORDS

LOCATION (REVISED).--Lat 38°03'55", long 103°41'08", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.9, T.23 S., R.56 W., Otero County, Hydrologic Unit 11020005, on right bank 250 feet upstream from Hwy 266 bridge, 2.1 mi northeast of city hall in Rocky Ford, and 9.8 mi downstream from Fort Lyon Canal diversion dam.

DRAINAGE AREA.--11,090 mi², of which 54 mi² is probably noncontributing.

PERIOD OF RECORD.--January 2002 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07120500

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

Date	Time	Instantaneous discharge, cfs (00061)	Dissolved oxygen, mg/L (00300)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unfltrd end pt, lab, mg/L as CaCO3 (90410)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)
DEC 18...	1130	18	12.3	8.5	1,850	6.0	197	75.9	4.23	148	E177	43.1	1.15
MAR 11...	1530	47	10.0	8.4	1,900	18.5	182	75.4	4.26	142	160	45.4	1.09
MAY 29...	1115	1,150	6.3	8.3	800	23.5	75.6	24.7	3.77	46.0	188	18.5	0.8
AUG 27...	1125	22	7.2	8.4	1,570	26.5	172	66.0	5.12	117	175	37.5	1.1

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

Date	Sulfate water, fltrd, mg/L (00945)
DEC 18...	806
MAR 11...	826
MAY 29...	243
AUG 27...	648

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)	Date	Time	Instantaneous discharge, cfs (00061)	Specif. conductance, wat unfltrd uS/cm 25 degC (00095)	Temperature, water, deg C (00010)
OCT 22...	1330	51	1,760	15.0	APR 29...	1230	320	1,560	20.5
NOV 07...	1330	129	1,460	11.0	JUL 24...	1545	124	1,180	34.0
JAN 21...	1345	43	1,810	2.0	SEP 16...	1430	159	1,010	25.0
FEB 12...	1415	31	1,790	10.0					

07121500 TIMPAS CREEK AT MOUTH NEAR SWINK, CO

LOCATION.--Lat 38°00'11", long 103°39'20", in NW¼SW¼ sec.35, T.23 S., R.56 W., Otero County, Hydrologic Unit 11020005, on right bank at downstream side of 23rd Rd. Bridge, 1.7 mi southwest of Swink, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--496 mi².

PERIOD OF RECORD.--January 1922 to September 1925, March 1968 to current year. Monthly discharge only for some periods, published in WSP 1311. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07121500

REVISED RECORDS.--WDR CO 76-1: 1975.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,120 ft above NGVD of 1929, from topographic map. Jan. 1922 to Sept. 1925 at several sites downstream at different datum. Mar. 1968 to May 29, 1975, at site 140 ft downstream at datum 0.13 ft lower. May 30, 1975 to Nov. 25, 1980, at site on left bank at same datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by erosion-control and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas and from Catlin and Rocky Ford Highline Canals. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1922, 21,400 ft³/s, June 17, 1965, gage height unknown.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	18	17	9.4	15	7.7	27	30	79	133	42	39
2	7.0	19	15	9.5	24	7.4	11	32	89	95	37	44
3	7.4	14	15	9.5	40	7.2	9.4	32	100	82	38	53
4	8.3	12	28	9.7	42	6.8	27	31	90	80	38	45
5	9.5	12	31	9.9	40	6.6	32	31	94	79	42	36
6	7.7	13	31	9.9	42	7.1	33	31	95	78	33	34
7	8.9	13	31	10	26	7.0	35	33	92	74	42	34
8	8.0	14	31	31	6.9	7.0	36	36	87	74	42	34
9	7.7	15	28	22	6.4	6.7	35	35	80	72	42	35
10	7.8	18	22	17	6.6	7.0	34	34	75	74	46	34
11	7.9	14	23	24	6.7	7.0	34	34	75	74	41	33
12	8.3	12	26	8.3	7.3	6.8	33	31	74	74	41	34
13	8.8	11	18	7.8	7.8	6.9	33	32	85	69	40	34
14	9.7	11	18	7.9	8.3	23	32	29	83	65	38	37
15	9.3	19	18	8.3	8.2	26	33	29	95	62	37	37
16	9.4	15	19	8.2	8.2	28	36	25	78	55	33	44
17	9.2	13	17	8.5	8.4	28	33	36	102	55	32	50
18	8.9	15	17	8.8	29	28	35	40	248	56	30	49
19	11	15	17	8.9	10	32	44	41	164	56	29	42
20	10	16	24	9.0	10	30	41	43	131	48	32	37
21	9.2	13	34	9.0	8.1	13	46	44	117	47	36	34
22	10	14	33	9.2	8.2	16	40	52	96	45	35	34
23	10	15	41	9.3	9.5	41	40	65	98	45	30	34
24	11	15	16	9.5	10	60	36	74	100	44	27	34
25	9.7	14	8.5	9.7	7.1	14	35	80	89	43	28	34
26	10	13	8.2	9.8	6.9	24	34	75	86	43	31	34
27	9.6	22	8.2	10	7.9	32	32	77	80	44	27	33
28	9.6	34	8.5	10	8.4	32	31	89	75	44	37	33
29	9.8	22	9.0	12	---	33	32	81	83	44	38	34
30	12	21	9.2	39	---	32	30	70	864	60	40	34
31	13	---	9.2	21	---	30	---	77	---	49	42	---
TOTAL	285.5	472	630.8	386.1	418.9	613.2	989.4	1,449	3,704	1,963	1,126	1,123
MEAN	9.21	15.7	20.3	12.5	15.0	19.8	33.0	46.7	123	63.3	36.3	37.4
MAX	13	34	41	39	42	60	46	89	864	133	46	53
MIN	6.8	11	8.2	7.8	6.4	6.6	9.4	25	74	43	27	33
AC-FT	566	936	1,250	766	831	1,220	1,960	2,870	7,350	3,890	2,230	2,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2003, BY WATER YEAR (WY)

	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	87.1	75.3	34.2	22.8	30.0	58.8	63.8	76.2	81.6	72.8	83.2	70.7																																																																						
MAX	265	210	109	60.4	84.6	201	170	187	318	200	401	159																																																																						
(WY)	(1924)	(1924)	(1971)	(1923)	(1924)	(1924)	(1924)	(1995)	(1923)	(1923)	(1923)	(1986)																																																																						
MIN	9.21	15.7	9.80	7.87	11.4	19.8	11.0	14.0	21.9	13.0	10.6	9.60																																																																						
(WY)	(2003)	(2003)	(1979)	(1975)	(1976)	(2003)	(1978)	(1981)	(2002)	(2002)	(2002)	(2002)																																																																						

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1922 - 2003

ANNUAL TOTAL	5,921.3	13,160.9	
ANNUAL MEAN	16.2	36.1	63.3
HIGHEST ANNUAL MEAN			130
LOWEST ANNUAL MEAN			23.7
HIGHEST DAILY MEAN	114	Mar 16	864
LOWEST DAILY MEAN	6.8	Oct 1	6.4
ANNUAL SEVEN-DAY MINIMUM	7.8	Sep 28	6.9
MAXIMUM PEAK FLOW			a2,820
MAXIMUM PEAK STAGE			14.58
ANNUAL RUNOFF (AC-FT)	11,740	26,100	b12,300
10 PERCENT EXCEEDS	24	77	c21.11
50 PERCENT EXCEEDS	14	31	48
90 PERCENT EXCEEDS	8.8	8.2	15

a From rating curve extended above 2,260 ft³/s on basis of contracted-opening measurement of peak flow.

b From contracted-opening measurement of peak flow.

c From floodmark.

07123000 ARKANSAS RIVER AT LA JUNTA, CO

LOCATION.--Lat 37°59'26", long 103°31'55", in SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.24 S., R.55 W., Otero County, Hydrologic Unit 11020005, on right bank at upstream side of bridge on State Highway 109 in La Junta, and 450 ft upstream from King Arroyo.

DRAINAGE AREA.--12,210 mi², of which 115 mi² is probably noncontributing.

PERIOD OF RECORD.--May to August 1889 and September 1893 to December 1895 (gage heights, discharge measurements, and flood data only), April to October 1903 and June to November 1908 (gage heights and discharge measurements only), April 1912 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near La Junta" in 1903. Statistical summary computed for 1975 to current year subsequent to completion of Pueblo Dam. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07123000

REVISED RECORDS.--WSP 1341: Drainage area. WSP 1731: 1922.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,039.60 ft above NGVD of 1929. See WSP 1711 or 1731 for history of changes prior to June 13, 1940. June 13, 1940 to June 6, 1967, water-stage recorder at site 300 ft upstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Pueblo Reservoir (station 07099350) about 82 mi upstream since Jan. 9, 1974.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	8.3	57	e57	43	42	23	42	937	403	135	69
2	25	8.2	53	e56	42	39	19	41	555	339	101	128
3	34	7.1	52	e55	48	39	18	40	1,160	258	61	92
4	35	8.6	65	50	53	35	19	40	1,500	203	34	86
5	42	14	77	47	52	30	19	42	1,540	221	29	64
6	47	13	76	46	50	59	20	57	970	185	14	53
7	28	13	74	59	e45	59	46	66	782	160	29	52
8	20	11	74	78	e43	62	71	64	206	134	59	48
9	18	13	76	67	e42	56	54	54	397	105	70	38
10	23	14	68	56	e43	54	35	52	674	92	99	16
11	23	18	66	54	e45	55	24	61	687	79	62	20
12	19	20	68	60	45	48	30	41	687	65	46	40
13	17	21	58	76	45	55	21	20	696	52	57	52
14	17	25	53	67	46	40	20	18	696	74	51	70
15	18	12	53	52	43	20	20	18	710	67	50	71
16	17	8.5	54	46	38	16	21	17	661	73	49	47
17	15	37	53	47	43	20	19	15	553	74	48	55
18	15	65	50	42	74	19	19	55	674	59	48	55
19	15	63	49	43	68	46	32	19	324	28	48	75
20	15	54	e48	45	49	31	64	16	437	24	47	61
21	17	47	e55	42	38	47	76	22	581	50	48	59
22	16	46	e55	e45	33	57	51	49	511	92	47	60
23	13	53	e52	e45	30	58	33	61	542	109	46	57
24	13	51	e50	e50	e19	57	22	94	425	74	45	60
25	13	48	e45	e55	e20	56	19	123	400	78	43	59
26	15	44	e47	e60	e30	34	32	146	554	88	47	52
27	17	50	e55	e65	e40	22	37	230	513	84	43	47
28	17	61	e58	73	49	29	26	327	451	80	46	49
29	15	72	e60	64	---	23	19	404	406	73	53	47
30	9.4	69	e62	58	---	31	18	514	821	323	58	49
31	8.3	---	e59	51	---	36	---	721	---	136	60	---
TOTAL	619.7	974.7	1,822	1,711	1,216	1,275	927	3,469	20,050	3,882	1,673	1,731
MEAN	20.0	32.5	58.8	55.2	43.4	41.1	30.9	112	668	125	54.0	57.7
MAX	47	72	77	78	74	62	76	721	1,540	403	135	128
MIN	8.3	7.1	4.5	4.2	1.9	1.6	1.8	1.5	206	24	14	16
AC-FT	1,230	1,930	3,610	3,390	2,410	2,530	1,840	6,880	39,770	7,700	3,320	3,430

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

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	161	123	119	160	150	108	131	556	869	499	314	118																	
MAX	1,189	545	335	569	620	517	821	3,375	4,307	3,634	1,345	464																	
(WY)	(1985)	(1987)	(1987)	(1998)	(1985)	(1998)	(1998)	(1999)	(1995)	(1995)	(1984)	(1982)																	
MIN	8.82	4.21	13.5	9.50	6.37	19.6	6.67	15.1	20.0	21.0	19.1	9.59																	
(WY)	(1978)	(1979)	(1976)	(1976)	(1976)	(1978)	(1978)	(2002)	(2002)	(2002)	(2002)	(1977)																	

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1975 - 2003

ANNUAL TOTAL	12,632.0	39,350.4	
ANNUAL MEAN	34.6	108	a276
HIGHEST ANNUAL MEAN			832
LOWEST ANNUAL MEAN			47.7
HIGHEST DAILY MEAN	135	Jan 4	1,540
LOWEST DAILY MEAN	5.5	May 15	7.1
ANNUAL SEVEN-DAY MINIMUM	6.8	May 10	9.1
MAXIMUM PEAK FLOW			1,690
MAXIMUM PEAK STAGE			9.35
ANNUAL RUNOFF (AC-FT)	25,060	78,050	200,100
10 PERCENT EXCEEDS	69	284	597
50 PERCENT EXCEEDS	22	50	95
90 PERCENT EXCEEDS	9.7	18	21

e Estimated.

a Average discharge for 61 years (water years 1913-73), 244 ft³/s; 176,800 acre-ft/yr, prior to completion of Pueblo Dam.

b Maximum daily discharge for period of record, 61,100 ft³/s, Jun 4, 1921.

c Also occurred Dec 9, 1978; minimum daily discharge for period of record, no flow, Jan 20-23 and Mar 20-23, 1915.

d Peak discharge includes 7,600 ft³/s (estimated) that bypassed the main channel; maximum discharge for period of record, 200,000 ft³/s, Jun 4, 1921, from rating curve extended above 15,000 ft³/s on basis of slope-area measurement of peak flow.

f Gage height reflects the discharge flowing in the main channel; maximum gage height for period of record, 18.4 ft, Jun 4, 1921, site and datum then in use.

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO

LOCATION.--Lat 38°04'51", long 103°13'09", in SE 1/4 NE 1/4 sec.3, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020009, on right bank at upstream side of bridge on U.S. Highway 50, 1.1 mi north of courthouse in Las Animas, and 4.2 mi upstream from Purgatoire River.

DRAINAGE AREA.--14,417 mi², of which 441 mi² are probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to November 1898 (gage heights only), August to November 1909 (gage heights and discharge measurements only), May 1939 to current year.

Statistical summary computed for 1975 to current year, subsequent to partial regulation by Pueblo Reservoir. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07124000

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 3,883.97 ft above NGVD of 1929. May 13 to Nov. 12, 1898, and Aug. 1 to Nov. 10, 1909, nonrecording gages near present site at different datums. May 23, 1939 to Apr. 27, 1967, water-stage recorder at site 0.4 mi downstream at datum 9.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow partly regulated by Pueblo Reservoir (station 07099350) about 104 mi upstream since Jan. 9, 1974.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	77	e80	75	80	15	12	505	697	99	50
2	17	14	76	e85	71	73	15	13	437	433	90	53
3	16	13	73	87	71	69	14	12	439	349	69	69
4	16	13	73	80	71	67	13	11	877	273	51	56
5	16	13	72	77	76	65	13	11	1,090	231	45	53
6	16	14	77	73	77	64	15	12	940	221	37	61
7	16	12	83	70	e70	77	14	12	736	187	31	58
8	16	12	83	72	e65	83	15	11	567	157	31	57
9	15	12	84	e75	64	84	15	11	237	131	44	55
10	15	12	87	e75	71	83	14	11	525	109	52	44
11	13	12	85	e74	90	84	14	11	682	94	65	17
12	13	12	83	73	92	83	15	11	681	77	61	19
13	13	12	83	75	80	81	14	14	693	65	45	37
14	13	13	81	83	74	78	14	11	723	53	45	51
15	12	28	77	84	71	67	14	19	693	52	39	56
16	13	34	76	e75	68	35	14	21	625	46	37	52
17	13	30	76	69	65	46	14	18	613	42	36	38
18	13	28	75	e68	66	30	13	15	595	41	36	38
19	12	51	71	e66	82	30	15	17	569	33	37	50
20	12	62	e65	66	86	27	15	24	414	24	37	53
21	12	64	e65	66	77	26	15	16	425	20	37	51
22	13	62	e63	e65	67	24	14	14	596	22	37	50
23	13	60	e60	e60	63	23	16	17	465	51	36	50
24	13	63	e63	e65	e62	21	25	20	506	80	36	48
25	13	65	e65	e75	e60	20	15	20	463	53	35	48
26	13	64	e65	e80	e62	18	15	27	512	41	39	46
27	15	64	e67	90	65	17	14	51	560	64	41	36
28	14	64	e70	93	91	17	14	41	511	82	40	35
29	13	69	e75	88	---	16	14	82	480	79	41	40
30	14	74	e80	82	---	16	12	139	545	64	45	40
31	14	---	e75	77	---	16	---	251	---	159	49	---
TOTAL	432	1,060	2,305	2,348	2,032	1,520	439	955	17,704	4,030	1,423	1,411
MEAN	13.9	35.3	74.4	75.7	72.6	49.0	14.6	30.8	590	130	45.9	47.0
MAX	17	74	87	93	92	84	25	251	1,090	697	99	69
MIN	12	12	60	60	60	16	12	11	237	20	31	17
AC-FT	857	2,100	4,570	4,660	4,030	3,010	871	1,890	35,120	7,990	2,820	2,800

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

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	153	145	142	183	190	119	123	562	855	465	295	108																		
MAX	1,092	810	398	641	761	422	877	4,043	4,263	3,339	1,343	373																		
(WY)	(1985)	(1998)	(1998)	(1998)	(1985)	(1998)	(1987)	(1999)	(1995)	(1995)	(1999)	(1984)																		
MIN	5.13	6.05	8.40	8.45	18.5	9.44	10.8	14.1	16.8	10.0	14.5	9.12																		
(WY)	(1978)	(1975)	(1978)	(1978)	(1978)	(1975)	(1978)	(1981)	(2002)	(2002)	(2002)	(1977)																		

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1975 - 2003

ANNUAL TOTAL	16,201.7	35,659	
ANNUAL MEAN	44.4	97.7	a279
HIGHEST ANNUAL MEAN			841
LOWEST ANNUAL MEAN			59.8
HIGHEST DAILY MEAN	222	Jan 5	1,090
LOWEST DAILY MEAN	7.5	Aug 17	11
ANNUAL SEVEN-DAY MINIMUM	7.8	Aug 12	11
MAXIMUM PEAK FLOW			1,220
MAXIMUM PEAK STAGE			8.03
ANNUAL RUNOFF (AC-FT)	32,140	70,730	d32,900
10 PERCENT EXCEEDS	114	225	f14.02
50 PERCENT EXCEEDS	21	53	112
90 PERCENT EXCEEDS	9.4	13	16

e Estimated.

a Average discharge for 34 years (water years 1940-73), 203 ft³/s; 147,100 acre-ft/yr, prior to completion of Pueblo Dam.

b Maximum daily discharge for period of record, 25,800 ft³/s, May 20, 1955.

c Minimum daily discharge for period of record, 0.9 ft³/s, Jul 31, Aug 1 and 3, 1964.

d From rating curve extended above 21,600 ft³/s; maximum discharge and stage for period of record, 44,000 ft³/s, May 20, 1955, gage height, 15.03 ft, from current-meter measurement and slope-area measurement of over-flow channel, site and datum then in use.

f From floodmark.

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1985 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07124000

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1985 to current year.

WATER TEMPERATURE: December 1985 to current year.

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

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 7,950 microsiemens/cm, Jan. 22, 1986; minimum, 310 microsiemens/cm, July 21, 1990.

WATER TEMPERATURE: Maximum, 35.3°C, July 8, 2002; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,530 microsiemens/cm, Apr. 23; minimum, 670 microsiemens/cm, June 5.

WATER TEMPERATURE: Maximum, 33.6°C, July 24; minimum, 0.0°C, on many days.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3,150	2,890	3,090	3,300	3,250	3,270	2,390	2,200	2,310	2,100	1,880	1,960
2	3,120	3,080	3,100	3,310	3,290	3,300	2,450	2,070	2,310	2,260	2,100	2,200
3	3,120	3,080	3,100	3,340	3,300	3,310	2,470	2,280	2,420	2,320	2,060	2,230
4	3,130	3,080	3,100	3,330	3,290	3,310	2,430	2,220	2,400	2,420	2,230	2,350
5	3,120	3,090	3,110	3,360	3,320	3,330	2,550	2,310	2,450	2,500	2,170	2,410
6	3,130	3,100	3,110	3,350	2,990	3,300	2,500	2,170	2,340	2,510	2,180	2,450
7	3,110	3,060	3,100	3,310	3,290	3,300	2,340	2,170	2,280	2,480	2,280	2,370
8	3,120	3,070	3,100	3,310	3,050	3,290	2,340	2,220	2,300	2,390	2,330	2,370
9	3,160	3,120	3,130	3,280	2,900	3,120	2,340	2,280	2,320	2,330	2,190	2,240
10	3,180	3,140	3,160	3,380	2,730	3,250	2,320	2,050	2,240	2,310	2,230	2,270
11	3,200	3,160	3,180	3,320	3,060	3,290	2,250	2,140	2,210	2,390	2,260	2,350
12	3,210	3,180	3,190	3,320	3,040	3,260	2,300	2,170	2,280	2,400	2,340	2,380
13	3,270	3,170	3,200	3,310	3,140	3,280	2,320	2,230	2,290	2,380	2,200	2,330
14	3,240	3,160	3,210	3,260	3,140	3,230	2,300	2,270	2,290	2,320	2,160	2,260
15	3,250	3,200	3,220	3,140	2,380	2,610	2,350	2,280	2,320	2,270	2,210	2,240
16	3,240	3,200	3,220	2,600	2,400	2,490	2,330	2,220	2,310	2,390	2,250	2,330
17	3,240	3,190	3,220	2,780	2,500	2,620	2,330	2,130	2,300	2,400	2,170	2,370
18	3,270	3,180	3,230	2,830	2,730	2,790	2,320	2,200	2,300	2,420	2,360	2,400
19	3,260	3,220	3,240	2,730	2,330	2,500	2,330	2,060	2,220	2,440	2,360	2,410
20	3,280	3,230	3,260	2,420	2,320	2,400	2,400	2,150	2,310	2,420	2,280	2,400
21	3,280	3,240	3,260	2,440	2,240	2,410	2,440	2,210	2,360	2,400	2,370	2,390
22	3,290	3,150	3,240	2,560	2,370	2,470	2,450	2,250	2,390	2,480	2,370	2,400
23	3,250	3,120	3,210	2,560	2,390	2,530	2,330	2,160	2,290	2,590	2,460	2,530
24	3,290	3,130	3,220	2,510	2,350	2,470	2,350	2,170	2,310	2,500	2,270	2,420
25	3,300	3,250	3,280	2,460	2,390	2,440	2,520	2,320	2,420	2,410	2,190	2,340
26	3,300	3,030	3,270	2,520	2,400	2,470	2,610	2,430	2,520	2,320	2,240	2,280
27	3,270	3,030	3,210	2,550	2,300	2,470	2,610	2,380	2,500	2,300	2,180	2,230
28	3,310	3,270	3,290	2,570	2,370	2,500	2,480	2,320	2,400	2,230	2,050	2,200
29	3,310	3,180	3,270	2,510	2,200	2,450	2,340	2,140	2,260	2,270	2,040	2,220
30	3,290	3,200	3,260	2,480	2,300	2,430	2,140	1,930	2,060	2,320	2,270	2,300
31	3,280	3,250	3,270	---	---	---	1,970	1,700	1,910	2,390	2,270	2,330
MONTH	3,310	2,890	3,200	3,380	2,200	2,860	2,610	1,700	2,310	2,590	1,880	2,320

ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, 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	24.0	11.7	16.9	6.5	2.7	4.4	5.1	0.1	2.4	2.3	0.7	1.3
2	15.2	11.7	13.3	9.2	4.7	6.7	6.3	0.7	3.4	4.6	0.0	1.8
3	20.4	10.4	14.1	11.9	4.8	7.3	3.8	0.0	1.7	5.7	0.3	2.8
4	21.1	8.9	14.0	12.0	4.1	7.5	2.8	0.0	1.3	6.7	1.6	4.0
5	22.4	9.3	15.0	12.6	4.2	7.6	6.6	1.6	3.6	7.6	2.9	5.1
6	21.0	10.0	14.8	13.6	3.1	7.4	6.1	1.0	3.3	9.2	4.5	6.3
7	22.5	10.3	15.5	14.9	3.9	8.8	5.7	1.0	3.2	8.2	2.4	5.0
8	22.3	10.1	15.5	14.4	6.2	9.8	5.4	1.7	3.2	8.4	1.7	4.8
9	23.4	13.5	17.3	16.0	7.7	11.1	5.2	0.2	2.5	6.0	1.9	3.7
10	22.5	12.3	16.4	14.8	6.2	9.7	5.3	0.1	2.5	3.2	0.0	1.3
11	22.3	11.7	16.2	12.3	4.1	7.4	5.1	0.4	2.5	1.3	0.0	0.5
12	17.9	10.5	13.4	12.0	3.0	6.7	5.6	1.5	3.1	5.6	0.0	2.2
13	18.6	7.4	12.2	11.6	3.4	7.2	5.9	0.5	3.0	5.8	0.0	2.6
14	18.2	7.4	12.1	13.1	6.6	9.0	6.5	0.9	3.3	5.8	1.1	3.2
15	17.4	6.5	11.2	10.1	4.8	7.7	6.8	0.8	3.7	5.2	0.6	2.6
16	17.5	6.9	11.3	9.6	2.2	5.5	6.0	1.5	3.7	4.7	0.0	1.7
17	18.2	5.9	11.4	10.2	2.7	6.1	7.6	2.4	4.6	6.1	0.5	2.7
18	18.6	7.8	12.7	11.2	4.1	7.0	7.4	3.1	5.0	5.3	0.0	2.1
19	17.4	8.1	11.9	9.9	3.7	6.3	6.1	1.7	3.8	7.2	0.0	2.9
20	18.4	6.7	11.7	9.9	3.7	6.3	4.7	0.0	1.7	7.6	0.5	3.7
21	16.3	7.2	11.2	10.4	3.8	6.8	4.9	0.0	1.8	3.8	0.8	2.1
22	17.4	8.6	11.5	10.0	4.2	6.8	3.6	0.0	1.2	0.8	0.0	0.4
23	8.6	5.8	7.2	8.5	4.1	6.0	0.7	0.0	0.2	1.4	0.0	0.4
24	8.3	5.3	6.5	4.7	2.4	3.7	1.1	0.0	0.2	2.9	0.0	1.1
25	14.4	6.5	9.5	3.3	0.3	1.9	0.5	0.0	0.1	5.2	0.0	1.9
26	14.8	7.6	10.8	3.7	0.0	1.0	0.1	0.0	0.0	4.8	0.0	1.6
27	14.9	9.1	11.4	4.0	0.0	1.0	0.3	0.0	0.0	7.1	0.3	3.4
28	16.9	8.9	11.9	5.2	0.0	1.8	1.3	0.0	0.4	8.9	3.5	5.7
29	11.4	3.9	8.7	6.7	1.3	3.6	1.4	0.0	0.5	9.3	2.9	5.8
30	9.6	3.3	5.6	6.1	1.5	3.6	3.3	0.0	1.1	6.9	2.3	4.6
31	5.5	3.2	4.2	---	---	---	2.0	0.0	0.6	9.4	2.1	5.6
MONTH	24.0	3.2	12.1	16.0	0.0	6.2	7.6	0.0	2.2	9.4	0.0	3.0
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.0	4.6	6.9	10.7	2.2	5.6	23.3	7.3	14.4	23.5	11.4	16.6
2	9.8	4.0	6.8	11.1	3.0	6.2	21.7	8.2	13.7	23.1	11.9	15.7
3	7.8	1.5	4.0	12.6	2.2	6.9	19.7	7.1	12.0	25.2	11.9	16.6
4	6.8	0.0	3.0	6.2	0.0	3.1	21.1	6.4	12.3	22.1	10.1	15.5
5	6.3	0.3	3.2	8.1	0.0	2.9	17.1	4.6	9.9	27.1	9.6	17.3
6	4.5	0.7	2.3	12.0	0.8	5.9	16.2	3.7	8.5	24.9	11.8	17.2
7	3.3	0.0	0.8	14.5	3.1	8.4	11.7	5.7	8.2	25.7	11.3	16.9
8	3.3	0.0	0.9	15.8	4.8	9.3	20.5	3.1	10.7	22.9	12.3	16.6
9	2.7	0.0	0.7	13.6	5.1	8.4	23.3	5.2	13.3	24.2	9.7	15.9
10	4.9	0.0	1.7	14.2	3.7	8.5	23.9	7.2	14.5	19.9	10.8	14.9
11	4.1	0.0	1.4	16.1	4.7	10.1	24.1	7.6	14.8	25.9	8.7	16.1
12	7.6	0.0	3.2	16.6	6.6	11.1	24.5	8.5	15.5	27.3	10.0	17.5
13	8.1	3.6	5.5	18.3	7.3	12.4	25.1	9.6	16.1	23.1	11.8	17.0
14	7.7	3.7	5.7	19.5	8.0	13.4	24.5	9.0	16.1	28.6	11.1	19.2
15	7.8	3.7	5.2	19.6	10.3	13.9	22.2	10.9	15.2	25.5	14.6	17.8
16	9.8	1.6	5.4	16.9	7.8	12.2	22.4	8.7	14.5	26.9	14.5	19.5
17	11.4	2.9	6.7	17.2	7.8	11.3	23.5	8.6	14.8	29.3	14.3	20.7
18	8.2	5.4	6.6	14.6	7.9	10.5	24.2	8.0	15.1	25.4	15.5	19.4
19	10.5	4.1	7.0	7.9	6.2	7.0	12.8	8.2	10.0	23.6	14.7	18.0
20	11.1	3.2	6.8	13.4	5.5	9.3	20.5	6.4	12.9	24.6	13.1	17.4
21	11.1	3.6	6.9	10.1	7.1	8.7	22.1	9.2	14.9	28.3	11.4	18.8
22	10.8	3.9	7.3	19.1	5.4	11.3	22.4	10.2	14.8	30.4	13.7	21.1
23	8.3	0.0	3.9	20.3	6.6	12.7	17.0	10.4	13.3	29.6	15.6	21.8
24	0.9	0.0	0.2	20.4	7.8	12.5	17.4	8.0	12.3	29.6	16.5	22.0
25	2.0	0.0	0.5	20.5	8.6	13.3	24.0	8.1	14.8	25.5	16.3	20.3
26	5.2	0.0	2.0	19.0	7.2	12.3	26.1	8.9	16.6	29.3	16.0	21.5
27	10.0	0.8	4.6	13.6	3.9	8.8	24.0	11.3	17.1	---	---	---
28	5.1	1.6	3.4	13.5	3.1	7.3	24.5	13.1	16.9	---	---	---
29	---	---	---	17.2	2.5	8.5	27.3	11.2	18.3	32.5	21.2	26.2
30	---	---	---	18.8	4.0	10.9	25.9	13.3	18.3	31.2	21.7	26.2
31	---	---	---	20.8	6.0	10.2	---	---	---	26.0	21.9	23.7
MONTH	11.4	0.0	4.0	20.8	0.0	9.4	27.3	3.1	14.0	---	---	---

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	24.8	20.9	22.5	24.6	18.9	21.8	29.4	20.0	24.2	26.9	16.2	21.0
2	25.9	19.8	22.3	28.3	22.3	24.9	29.9	20.7	24.8	28.0	17.5	22.1
3	24.4	19.5	21.6	29.3	22.8	25.6	31.9	20.8	25.3	22.7	19.0	20.7
4	21.2	19.4	20.2	28.4	22.7	25.3	31.7	19.9	25.1	27.2	18.0	21.8
5	19.4	17.3	18.5	31.0	22.2	26.0	33.0	19.3	25.6	28.3	17.3	22.3
6	20.9	16.2	18.3	30.0	21.4	24.9	32.2	20.8	25.6	24.4	19.0	21.7
7	20.2	17.1	18.2	29.9	21.3	24.8	33.5	19.9	25.6	20.5	18.6	19.5
8	23.1	16.2	19.4	31.4	20.5	25.1	32.5	20.2	25.3	27.1	17.4	22.9
9	22.8	18.1	20.3	29.8	20.8	24.9	32.8	21.0	26.1	24.9	18.6	21.2
10	25.1	19.8	22.2	31.9	19.9	25.3	32.8	21.4	26.2	24.5	18.3	20.3
11	26.2	20.3	22.8	31.4	20.7	25.4	30.6	21.6	25.5	26.5	17.2	22.7
12	26.1	20.9	23.1	30.7	18.9	24.1	29.1	20.1	23.9	27.4	13.0	19.6
13	24.7	20.9	22.4	32.6	20.4	24.8	28.3	18.4	22.5	18.1	13.1	15.3
14	24.8	20.2	22.2	---	---	---	27.6	18.1	22.1	22.9	11.3	16.3
15	26.2	20.9	23.3	---	---	---	27.8	17.5	21.9	24.6	13.3	18.2
16	26.3	21.5	23.7	---	---	---	28.2	18.4	22.5	24.7	14.3	19.0
17	26.8	22.0	24.0	---	---	---	28.5	18.6	23.0	23.2	13.9	18.4
18	23.9	21.9	23.0	---	---	---	30.3	19.5	24.2	20.9	11.6	15.5
19	23.9	20.2	21.8	---	---	---	31.8	20.0	24.8	22.0	11.3	16.0
20	26.6	20.0	22.6	---	---	---	32.2	19.8	25.3	21.0	13.4	16.6
21	25.4	19.6	22.2	---	---	---	30.5	20.5	24.8	23.8	13.8	18.1
22	25.2	20.0	22.4	---	---	---	30.6	20.4	24.5	23.3	14.2	18.1
23	26.1	20.0	22.7	---	---	---	30.0	20.3	24.1	24.0	14.5	18.8
24	24.9	19.9	22.1	---	---	---	30.6	18.9	23.9	21.4	14.1	17.3
25	24.6	18.6	21.3	33.4	22.0	26.9	32.1	19.6	24.7	22.6	12.4	16.8
26	23.3	19.9	21.7	32.7	20.8	25.8	30.6	20.5	24.8	22.5	12.8	17.0
27	25.2	21.4	22.9	26.5	21.4	23.9	31.3	20.5	25.2	22.4	12.4	16.9
28	27.3	21.6	24.0	26.0	21.1	23.3	27.2	20.9	23.2	21.1	11.9	16.0
29	25.6	20.6	22.6	31.0	19.9	24.7	23.3	19.7	21.0	21.4	12.1	16.1
30	24.7	20.4	22.0	31.4	20.7	25.2	21.4	18.0	19.4	15.3	11.6	13.6
31	---	---	---	29.0	21.4	24.5	23.0	17.7	19.9	---	---	---
MONTH	27.3	16.2	21.9	---	---	---	33.5	17.5	24.0	28.3	11.3	18.7

07124200 PURGATOIRE RIVER AT MADRID, CO

LOCATION.--Lat 37°07'46", long 104°38'22", in SW¹/₄NE¹/₄ sec.35, T.33 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on left bank 70 ft downstream from county road bridge, 0.3 mi northeast of Madrid, 1.0 mi downstream from Burro Canyon, and 9 mi west of Trinidad.

DRAINAGE AREA.--505 mi².

PERIOD OF RECORD.--March 1972 to current year. Daily record for water temperature and specific conductance available, March 1979 to July 1981. Daily record for suspended sediment available, October 1978 to September 1981. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07124200

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 6,261.61 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except for June 16, Sept. 3, and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, and return flows from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	15	e12	e13	10	12	17	30	217	56	33	110
2	19	14	13	e13	10	14	19	31	186	54	30	99
3	22	14	e13	e13	11	12	18	29	177	47	31	291
4	21	15	e12	e12	8.6	14	19	27	163	46	32	160
5	20	14	e11	e12	8.6	13	19	27	226	43	45	144
6	19	13	e10	e13	e9.0	12	18	24	177	44	42	137
7	18	13	e10	e12	e9.0	12	19	22	144	53	35	179
8	18	14	e10	e13	e9.0	12	18	25	134	52	33	133
9	18	13	e11	e12	e10	12	18	24	117	47	34	116
10	18	17	e9.0	e12	e12	12	18	23	113	43	35	173
11	16	15	e9.0	e12	e13	13	18	23	118	43	32	181
12	16	13	e9.0	e13	e13	14	19	22	126	42	34	168
13	16	13	e9.0	e13	e14	14	20	21	117	41	35	160
14	16	16	e10	e12	e14	13	20	24	108	39	35	159
15	15	15	e9.0	e12	e13	14	21	27	102	44	34	143
16	15	13	e9.0	e11	e13	14	22	35	171	42	33	129
17	15	14	e9.0	e12	e12	15	21	41	98	38	32	116
18	15	14	e10	e11	e12	16	20	54	99	36	43	111
19	15	13	e10	e11	e11	19	32	71	153	35	50	107
20	15	13	e9.0	e12	e10	19	39	83	139	44	48	96
21	14	e12	e10	e12	e11	23	40	80	95	45	42	89
22	14	e11	e10	12	11	22	32	74	79	83	41	80
23	15	e10	e9.0	e12	12	19	36	87	71	52	47	75
24	15	e10	e10	e12	11	18	32	108	67	27	46	69
25	15	e9.0	e11	11	11	18	29	106	63	19	46	66
26	14	e9.0	e11	11	e13	18	27	84	70	20	63	62
27	16	e9.0	e10	13	e14	19	26	78	69	34	63	58
28	16	e9.0	e10	12	e12	21	29	94	78	59	57	58
29	15	e10	e11	11	---	17	28	121	61	98	128	59
30	15	e11	e10	9.5	---	17	29	154	60	64	187	52
31	13	---	e12	11	---	18	---	208	---	44	134	---
TOTAL	507	381.0	318.0	370.5	317.2	486	723	1,857	3,598	1,434	1,580	3,580
MEAN	16.4	12.7	10.3	12.0	11.3	15.7	24.1	59.9	120	46.3	51.0	119
MAX	22	17	13	13	14	23	40	208	226	98	187	291
MIN	13	9.0	9.0	9.5	8.6	12	17	21	60	19	30	52
AC-FT	1,010	756	631	735	629	964	1,430	3,680	7,140	2,840	3,130	7,100

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

	29.8	24.5	20.7	18.6	19.2	20.6	45.3	140	190	120	108	55.6
MEAN	29.8	24.5	20.7	18.6	19.2	20.6	45.3	140	190	120	108	55.6
MAX	78.5	39.2	40.3	36.6	37.2	55.9	204	547	589	313	342	232
(WY)	(1983)	(1999)	(1984)	(1984)	(1983)	(1987)	(1987)	(1999)	(1983)	(1983)	(1981)	(1981)
MIN	9.89	12.7	8.47	7.60	5.80	9.72	11.0	14.4	9.51	12.5	8.12	11.0
(WY)	(1973)	(1977)	(1977)	(1973)	(1977)	(1979)	(2002)	(2002)	(2002)	(2002)	(2002)	(1978)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1972 - 2003

ANNUAL TOTAL	4,638.1	15,151.7	
ANNUAL MEAN	12.7	41.5	67.7
HIGHEST ANNUAL MEAN			145
LOWEST ANNUAL MEAN			13.0
HIGHEST DAILY MEAN	133	Sep 19	291
LOWEST DAILY MEAN	1.4	Sep 7	8.6
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 26	9.1
MAXIMUM PEAK FLOW			a2,360
MAXIMUM PEAK STAGE			6.61
ANNUAL RUNOFF (AC-FT)	9,200	30,050	49,010
10 PERCENT EXCEEDS	17	114	171
50 PERCENT EXCEEDS	12	19	29
90 PERCENT EXCEEDS	5.3	10	13

e Estimated.

a From rating curve extended above 832 ft³/s on basis of slope-area measurement of peak flow at gage height 10.90 ft and timed-drift measurement of peak flow at gage height 12.80 ft.

b From timed-drift measurement of peak flow.

c From floodmarks.

07124400 TRINIDAD LAKE NEAR TRINIDAD, CO

LOCATION.--Lat 37°08'28", long 104°33'05", in NE¹/₄SW¹/₄ sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, in valve house near center of dam on Purgatoire River and 3.2 mi southwest of courthouse in Trinidad.

DRAINAGE AREA.--672 mi².

PERIOD OF RECORD.--August 1977 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07124400

REVISED RECORDS.--WDR CO-78-1: 1977(M). WDR CO-83-1: 1981-82 (contents). WDR CO-89-1: 1988 (contents).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,073.64 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers); gage readings have been reduced to elevations above NGVD of 1929.

REMARKS.--Reservoir is formed by a rock and earthfill dam completed in 1977. Storage began Aug. 19, 1977. Recreation pool reached June 4, 1979. All figures represent total contents from area-capacity table effective Nov. 1, 1999, and based on a 1999 resurvey by the U.S. Army Corp of Engineers. Total capacity at top of parapet wall, 180,000 acre-ft at elevation 6,284.00 ft. Maximum pool, 167,700 acre-ft at elevation 6,279.30 ft. Top of flood control storage, 123,200 acre-ft at elevation 6,260.00 ft. Capacity at high crest of spillway, 119,100 acre-ft at elevation 6,258.00 ft. Capacity at notch crest of spillway, 91,300 acre-ft at elevation 6,243.00 ft. Top of irrigation storage, 71,000 acre-ft at elevation 6,230.00 ft. Recreation pool, 14,895 acre-ft at elevation 6,171.86 ft. Elevation of no contents, 6,115.00 ft. No dead storage. Reservoir is used for flood control, recreation, storage for irrigation, and sediment retention.

COOPERATION.--Capacity tables provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 72,800 acre-ft, Aug. 8, 1999, elevation, 6,230.35 ft; minimum contents since recreation pool was reached, 4,260 acre-feet, Oct. 5, 1992, elevation, 6,142.41 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 20,000 acre-ft, May 2-7, maximum elevation, 6,180.20 ft, May 6; minimum contents, 11,200 acre-ft, Sept. 27-30, minimum elevation, 6,164.46 ft, Sept. 28.

Capacity table
(Elevation, in feet, and contents, in acre-feet, effective Nov. 1, 1999)

Elevation	Capacity	Elevation	Capacity	Elevation	Capacity
6,150.0	5,660	6,180.0	19,900	6,210.0	45,800
6,155.0	7,320	6,185.0	23,400	6,215.0	51,500
6,160.0	9,220	6,190.0	27,200	6,220.0	57,600
6,165.0	11,400	6,195.0	31,400	6,225.0	64,100
6,170.0	13,900	6,200.0	35,800	6,230.0	71,000
6,175.0	16,700	6,205.0	40,600	6,235.0	78,400

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13,200	14,000	14,500	15,200	15,900	16,500	17,700	19,900	16,100	13,600	12,700	11,600
2	13,300	14,000	14,600	15,200	15,900	16,500	17,700	20,000	15,900	13,600	12,700	11,600
3	13,300	14,000	14,600	15,200	15,900	16,500	17,800	20,000	15,800	13,500	12,600	12,400
4	13,300	14,100	14,600	15,200	15,900	16,600	17,900	20,000	15,800	13,500	12,600	12,200
5	13,400	14,100	14,600	15,300	16,000	16,600	17,900	20,000	15,800	13,400	12,600	11,600
6	13,400	14,100	14,600	15,300	16,000	16,600	18,000	20,000	15,500	13,400	12,600	11,400
7	13,400	14,100	14,700	15,400	16,000	16,600	18,000	19,900	15,100	13,400	12,600	11,800
8	13,500	14,100	14,700	15,400	16,000	16,700	18,100	19,800	14,700	13,500	12,600	11,800
9	13,500	14,200	14,700	15,400	16,000	16,700	18,100	19,700	14,300	13,400	12,500	11,700
10	13,500	14,200	14,700	15,400	16,000	16,700	18,200	19,500	13,800	13,400	12,500	11,800
11	13,600	14,200	14,700	15,400	16,100	16,700	18,200	19,400	13,600	13,400	12,400	11,800
12	13,600	14,200	14,800	15,400	16,100	16,800	18,200	19,200	13,700	13,300	12,400	11,700
13	13,600	14,300	14,800	15,400	16,200	16,800	18,300	19,000	13,700	13,200	12,300	11,500
14	13,600	14,300	14,800	15,500	16,200	16,800	18,300	18,800	13,700	13,200	12,300	11,500
15	13,700	14,300	14,800	15,500	16,300	16,800	18,400	18,500	13,700	13,200	12,200	11,500
16	13,700	14,300	14,900	15,500	16,300	16,800	18,400	18,300	14,000	13,100	12,100	11,600
17	13,700	14,400	14,900	15,500	16,300	16,800	18,400	17,900	14,000	13,100	12,000	11,600
18	13,700	14,400	14,900	15,500	16,300	16,900	18,500	17,600	13,900	13,000	12,000	11,600
19	13,800	14,400	14,900	15,600	16,400	17,000	18,600	17,300	13,900	13,000	12,000	11,600
20	13,800	14,400	14,900	15,600	16,300	17,000	18,800	17,000	13,800	13,000	12,000	11,600
21	13,800	14,400	14,900	15,600	16,300	17,100	18,900	16,800	13,700	13,000	11,900	11,600
22	13,800	14,400	14,900	15,600	16,300	17,200	19,000	16,500	13,600	13,200	11,900	11,500
23	13,900	14,400	15,000	15,700	16,300	17,300	19,200	16,400	13,600	13,200	11,900	11,500
24	13,900	14,400	15,000	15,700	16,300	17,300	19,400	16,400	13,500	12,900	11,800	11,400
25	13,900	14,500	15,000	15,700	16,400	17,400	19,500	16,400	13,600	12,800	11,800	11,400
26	13,900	14,500	15,000	15,700	16,400	17,400	19,600	16,200	13,700	12,700	11,800	11,300
27	13,900	14,500	15,100	15,800	16,400	17,500	19,600	16,000	13,700	12,800	11,700	11,200
28	13,900	14,500	15,100	15,800	16,400	17,500	19,700	15,900	13,800	12,900	11,600	11,200
29	13,900	14,500	15,100	15,800	---	17,500	19,800	15,900	13,700	13,000	11,700	11,200
30	13,900	14,500	15,100	15,800	---	17,600	19,900	15,900	13,600	12,900	11,800	11,200
31	14,000	---	15,100	15,900	---	e17,600	---	16,000	---	12,800	11,700	---
MAX	14,000	14,500	15,100	15,900	16,400	17,600	19,900	20,000	16,100	13,600	12,700	12,400
MIN	13,200	14,000	14,500	15,200	15,900	16,500	17,700	15,900	13,500	12,700	11,600	11,200

07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO

LOCATION.--Lat 37°08'38", long 104°32'50", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, on left bank of flip bucket outlet 500 ft downstream from base of Trinidad Dam, 0.8 mi upstream from Santa Fe Railroad bridge, and 3.0 mi southwest of courthouse in Trinidad.

DRAINAGE AREA.--672 mi².

PERIOD OF RECORD.--December 1976 to current year. Suspended-sediment data available, March 1977 to September 1984. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07124410

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 6,073.64 ft above NGVD of 1929 (levels by U.S. Army, Corps of Engineers). Supplementary water-stage recorder about 1,000 ft downstream at same datum, for use when flows exceed approximately 1,500 ft³/s.

REMARKS.--Records good except for those below 0.5 ft³/s, which are fair, and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, and return flows from irrigated areas. Flow completely regulated by Trinidad Lake (station 07124400) immediately upstream since Aug. 19, 1977. 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	0.03	0.05	0.44	0.19	0.56	0.87	0.68	11	189	83	74	123
2	e0.01	0.03	0.44	0.18	0.51	0.87	0.61	e16	264	70	55	82
3	e0.01	0.03	11	0.18	0.51	0.87	0.51	e19	233	68	41	65
4	e0.01	0.03	6.0	0.18	0.51	0.80	0.51	e19	200	66	40	257
5	e0.01	0.03	0.58	0.18	0.51	0.77	0.51	e19	234	66	43	421
6	e0.01	1.5	0.52	0.18	0.51	0.71	0.51	e29	347	55	43	182
7	e0.01	2.1	0.44	0.18	0.51	0.58	0.51	56	348	41	45	51
8	e0.01	1.8	0.44	0.18	0.51	0.58	0.51	87	345	44	53	119
9	e0.01	1.5	0.44	0.18	0.51	0.58	0.51	97	343	54	56	124
10	0.00	1.2	0.44	5.0	0.51	0.58	0.51	94	340	58	55	121
11	0.00	0.44	0.44	7.5	0.51	0.58	0.51	92	232	65	55	182
12	0.00	0.03	0.51	7.2	0.51	0.58	0.51	92	113	68	55	247
13	0.00	0.03	0.51	7.2	0.51	0.55	0.51	122	109	67	62	232
14	0.00	0.03	0.51	4.9	0.52	8.5	0.51	137	109	60	65	170
15	0.00	0.03	0.51	0.58	0.51	13	5.5	143	109	55	61	126
16	0.00	0.02	0.51	0.58	0.51	13	8.0	178	109	55	58	97
17	0.02	0.01	0.51	0.58	0.51	6.3	8.0	205	109	55	59	96
18	0.02	9.7	0.51	0.58	9.3	0.58	8.0	208	173	53	49	109
19	0.02	9.2	0.51	0.58	18	0.55	3.1	213	205	52	44	112
20	0.02	8.0	0.51	0.58	20	0.51	0.61	215	217	52	44	106
21	0.02	8.0	0.45	0.58	17	0.51	0.68	198	188	59	46	96
22	0.02	6.6	0.44	0.58	15	0.51	0.66	191	141	63	47	106
23	0.02	0.04	0.44	0.58	8.1	0.51	0.61	154	111	86	47	81
24	0.45	0.04	0.44	0.58	4.5	0.51	0.52	118	81	125	47	67
25	17	0.04	0.38	0.58	4.5	0.74	0.51	150	57	69	53	74
26	25	0.36	0.33	0.58	2.4	0.87	0.53	177	50	36	63	96
27	25	0.50	0.32	0.58	1.1	0.77	0.53	183	60	35	81	105
28	12	0.44	0.27	0.58	1.1	0.77	0.55	130	76	47	79	65
29	1.0	0.44	0.19	0.58	---	0.70	0.47	119	116	69	61	46
30	0.11	0.44	0.21	0.58	---	0.68	8.2	150	117	100	124	50
31	0.08	---	0.22	0.58	---	0.68	---	163	---	111	184	---
TOTAL	80.89	52.66	29.46	43.29	109.73	58.61	53.88	3,785	5,325	1,987	1,889	3,808
MEAN	2.61	1.76	0.95	1.40	3.92	1.89	1.80	122	178	64.1	60.9	127
MAX	25	9.7	11	7.5	20	13	8.2	215	348	125	184	421
MIN	0.00	0.01	0.19	0.18	0.51	0.51	0.47	11	50	35	40	46
AC-FT	160	104	58	86	218	116	107	7,510	10,560	3,940	3,750	7,550

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

	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	22.6	5.29	2.34	2.56	3.00	2.89	30.0	161	198	168	143	112															
MAX	96.0	25.9	11.9	14.7	13.1	17.8	106	375	614	306	310	283															
(WY)	(1984)	(1984)	(1979)	(1977)	(1977)	(1977)	(2000)	(1994)	(1983)	(1983)	(1999)	(1984)															
MIN	0.35	0.015	0.001	0.012	0.046	0.007	0.073	25.5	33.8	17.0	8.81	5.15															
(WY)	(1989)	(1982)	(1995)	(1985)	(2001)	(1982)	(1984)	(1980)	(2002)	(2002)	(2002)	(1987)															

SUMMARY STATISTICS

ANNUAL TOTAL
ANNUAL MEAN
HIGHEST ANNUAL MEAN
LOWEST ANNUAL MEAN
HIGHEST DAILY MEAN
LOWEST DAILY MEAN
ANNUAL SEVEN-DAY MINIMUM
MAXIMUM PEAK FLOW
MAXIMUM PEAK STAGE
ANNUAL RUNOFF (AC-FT)
10 PERCENT EXCEEDS
50 PERCENT EXCEEDS
90 PERCENT EXCEEDS

FOR 2002 CALENDAR YEAR

4,563.43
12.5
130 Sep 20
0.00 Oct 10
0.00 Oct 10
9,050
36
3.1
0.05

FOR 2003 WATER YEAR

17,222.52
47.2
421 Sep 5
0.00 Oct 10
0.00 Oct 10
458 Sep 5
7.01 Sep 5
34,160
146
5.0
0.05

WATER YEARS 1977 - 2003

73.1
146 1983
12.6 2002
917 Sep 11, 1981
a0.00 Aug 20, 1977
0.00 Nov 18, 1979
b963 Sep 10, 1981
7.89 Sep 10, 1981
52,960
238
8.8
0.04

e Estimated.

a No flow on many days during many years.

b From rating curve extended above 919 ft³/s.

07126140 VAN BREMER ARROYO NEAR TYRONE, CO

LOCATION.--Lat 37°23'58", long 104°06'55", in SW¹/₄SW¹/₄, sec.27, T.30 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, on left bank 200 ft downstream from military road at gas line crossing near Brown Sheep Camp, 6 mi southeast of Tyrone, and 11 mi upstream from mouth.

DRAINAGE AREA.--132 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1985 to September 1998, October 1998 to current year (seasonal records only). Daily records of specific conductance and water temperature available, May 1985 to April 1998. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126140

REVISED RECORDS.--WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, crest-stage gages, and V-notch sharp-crested weir. Elevation of gage is 5,310 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for June 17, which is poor. Natural flow of stream affected by storage reservoirs, erosion-control and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Several measurements of specific conductance and water temperature, when obtained, are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 511 ft³/s, Aug. 23, 1986, from flow through culvert computation, gage height, 10.02 ft; maximum gage height, 11.64 ft, Aug. 3, 1998; no flow on many days during most years (some estimated).

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 125 ft³/s, June 17, gage height, 7.56 ft; no flow on many days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
4	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
5	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02
7	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.25
8	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.75	0.00
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.31	0.00
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.11	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	9.9	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	2.7	0.00	0.00	0.00
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.00	12.60	0.00	1.17	0.27
MEAN	---	---	---	---	---	---	---	0.000	0.42	0.000	0.038	0.009
MAX	---	---	---	---	---	---	---	0.00	9.9	0.00	0.75	0.25
MIN	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	0.00	25	0.00	2.3	0.5

e Estimated.

07126140 VAN BREMER ARROYO NEAR TYRONE, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only).

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

REMARKS.--Records during Apr. 8 to June 5 and estimated daily precipitation are less accurate than the rest of the published records.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 3.00 inches, Sept. 9, 1995.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 2.04 inches, June 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.00	---	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00
2	---	---	---	---	---	---	---	0.02	0.01	0.00	0.00	0.00
3	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.26
4	---	---	---	---	---	---	---	0.00	0.13	0.00	0.34	0.00
5	---	---	---	---	---	---	---	0.00	0.50	0.00	0.18	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.72
7	---	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.15
8	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	1.33	0.01
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.20	0.09
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	e0.05
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	e0.00
15	---	---	---	---	---	---	0.12	0.14	0.00	0.02	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	2.04	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	---	---	---	---	---	---	0.28	0.02	0.00	0.01	0.00	0.00
20	---	---	---	---	---	---	0.00	0.03	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.14	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.26	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.12	0.00	0.34	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.55	0.00
31	---	---	---	---	---	---	---	0.11	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.46	2.87	0.32	2.94	1.28
MAX	---	---	---	---	---	---	---	0.14	2.04	0.26	1.33	0.72

e Estimated.

07126200 VAN BREMER ARROYO NEAR MODEL, CO

LOCATION.--Lat 37°20'44", long 103°57'27", in SE¹/₄NE¹/₄ sec.13, T.31 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on right bank 3 mi upstream from mouth, 16 mi east of Model, and 33 mi northeast of Trinidad.

DRAINAGE AREA.--175 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1966 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126200

REVISIONS.--WDR CO-84-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,960 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.08	0.14	0.14	0.23	0.14	0.19	0.19	0.07	0.08	0.10	0.07	0.12
2	0.08	0.14	0.15	0.21	0.15	0.18	0.18	0.10	0.10	0.09	0.07	0.10
3	0.10	0.13	0.22	0.17	0.16	0.17	0.14	0.09	0.10	0.07	0.07	0.11
4	0.10	0.13	0.23	0.16	0.14	0.16	0.16	0.06	0.10	0.07	0.08	0.11
5	0.10	0.14	0.20	0.18	0.13	0.16	0.16	0.07	0.21	0.06	0.10	0.09
6	0.11	0.14	0.19	0.20	0.15	0.17	0.22	0.07	0.17	0.06	0.10	0.08
7	0.11	0.12	0.19	0.18	0.14	0.17	0.17	0.06	0.14	0.06	0.09	10
8	0.11	0.12	0.18	0.18	0.14	0.17	0.17	0.05	0.14	0.06	0.09	4.1
9	0.11	0.13	0.18	0.17	0.16	0.15	0.14	0.06	0.11	0.05	26	0.45
10	0.11	0.18	0.18	0.15	0.16	0.15	0.14	0.07	0.10	0.05	38	0.31
11	0.10	0.17	0.18	0.15	0.17	0.15	0.15	0.07	0.10	0.05	3.6	0.22
12	0.09	0.17	0.15	0.17	0.18	0.15	0.17	0.08	0.10	0.05	0.70	0.20
13	0.10	0.17	0.14	0.16	0.19	0.16	0.16	0.08	0.14	0.05	0.23	0.18
14	0.10	0.17	0.15	0.17	0.19	0.17	0.14	0.07	0.14	0.05	0.12	0.15
15	0.10	0.19	0.16	0.19	0.17	0.16	0.14	0.08	0.13	0.06	0.07	0.14
16	0.10	0.18	0.17	0.19	0.17	0.17	0.14	0.10	0.12	0.06	0.05	0.10
17	0.09	0.19	0.17	0.18	0.17	0.20	0.11	0.08	0.26	0.05	0.05	0.10
18	0.10	0.17	0.18	0.17	0.16	0.24	0.11	0.08	65	0.05	0.05	0.10
19	0.10	0.16	0.22	0.16	0.21	0.49	0.15	0.08	5.2	0.05	19	0.10
20	0.11	0.15	0.18	0.17	0.21	0.58	0.18	0.08	1.1	0.05	3.0	0.10
21	0.12	0.16	0.18	0.17	0.20	0.43	0.16	0.08	0.41	0.05	0.29	0.11
22	0.13	0.16	0.18	0.15	0.17	0.35	0.14	0.07	0.19	0.06	0.15	0.08
23	0.14	0.17	0.18	0.15	0.15	0.25	0.12	0.06	0.11	0.06	0.11	0.09
24	0.11	0.17	0.17	0.17	0.14	0.20	0.10	0.05	0.08	0.06	0.07	0.09
25	0.10	0.17	0.16	0.17	0.14	0.18	0.10	0.07	0.08	0.05	0.06	0.10
26	0.12	0.17	0.16	0.16	0.15	0.18	0.11	0.06	0.10	0.05	0.05	0.10
27	0.21	0.16	0.15	0.16	0.18	0.17	0.10	0.06	0.09	0.07	0.05	0.10
28	0.16	0.17	0.15	0.17	0.20	0.17	0.08	0.06	0.08	0.07	0.06	0.09
29	0.12	0.18	0.16	0.15	---	0.17	0.07	0.05	0.08	0.08	0.09	0.09
30	0.12	0.16	0.18	0.15	---	0.17	0.06	0.05	0.10	0.07	0.25	0.10
31	0.13	---	0.17	0.15	---	0.18	---	0.06	---	0.07	0.15	---
TOTAL	3.46	4.76	5.40	5.29	4.62	6.59	4.16	2.17	74.86	1.88	92.87	17.81
MEAN	0.11	0.16	0.17	0.17	0.17	0.21	0.14	0.070	2.50	0.061	3.00	0.59
MAX	0.21	0.19	0.23	0.23	0.21	0.58	0.22	0.10	65	0.10	38	10
MIN	0.08	0.12	0.14	0.15	0.13	0.15	0.06	0.05	0.08	0.05	0.05	0.08
AC-FT	6.9	9.4	11	10	9.2	13	8.3	4.3	148	3.7	184	35

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2003, BY WATER YEAR (WY)

	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	1.24	0.20	0.17	0.18	0.20	0.18	0.19	2.65	1.89	3.85	7.78	1.75																										
MAX	16.0	0.74	0.32	0.43	0.59	0.40	0.73	30.1	20.6	36.4	104	9.89																										
(WY)	(1986)	(1998)	(1998)	(1973)	(1987)	(1973)	(1973)	(1981)	(1969)	(1977)	(1981)	(1972)																										
MIN	0.059	0.067	0.031	0.064	0.11	0.072	0.074	0.070	0.030	0.039	0.065	0.041																										
(WY)	(1992)	(1984)	(1984)	(1984)	(1992)	(1979)	(2002)	(2003)	(1968)	(1978)	(2002)	(1991)																										

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1966 - 2003

ANNUAL TOTAL	39.23	223.87	
ANNUAL MEAN	0.11	0.61	
HIGHEST ANNUAL MEAN			1.70
LOWEST ANNUAL MEAN			0.10
HIGHEST DAILY MEAN	0.45	Jul 22	802
LOWEST DAILY MEAN	0.03	Jul 9	a0.00
ANNUAL SEVEN-DAY MINIMUM	0.04	Jul 8	0.00
MAXIMUM PEAK FLOW			b332
MAXIMUM PEAK STAGE			3.86
ANNUAL RUNOFF (AC-FT)	78	444	1,230
10 PERCENT EXCEEDS	0.17	0.20	0.38
50 PERCENT EXCEEDS	0.10	0.14	0.15
90 PERCENT EXCEEDS	0.05	0.06	0.07

a Also occurred Jun 8-13, 1968.

b From rating curve extended above 134 ft³/s on basis of slope-area measurements of peak flow at gage heights 5.48 ft and 9.98 ft.

c From slope-area measurement of peak flow.

d From floodmarks. Maximum gage height, 9.98 ft, Aug 9, 1979, from floodmark.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1983 to April 1998, May 1999 to current year (seasonal peak flows only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126200

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1983 to April 1998.

WATER TEMPERATURE: January 1983 to April 1998.

SUSPENDED SEDIMENT: May 1999 to current year (seasonal peak flows only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal peak flows only): Maximum daily mean, 1,810 mg/L, June 18, 2003; minimum daily mean, 111 mg/L, Aug. 12, 2003.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peak flows only): Maximum daily, 4,000 tons (estimated), Aug. 3, 1999; minimum daily, 0.02 ton, (estimated), June 22, Aug 14, 23, 2003.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal peak flows only): Maximum daily mean, 1,810 mg/L, June 18; minimum daily mean, 111 mg/L, Aug. 12.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peak flows only): Maximum daily, 545 tons, June 18; minimum daily, 0.02 ton, (estimated), June 22, Aug 14, 23.

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

Date	Time	Instantaneous discharge, cfs (00061)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT					
03...	1640	0.10	16.5	--	--
NOV					
13...	1500	0.18	10.5	--	--
JAN					
09...	0940	0.16	4.0	--	--
MAR					
04...	1030	0.14	7.5	--	--
APR					
09...	1100	0.14	12.0	--	--
JUN					
06...	1340	0.16	22.0	--	--
30...	1550	0.10	27.0	--	--
AUG					
12...	1315	0.58	26.5	101	0.16
SEP					
16...	1710	0.09	22.5	--	--

07126200 VAN BREMER ARROYO NEAR MODEL, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
OCTOBER			NOVEMBER			DECEMBER			
1	0.08	---	---	0.14	---	---	0.14	---	---
2	0.08	---	---	0.14	---	---	0.15	---	---
3	0.10	---	---	0.13	---	---	0.22	---	---
4	0.10	---	---	0.13	---	---	0.23	---	---
5	0.10	---	---	0.14	---	---	0.20	---	---
6	0.11	---	---	0.14	---	---	0.19	---	---
7	0.11	---	---	0.12	---	---	0.19	---	---
8	0.11	---	---	0.12	---	---	0.18	---	---
9	0.11	---	---	0.13	---	---	0.18	---	---
10	0.11	---	---	0.18	---	---	0.18	---	---
11	0.10	---	---	0.17	---	---	0.18	---	---
12	0.09	---	---	0.17	---	---	0.15	---	---
13	0.10	---	---	0.17	---	---	0.14	---	---
14	0.10	---	---	0.17	---	---	0.15	---	---
15	0.10	---	---	0.19	---	---	0.16	---	---
16	0.10	---	---	0.18	---	---	0.17	---	---
17	0.09	---	---	0.19	---	---	0.17	---	---
18	0.10	---	---	0.17	---	---	0.18	---	---
19	0.10	---	---	0.16	---	---	0.22	---	---
20	0.11	---	---	0.15	---	---	0.18	---	---
21	0.12	---	---	0.16	---	---	0.18	---	---
22	0.13	---	---	0.16	---	---	0.18	---	---
23	0.14	---	---	0.17	---	---	0.18	---	---
24	0.11	---	---	0.17	---	---	0.17	---	---
25	0.10	---	---	0.17	---	---	0.16	---	---
26	0.12	---	---	0.17	---	---	0.16	---	---
27	0.21	---	---	0.16	---	---	0.15	---	---
28	0.16	---	---	0.17	---	---	0.15	---	---
29	0.12	---	---	0.18	---	---	0.16	---	---
30	0.12	---	---	0.16	---	---	0.18	---	---
31	0.13	---	---	---	---	---	0.17	---	---
TOTAL	3.46	---	0	4.76	---	0	5.40	---	0
JANUARY			FEBRUARY			MARCH			
1	0.23	---	---	0.14	---	---	0.19	---	---
2	0.21	---	---	0.15	---	---	0.18	---	---
3	0.17	---	---	0.16	---	---	0.17	---	---
4	0.16	---	---	0.14	---	---	0.16	---	---
5	0.18	---	---	0.13	---	---	0.16	---	---
6	0.20	---	---	0.15	---	---	0.17	---	---
7	0.18	---	---	0.14	---	---	0.17	---	---
8	0.18	---	---	0.14	---	---	0.17	---	---
9	0.17	---	---	0.16	---	---	0.15	---	---
10	0.15	---	---	0.16	---	---	0.15	---	---
11	0.15	---	---	0.17	---	---	0.15	---	---
12	0.17	---	---	0.18	---	---	0.15	---	---
13	0.16	---	---	0.19	---	---	0.16	---	---
14	0.17	---	---	0.19	---	---	0.17	---	---
15	0.19	---	---	0.17	---	---	0.16	---	---
16	0.19	---	---	0.17	---	---	0.17	---	---
17	0.18	---	---	0.17	---	---	0.20	---	---
18	0.17	---	---	0.16	---	---	0.24	---	---
19	0.16	---	---	0.21	---	---	0.49	---	---
20	0.17	---	---	0.21	---	---	0.58	---	---
21	0.17	---	---	0.20	---	---	0.43	---	---
22	0.15	---	---	0.17	---	---	0.35	---	---
23	0.15	---	---	0.15	---	---	0.25	---	---
24	0.17	---	---	0.14	---	---	0.20	---	---
25	0.17	---	---	0.14	---	---	0.18	---	---
26	0.16	---	---	0.15	---	---	0.18	---	---
27	0.16	---	---	0.18	---	---	0.17	---	---
28	0.17	---	---	0.20	---	---	0.17	---	---
29	0.15	---	---	---	---	---	0.17	---	---
30	0.15	---	---	---	---	---	0.17	---	---
31	0.15	---	---	---	---	---	0.18	---	---
TOTAL	5.29	---	0	4.62	---	0	6.59	---	0

ARKANSAS RIVER BASIN

07126200 VAN BREMER ARROYO NEAR MODEL, CO—Continued

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

Day	Mean discharge (cfs)	APRIL			MAY			JUNE		
		Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	
1	0.19	---	---	0.07	---	---	0.08	---	---	
2	0.18	---	---	0.10	---	---	0.10	---	---	
3	0.14	---	---	0.09	---	---	0.10	---	---	
4	0.16	---	---	0.06	---	---	0.10	---	---	
5	0.16	---	---	0.07	---	---	0.21	---	---	
6	0.22	---	---	0.07	---	---	0.17	---	---	
7	0.17	---	---	0.06	---	---	0.14	---	---	
8	0.17	---	---	0.05	---	---	0.14	---	---	
9	0.14	---	---	0.06	---	---	0.11	---	---	
10	0.14	---	---	0.07	---	---	0.10	---	---	
11	0.15	---	---	0.07	---	---	0.10	---	---	
12	0.17	---	---	0.08	---	---	0.10	---	---	
13	0.16	---	---	0.08	---	---	0.14	---	---	
14	0.14	---	---	0.07	---	---	0.14	---	---	
15	0.14	---	---	0.08	---	---	0.13	---	---	
16	0.14	---	---	0.10	---	---	0.12	---	---	
17	0.11	---	---	0.08	---	---	0.26	---	e0.03	
18	0.11	---	---	0.08	---	---	65	1,810	545	
19	0.15	---	---	0.08	---	---	5.2	315	6.3	
20	0.18	---	---	0.08	---	---	1.1	---	e0.40	
21	0.16	---	---	0.08	---	---	0.41	---	e0.07	
22	0.14	---	---	0.07	---	---	0.19	---	e0.02	
23	0.12	---	---	0.06	---	---	0.11	---	---	
24	0.10	---	---	0.05	---	---	0.08	---	---	
25	0.10	---	---	0.07	---	---	0.08	---	---	
26	0.11	---	---	0.06	---	---	0.10	---	---	
27	0.10	---	---	0.06	---	---	0.09	---	---	
28	0.08	---	---	0.06	---	---	0.08	---	---	
29	0.07	---	---	0.05	---	---	0.08	---	---	
30	0.06	---	---	0.05	---	---	0.10	---	---	
31	---	---	---	0.06	---	---	---	---	---	
TOTAL	4.16	---	0	2.17	---	0	74.86	---	551.82	

07126200 VAN BREMER ARROYO NEAR MODEL, CO—Continued

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

Day	Mean discharge (cfs)	JULY			AUGUST			SEPTEMBER		
		Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	
1	0.10	---	---	0.07	---	---	0.12	---	---	
2	0.09	---	---	0.07	---	---	0.10	---	---	
3	0.07	---	---	0.07	---	---	0.11	---	---	
4	0.07	---	---	0.08	---	---	0.11	---	---	
5	0.06	---	---	0.10	---	---	0.09	---	---	
6	0.06	---	---	0.10	---	---	0.08	---	---	
7	0.06	---	---	0.09	---	---	10	359	51	
8	0.06	---	---	0.09	---	---	4.1	250	3.8	
9	0.05	---	---	26	313	75	0.45	---	e0.23	
10	0.05	---	---	38	869	105	0.31	---	e0.12	
11	0.05	---	---	3.6	---	e2.9	0.22	---	e0.07	
12	0.05	---	---	0.70	111	0.23	0.20	---	e0.06	
13	0.05	---	---	0.23	---	e0.08	0.18	---	---	
14	0.05	---	---	0.12	---	e0.02	0.15	---	---	
15	0.06	---	---	0.07	---	---	0.14	---	---	
16	0.06	---	---	0.05	---	---	0.10	---	---	
17	0.05	---	---	0.05	---	---	0.10	---	---	
18	0.05	---	---	0.05	---	---	0.10	---	---	
19	0.05	---	---	19	300	44	0.10	---	---	
20	0.05	---	---	3.0	172	2.6	0.10	---	---	
21	0.05	---	---	0.29	---	e0.08	0.11	---	---	
22	0.06	---	---	0.15	---	e0.03	0.08	---	---	
23	0.06	---	---	0.11	---	e0.02	0.09	---	---	
24	0.06	---	---	0.07	---	---	0.09	---	---	
25	0.05	---	---	0.06	---	---	0.10	---	---	
26	0.05	---	---	0.05	---	---	0.10	---	---	
27	0.07	---	---	0.05	---	---	0.10	---	---	
28	0.07	---	---	0.06	---	---	0.09	---	---	
29	0.08	---	---	0.09	---	---	0.09	---	---	
30	0.07	---	---	0.25	---	---	0.10	---	---	
31	0.07	---	---	0.15	---	---	---	---	---	
TOTAL	1.88	---	0	92.87	---	229.96	17.81	---	55.28	
YEAR	223.87	837.06								

e Estimated.

07126200 VAN BREMER ARROYO NEAR MODEL, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126200

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.67 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.04 inches, Aug. 9.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00
3	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.13
4	---	---	---	---	---	---	---	0.00	0.08	0.00	0.01	0.00
5	---	---	---	---	---	---	---	0.00	0.66	0.00	0.13	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.20
7	---	---	---	---	---	---	---	0.00	0.01	0.00	0.00	1.03
8	---	---	---	---	---	---	---	0.00	0.00	0.00	0.17	0.00
9	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	1.04	0.19
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.21	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.09	0.00	0.00	0.02
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.20	0.21	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.87	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.04	0.00
19	---	---	---	---	---	---	0.31	0.00	0.00	0.04	0.46	0.00
20	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.20	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.14	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.22	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.13	0.00	0.22	0.00
30	---	---	---	---	---	---	0.00	0.13	0.00	0.00	0.47	0.00
31	---	---	---	---	---	---	---	0.05	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.60	2.09	0.41	2.55	1.57
MAX	---	---	---	---	---	---	---	0.21	0.87	0.22	1.04	1.03

e Estimated.

07126300 PURGATOIRE RIVER NEAR THATCHER, CO

LOCATION.--Lat 37°21'23", long 103°53'59", in NW¼SW¼ sec.10, T.31 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on right bank 250 ft downstream from county road bridge at gas line crossing, 1.2 mi downstream from Van Bremer Arroyo, and 18 mi southeast of Thatcher.

DRAINAGE AREA.--1,791 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1966 to current year. Statistical summary computed for 1976 to current year, subsequent to completion of Trinidad Reservoir. Daily records of specific conductance and water temperature available, December 1982 to April 1998. Daily records of suspended-sediment discharge available, May 1983 to November 1983, March 1984 to September 1992. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126300

REVISED RECORDS.--WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,790 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Peak flows regulated to some extent by Trinidad Lake (station 07124400) 52 mi upstream since January 1975. 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.--Floods of July 22, 1954 and May 19, 1955, reached stages of 26.7 and 25.2 ft, respectively, from floodmarks, discharges unknown. Flood of June 18, 1965, reached a stage of 23.5 ft, from floodmarks, discharge, 47,700 ft³/s.

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	1.00	e1.5	4.7	e9.2	6.9	e11	32	18	61	20	2.2	19
2	0.83	e1.6	4.7	e9.3	5.9	e11	63	12	18	12	1.2	22
3	0.75	e1.7	5.4	9.5	5.8	e12	172	12	12	10	0.74	11
4	0.62	e1.9	6.7	9.7	5.4	12	141	9.6	23	4.6	1.6	9.9
5	0.55	2.3	7.0	10	5.2	12	76	8.1	64	2.3	20	39
6	0.46	2.4	13	11	5.7	11	53	7.1	196	1.2	3.3	143
7	0.41	2.2	8.9	11	5.8	11	41	6.9	90	0.63	21	240
8	0.39	2.3	6.8	9.5	5.6	10	35	6.6	71	0.33	35	166
9	0.34	2.5	6.7	10	6.7	9.5	30	6.1	70	0.05	187	44
10	0.32	2.9	6.8	9.8	7.1	9.3	24	5.8	64	0.00	140	19
11	0.28	3.2	6.9	9.0	8.4	8.7	20	5.2	70	0.00	11	13
12	0.25	3.2	6.9	8.3	9.4	8.5	19	4.5	68	0.00	3.9	7.7
13	0.24	2.9	6.8	7.8	11	8.4	39	3.9	31	0.00	1.7	8.0
14	0.22	2.8	6.3	7.9	12	8.0	47	3.5	16	0.00	0.78	27
15	0.23	3.2	e6.6	8.2	12	7.4	34	4.1	11	0.00	0.37	20
16	0.25	5.7	e6.6	8.1	12	17	35	4.7	7.7	0.00	0.12	14
17	0.27	5.5	e6.8	8.2	13	9.6	32	4.4	7.8	0.00	0.00	7.7
18	0.30	5.7	e6.8	7.2	12	7.5	21	4.2	142	0.00	0.00	5.0
19	0.29	5.5	e6.8	6.9	12	11	17	3.9	45	0.00	12	3.7
20	0.30	5.2	e6.7	6.9	12	19	20	2.9	36	0.00	6.2	2.4
21	0.30	5.4	e6.6	e7.4	13	22	38	2.4	35	0.00	0.98	1.6
22	0.30	5.2	e6.8	e7.8	12	32	111	2.0	27	0.00	0.31	2.3
23	0.36	4.7	e6.8	e8.0	11	38	313	1.8	28	0.00	0.29	3.1
24	0.40	4.6	e7.0	e8.6	10	93	297	3.6	14	24	0.13	4.9
25	0.39	4.7	e7.0	9.4	e10	192	127	44	15	10	0.00	5.0
26	0.38	4.4	7.0	9.5	e11	168	80	45	13	7.5	0.00	2.7
27	0.52	4.7	7.1	9.5	12	206	66	14	8.6	6.0	0.00	1.5
28	0.60	5.1	7.2	9.6	10	115	58	7.6	5.1	36	0.00	7.0
29	0.51	5.2	8.1	9.6	---	61	42	5.8	3.1	23	0.00	20
30	e1.0	4.9	9.1	9.3	---	41	27	4.3	3.6	13	0.14	11
31	e1.3	---	9.2	8.3	---	31	---	48	---	4.5	33	---
TOTAL	14.36	113.1	219.8	274.5	262.9	1,212.9	2,110	312.0	1,255.9	175.11	482.96	880.5
MEAN	0.46	3.77	7.09	8.85	9.39	39.1	70.3	10.1	41.9	5.65	15.6	29.4
MAX	1.3	5.7	13	11	13	206	313	48	196	36	187	240
MIN	0.22	1.5	4.7	6.9	5.2	7.4	17	1.8	3.1	0.00	0.00	1.5
AC-FT	28	224	436	544	521	2,410	4,190	619	2,490	347	958	1,750

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

MEAN	32.8	31.3	28.0	27.3	29.1	36.8	83.4	125	90.0	81.9	129	58.2
MAX	84.0	66.4	44.3	43.2	53.3	143	467	592	764	547	910	302
(WY)	(1986)	(1999)	(1987)	(1988)	(1987)	(1998)	(1983)	(1987)	(1983)	(1981)	(1981)	(1981)
MIN	0.46	3.71	7.09	8.85	9.39	5.97	1.38	1.45	6.69	5.65	0.012	0.64
(WY)	(2003)	(1979)	(2003)	(2003)	(2003)	(1977)	(1978)	(2002)	(1976)	(2003)	(2002)	(1978)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1976 - 2003

ANNUAL TOTAL	5,567.03		7,314.03		
ANNUAL MEAN	15.3		20.0		a63.0
HIGHEST ANNUAL MEAN					181 1981
LOWEST ANNUAL MEAN					12.3 1976
HIGHEST DAILY MEAN	1,140	Sep 10	313	Apr 23	10,000 Jul 3, 1981
LOWEST DAILY MEAN	0.00	Jun 20	0.00	Jul 10	b0.00 Jun 28, 1976
ANNUAL SEVEN-DAY MINIMUM	0.00	Aug 5	0.00	Jul 10	0.00 Jun 28, 1976
MAXIMUM PEAK FLOW			807	Aug 10	c42,400 Jul 3, 1981
MAXIMUM PEAK STAGE			5.80	Aug 10	22.00 Jul 3, 1981
ANNUAL RUNOFF (AC-FT)	11,040		14,510		45,660
10 PERCENT EXCEEDS	19		45		103
50 PERCENT EXCEEDS	4.9		7.5		29
90 PERCENT EXCEEDS	0.00		0.30		5.3

e Estimated.

a Average discharge for 10 years (water years 1967-76), 37.9 ft³/s, 27,460 acre-ft/yr, prior to completion of Trinidad Dam.

b No flow at times during many years.

c From rating curve extended above 2,020 ft³/s on basis of slope-area measurements of peak flow at gage heights 12.25 ft and 23.50 ft.

07126300 PURGATOIRE RIVER NEAR THATCHER, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126300

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

REMARKS.--Estimated daily precipitation records are less accurate than the rest of the published records.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.79 inches, Aug. 21, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.74 inches, Aug. 8.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.15	0.00
3	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.11
4	---	---	---	---	---	---	---	0.00	0.10	0.00	0.09	0.00
5	---	---	---	---	---	---	---	0.00	0.55	0.00	0.21	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.20
7	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.42
8	---	---	---	---	---	---	0.00	0.00	0.00	0.00	1.74	0.00
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.62	0.26
10	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.11	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.07	0.00	0.00	0.01
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.27	0.38	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.83	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.10	0.00
19	---	---	---	---	---	---	0.35	0.00	0.11	0.00	0.27	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.23	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.07	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.06	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.06	0.00	0.15	0.00
30	---	---	---	---	---	---	0.00	0.17	0.01	0.00	0.36	0.00
31	---	---	---	---	---	---	---	0.01	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.80	1.88	0.13	3.69	1.00
MAX	---	---	---	---	---	---	---	0.38	0.83	0.07	1.74	0.42

e Estimated.

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO

LOCATION.--Lat 37°25'27", long 103°55'11", in SE¹/₄SE¹/₄ sec.17, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, on left bank 2.0 mi downstream from Rock Crossing, 5 mi upstream from mouth, and 13.5 mi southeast of Thatcher.

DRAINAGE AREA.--48.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1983 to September 1998, October 1998 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126325

GAGE.--Water-stage recorder with satellite telemetry, concrete control, and crest-stage gages. Elevation of gage is 4,982 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,090 ft³/s, Sept. 30, 1998, gage height, 13.71 ft, from slope-area measurement of peak flow; no flow on many days during most years.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 2.1 ft³/s, June 17, gage height, 4.22 ft; no flow on most days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
3	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
4	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
5	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
7	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
8	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.11	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.03	0.00	0.00	0.00
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.00	0.14	0.00	0.00	0.00
MEAN	---	---	---	---	---	---	---	0.000	0.005	0.000	0.000	0.000
MAX	---	---	---	---	---	---	---	0.00	0.11	0.00	0.00	0.00
MIN	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	0.00	0.3	0.00	0.00	0.00

e Estimated.

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	
										JANUARY
1	---	---	---	---	---	---	---	---	---	
2	---	---	---	---	---	---	---	---	---	
3	---	---	---	---	---	---	---	---	---	
4	---	---	---	---	---	---	---	---	---	
5	---	---	---	---	---	---	---	---	---	
6	---	---	---	---	---	---	---	---	---	
7	---	---	---	---	---	---	---	---	---	
8	---	---	---	---	---	---	---	---	---	
9	---	---	---	---	---	---	---	---	---	
10	---	---	---	---	---	---	---	---	---	
11	---	---	---	---	---	---	---	---	---	
12	---	---	---	---	---	---	---	---	---	
13	---	---	---	---	---	---	---	---	---	
14	---	---	---	---	---	---	---	---	---	
15	---	---	---	---	---	---	---	---	---	
16	---	---	---	---	---	---	---	---	---	
17	---	---	---	---	---	---	---	---	---	
18	---	---	---	---	---	---	---	---	---	
19	---	---	---	---	---	---	---	---	---	
20	---	---	---	---	---	---	---	---	---	
21	---	---	---	---	---	---	---	---	---	
22	---	---	---	---	---	---	---	---	---	
23	---	---	---	---	---	---	---	---	---	
24	---	---	---	---	---	---	---	---	---	
25	---	---	---	---	---	---	---	---	---	
26	---	---	---	---	---	---	---	---	---	
27	---	---	---	---	---	---	---	---	---	
28	---	---	---	---	---	---	---	---	---	
29	---	---	---	---	---	---	---	---	---	
30	---	---	---	---	---	---	---	---	---	
31	---	---	---	---	---	---	---	---	---	
TOTAL	---	---	---	---	---	---	---	---	---	
		APRIL			MAY			JUNE		
1	---	---	---	0.00	---	---	0.00	---	---	
2	---	---	---	0.00	---	---	0.00	---	---	
3	---	---	---	0.00	---	---	0.00	---	---	
4	---	---	---	0.00	---	---	0.00	---	---	
5	---	---	---	0.00	---	---	0.00	---	---	
6	---	---	---	0.00	---	---	0.00	---	---	
7	---	---	---	0.00	---	---	0.00	---	---	
8	e0.00	---	---	0.00	---	---	0.00	---	---	
9	0.00	---	---	0.00	---	---	0.00	---	---	
10	0.00	---	---	0.00	---	---	0.00	---	---	
11	0.00	---	---	0.00	---	---	0.00	---	---	
12	0.00	---	---	0.00	---	---	0.00	---	---	
13	0.00	---	---	0.00	---	---	0.00	---	---	
14	0.00	---	---	0.00	---	---	0.00	---	---	
15	0.00	---	---	0.00	---	---	0.00	---	---	
16	0.00	---	---	0.00	---	---	0.00	---	---	
17	0.00	---	---	0.00	---	---	0.11	81	0.17	
18	0.00	---	---	0.00	---	---	0.03	90	0.02	
19	0.00	---	---	0.00	---	---	0.00	---	---	
20	0.00	---	---	0.00	---	---	0.00	---	---	
21	0.00	---	---	0.00	---	---	0.00	---	---	
22	0.00	---	---	0.00	---	---	0.00	---	---	
23	0.00	---	---	0.00	---	---	0.00	---	---	
24	0.00	---	---	0.00	---	---	0.00	---	---	
25	0.00	---	---	0.00	---	---	0.00	---	---	
26	0.00	---	---	0.00	---	---	0.00	---	---	
27	0.00	---	---	0.00	---	---	0.00	---	---	
28	0.00	---	---	0.00	---	---	0.00	---	---	
29	0.00	---	---	0.00	---	---	0.00	---	---	
30	0.00	---	---	0.00	---	---	0.00	---	---	
31	---	---	---	0.00	---	---	---	---	---	
TOTAL	---	---	---	0.00	---	---	0.14	---	---	

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO—Continued

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

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

e Estimated.

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126325

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 3.23 inches, Aug. 21, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.14 inches, June 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.01	0.03	0.00	0.00	0.00
3	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.12
4	---	---	---	---	---	---	---	0.00	0.20	0.00	0.23	0.00
5	---	---	---	---	---	---	---	0.00	0.50	0.00	0.07	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.39
7	---	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00
8	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.53	0.00
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.15
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.05	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.04	0.00	0.00	0.09
14	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.24	0.25	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	1.14	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	---	---	---	---	---	---	0.29	0.01	0.04	0.37	0.00	0.00
20	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.09	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.00	0.14	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.12	0.00	0.27	0.00
30	---	---	---	---	---	---	0.00	0.16	0.00	0.00	0.25	0.00
31	---	---	---	---	---	---	---	0.02	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.57	2.16	0.51	1.35	0.76
MAX	---	---	---	---	---	---	---	0.25	1.14	0.37	0.53	0.39

e Estimated.

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO

LOCATION.--Lat 37°29'34", long 103°49'39", in SW¹/₄NE¹/₄ sec.30, T.29 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, on left bank 0.8 mi downstream from Sharp Ranch, 5.3 mi upstream from mouth, and 16 mi southeast of Thatcher.

DRAINAGE AREA.--48.8 mi² (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1983 to September 1992, October 1992 to May 1999 (annual maximum only), May 1999 to current year (seasonal records only). Records prior to May 14, 1999, may not be equivalent because of difference in drainage area. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126390

REVISED RECORDS.--WDR CO-86-1: 1983-84. WDR CO-97-1: 1987(M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,785 ft above NGVD of 1929, from topographic map. April 1983 to May 2, 1989, at site 0.4 mile upstream at different datum. May 3, 1989 to May 13, 1999, at site 0.2 mile upstream at different datum.

REMARKS.--Records good. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s, May 22, 1987, from slope-area measurement of peak flow, gage height, 10.39 ft, site and datum then in use; no flow on most days.

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

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

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

e Estimated.

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1983 to September 1992, May 1999 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126390

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1983 to September 1992.

WATER TEMPERATURE: June 1983 to September 1992.

SUSPENDED SEDIMENT: May 1999 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry. June 1983 to September 1992, water-quality monitor at site 0.4 mi upstream.

REMARKS.--Daily suspended-sediment records are poor. Daily mean suspended-sediment concentrations published for days of partial flow might not reflect concentrations during the flow event including June 13.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 827 mg/L, June 13, 1999; minimum daily, 6 mg/L, Aug. 7, 1999.

SUSPENDED SEDIMENT DISCHARGE (seasonal only): Maximum daily, 66 tons, June 13, 1999; minimum daily, 0.0 ton, on many days during 1999, no flow on most days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): No flow during current year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): No flow during current year.

*****NO FLOW DURING 2003 WATER YEAR*****

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126390

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.71 inches, Aug. 10, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.84 inch, June 17.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00
2	0.00	---	---	---	---	---	---	0.03	0.01	0.00	0.00	0.00
3	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.13
4	---	---	---	---	---	---	---	0.00	0.09	0.00	0.12	0.00
5	---	---	---	---	---	---	---	0.00	0.57	0.00	0.09	0.00
6	---	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.24
7	---	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.04
8	---	---	---	---	---	---	---	0.00	0.00	0.00	0.07	0.00
9	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.18
10	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.05	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.12	0.00	0.00	0.10
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.44	0.22	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.84	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.02	0.00
19	---	---	---	---	---	---	0.49	0.01	0.01	0.01	0.01	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.30	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.01	0.01	0.00	0.11	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00	0.00
28	---	---	---	---	---	---	0.01	0.00	0.00	0.29	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.08	0.01	0.12	0.00
30	---	---	---	---	---	---	0.00	0.07	0.00	0.00	0.22	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.64	1.87	0.33	0.77	0.69
MAX	---	---	---	---	---	---	---	0.30	0.84	0.29	0.22	0.24

e Estimated.

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO

LOCATION.--Lat 37°30'55", long 103°43'30", Las Animas County, Hydrologic Unit 11020010, on left bank 200 ft downstream from Welsh Canyon Creek, 0.3 mi upstream from mouth, and 21 mi east of Thatcher.

DRAINAGE AREA.--48.9 mi² (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, October 1990 to April 2000 (annual maximum only), April 2000 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126415

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,510 ft above NGVD of 1929, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,430 ft³/s, June 13, 2002, from slope-area measurement of peak flow, gage height, 11.46 ft, from floodmarks; no flow on many days most years.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 555 ft³/s, May 30, (gage height 7.90 ft, from floodmarks) from rating curve extended above 292 ft³/s on basis of step-backwater analysis and slope-area measurements of peak flow at gage heights, 7.54 ft, 8.40 ft, and 11.46 ft; no flow on most days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
4	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
5	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
7	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
8	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	2.9	0.00	0.00	0.00
14	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	3.4	0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	e0.09	0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	17	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	e0.26	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	17.26	6.40	0.00	0.00	0.00
MEAN	---	---	---	---	---	---	---	0.56	0.21	0.000	0.000	0.000
MAX	---	---	---	---	---	---	---	17	3.4	0.00	0.00	0.00
MIN	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	34	13	0.00	0.00	0.00

e Estimated.

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---
		APRIL		MAY			JUNE		
1	---	---	---	0.00	---	---	0.00	---	---
2	---	---	---	0.00	---	---	0.00	---	---
3	---	---	---	0.00	---	---	0.00	---	---
4	---	---	---	0.00	---	---	0.00	---	---
5	---	---	---	0.00	---	---	0.00	---	---
6	---	---	---	0.00	---	---	0.00	---	---
7	---	---	---	0.00	---	---	0.00	---	---
8	---	---	---	0.00	---	---	0.00	---	---
9	e0.00	---	---	0.00	---	---	0.00	---	---
10	0.00	---	---	0.00	---	---	0.00	---	---
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	2.9	---	---
14	0.00	---	---	0.00	---	---	0.01	---	e7
15	0.00	---	---	0.00	---	---	0.00	---	e0.00
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	0.00	---	---	0.00	---	---	0.00	---	---
23	0.00	---	---	0.00	---	---	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	0.00	---	---	0.00	---	---
26	0.00	---	---	0.00	---	---	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	0.00	---	---	3.4	---	e9
29	0.00	---	---	0.00	---	---	e0.09	---	e0.03
30	0.00	---	---	17	202	107	0.00	---	---
31	---	---	---	e0.26	---	e0.18	---	---	---
TOTAL	---	---	---	17.26	---	---	6.40	---	---

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO—Continued

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

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

e Estimated.

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126415

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.20 inches, Sept. 9, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.85 inch, June 13.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.05	0.00	0.00	0.00
2	e0.00	---	---	---	---	---	---	0.06	0.04	0.00	0.00	0.00
3	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.06
4	---	---	---	---	---	---	---	0.00	0.01	0.00	0.06	0.00
5	---	---	---	---	---	---	---	0.00	0.52	0.00	0.22	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.11	0.00	0.06
7	---	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.15
8	---	---	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00
9	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.11	0.19
10	---	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.04	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.85	0.00	0.00	0.08
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.01
15	---	---	---	---	---	---	0.65	0.31	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.07	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.12	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.03	0.00	0.07	0.00
19	---	---	---	---	---	---	0.54	0.00	0.05	0.05	0.01	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.01	0.25	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.03	0.00	0.06	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.02	0.00	0.07	0.20	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	0.77	0.00	0.00	0.35	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	1.39	1.85	0.36	0.90	0.55
MAX	---	---	---	---	---	---	---	0.77	0.85	0.20	0.35	0.19

e Estimated.

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO

LOCATION.--Lat 37°35'21", long 103°38'52", in SE¹/₄SE¹/₄ sec.23, T.28 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on Comanche National Grassland, on left bank 0.5 mi upstream from mouth, 0.6 mi southwest of Rourke Ranch house, 0.9 mi upstream from Iron Canyon, and 17 mi southeast of Timpas.

DRAINAGE AREA.--56.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, October 1990 to May 2000 (annual maximum only), June 2000 to current year (seasonal records only).
For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126480

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,402 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by erosion-control and livestock-watering reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s, Aug. 21, 1984, from slope-area measurement of peak flow, gage height, 12.56 feet, from floodmark; no flow on many days during most years.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 138 ft³/s, July 15, gage height, 6.04 ft, from rating curve extended above 0.50 ft³/s on the basis of step-backwater analysis of flow and slope-area measurements of peak flow at gage heights 4.67 ft, 8.70 ft, 8.93 ft, 11.61 ft, and 12.56 ft; no flow on most days.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
2	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
4	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
5	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
7	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
8	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
10	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.00
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.00	0.00	0.00	8.8	0.00	0.00
16	---	---	---	---	---	---	0.00	0.00	0.00	3.0	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	e0.01	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
19	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	9.9	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	e0.05	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	1.4	0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	e0.06	0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	9.95	1.46	11.81	0.00	0.00
MEAN	---	---	---	---	---	---	---	0.32	0.049	0.38	0.000	0.000
MAX	---	---	---	---	---	---	---	9.9	1.4	8.8	0.00	0.00
MIN	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
AC-FT	---	---	---	---	---	---	---	20	2.9	23	0.00	0.00

e Estimated.

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	---	---	---	---	---	---	---	---	---
		APRIL		MAY			JUNE		
1	---	---	---	0.00	---	---	0.00	---	---
2	---	---	---	0.00	---	---	0.00	---	---
3	---	---	---	0.00	---	---	0.00	---	---
4	---	---	---	0.00	---	---	0.00	---	---
5	---	---	---	0.00	---	---	0.00	---	---
6	---	---	---	0.00	---	---	0.00	---	---
7	---	---	---	0.00	---	---	0.00	---	---
8	---	---	---	0.00	---	---	0.00	---	---
9	---	---	---	0.00	---	---	0.00	---	---
10	e0.00	---	---	0.00	---	---	0.00	---	---
11	0.00	---	---	0.00	---	---	0.00	---	---
12	0.00	---	---	0.00	---	---	0.00	---	---
13	0.00	---	---	0.00	---	---	0.00	---	---
14	0.00	---	---	0.00	---	---	0.00	---	---
15	0.00	---	---	0.00	---	---	0.00	---	---
16	0.00	---	---	0.00	---	---	0.00	---	---
17	0.00	---	---	0.00	---	---	0.00	---	---
18	0.00	---	---	0.00	---	---	0.00	---	---
19	0.00	---	---	0.00	---	---	0.00	---	---
20	0.00	---	---	0.00	---	---	0.00	---	---
21	0.00	---	---	0.00	---	---	0.00	---	---
22	0.00	---	---	0.00	---	---	0.00	---	---
23	0.00	---	---	0.00	---	---	0.00	---	---
24	0.00	---	---	0.00	---	---	0.00	---	---
25	0.00	---	---	9.9	2,350	114	0.00	---	---
26	0.00	---	---	e0.05	---	e0.01	0.00	---	---
27	0.00	---	---	0.00	---	---	0.00	---	---
28	0.00	---	---	0.00	---	---	1.4	368	9.1
29	0.00	---	---	0.00	---	---	e0.06	---	e0.04
30	0.00	---	---	0.00	---	---	0.00	---	---
31	---	---	---	0.00	---	---	---	---	---
TOTAL	---	---	---	9.95	---	---	1.46	---	---

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO—Continued

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

Day	Mean discharge (cfs)	JULY			AUGUST			SEPTEMBER		
		Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	
1	0.00	---	---	0.00	---	---	0.00	---	---	
2	0.00	---	---	0.00	---	---	0.00	---	---	
3	0.00	---	---	0.00	---	---	0.00	---	---	
4	0.00	---	---	0.00	---	---	0.00	---	---	
5	0.00	---	---	0.00	---	---	0.00	---	---	
6	0.00	---	---	0.00	---	---	0.00	---	---	
7	0.00	---	---	0.00	---	---	0.00	---	---	
8	0.00	---	---	0.00	---	---	0.00	---	---	
9	0.00	---	---	0.00	---	---	0.00	---	---	
10	0.00	---	---	0.00	---	---	0.00	---	---	
11	0.00	---	---	0.00	---	---	0.00	---	---	
12	0.00	---	---	0.00	---	---	0.00	---	---	
13	0.00	---	---	0.00	---	---	0.00	---	---	
14	0.00	---	---	0.00	---	---	0.00	---	---	
15	8.8	473	67	0.00	---	---	0.00	---	---	
16	3.0	538	7.4	0.00	---	---	0.00	---	---	
17	e0.01	---	e0.00	0.00	---	---	0.00	---	---	
18	0.00	---	---	0.00	---	---	0.00	---	---	
19	0.00	---	---	0.00	---	---	0.00	---	---	
20	0.00	---	---	0.00	---	---	0.00	---	---	
21	0.00	---	---	0.00	---	---	0.00	---	---	
22	0.00	---	---	0.00	---	---	0.00	---	---	
23	0.00	---	---	0.00	---	---	0.00	---	---	
24	0.00	---	---	0.00	---	---	0.00	---	---	
25	0.00	---	---	0.00	---	---	0.00	---	---	
26	0.00	---	---	0.00	---	---	0.00	---	---	
27	0.00	---	---	0.00	---	---	0.00	---	---	
28	0.00	---	---	0.00	---	---	0.00	---	---	
29	0.00	---	---	0.00	---	---	0.00	---	---	
30	0.00	---	---	0.00	---	---	0.00	---	---	
31	0.00	---	---	0.00	---	---	---	---	---	
TOTAL	11.81	---	---	0.00	---	---	0.00	---	---	

e Estimated.

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 2000 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126480

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

REMARKS.--Records during Apr. 10 to July 2 are less accurate than the rest of the published records.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.28 inches, July 11, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.88 inch, June 5.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.00
2	e0.01	---	---	---	---	---	---	0.00	0.00	0.00	0.15	0.00
3	---	---	---	---	---	---	---	0.00	0.04	0.00	0.00	0.05
4	---	---	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00
5	---	---	---	---	---	---	---	0.00	0.88	0.00	0.07	0.00
6	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
7	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.06
8	---	---	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00
9	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.14
10	---	---	---	---	---	---	e0.00	0.00	0.00	0.00	0.00	0.01
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.56	0.00	0.00	0.09
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.81	0.41	0.00	0.73	0.00	0.00
16	---	---	---	---	---	---	0.11	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.25	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.06	0.00	0.01	0.00
19	---	---	---	---	---	---	0.77	0.00	0.00	0.09	0.01	0.00
20	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.04	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.13	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.01	0.00	0.00
28	---	---	---	---	---	---	0.08	0.00	0.13	0.18	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.03	0.01	0.03	0.00
30	---	---	---	---	---	---	0.00	0.02	0.00	0.00	0.24	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.60	1.97	1.02	0.56	0.35
MAX	---	---	---	---	---	---	---	0.41	0.88	0.73	0.24	0.14

e Estimated.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO

LOCATION.--Lat 37°37'06", long 103°35'35" in NE¹/₄SE¹/₄ sec. 10, T.28 S., R.55 W., Las Animas County, Hydrologic Unit 11020010, on right bank at Rock Crossing, 2.1 mi upstream from Minnie Canyon, 2.4 mi downstream from Beaty Canyon, and 17 mi southeast of Timpas.

DRAINAGE AREA.--2,635 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1983 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126485

REVISED RECORD.--WDR CO-87-1: 1984-86 (M). WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,350 ft above NGVD of 1929, from topographic map. June 1, 1983 to July 17, 1985, at site 500 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Peak flows are regulated to some extent by Trinidad Lake (station 07124400) 92 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	4.2	0.92	4.6	e11	11	11	35	31	20	3.8	5.1	0.21
2	3.4	0.92	4.6	e12	10	12	32	23	58	2.6	2.5	0.15
3	2.9	0.85	5.0	13	9.2	12	74	18	26	5.8	1.4	7.5
4	2.3	0.82	5.6	12	8.1	12	198	14	15	7.0	0.84	14
5	2.0	0.80	5.5	12	7.1	13	133	13	16	6.4	0.54	7.1
6	1.6	0.77	5.6	11	7.1	13	73	12	138	3.9	0.27	19
7	1.5	0.76	6.0	11	6.5	13	55	10	124	2.4	0.09	192
8	1.3	0.74	11	11	6.4	12	43	8.8	81	1.7	0.00	241
9	1.2	0.98	9.2	11	6.7	12	37	8.0	71	1.2	465	133
10	1.1	1.4	7.4	11	6.9	11	32	7.4	67	0.83	253	44
11	0.91	1.4	6.7	11	7.1	11	28	7.0	63	0.56	61	23
12	0.85	1.5	6.8	11	7.6	10	24	6.5	68	0.38	20	14
13	0.78	1.9	6.6	10	8.6	9.9	20	6.0	66	0.20	9.3	11
14	0.74	2.0	7.1	9.7	10	9.4	33	5.5	40	0.08	4.9	7.2
15	0.68	2.4	6.9	9.1	12	9.3	46	5.8	21	0.01	2.9	8.8
16	0.67	3.1	6.8	8.9	13	9.1	44	6.0	14	5.3	1.8	19
17	0.66	3.2	6.5	9.3	12	10	32	5.4	52	1.2	1.3	14
18	0.66	2.8	e6.6	9.0	13	18	34	4.5	25	0.47	0.90	9.6
19	0.66	3.7	e6.6	9.7	14	19	28	4.8	122	0.23	0.66	6.4
20	0.67	4.3	e6.7	8.3	14	25	23	4.5	43	0.16	0.46	4.7
21	0.66	4.7	e6.6	8.1	13	24	19	4.2	30	0.02	0.31	3.5
22	0.66	4.6	e6.7	8.1	13	24	33	4.1	32	0.00	0.21	2.6
23	0.60	4.6	e6.8	9.3	e12	31	147	3.7	22	0.00	1.8	2.1
24	0.68	4.6	e6.8	11	e12	37	378	3.4	25	0.00	1.5	1.7
25	0.72	4.6	e6.8	10	e11	123	220	43	17	0.00	0.92	1.4
26	0.74	4.3	e7.3	11	e11	194	116	17	11	0.00	0.61	1.1
27	1.1	4.1	e7.6	11	e10	199	76	41	12	0.00	0.39	0.87
28	0.96	3.9	e8.3	11	9.9	208	66	22	9.9	0.00	0.25	0.70
29	0.82	3.9	8.5	11	---	96	57	12	11	0.00	0.20	0.61
30	0.80	3.8	8.4	11	---	60	43	7.7	5.8	0.00	0.26	1.1
31	0.83	---	8.5	11	---	45	---	41	---	6.0	0.25	---
TOTAL	37.35	78.36	214.1	323.5	282.2	1,292.7	2,179	400.3	1,305.7	50.24	838.66	791.34
MEAN	1.20	2.61	6.91	10.4	10.1	41.7	72.6	12.9	43.5	1.62	27.1	26.4
MAX	4.2	4.7	11	13	14	208	378	43	138	7.0	465	241
MIN	0.60	0.74	4.6	8.1	6.4	9.1	19	3.4	5.8	0.00	0.00	0.15
AC-FT	74	155	425	642	560	2,560	4,320	794	2,590	100	1,660	1,570

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

	39.7	38.0	32.3	30.7	33.1	44.4	85.2	121	95.9	71.3	113	47.3
MEAN												
MAX	89.1	68.3	43.4	41.4	56.0	139	330	585	836	186	468	124
(WY)	(1999)	(1999)	(1998)	(1984)	(1988)	(1998)	(1993)	(1987)	(1983)	(1992)	(1999)	(2002)
MIN	1.20	2.61	6.91	10.4	10.1	15.7	8.23	1.34	7.23	1.62	24.4	12.5
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2001)	(2003)	(2001)	(1990)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1983 - 2003	
ANNUAL TOTAL	9,001.93		7,793.45			
ANNUAL MEAN	24.7		21.4		59.5	
HIGHEST ANNUAL MEAN					123 1987	
LOWEST ANNUAL MEAN					21.4 2003	
HIGHEST DAILY MEAN	1,220 Sep 10		465 Aug 9		4,190 May 2, 1999	
LOWEST DAILY MEAN	0.00 Jun 1		0.00 Jul 22		a0.00 Jun 30, 1990	
ANNUAL SEVEN-DAY MINIMUM	0.00 Jun 1		0.00 Jul 22		0.00 Jun 30, 1990	
MAXIMUM PEAK FLOW			2,050 Aug 9		b11,400 Jul 9, 1992	
MAXIMUM PEAK STAGE			11.55 Aug 9		c17.90 Jul 9, 1992	
ANNUAL RUNOFF (AC-FT)	17,860		15,460		43,100	
10 PERCENT EXCEEDS	23		45		105	
50 PERCENT EXCEEDS	6.0		7.6		33	
90 PERCENT EXCEEDS	0.00		0.66		9.4	

e Estimated.

a Also occurred many days during water years 1990, 2002-2003.

b From slope-area measurement of peak flow.

c From floodmarks.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to September 1992, June 1997 to current year (seasonal peaks only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126485

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1983 to September 1992.

WATER TEMPERATURE: July 1983 to September 1992.

SUSPENDED SEDIMENT: August 1983 to September 1992, June 1997 to current year (seasonal peaks only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are published for days when instantaneous discharge exceeds 100 ft³/s. Daily mean suspended-sediment concentrations published for days of partial flow might not reflect mean concentrations during the flow event, including Aug. 9. Daily maximum and minimum specific conductance and daily mean water-temperature data for July 1983 to September 1992 are available in files of the district office.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 54,900 mg/L, Aug. 16, 1986; minimum daily mean, 5 mg/L, Mar. 22, 1988, and Feb. 10, 1989.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily (occurred during period of seasonal record), 287,000 tons (estimated), May 2, 1999; minimum daily, 0.0 ton (estimated), several days during 1989 and 1990.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS (seasonal peaks only): Maximum daily mean, 6,120 mg/L, Sept. 8; minimum daily mean, 115 mg/L, May 31.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peaks only): Maximum daily, 13,200 tons, Aug. 9; minimum daily, 21 tons, May 31.

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

Date	Time	Instantaneous discharge, cfs (00061)	Specific conductance, wat unflab, uS/cm 25 degC (90095)	Temperature, water, deg C (00010)	Suspended sediment concentration mg/L (80154)	Suspended sediment load, tons/d (80155)
OCT						
02...	1110	3.4	1,280	14.5	--	--
NOV						
12...	1620	1.6	2,710	9.5	--	--
JAN						
07...	1550	12	2,880	5.0	--	--
MAR						
05...	1540	13	2,990	7.0	--	--
APR						
10...	1830	34	942	17.0	198	18
30...	0845	45	921	17.0	284	35
JUN						
03...	1650	23	970	25.5	--	--
JUL						
02...	1110	2.4	1,410	26.5	--	--
AUG						
15...	1200	2.8	1,000	24.0	97	0.72
SEP						
19...	1355	6.3	1,640	20.0	--	--

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
	OCTOBER			NOVEMBER			DECEMBER		
1	4.2	---	---	0.92	---	---	4.6	---	---
2	3.4	---	---	0.92	---	---	4.6	---	---
3	2.9	---	---	0.85	---	---	5.0	---	---
4	2.3	---	---	0.82	---	---	5.6	---	---
5	2.0	---	---	0.80	---	---	5.5	---	---
6	1.6	---	---	0.77	---	---	5.6	---	---
7	1.5	---	---	0.76	---	---	6.0	---	---
8	1.3	---	---	0.74	---	---	11	---	---
9	1.2	---	---	0.98	---	---	9.2	---	---
10	1.1	---	---	1.4	---	---	7.4	---	---
11	0.91	---	---	1.4	---	---	6.7	---	---
12	0.85	---	---	1.5	---	---	6.8	---	---
13	0.78	---	---	1.9	---	---	6.6	---	---
14	0.74	---	---	2.0	---	---	7.1	---	---
15	0.68	---	---	2.4	---	---	6.9	---	---
16	0.67	---	---	3.1	---	---	6.8	---	---
17	0.66	---	---	3.2	---	---	6.5	---	---
18	0.66	---	---	2.8	---	---	e6.6	---	---
19	0.66	---	---	3.7	---	---	e6.6	---	---
20	0.67	---	---	4.3	---	---	e6.7	---	---
21	0.66	---	---	4.7	---	---	e6.6	---	---
22	0.66	---	---	4.6	---	---	e6.7	---	---
23	0.60	---	---	4.6	---	---	e6.8	---	---
24	0.68	---	---	4.6	---	---	e6.8	---	---
25	0.72	---	---	4.6	---	---	e6.8	---	---
26	0.74	---	---	4.3	---	---	e7.3	---	---
27	1.1	---	---	4.1	---	---	e7.6	---	---
28	0.96	---	---	3.9	---	---	e8.3	---	---
29	0.82	---	---	3.9	---	---	8.5	---	---
30	0.80	---	---	3.8	---	---	8.4	---	---
31	0.83	---	---	---	---	---	8.5	---	---
TOTAL	37.35	---	---	78.36	---	---	214.1	---	---
	JANUARY			FEBRUARY			MARCH		
1	e11	---	---	11	---	---	11	---	---
2	e12	---	---	10	---	---	12	---	---
3	13	---	---	9.2	---	---	12	---	---
4	12	---	---	8.1	---	---	12	---	---
5	12	---	---	7.1	---	---	13	---	---
6	11	---	---	7.1	---	---	13	---	---
7	11	---	---	6.5	---	---	13	---	---
8	11	---	---	6.4	---	---	12	---	---
9	11	---	---	6.7	---	---	12	---	---
10	11	---	---	6.9	---	---	11	---	---
11	11	---	---	7.1	---	---	11	---	---
12	11	---	---	7.6	---	---	10	---	---
13	10	---	---	8.6	---	---	9.9	---	---
14	9.7	---	---	10	---	---	9.4	---	---
15	9.1	---	---	12	---	---	9.3	---	---
16	8.9	---	---	13	---	---	9.1	---	---
17	9.3	---	---	12	---	---	10	---	---
18	9.0	---	---	13	---	---	18	---	---
19	9.7	---	---	14	---	---	19	---	---
20	8.3	---	---	14	---	---	25	---	---
21	8.1	---	---	13	---	---	24	---	---
22	8.1	---	---	13	---	---	24	---	---
23	9.3	---	---	e12	---	---	31	---	---
24	11	---	---	e12	---	---	37	---	---
25	10	---	---	e11	---	---	123	---	---
26	11	---	---	e11	---	---	194	---	---
27	11	---	---	e10	---	---	199	---	---
28	11	---	---	9.9	---	---	208	---	---
29	11	---	---	---	---	---	96	---	---
30	11	---	---	---	---	---	60	---	---
31	11	---	---	---	---	---	45	---	---
TOTAL	323.5	---	---	282.2	---	---	1,292.7	---	---

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO—Continued

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

Day	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)	Mean discharge (cfs)	Mean concentration (mg/l)	Load (tons/day)
1	35	---	---	31	---	---	20	---	---
2	32	---	---	23	---	---	58	---	---
3	74	---	e70	18	---	---	26	---	---
4	198	---	e900	14	---	---	15	---	---
5	133	---	e300	13	---	---	16	---	---
6	73	---	---	12	---	---	138	275	212
7	55	---	---	10	---	---	124	---	e160
8	43	---	---	8.8	---	---	81	---	e80
9	37	---	---	8.0	---	---	71	---	---
10	32	---	---	7.4	---	---	67	---	---
11	28	---	---	7.0	---	---	63	---	---
12	24	---	---	6.5	---	---	68	---	---
13	20	---	---	6.0	---	---	66	---	---
14	33	---	---	5.5	---	---	40	---	---
15	46	---	---	5.8	---	---	21	---	---
16	44	---	---	6.0	---	---	14	---	---
17	32	---	---	5.4	---	---	52	1,070	1,190
18	34	---	---	4.5	---	---	25	874	129
19	28	---	---	4.8	---	---	122	2,470	1,100
20	23	---	---	4.5	---	---	43	---	---
21	19	---	---	4.2	---	---	30	---	---
22	33	---	---	4.1	---	---	32	---	---
23	147	481	251	3.7	---	---	22	---	---
24	378	2,720	2,740	3.4	---	---	25	---	---
25	220	4,190	2,490	43	---	e24	17	---	---
26	116	---	e200	17	---	---	11	---	---
27	76	---	---	41	---	---	12	---	---
28	66	---	---	22	---	---	9.9	---	---
29	57	---	---	12	---	---	11	---	---
30	43	---	---	7.7	---	---	5.8	---	---
31	---	---	---	41	115	21	---	---	---
TOTAL	2,179	---	---	400.3	---	---	1,305.7	---	---
		JULY		AUGUST		SEPTEMBER			
1	3.8	---	---	5.1	---	---	0.21	---	---
2	2.6	---	---	2.5	---	---	0.15	---	---
3	5.8	---	---	1.4	---	---	7.5	---	---
4	7.0	---	---	0.84	---	---	14	---	---
5	6.4	---	---	0.54	---	---	7.1	---	---
6	3.9	---	---	0.27	---	---	19	---	---
7	2.4	---	---	0.09	---	---	192	1,920	1,740
8	1.7	---	---	0.00	---	---	241	6,120	4,470
9	1.2	---	---	465	5,750	13,200	133	---	e670
10	0.83	---	---	253	4,560	3,350	44	---	---
11	0.56	---	---	61	2,790	492	23	---	---
12	0.38	---	---	20	---	---	14	---	---
13	0.20	---	---	9.3	---	---	11	---	---
14	0.08	---	---	4.9	---	---	7.2	---	---
15	0.01	---	---	2.9	---	---	8.8	---	---
16	5.3	---	---	1.8	---	---	19	---	---
17	1.2	---	---	1.3	---	---	14	---	---
18	0.47	---	---	0.90	---	---	9.6	---	---
19	0.23	---	---	0.66	---	---	6.4	---	---
20	0.16	---	---	0.46	---	---	4.7	---	---
21	0.02	---	---	0.31	---	---	3.5	---	---
22	0.00	---	---	0.21	---	---	2.6	---	---
23	0.00	---	---	1.8	---	---	2.1	---	---
24	0.00	---	---	1.5	---	---	1.7	---	---
25	0.00	---	---	0.92	---	---	1.4	---	---
26	0.00	---	---	0.61	---	---	1.1	---	---
27	0.00	---	---	0.39	---	---	0.87	---	---
28	0.00	---	---	0.25	---	---	0.70	---	---
29	0.00	---	---	0.20	---	---	0.61	---	---
30	0.00	---	---	0.26	---	---	1.1	---	---
31	6.0	---	---	0.25	---	---	---	---	---
TOTAL	50.24	---	---	838.66	---	---	791.34	---	---

e Estimated.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07126485

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

REMARKS.--Records during July 2 to Sept. 19 are less accurate than the rest of the published records.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.11 inches, Oct. 4, 2000.

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

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.04	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00
2	e0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
3	---	---	---	---	---	---	---	0.00	0.03	0.00	0.00	0.04
4	---	---	---	---	---	---	---	0.00	0.00	0.00	0.42	0.00
5	---	---	---	---	---	---	---	0.00	0.74	0.00	0.07	0.00
6	---	---	---	---	---	---	---	0.01	0.01	0.00	0.00	0.00
7	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.05
8	---	---	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00
9	---	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.13
10	---	---	---	---	---	---	e0.00	0.00	0.05	0.00	0.00	0.01
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.67	0.00	0.00	0.11
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.89	0.56	0.00	0.37	0.00	0.00
16	---	---	---	---	---	---	0.18	0.01	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.14	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.15	0.00	0.02	0.00
19	---	---	---	---	---	---	1.00	0.00	0.00	0.20	0.00	0.00
20	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.04
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.00	0.03	0.00	0.01	0.00	0.00
24	---	---	---	---	---	---	0.00	0.35	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.09	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.02	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00	0.00
28	---	---	---	---	---	---	0.04	0.00	0.01	0.30	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.23	0.00	0.00	0.00
30	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.26	0.00
31	---	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	---	0.97	2.04	0.93	0.89	0.38
MAX	---	---	---	---	---	---	---	0.56	0.74	0.37	0.42	0.13

e Estimated.

07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO

LOCATION.--Lat 38°02'02", long 103°12'00", in NE¹/₄SW¹/₄ sec.23, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020010, on left bank at downstream side of bridge on State Highway 101, 2.3 mi southeast of courthouse in Las Animas, and 4.5 mi upstream from mouth. Prior to July 17, 2002, at site on right bank.

DRAINAGE AREA.--3,318 mi², of which 11.8 mi² is noncontributing.

PERIOD OF RECORD.--May to September 1889, July to October 1909 (gage heights and discharge measurements only), January 1922 to September 1931, July 1948 to current year.

Monthly discharge only for some periods, published in WSP 1311. Published as Purgatoire Creek at Las Animas in 1889 and as Purgatory River near Las Animas in 1909.

Statistical summary computed for 1978 to current year, subsequent to completion of Trinidad Reservoir. Daily record for water temperature and specific conductance available, December 1985 to September 1996. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07128500

REVISED RECORDS.--WSP 1241: 1927(M); WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 3,878.04 ft above NGVD of 1929. See WSP 1731 for history of changes prior to Oct. 1, 1955. Oct. 1, 1955 to July 11, 1966, at datum 6.00 ft higher. Supplementary water-stage recorder at site 1.6 mi downstream at different datum July 12 to Nov. 17, 1966. Nov. 18, 1966 to May 4, 1982, at datum 3.1 ft higher. May 5, 1982 to July 17, 2002, at site on right bank at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flows regulated to some extent by Trinidad Lake (station 07124400) about 141 mi upstream since January 1975. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 1, 1904, is the greatest since at least 1860, discharge unknown.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	1.7	1.3	3.2	3.6	9.4	49	49	7.4	35	1.0	0.20
2	5.7	1.6	1.3	e3.2	3.5	7.1	42	42	25	14	1.6	0.19
3	5.0	1.4	1.4	e3.2	3.8	6.5	35	35	13	8.6	1.7	0.16
4	4.2	1.3	2.0	4.2	3.5	5.7	45	29	21	4.6	0.35	0.17
5	3.3	1.3	2.2	4.8	3.4	4.7	135	24	16	2.7	47	0.16
6	2.9	1.2	2.1	8.3	3.3	4.5	104	19	14	2.1	e65	0.16
7	2.6	1.2	2.3	8.7	e3.2	4.0	78	17	34	1.9	e15	7.6
8	2.4	1.2	2.5	8.1	e3.0	5.4	69	15	107	1.4	e4.0	1.8
9	2.2	1.3	2.3	6.4	3.1	4.1	53	15	75	1.1	1.5	89
10	2.0	1.3	2.4	e6.2	3.2	5.0	44	11	65	0.90	147	101
11	1.8	1.2	3.0	e6.0	3.5	4.6	38	9.1	59	0.74	154	43
12	1.7	1.3	2.9	e5.6	3.6	4.7	33	8.5	43	0.61	60	26
13	1.5	1.2	2.4	5.4	3.8	4.6	28	9.4	42	0.66	21	14
14	1.4	1.3	2.3	4.8	4.0	3.9	24	7.0	53	1.1	10	8.1
15	1.4	1.3	2.4	4.1	4.1	4.1	21	7.2	42	1.4	5.3	4.6
16	1.3	1.3	2.2	3.5	3.9	13	41	10	23	1.4	1.7	3.6
17	1.3	1.3	2.1	4.2	4.0	4.9	54	9.6	17	0.44	0.62	e2.5
18	1.3	1.2	2.0	3.7	4.1	10	36	4.7	11	0.43	0.32	e2.0
19	1.3	1.2	1.8	3.8	4.7	6.9	36	3.6	166	0.44	0.29	e1.5
20	1.3	1.2	1.7	3.8	4.8	14	40	2.9	72	0.47	0.26	e1.0
21	1.3	1.2	1.8	3.5	4.1	18	36	2.6	50	0.51	0.24	e0.90
22	1.4	1.3	1.8	3.3	3.9	18	30	2.2	31	0.42	0.23	e0.80
23	1.4	1.3	2.1	3.1	4.2	18	24	2.1	29	0.38	0.20	e0.75
24	1.3	1.3	e2.1	3.4	e4.0	17	90	2.2	31	0.37	0.18	e0.60
25	1.3	1.3	e2.0	3.2	3.8	20	298	24	15	0.34	0.16	e0.55
26	1.7	1.3	e2.0	4.2	3.7	64	157	52	14	0.33	0.15	e0.47
27	1.8	1.3	e2.0	7.6	4.8	146	98	31	11	0.34	0.15	e0.54
28	1.4	1.3	3.2	6.9	7.0	162	77	17	7.7	0.35	0.14	e0.68
29	1.4	1.3	3.0	5.5	---	166	67	30	5.4	0.41	0.16	e0.68
30	1.5	1.3	2.8	4.4	---	106	59	18	503	0.35	0.19	e0.61
31	1.4	---	e3.0	4.0	---	75	---	11	---	0.34	0.20	---
TOTAL	66.6	38.9	68.4	150.3	109.6	937.1	1,941	520.1	1,602.5	84.13	539.64	313.32
MEAN	2.15	1.30	2.21	4.85	3.91	30.2	64.7	16.8	53.4	2.71	17.4	10.4
MAX	6.1	1.7	3.2	8.7	7.0	166	298	52	503	35	154	101
MIN	1.3	1.2	1.3	3.1	3.0	3.9	21	2.1	5.4	0.33	0.14	0.16
AC-FT	132	77	136	298	217	1,860	3,850	1,030	3,180	167	1,070	621

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

	1978	1979	2000	2001	2002	2003	1978	1979	2000	2001	2002	2003
MEAN	36.4	36.9	29.3	31.4	31.5	42.3	80.1	128	97.8	69.4	123	48.0
MAX	125	88.4	57.5	57.4	61.9	169	418	614	724	263	761	224
(WY)	(1999)	(1999)	(1998)	(1998)	(1998)	(1998)	(1983)	(1987)	(1983)	(1981)	(1981)	(1981)
MIN	1.58	1.30	2.21	4.72	3.91	5.26	3.53	2.15	8.76	2.71	3.76	3.14
(WY)	(1978)	(2003)	(2003)	(1979)	(2003)	(1978)	(1978)	(2002)	(1990)	(2003)	(1980)	(1978)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1978 - 2003

ANNUAL TOTAL	6,717.46	6,371.59	
ANNUAL MEAN	18.4	17.5	a63.1
HIGHEST ANNUAL MEAN			166
LOWEST ANNUAL MEAN			17.5
HIGHEST DAILY MEAN	786	Sep 11	503
LOWEST DAILY MEAN	0.32	Aug 17	0.14
ANNUAL SEVEN-DAY MINIMUM	0.33	Aug 21	0.16
MAXIMUM PEAK FLOW			1,830
MAXIMUM PEAK STAGE			8.46
ANNUAL RUNOFF (AC-FT)	13,320	12,640	f10.09
10 PERCENT EXCEEDS	27	49	117
50 PERCENT EXCEEDS	2.7	3.6	29
90 PERCENT EXCEEDS	0.51	0.49	4.0

e Estimated.

a Average discharge for 37 years (water years 1923-31, 1949-76), 116 ft³/s; 84,040 acre-ft/yr, prior to completion of Trinidad Reservoir.

b Maximum daily discharge for period of record, 46,300 ft³/s, May 20, 1955.

c No flow at times in 1924-25, 1927, 1949, and 1974.

d From rating curve extended above 4,460 ft³/s; maximum discharge for period of record, 70,000 ft³/s, May 20, 1955, from rating curve extended above 38,000 ft³/s, gage height, 15.00 ft, datum then in use.

f Maximum gage height for statistical period, 12.00 ft, May 3, 1999; maximum gage height for period of record, 15.94 ft, Jun 18, 1965, datum then in use.

07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--October 2002 to September 2003 (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07128500

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.32 inches, June 19, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.32 inches, June 19.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.46	---	---	---	---	---	0.00	0.00	0.09	0.00	0.00	0.00
2	0.01	---	---	---	---	---	0.00	0.00	0.10	0.00	0.00	0.00
3	0.01	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.12
4	0.00	---	---	---	---	---	0.00	0.00	0.10	0.00	0.00	0.00
5	0.00	---	---	---	---	---	0.00	0.17	0.42	0.00	0.00	0.00
6	0.00	---	---	---	---	---	0.06	0.00	0.05	0.00	0.00	0.11
7	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.57
8	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.02	0.01
9	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.10
10	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.13
11	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	0.00	---	---	---	---	---	0.00	0.00	1.24	0.02	0.00	0.22
14	0.00	---	---	---	---	---	0.01	0.00	0.00	0.00	0.00	0.00
15	0.00	---	---	---	---	---	0.18	1.02	0.00	0.00	0.00	0.00
16	0.00	---	---	---	---	---	0.10	0.11	0.81	0.00	0.00	0.00
17	0.00	---	---	---	---	---	0.00	0.00	0.01	0.00	0.00	0.00
18	0.00	---	---	---	---	---	0.00	0.00	0.26	0.00	0.04	0.00
19	0.00	---	---	---	---	---	0.33	0.00	1.32	0.07	0.00	0.00
20	0.00	---	---	---	---	---	0.00	0.00	0.00	0.03	0.00	0.00
21	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.13	0.00
22	0.13	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	---	---	---	---	---	0.01	0.03	0.00	0.00	0.00	0.00
24	0.01	---	---	---	---	---	0.00	0.20	0.00	0.00	0.00	0.00
25	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	0.51	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	0.03	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
29	0.01	---	---	---	---	---	0.00	0.00	0.00	0.00	0.04	0.00
30	0.00	---	---	---	---	---	0.00	0.56	0.00	0.00	0.31	0.00
31	0.00	---	---	---	---	---	---	0.00	---	0.00	0.00	---
TOTAL	1.17	---	---	---	---	---	0.69	2.09	4.43	0.12	0.54	1.26
MAX	0.51	---	---	---	---	---	0.33	1.02	1.32	0.07	0.31	0.57

07130000 JOHN MARTIN RESERVOIR AT CADDOA, CO

LOCATION.--Lat 38°04'05", long 102°56'13", in NE¹/₄NW¹/₄ sec.8, T.23 S., R.49 W., Bent County, Hydrologic Unit 11020009, in north parapet of dam on Arkansas River at Caddoa, 3.2 mi southeast of Hasty, and 58 mi upstream from Colorado-Kansas State Line.

DRAINAGE AREA.--18,915 mi², of which 785 mi² is probably noncontributing.

PERIOD OF RECORD.--December 1942 to current year. Month-end contents only prior to November 1943, published in WSP 1311. Water-quality data available, June to October 1988 (profile and chemical data at transects along length of reservoir). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07130000

GAGE.--Water-stage recorder with satellite telemetry for elevations above 3,784 ft (48 acre-feet) and nonrecording gage read once daily for those below. Datum of gage is 3,760.00 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers); gage readings have been reduced to elevations above NGVD of 1929.

REMARKS.--Reservoir is formed by concrete and earthfill dam. Construction started fall of 1939; storage began while dam was under construction in Jan. 1943; record of contents began Dec. 31, 1942; dam completed October 1948. All figures represent total contents from area-capacity table effective Nov. 1, 1999, and based on a 1999 resurvey by the U.S. Army Corp of Engineers. Total capacity at top of dam, 793,400 acre-ft at elevation 3,880.00 ft. Maximum flood control storage at top of spillway gates, 603,500 acre-ft at elevation 3,870.00 ft. Maximum recreation and conservation storage, 344,000 acre-ft at elevation 3,851.87 ft. Capacity at spillway crest, 222,400 acre-ft at elevation 3,840.00 ft. Elevation of no contents, 3,780.00 ft. No dead storage. Reservoir is used for flood control, storage for irrigation, recreation, and in the administration of terms of the Arkansas River Compact between the states of Colorado and Kansas.

COOPERATION.--Capacity tables provided by U.S. Army Corps of Engineers. Records prior to 1979 were furnished by the U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 451,000 acre-ft, May 10, 1999, elevation, 3,860.57 ft; no contents at times many years.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 45,400 acre-ft, Apr. 16, elevation, 3,809.78 ft; minimum contents, 20,300 acre-ft, Sept. 30, elevation, 3,801.10 ft.

Reservoir capacity table
(elevation, in feet, and contents, in acre-feet, effective Nov. 1, 1999)

Elevation	Contents	Elevation	Contents
3,785.0	235	3,820.0	86,400
3,790.0	2,410	3,830.0	144,000
3,795.0	8,300	3,840.0	222,000
3,800.0	17,800	3,850.0	323,000
3,810.0	46,200	3,860.0	448,000

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22,200	21,500	23,800	29,000	34,600	39,000	43,700	40,800	29,600	28,300	24,500	22,000
2	22,200	21,600	23,900	29,300	34,600	39,200	43,800	40,600	29,000	28,000	24,400	22,000
3	22,200	21,600	24,100	29,500	34,900	39,400	43,900	40,600	28,400	27,900	24,400	22,100
4	22,200	21,700	24,300	29,700	35,100	39,500	43,900	40,200	27,800	27,900	24,300	22,000
5	22,200	21,700	24,600	29,900	35,200	39,700	44,100	39,900	28,000	27,600	24,100	21,900
6	22,100	21,700	24,700	30,200	35,400	39,900	44,300	39,100	28,300	27,500	24,100	21,900
7	22,100	21,800	24,900	30,300	35,500	39,900	44,500	38,600	28,800	27,300	23,900	22,100
8	22,100	21,900	25,100	30,500	35,600	39,900	44,600	38,100	28,800	27,200	23,800	22,000
9	22,000	21,900	25,200	30,700	35,800	40,200	44,800	37,300	28,600	27,000	23,700	22,200
10	22,000	21,900	25,400	30,800	e35,900	40,300	44,900	36,800	28,500	26,900	23,700	22,100
11	22,000	21,900	25,600	30,900	36,000	40,500	44,900	36,200	28,600	26,700	23,800	22,000
12	21,900	22,000	25,700	31,200	36,200	40,700	44,900	35,700	28,900	26,700	23,800	21,900
13	21,900	22,000	25,900	31,300	36,400	40,800	44,900	35,100	29,500	26,600	23,600	21,900
14	21,800	22,000	26,100	31,500	36,600	41,000	44,900	34,600	29,900	26,600	23,400	21,800
15	21,800	22,100	26,300	31,700	36,700	41,100	45,100	34,100	30,300	26,400	23,200	21,900
16	21,800	22,100	26,400	e31,900	36,900	41,200	44,000	33,600	30,300	26,200	23,100	21,800
17	21,700	22,300	26,600	32,000	37,100	41,400	43,700	33,500	29,900	26,100	23,100	21,900
18	21,700	22,200	26,800	32,200	37,300	41,500	43,400	33,500	29,300	26,000	22,800	21,700
19	21,700	22,300	26,900	32,300	37,500	41,800	43,300	33,400	29,000	25,900	22,800	21,600
20	21,700	22,400	27,100	32,400	37,700	41,800	43,000	33,100	28,600	25,900	22,800	21,700
21	e21,700	22,500	27,200	32,600	37,900	42,000	42,600	33,100	28,600	25,800	22,800	21,700
22	21,600	22,700	27,300	32,700	37,900	42,100	42,300	33,200	28,700	25,500	22,600	21,600
23	21,700	22,600	27,500	32,800	38,100	42,100	42,300	33,200	28,400	25,500	22,400	21,500
24	e21,700	22,900	27,600	32,900	38,100	42,200	41,700	33,100	28,200	25,300	22,300	21,400
25	21,700	23,000	27,600	33,100	38,200	42,300	41,800	33,800	27,900	25,200	22,300	21,200
26	21,700	23,100	27,700	e33,300	38,400	42,400	41,900	33,900	27,800	25,000	22,200	21,000
27	21,800	23,200	27,800	e33,500	38,500	42,600	41,800	33,500	28,000	24,900	22,200	20,900
28	21,700	23,400	27,900	e33,700	38,800	42,900	41,500	32,700	28,300	24,900	22,100	20,700
29	21,700	23,500	28,100	e33,900	---	43,200	41,300	31,800	28,200	24,800	22,000	20,500
30	21,500	23,700	28,300	34,100	---	43,400	41,100	30,800	28,500	24,700	22,100	20,400
31	21,400	---	28,600	34,400	---	e43,500	---	30,100	---	24,700	22,000	---
MAX	22,200	23,700	28,600	34,400	38,800	43,500	45,100	40,800	30,300	28,300	24,500	22,200
MIN	21,400	21,500	23,800	29,000	34,600	39,000	41,100	30,100	27,800	24,700	22,000	20,400

e Estimated.

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO

LOCATION.--Lat 38°03'59", long 102°55'55", in NW¼NE¼ sec.8, T.23 S., R.49 W., Bent County, Hydrologic Unit 11020009, on right bank 0.2 mi downstream from John Martin Dam, 2.6 mi upstream from Caddoa Creek, and 3.5 mi southeast of Hasty.

DRAINAGE AREA.--18,915 mi², of which 785 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1938 to current year. Published as "at Caddoa" prior to October 1947. Statistical summary computed for 1949 to current year, subsequent to completion of John Martin Reservoir. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07130500

REVISED RECORDS.--WSP 1241: 1942(M). WSP 1341: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 3,737.40 ft above NGVD of 1929. Prior to Feb. 22, 1940, at site 3 mi upstream at datum 22.83 ft higher. Feb. 22, 1940 to Feb. 4, 1943, at site 700 ft upstream at datum 3.64 ft higher. Feb. 5, 1943 to Apr. 8, 1975, at site 1.5 mi downstream at datum approximately 27.5 ft lower.

REMARKS.--No estimated daily discharges. Records good except for those below 3 ft³/s, which are fair. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow completely regulated by John Martin Reservoir (station 07130000) 0.2 mi upstream since Oct. 1948.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	2.2	1.5	1.3	1.4	1.2	1.3	184	541	862	199	25
2	25	2.1	1.5	1.3	1.4	1.2	1.2	144	656	650	77	25
3	25	2.1	1.5	1.3	1.4	1.2	1.2	111	815	383	77	25
4	20	2.1	1.5	1.3	1.4	1.1	1.3	110	815	319	77	26
5	16	2.0	1.4	1.3	1.3	1.2	1.2	242	787	282	76	25
6	14	1.9	1.4	1.3	1.2	1.2	1.3	354	790	252	86	24
7	14	1.7	1.4	1.3	1.3	1.2	1.2	311	792	236	94	24
8	24	1.7	1.4	1.4	1.3	1.2	1.3	271	791	210	68	31
9	27	1.7	1.4	1.2	1.3	1.1	1.3	285	549	173	44	38
10	19	1.6	1.4	1.2	1.3	1.1	1.3	295	454	118	44	69
11	18	1.6	1.4	1.2	1.3	1.2	18	295	459	79	58	102
12	18	1.6	1.4	1.2	1.3	1.2	31	294	461	69	99	65
13	17	1.6	1.4	1.2	1.4	1.1	31	293	462	69	124	32
14	15	1.6	1.4	1.2	1.4	1.5	54	293	464	68	102	34
15	14	1.6	1.4	1.2	1.4	1.4	193	296	467	67	62	27
16	13	1.6	1.4	1.2	1.4	1.3	243	292	618	66	42	21
17	16	1.6	1.4	1.2	1.4	1.3	181	96	780	57	41	20
18	21	1.6	1.4	1.2	1.3	1.3	167	24	860	43	38	21
19	20	1.5	1.3	1.2	1.2	1.4	177	31	910	37	33	21
20	17	1.5	1.4	1.2	1.2	1.3	176	45	634	38	33	22
21	16	1.5	1.4	1.2	1.2	1.3	176	45	460	43	32	21
22	15	1.6	1.3	1.2	1.2	1.3	175	35	462	49	32	50
23	10	1.5	1.3	1.2	1.1	1.3	175	25	516	49	31	80
24	14	1.4	1.4	1.2	1.1	1.3	172	31	575	50	31	82
25	22	1.5	1.3	1.2	1.1	1.3	173	31	574	50	26	83
26	30	1.5	1.2	1.2	1.2	1.3	174	32	503	50	18	87
27	30	1.5	1.2	1.2	1.2	1.2	173	294	446	50	19	91
28	62	1.5	1.3	1.3	1.2	1.1	174	494	447	60	22	91
29	84	1.5	1.3	1.4	---	1.2	174	527	446	72	25	87
30	84	1.5	1.4	1.4	---	1.2	180	543	652	74	25	49
31	45	---	1.4	1.4	---	1.2	---	541	---	74	25	---
TOTAL	795	49.9	42.8	38.8	35.9	38.4	3,029.6	6,864	18,186	4,699	1,760	1,398
MEAN	25.6	1.66	1.38	1.25	1.28	1.24	101	221	606	152	56.8	46.6
MAX	84	2.2	1.5	1.4	1.4	1.5	243	543	910	862	199	102
MIN	10	1.4	1.2	1.2	1.1	1.1	1.2	24	446	37	18	20
AC-FT	1,580	99	85	77	71	76	6,010	13,610	36,070	9,320	3,490	2,770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)

MEAN	197	25.6	16.6	19.4	22.9	53.0	419	476	596	695	557	320
MAX	565	217	317	725	477	498	1,174	2,576	2,665	2,895	2,127	1,007
(WY)	(1949)	(1966)	(1998)	(1998)	(1966)	(1998)	(1987)	(1987)	(1987)	(1995)	(1965)	(1984)
MIN	11.4	0.85	0.64	0.62	0.75	1.06	2.43	34.2	52.0	86.1	22.6	6.69
(WY)	(1975)	(1977)	(1977)	(1977)	(1977)	(1980)	(1973)	(1975)	(1954)	(1963)	(1960)	(1974)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1949 - 2003

ANNUAL TOTAL	39,543.6		36,937.4			
ANNUAL MEAN	108		101		a285	
HIGHEST ANNUAL MEAN					745 1987	
LOWEST ANNUAL MEAN					82.5 1964	
HIGHEST DAILY MEAN	911	Jun 18	910	Jun 19	3,830	Aug 25, 1965
LOWEST DAILY MEAN	1.1	Feb 9	1.1	Feb 23	b0.36	Dec 25, 1979
ANNUAL SEVEN-DAY MINIMUM	1.2	Jan 24	1.2	Feb 19	0.36	Dec 25, 1979
MAXIMUM PEAK FLOW			955 Jun 19		c4,100 Aug 25, 1965	
MAXIMUM PEAK STAGE			3.42 Jun 19		d5.75 Aug 25, 1965	
ANNUAL RUNOFF (AC-FT)	78,430		73,270		206,100	
10 PERCENT EXCEEDS	495		408		873	
50 PERCENT EXCEEDS	24		20		57	
90 PERCENT EXCEEDS	1.3		1.2		2.0	

a Average discharge for 5 years (water years 1939-43), 628 ft³/s; 455,000 acre-ft/yr, prior to start of storage in John Martin Reservoir.

b Also occurred Dec 26, 1979 to Jan 3, 1980; no flow on many days during 1945-47. Minimum daily discharge prior to start of storage in John Martin Reservoir, 5 ft³/s, Jul 16, 1939.

c Maximum discharge for period of record, 40,000 ft³/s, Apr 24, 1942, from rating curve extended above 12,000 ft³/s on basis of flow-over-dam and critical-depth measurement of peak flow, gage height, 10.46 ft, site and datum then in use.

d Maximum gage height for period of record, 10.62 ft, Jun 18, 1965 (backwater from Caddoa Creek), site and datum then in use.

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1942 to August 1943, October 1945 to July 1949, January 1951 to September 1981, December 1985 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07130500

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to September 1981 (observer once-daily measurements), December 1985 to current year.

WATER TEMPERATURE: January 1951 to September 1981 (observer once-daily measurements), December 1985 to current year.

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

REMARKS.--Daily specific-conductance records are fair. Daily water-temperature records are good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (1985 to current year).--

SPECIFIC CONDUCTANCE: Maximum, 3,540 microsiemens/cm, Feb. 26, 1986; minimum, 1,060 microsiemens/cm, on many days in 1995.

WATER TEMPERATURE: Maximum, 28.1°C, June 11, 2001; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,880 microsiemens/cm, Apr. 14; minimum, 1,550 microsiemens/cm, July 10-11.

WATER TEMPERATURE: Maximum, 26.6°C, July 20, Aug. 10; minimum, 0.6°C, Feb. 25.

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

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2,540	2,390	2,500	2,730	2,700	2,720	2,560	2,520	2,550	2,600	2,550	2,570
2	2,500	2,480	2,490	2,740	2,720	2,720	2,570	2,540	2,550	2,580	2,550	2,570
3	2,500	2,470	2,490	2,740	2,710	2,720	2,560	2,510	2,540	2,600	2,550	2,570
4	2,500	2,480	2,490	2,730	2,710	2,720	2,530	2,490	2,510	2,590	2,550	2,570
5	2,520	2,490	2,500	2,740	2,700	2,710	2,610	2,500	2,540	2,580	2,510	2,550
6	2,540	2,500	2,510	2,760	2,710	2,730	2,600	2,550	2,570	2,580	2,510	2,550
7	2,560	2,520	2,540	2,720	2,690	2,710	2,610	2,560	2,570	2,560	2,500	2,540
8	2,600	2,550	2,570	2,700	2,660	2,680	2,620	2,590	2,600	2,580	2,500	2,540
9	2,600	2,570	2,590	2,680	2,640	2,660	2,620	2,590	2,600	2,590	2,530	2,560
10	2,610	2,580	2,600	2,680	2,640	2,660	2,620	2,570	2,600	2,590	2,540	2,570
11	2,610	2,580	2,600	2,710	2,620	2,640	2,620	2,580	2,600	2,600	2,560	2,580
12	2,600	2,560	2,590	2,650	2,620	2,630	2,610	2,590	2,600	2,600	2,550	2,580
13	2,630	2,590	2,610	2,650	2,620	2,630	2,620	2,570	2,600	2,610	2,560	2,580
14	2,640	2,610	2,620	2,640	2,610	2,620	2,610	2,560	2,600	2,580	2,550	2,570
15	2,640	2,620	2,630	2,620	2,600	2,610	2,620	2,580	2,600	2,590	2,550	2,570
16	2,660	2,620	2,640	2,630	2,590	2,610	2,620	2,570	2,600	2,580	2,550	2,570
17	2,660	2,640	2,650	2,620	2,590	2,610	2,610	2,590	2,600	2,580	2,530	2,570
18	2,670	2,640	2,650	2,620	2,590	2,610	2,610	2,580	2,600	2,580	2,550	2,560
19	2,670	2,640	2,660	2,630	2,590	2,610	2,610	2,580	2,590	2,590	2,550	2,570
20	2,680	2,640	2,660	2,620	2,580	2,600	2,610	2,560	2,580	2,590	2,560	2,570
21	2,670	2,650	2,660	2,620	2,580	2,600	2,620	2,570	2,590	2,570	2,540	2,560
22	2,680	2,660	2,670	2,630	2,580	2,600	2,630	2,580	2,600	2,590	2,560	2,580
23	2,710	2,670	2,690	2,600	2,570	2,590	2,610	2,550	2,590	2,600	2,570	2,590
24	2,730	2,700	2,720	2,600	2,580	2,590	2,590	2,560	2,570	2,600	2,560	2,580
25	2,750	2,720	2,730	2,600	2,560	2,580	2,630	2,590	2,610	2,580	2,530	2,560
26	2,750	2,670	2,740	2,620	2,540	2,560	2,670	2,600	2,630	2,560	2,520	2,530
27	2,750	2,690	2,740	2,580	2,530	2,560	2,670	2,580	2,640	2,590	2,520	2,550
28	2,760	2,730	2,750	2,580	2,540	2,560	2,630	2,570	2,600	2,560	2,480	2,530
29	2,750	2,680	2,710	2,590	2,550	2,570	2,610	2,560	2,570	2,570	2,480	2,530
30	2,760	2,670	2,700	2,580	2,550	2,560	2,590	2,540	2,560	2,570	2,540	2,550
31	2,760	2,700	2,720	---	---	---	2,590	2,530	2,560	2,570	2,540	2,560
MONTH	2,760	2,390	2,630	2,760	2,530	2,630	2,670	2,490	2,580	2,610	2,480	2,560

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO—Continued

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

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2,600	2,550	2,560	2,500	2,450	2,470	2,520	2,490	2,510	2,850	2,840	2,850
2	2,570	2,530	2,550	2,500	2,470	2,480	2,500	2,470	2,490	2,850	2,830	2,830
3	2,540	2,510	2,530	2,500	2,470	2,490	2,520	2,500	2,510	2,830	2,810	2,820
4	2,560	2,500	2,520	2,490	2,470	2,480	2,520	2,490	2,500	2,820	2,810	2,820
5	2,560	2,520	2,540	2,510	2,470	2,480	2,500	2,480	2,490	2,820	2,810	2,810
6	2,540	2,510	2,520	2,530	2,480	2,500	2,490	2,470	2,480	2,810	2,800	2,810
7	2,570	2,520	2,540	2,550	2,480	2,510	2,480	2,470	2,470	2,820	2,810	2,810
8	2,600	2,520	2,560	2,530	2,490	2,510	2,490	2,450	2,470	2,810	2,800	2,810
9	2,570	2,510	2,540	2,520	2,490	2,510	2,500	2,460	2,480	2,810	2,810	2,810
10	2,570	2,500	2,540	2,540	2,500	2,520	2,490	2,460	2,470	2,810	2,800	2,800
11	2,570	2,480	2,510	2,540	2,500	2,520	2,600	2,450	2,510	2,800	2,800	2,800
12	2,550	2,480	2,520	2,520	2,490	2,510	2,720	2,600	2,680	2,800	2,800	2,800
13	2,530	2,450	2,500	2,510	2,490	2,500	2,810	2,720	2,770	2,800	2,790	2,790
14	2,540	2,490	2,520	2,500	2,470	2,490	2,880	2,810	2,840	2,790	2,790	2,790
15	2,530	2,520	2,520	2,500	2,460	2,480	---	---	---	2,810	2,790	2,790
16	2,550	2,510	2,530	2,490	2,460	2,470	---	---	---	2,800	2,790	2,790
17	2,550	2,520	2,530	2,500	2,470	2,480	---	---	---	2,820	2,800	2,810
18	2,540	2,480	2,510	2,490	2,470	2,480	---	---	---	2,820	2,800	2,810
19	2,510	2,480	2,490	2,470	2,430	2,450	---	---	---	2,820	2,810	2,820
20	2,500	2,480	2,490	2,490	2,460	2,480	---	---	---	2,830	2,820	2,820
21	2,500	2,460	2,480	2,500	2,470	2,480	---	---	---	2,840	2,820	2,830
22	2,490	2,460	2,480	2,520	2,490	2,500	---	---	---	2,850	2,830	2,840
23	2,470	2,440	2,460	2,520	2,490	2,500	---	---	---	2,850	2,840	2,840
24	2,470	2,450	2,460	2,510	2,490	2,510	---	---	---	2,850	2,840	2,850
25	2,520	2,460	2,500	2,520	2,490	2,500	---	---	---	2,850	2,840	2,840
26	2,530	2,450	2,490	2,510	2,500	2,500	---	---	---	2,850	2,840	2,850
27	2,490	2,330	2,440	2,520	2,490	2,510	---	---	---	2,860	2,850	2,850
28	2,460	2,410	2,450	2,530	2,500	2,510	2,850	2,810	2,820	2,860	2,840	2,850
29	---	---	---	2,540	2,510	2,520	2,840	2,820	2,830	2,850	2,830	2,840
30	---	---	---	2,540	2,510	2,530	2,850	2,840	2,840	2,830	2,800	2,820
31	---	---	---	---	---	---	---	---	---	2,830	2,780	2,810
MONTH	2,600	2,330	2,510	---	---	---	---	---	---	2,860	2,780	2,820
	JUNE			JULY			AUGUST			SEPTEMBER		
1	2,840	2,750	2,770	1,750	1,730	1,740	1,660	1,640	1,650	1,770	1,750	1,760
2	2,840	2,830	2,840	1,740	1,730	1,730	1,670	1,650	1,660	1,770	1,760	1,770
3	2,840	2,800	2,820	1,750	1,730	1,740	1,670	1,660	1,660	1,780	1,760	1,770
4	2,830	2,790	2,810	1,750	1,610	1,640	1,670	1,660	1,660	1,790	1,770	1,780
5	2,800	2,690	2,750	1,630	1,600	1,620	1,670	1,660	1,660	1,790	1,770	1,780
6	2,720	2,650	2,690	1,600	1,590	1,590	1,670	1,660	1,660	1,790	1,780	1,790
7	2,730	2,560	2,630	1,600	1,580	1,590	1,670	1,660	1,670	1,790	1,780	1,780
8	2,640	2,580	2,610	1,600	1,560	1,580	1,680	1,660	1,670	1,790	1,780	1,780
9	2,590	2,530	2,550	1,580	1,560	1,570	1,680	1,670	1,680	1,790	1,740	1,770
10	2,560	2,490	2,530	1,570	1,550	1,550	1,680	1,670	1,680	1,760	1,720	1,750
11	2,490	2,400	2,420	1,570	1,550	1,560	1,680	1,650	1,670	1,730	1,700	1,710
12	2,420	2,320	2,370	1,580	1,560	1,570	1,660	1,630	1,640	1,700	1,680	1,690
13	2,350	2,300	2,330	1,590	1,580	1,580	1,630	1,600	1,620	1,690	1,670	1,680
14	2,310	2,270	2,290	1,600	1,580	1,590	1,600	1,560	1,590	1,680	1,660	1,670
15	2,270	2,260	2,260	1,600	1,590	1,590	1,580	1,560	1,570	1,680	1,660	1,670
16	2,270	2,260	2,260	1,610	1,590	1,600	1,600	1,570	1,580	1,690	1,660	1,680
17	2,260	2,230	2,240	1,610	1,600	1,600	1,610	1,590	1,600	1,690	1,670	1,680
18	2,240	2,100	2,170	1,620	1,610	1,610	1,630	1,600	1,610	1,680	1,670	1,680
19	2,190	2,130	2,160	1,630	1,610	1,620	1,660	1,620	1,640	1,690	1,660	1,670
20	2,190	2,120	2,160	1,630	1,620	1,630	1,680	1,650	1,670	1,680	1,660	1,670
21	2,120	1,970	2,040	1,640	1,630	1,630	1,700	1,670	1,680	1,680	1,660	1,670
22	1,970	1,840	1,880	1,640	1,630	1,630	1,710	1,690	1,700	1,680	1,660	1,670
23	1,850	1,830	1,840	1,640	1,620	1,630	1,720	1,710	1,710	1,680	1,660	1,670
24	1,850	1,720	1,780	1,640	1,620	1,630	1,730	1,710	1,720	1,670	1,660	1,670
25	1,750	1,730	1,740	1,640	1,620	1,630	1,740	1,720	1,730	1,680	1,670	1,670
26	1,760	1,740	1,750	1,640	1,630	1,630	1,750	1,730	1,740	1,680	1,660	1,670
27	1,770	1,760	1,760	1,640	1,630	1,640	1,760	1,730	1,750	1,680	1,660	1,670
28	1,770	1,760	1,760	1,640	1,640	1,640	1,760	1,740	1,750	1,680	1,660	1,670
29	1,770	1,750	1,760	1,650	1,640	1,640	1,760	1,750	1,750	1,670	1,650	1,660
30	1,760	1,740	1,750	1,640	1,640	1,640	1,760	1,750	1,750	1,670	1,650	1,650
31	---	---	---	1,650	1,640	1,640	1,770	1,750	1,760	---	---	---
MONTH	2,840	1,720	2,260	1,750	1,550	1,620	1,770	1,560	1,670	1,790	1,650	1,710

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, 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	19.0	16.4	17.3	5.7	4.7	5.3	4.9	2.1	3.6	3.4	2.3	2.8
2	16.8	15.5	16.1	6.7	5.0	5.9	5.4	2.3	3.9	3.9	2.4	3.0
3	17.2	15.1	15.8	8.5	5.3	6.6	4.6	1.8	3.3	3.9	2.4	3.4
4	18.0	14.6	15.6	8.4	5.1	6.6	4.0	1.3	2.5	4.3	3.1	3.8
5	17.8	14.2	15.4	8.6	5.3	6.7	5.0	2.5	3.8	4.4	2.6	3.6
6	17.1	13.9	15.0	9.9	4.9	6.8	5.2	2.4	3.9	5.2	3.6	4.4
7	17.3	13.5	14.9	10.9	5.0	7.5	4.7	2.1	3.6	5.6	2.9	4.5
8	16.0	13.6	14.6	9.8	6.2	7.7	4.7	2.8	3.9	6.1	3.0	4.4
9	16.4	14.3	14.9	11.2	7.1	8.6	4.9	2.9	3.8	5.2	3.7	4.5
10	16.6	14.1	14.8	10.9	7.1	8.6	5.0	1.8	3.3	4.2	2.7	3.5
11	17.5	13.9	15.1	9.2	6.0	7.5	4.2	2.3	3.5	3.8	2.0	3.1
12	15.7	13.8	14.4	9.4	5.5	7.1	4.2	2.7	3.5	4.7	2.6	3.6
13	15.5	13.1	14.0	8.4	5.2	6.8	4.9	1.9	3.5	5.1	2.8	4.0
14	15.3	12.7	13.7	8.8	6.5	7.5	6.6	2.1	3.8	4.5	2.8	3.9
15	15.0	12.2	13.3	8.6	6.7	7.4	4.8	2.1	3.6	4.4	2.7	3.7
16	14.9	12.1	13.2	8.7	5.1	6.7	4.3	2.2	3.8	3.3	0.8	2.4
17	14.9	11.6	12.8	8.8	5.1	6.8	5.0	3.3	4.2	4.3	2.8	3.4
18	14.3	11.7	12.8	9.5	5.7	7.1	5.5	3.5	4.6	3.5	1.0	2.4
19	13.8	11.8	12.4	9.5	4.7	6.5	4.3	2.4	3.5	5.4	1.1	3.2
20	14.7	11.3	12.4	9.0	4.8	6.6	4.5	1.2	2.8	5.2	2.2	3.7
21	13.6	11.1	12.1	9.4	5.0	6.9	4.3	2.3	3.2	3.8	1.1	2.9
22	13.7	11.0	12.0	11.2	5.4	7.6	4.2	1.9	3.0	2.6	1.7	2.2
23	11.0	9.8	10.4	7.3	5.5	6.5	3.0	1.3	2.2	2.5	1.4	1.9
24	10.1	9.5	9.7	6.6	4.9	5.6	3.4	1.9	2.6	3.2	1.5	2.3
25	11.0	9.4	9.9	4.9	3.5	4.3	3.0	1.2	2.1	4.1	2.0	2.8
26	10.8	9.7	10.1	4.1	2.1	3.1	2.4	0.7	1.8	4.4	2.0	3.1
27	10.9	9.8	10.1	5.1	2.1	3.4	2.2	0.7	1.4	4.8	3.5	4.0
28	10.4	9.5	9.8	5.4	1.6	3.3	3.0	1.0	2.0	5.3	3.4	4.4
29	9.7	8.1	9.2	5.7	2.8	4.1	3.3	1.6	2.5	6.0	2.3	4.6
30	8.1	7.2	7.7	6.3	2.8	4.3	4.0	2.2	2.9	5.3	3.3	4.3
31	7.2	5.5	6.7	---	---	---	3.4	1.6	2.7	6.4	3.0	4.7
MONTH	19.0	5.5	12.8	11.2	1.6	6.3	6.6	0.7	3.2	6.4	0.8	3.5
	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.9	4.4	5.8	7.6	3.4	5.2	19.5	10.0	14.0	14.7	13.0	13.8
2	7.4	4.9	5.8	7.8	4.5	5.9	16.2	11.5	13.6	14.8	13.4	14.0
3	6.0	3.6	4.6	7.6	3.7	5.9	15.9	10.3	12.9	15.0	13.7	14.2
4	5.6	2.7	4.0	6.8	2.9	4.6	18.4	11.0	13.7	15.3	13.7	14.5
5	5.1	3.5	4.3	6.1	1.1	3.4	12.8	10.5	11.6	15.3	14.1	14.7
6	4.7	2.2	3.4	7.6	2.8	5.0	12.0	8.8	10.3	15.3	14.4	14.7
7	4.1	1.7	2.7	11.1	4.1	7.1	11.0	9.3	10.2	15.6	14.3	14.9
8	3.8	1.5	2.7	13.1	5.3	7.7	16.2	8.4	11.7	16.2	14.9	15.4
9	4.1	2.2	2.9	8.4	5.6	7.0	18.3	9.2	13.1	16.0	15.0	15.4
10	4.8	2.2	3.4	9.7	5.5	7.5	17.1	10.5	13.8	15.8	15.1	15.4
11	4.8	2.0	3.5	13.8	6.0	9.4	14.9	10.9	12.7	15.9	14.9	15.3
12	5.8	2.2	4.1	12.2	7.0	9.4	12.5	10.1	11.2	15.6	14.5	14.9
13	5.6	3.6	4.7	13.7	7.6	10.6	12.8	10.0	11.2	15.3	14.3	14.8
14	6.2	3.7	5.0	15.1	8.4	11.1	12.0	10.1	11.0	16.1	14.5	15.2
15	5.4	4.4	4.9	16.1	8.5	11.8	13.5	10.0	11.4	16.1	14.8	15.3
16	6.6	3.6	5.0	14.6	9.8	12.0	13.5	12.2	12.6	16.3	15.3	15.7
17	8.8	4.4	6.4	13.2	9.6	11.3	13.8	12.3	12.9	18.8	15.5	16.8
18	6.7	5.5	6.0	12.4	10.2	11.4	14.0	12.3	13.0	18.5	16.1	17.2
19	8.1	5.0	6.1	11.2	8.3	9.6	12.7	12.1	12.4	18.0	16.1	16.8
20	9.5	4.8	6.8	10.4	7.4	8.8	13.1	11.8	12.4	18.2	16.1	16.9
21	8.0	4.2	6.2	9.7	8.7	9.1	13.8	12.3	12.9	18.9	15.7	17.2
22	10.3	5.3	7.2	15.0	7.7	10.6	13.6	12.5	12.9	20.1	16.2	17.7
23	6.3	3.8	4.9	16.0	9.0	11.9	13.7	12.6	13.1	19.6	16.6	18.0
24	3.8	1.4	2.4	14.8	10.2	12.4	12.8	12.0	12.3	20.0	17.2	18.2
25	2.8	0.6	1.8	17.5	11.2	13.8	13.3	11.9	12.4	18.8	17.2	17.7
26	4.3	2.0	3.1	16.3	11.0	13.0	13.2	11.7	12.3	19.3	17.0	17.9
27	6.4	2.9	4.3	11.8	9.0	10.8	13.9	11.7	12.8	18.7	17.3	18.0
28	4.5	3.4	3.9	9.8	7.0	8.6	13.6	12.4	12.8	19.1	18.0	18.5
29	---	---	---	11.8	6.7	9.1	14.4	12.4	13.3	20.4	18.2	19.1
30	---	---	---	13.8	7.3	10.4	14.3	13.0	13.5	20.7	18.8	19.5
31	---	---	---	15.9	8.8	10.9	---	---	---	21.1	20.4	20.6
MONTH	10.3	0.6	4.5	17.5	1.1	9.2	19.5	8.4	12.5	21.1	13.0	16.4

07133000 ARKANSAS RIVER AT LAMAR, CO

LOCATION.--Lat 38°06'21", long 102°37'05", in NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec.30, T.22 S., R.46 W., Prowers County, Hydrologic Unit 11020009, on left bank at left downstream end of downstream bridge on U.S. Highways 50 and 287, and 1.3 mi north of courthouse in Lamar.

DRAINAGE AREA.--19,780 mi², of which 950 mi² is probably noncontributing.

PERIOD OF RECORD.--May 1913 to September 1955. April 1959 to current year. Monthly discharge only for some periods, published in WSP 1311. Statistical summary computed for 1949 to current year, subsequent to completion of John Martin Reservoir. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07133000

REVISED RECORDS.--WSP 1341: 1921(M), 1945-46(M), drainage area; WDR CO-86-1: 1985.

GAGE.--Water-stage recorder with satellite telemetry and crest stage gage. Datum of gage is 3,597.39 ft above NGVD of 1929. See WSP 1731 for history of changes prior to Apr. 4, 1959. Apr. 4, 1959 to Mar. 26, 1968, at site 525 ft upstream at datum 2.42 ft higher. Mar. 27, 1968 to Nov. 17, 1982, at site 375 ft downstream at datum 4.00 ft lower. March 18, 1987 to March 6, 2002, at site 75 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow regulated by John Martin Reservoir (station 07130000) 21 mi upstream since Oct. 1948. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.2	5.6	3.6	3.7	3.8	5.5	4.0	79	21	33	28	17
2	3.9	6.0	3.4	3.6	3.9	5.3	4.2	83	19	61	29	14
3	3.6	6.5	3.2	3.6	4.3	5.3	4.1	54	28	18	34	12
4	3.4	7.1	3.2	3.5	3.9	5.4	4.0	43	77	30	33	12
5	3.3	6.9	3.7	3.5	4.0	5.5	3.9	41	49	14	33	11
6	3.3	5.5	3.7	3.4	3.9	5.2	4.0	14	32	14	32	10
7	3.5	5.3	3.7	3.4	e3.9	8.6	4.0	9.6	82	12	40	13
8	4.4	5.0	3.6	3.5	e3.8	11	3.9	8.0	44	13	46	14
9	4.1	4.9	3.3	3.5	4.1	8.6	3.9	6.3	25	25	35	14
10	3.8	4.7	3.0	3.5	4.1	6.2	4.0	6.0	19	37	23	17
11	3.8	4.7	3.4	3.4	3.8	4.2	4.0	5.5	10	39	19	21
12	3.8	4.6	3.1	3.4	4.1	3.8	4.1	5.2	9.6	51	20	38
13	3.6	4.6	3.2	3.4	4.2	3.8	4.3	4.9	9.1	38	49	32
14	4.0	4.5	3.5	3.4	4.2	4.1	13	4.9	9.1	32	66	22
15	4.3	4.4	3.1	3.5	4.7	4.3	33	6.6	7.4	33	47	18
16	4.3	4.2	3.3	3.5	4.9	4.4	64	12	9.0	31	28	15
17	4.5	4.2	3.4	3.5	4.8	4.4	82	18	93	26	17	10
18	4.5	4.2	3.1	3.6	5.0	4.5	54	52	149	26	13	10
19	4.6	4.1	3.1	3.6	4.9	5.0	94	39	171	23	15	10
20	4.6	4.0	3.1	3.7	5.0	4.4	102	31	120	19	13	14
21	4.6	3.7	3.2	3.9	5.1	4.3	99	33	40	22	11	11
22	4.8	3.3	3.1	3.7	4.7	4.2	86	34	89	29	11	8.6
23	4.8	3.3	2.9	3.5	5.0	4.2	90	33	21	31	9.6	16
24	4.5	3.3	3.5	3.9	e4.8	4.3	89	18	16	29	7.8	38
25	4.6	3.3	e3.4	3.9	e5.0	4.2	93	6.1	16	27	9.2	45
26	5.0	3.3	e3.5	3.8	5.9	4.2	92	5.4	49	26	7.9	47
27	6.3	3.2	e3.4	3.8	5.9	4.4	93	5.0	21	27	7.1	52
28	5.2	3.1	3.9	4.3	5.4	4.1	87	5.2	12	30	6.5	55
29	5.8	3.1	3.7	3.9	---	4.0	79	8.8	19	28	8.9	57
30	5.6	3.4	3.7	3.9	---	4.0	77	6.7	11	30	33	55
31	5.5	---	3.7	3.8	---	4.0	---	6.0	---	28	28	---
TOTAL	136.2	134.0	104.7	112.6	127.1	155.4	1,379.4	684.2	1,277.2	882	760.0	708.6
MEAN	4.39	4.47	3.38	3.63	4.54	5.01	46.0	22.1	42.6	28.5	24.5	23.6
MAX	6.3	7.1	3.9	4.3	5.9	11	102	83	171	61	66	57
MIN	3.3	3.1	2.9	3.4	3.8	3.8	3.9	4.9	7.4	12	6.5	8.6
AC-FT	270	266	208	223	252	308	2,740	1,360	2,530	1,750	1,510	1,410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2003, BY WATER YEAR (WY)

	37.8	21.3	29.5	39.7	40.8	41.1	161	198	280	309	217	89.3
MEAN	37.8	21.3	29.5	39.7	40.8	41.1	161	198	280	309	217	89.3
MAX	233	117	350	796	507	516	1,089	2,143	2,087	2,457	1,547	689
(WY)	(1949)	(1998)	(1998)	(1998)	(1966)	(1998)	(1987)	(1987)	(1987)	(1995)	(1965)	(1965)
MIN	0.84	1.81	0.56	0.47	0.72	1.11	5.90	6.41	3.80	10.2	10.9	1.37
(WY)	(1978)	(1978)	(1978)	(1978)	(1965)	(1965)	(1995)	(1963)	(1954)	(1964)	(1974)	(1974)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1949 - 2003

ANNUAL TOTAL	15,406.7	6,461.4	
ANNUAL MEAN	42.2	17.7	a122
HIGHEST ANNUAL MEAN			537
LOWEST ANNUAL MEAN			17.7
HIGHEST DAILY MEAN	599	Aug 29	171
LOWEST DAILY MEAN	2.9	Dec 23	2.9
ANNUAL SEVEN-DAY MINIMUM	3.1	Dec 17	3.1
MAXIMUM PEAK FLOW			215
MAXIMUM PEAK STAGE			5.80
ANNUAL RUNOFF (AC-FT)	30,560	12,820	d73,800
10 PERCENT EXCEEDS	76	48	f16.48
50 PERCENT EXCEEDS	7.9	5.4	88,310
90 PERCENT EXCEEDS	3.6	3.4	410
			23
			4.2

e Estimated.

a Average discharge for 30 years (water years 1914-43), 298 ft³/s, 215,900 acre-ft/yr, prior to and during construction of John Martin Dam.

b Maximum daily discharge for period of record, 87,300 ft³/s, Jun 5, 1921.

c Also minimum daily discharge for period of record; also occurred at times in 1913-15.

d From current-meter and timed-drift measurement of peak flow, maximum discharge and gage height for period of record, 130,000 ft³/s, (determined by Colorado State Engineer)

e Jun 5, 1921, from rating curve extended above 10,000 ft³/s, gage height, 14.55 ft, site and datum then in use.

f From floodmarks, site and datum then in use.

07134100 BIG SANDY CREEK NEAR LAMAR, CO

LOCATION.--Lat 38°06'51", long 102°29'00", in SW¹/₄SW¹/₄ sec.21, T.22 S., R.45 W., Prowers County, Hydrologic Unit 11020011, on right bank 35 ft upstream from State Highway 196, 950 ft upstream from mouth, and 7.5 mi east of Lamar.

DRAINAGE AREA.--3,248 mi², of which about 585 mi² is probably noncontributing.

PERIOD OF RECORD.-- February 1968 to September 1982, July 1995 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07134100

REVISED RECORDS.--WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 3,545 ft above NGVD of 1929, from topographic map. Prior to June 30, 1977, at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage, erosion-control, and livestock-watering reservoirs, diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas. Flow affected by backwater from the Arkansas River at times. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 17, 1965, reached a discharge of 3,600 ft³/s, from slope-area measurement of peak flow 0.5 mi upstream from station. Flood of Aug. 21, 1965, reached a stage of 9.93 ft, from floodmarks, discharge unknown.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	3.4	1.4	2.5	2.9	2.3	2.3	1.7	2.2	2.0	1.3	1.6
2	1.3	3.4	1.4	2.5	3.2	2.4	2.2	1.8	5.9	2.8	1.1	1.6
3	1.3	3.4	1.4	2.5	3.1	2.4	2.3	1.8	3.8	4.8	1.1	1.5
4	1.2	3.7	1.4	2.5	2.9	2.2	2.2	1.9	13	3.9	1.1	1.4
5	1.2	3.8	1.6	2.6	2.9	2.1	2.2	2.0	12	3.4	1.0	1.4
6	1.2	3.8	1.7	2.8	2.9	2.2	2.2	2.1	12	3.5	1.0	1.4
7	1.7	3.9	1.7	2.9	2.7	2.0	2.1	1.9	23	3.7	0.98	1.6
8	2.3	4.0	1.7	3.0	2.8	2.1	2.1	4.5	19	4.0	0.76	1.6
9	3.2	4.0	1.8	2.9	2.8	2.0	2.2	2.8	16	4.3	0.81	1.7
10	2.1	4.0	2.1	2.7	2.5	2.0	2.0	2.5	13	4.1	0.51	1.8
11	1.7	3.9	1.9	2.6	2.5	2.0	2.1	2.8	12	3.0	0.66	1.6
12	0.95	3.9	2.0	2.5	2.3	1.9	2.0	2.7	12	2.6	1.5	1.6
13	0.95	3.9	2.1	2.5	2.5	1.7	2.0	3.0	12	1.9	1.5	1.6
14	0.97	4.1	2.1	2.4	2.6	1.7	1.9	1.8	12	1.9	1.5	1.7
15	1.1	3.9	2.3	2.6	2.2	1.8	1.8	1.7	11	1.7	1.5	1.7
16	1.2	3.6	2.4	2.6	2.0	1.7	2.0	2.1	11	1.7	1.5	1.7
17	1.1	4.0	2.7	2.6	2.0	1.6	1.7	3.5	9.9	1.6	1.5	1.4
18	1.3	3.9	2.4	2.6	2.1	1.8	2.2	3.1	7.8	0.50	1.4	1.4
19	1.2	3.9	2.4	2.6	2.2	2.6	3.2	2.2	7.9	0.72	1.5	1.4
20	1.2	4.2	2.4	2.6	2.3	3.1	2.5	2.0	9.4	0.93	1.5	1.4
21	1.2	4.8	2.5	2.6	2.3	2.8	2.2	1.8	8.9	0.87	1.4	1.4
22	1.3	5.0	2.5	2.6	2.3	2.4	2.0	1.8	10	0.99	1.4	1.4
23	1.8	5.1	2.6	2.5	2.2	2.4	2.2	1.8	5.8	1.0	1.3	1.4
24	1.8	5.0	2.7	2.4	2.1	2.4	2.2	1.9	7.6	1.2	1.0	1.4
25	2.5	4.9	2.7	2.4	2.1	2.4	2.3	2.1	8.4	1.0	1.2	1.4
26	2.2	4.3	2.7	2.4	2.1	2.4	2.1	2.2	8.8	0.94	1.4	e1.2
27	2.7	1.9	2.9	2.6	2.2	2.3	2.0	2.1	8.6	1.2	0.68	e1.2
28	3.0	1.5	3.0	2.7	2.2	2.3	1.9	3.4	3.0	1.4	0.71	e1.0
29	3.2	1.6	3.0	3.1	---	2.1	1.9	1.8	2.7	1.2	2.4	e1.0
30	3.1	1.3	2.6	3.0	---	2.1	1.9	1.8	2.1	0.80	1.6	e0.90
31	3.3	---	2.4	2.7	---	2.1	---	2.3	---	1.2	1.6	---
TOTAL	54.47	112.1	68.5	81.5	68.9	67.3	63.9	70.9	290.8	64.85	38.41	43.40
MEAN	1.76	3.74	2.21	2.63	2.46	2.17	2.13	2.29	9.69	2.09	1.24	1.45
MAX	3.3	5.1	3.0	3.1	3.2	3.1	3.2	4.5	23	4.8	2.4	1.8
MIN	0.95	1.3	1.4	2.4	2.0	1.6	1.7	1.7	2.1	0.50	0.51	0.90
AC-FT	108	222	136	162	137	133	127	141	577	129	76	86

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

	MEAN	MAX	MIN	(WY)	(1997)	(1998)	(1998)	(1998)	(1999)	(1999)	(1999)	(1998)	(1997)	(1976)
MEAN	8.29	15.2	20.4	21.9	21.5	21.5	20.6	21.8	11.0	10.3	14.5	9.68		
MAX	28.4	58.9	63.0	75.5	55.6	59.0	70.6	166	42.9	41.6	85.3	41.8		
(WY)	(1997)	(1998)	(1998)	(1998)	(1998)	(1998)	(1999)	(1999)	(1999)	(1998)	(1997)	(1976)		
MIN	0.087	0.41	0.34	0.50	2.23	2.10	0.81	2.14	1.77	0.21	0.027	0.084		
(WY)	(1979)	(1978)	(1978)	(1978)	(1978)	(1977)	(1978)	(1975)	(1976)	(1978)	(1976)	(1978)		

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1968 - 2003

ANNUAL TOTAL	2,713.45		1,025.03		
ANNUAL MEAN	7.43		2.81		
HIGHEST ANNUAL MEAN					16.6
LOWEST ANNUAL MEAN					45.6
HIGHEST DAILY MEAN	e200	Aug 29	23	Jun 7	2.23
LOWEST DAILY MEAN	0.82	Sep 3	0.50	Jul 18	1,460
ANNUAL SEVEN-DAY MINIMUM	1.1	Oct 12	0.82	Aug 5	a0.00
MAXIMUM PEAK FLOW			71	Jun 4	0.00
MAXIMUM PEAK STAGE			2.46	Jun 4	b2,850
ANNUAL RUNOFF (AC-FT)	5,380		2,030		9.66
10 PERCENT EXCEEDS	18		4.1		12,050
50 PERCENT EXCEEDS	3.6		2.2		42
90 PERCENT EXCEEDS	1.3		1.2		9.0

e Estimated.

a Also occurred on many days during 1976-79 water years.

b From rating curve extended above 1,470 ft³/s on the basis of flow through culvert analysis with flow over road measurement at gage height 9.48 ft.

07134100 BIG SANDY CREEK NEAR LAMAR, CO—Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2003 (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07134100

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.79 inches, Aug. 29, 2003.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation during period April to September, 2.79 inches, Aug. 29.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	0.00	0.05	1.35	0.00	0.00	0.01
2	---	---	---	---	---	---	0.00	0.06	0.42	0.00	0.00	0.00
3	---	---	---	---	---	---	0.00	0.00	0.03	0.00	0.00	0.02
4	---	---	---	---	---	---	0.00	0.02	1.07	0.00	0.00	0.00
5	---	---	---	---	---	---	0.00	0.00	0.52	0.02	0.00	0.00
6	---	---	---	---	---	---	0.00	0.03	0.52	0.00	0.00	0.00
7	---	---	---	---	---	---	0.00	0.00	0.36	0.00	0.00	0.68
8	---	---	---	---	---	---	0.00	0.01	0.00	0.00	0.00	0.00
9	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.19
10	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.02
11	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
12	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
13	---	---	---	---	---	---	0.00	0.00	0.12	0.00	0.00	0.00
14	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	---	---	---	0.12	0.52	0.00	0.00	0.00	0.00
16	---	---	---	---	---	---	0.12	0.00	0.00	0.00	0.00	0.00
17	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
18	---	---	---	---	---	---	0.00	0.00	0.78	0.00	0.23	0.00
19	---	---	---	---	---	---	0.13	0.00	0.16	0.10	0.00	0.00
20	---	---	---	---	---	---	0.00	0.00	0.09	0.00	0.00	0.00
21	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.01	0.00
22	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
23	---	---	---	---	---	---	0.05	0.00	0.00	0.00	0.00	0.00
24	---	---	---	---	---	---	0.00	0.22	0.00	0.00	0.00	0.00
25	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
26	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
27	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00	0.00
28	---	---	---	---	---	---	0.00	0.00	0.02	0.00	0.00	0.00
29	---	---	---	---	---	---	0.00	0.00	0.00	0.00	2.79	0.00
30	---	---	---	---	---	---	0.00	0.88	0.00	0.00	0.04	0.00
31	---	---	---	---	---	---	---	0.03	---	0.00	0.00	---
TOTAL	---	---	---	---	---	---	0.42	1.82	5.44	0.12	3.07	0.92
MAX	---	---	---	---	---	---	0.13	0.88	1.35	0.10	2.79	0.68

07134180 ARKANSAS RIVER NEAR GRANADA, CO

LOCATION.--Lat 38°05'44", long 102°18'37", in SE¼NE¼ sec.36, T.22 S., R.44 W., Prowers County, Hydrologic Unit 11020009, on left bank at upstream side of end of bridge on U.S. Highway 385, 1.2 mi downstream from headgate of Buffalo Canal, and 2.3 mi north of Granada.

DRAINAGE AREA.--23,707 mi², of which 1,648 mi² is probably noncontributing.

PERIOD OF RECORD.--January 1899 to December 1901 (gage heights only), August to October 1903 (monthly discharge only for some periods, published in WSP 1311), December 1980 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07134180

REVISED RECORDS.--WDR CO-01-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 3,480 ft above NGVD of 1929, from topographic map. See WSP 1311 for history of changes prior to December 5, 1980.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, diversions for irrigation and municipal use, ground-water withdrawals, return flows from irrigated areas, and flows from sewage-treatment plants. Flow regulated by John Martin Reservoir (station 07130000) 38 mi upstream since October 1948. 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	7.3	4.0	27	36	40	49	3.9	8.1	3.5	11	3.3	3.1
2	6.6	3.9	28	36	40	48	3.7	10	3.5	17	3.2	3.1
3	6.6	3.7	27	36	41	49	3.7	10	9.2	40	3.2	3.0
4	6.4	3.8	30	36	41	49	3.6	4.1	25	13	3.2	3.0
5	6.6	3.6	29	36	40	49	3.6	3.7	65	7.7	3.3	3.0
6	4.8	3.4	30	36	40	48	3.5	3.6	77	4.5	3.2	3.0
7	4.9	3.5	30	36	40	47	3.3	3.6	93	4.1	3.3	3.2
8	4.9	3.6	30	37	40	50	3.4	3.4	96	4.1	3.2	3.3
9	5.0	3.6	31	36	42	53	3.5	3.4	82	4.0	3.2	3.4
10	5.1	3.5	31	35	43	54	3.6	3.2	95	4.0	3.2	3.4
11	5.5	3.4	32	36	43	52	3.7	3.2	88	4.1	3.2	3.2
12	5.2	3.4	32	37	44	49	3.7	3.3	83	3.9	3.1	3.3
13	5.2	3.4	32	37	44	47	3.8	3.2	81	3.7	3.0	3.2
14	5.2	3.3	32	37	46	46	3.7	3.2	80	3.7	3.1	3.4
15	5.1	3.3	32	37	44	46	4.1	3.6	78	3.4	3.2	3.6
16	5.1	3.2	32	37	44	47	3.8	3.4	42	3.2	3.1	3.6
17	5.1	14	34	37	45	26	3.8	3.3	11	3.1	3.1	3.5
18	5.2	23	33	38	44	6.7	4.0	3.4	64	3.0	3.1	3.2
19	5.1	24	31	39	44	30	4.0	3.3	123	3.0	3.1	3.2
20	5.0	25	32	39	44	50	5.2	3.3	142	2.9	3.1	3.3
21	4.9	25	32	38	45	49	8.0	3.5	111	3.0	3.6	3.4
22	4.9	25	32	37	46	48	8.8	3.5	84	3.1	3.4	4.3
23	4.5	25	32	34	46	32	7.5	3.6	63	3.1	3.2	3.1
24	4.4	24	33	38	45	7.7	7.0	3.7	27	3.2	3.1	3.0
25	4.7	24	33	39	43	6.8	7.3	3.9	26	3.2	3.1	3.1
26	4.6	25	33	37	46	6.3	8.6	3.7	23	3.1	3.0	3.2
27	4.4	25	34	39	48	5.5	8.6	3.6	27	3.1	3.0	3.1
28	4.3	26	36	39	49	4.8	9.3	3.6	21	3.2	3.0	3.1
29	4.5	27	37	39	---	4.5	9.2	3.5	19	3.5	3.5	3.3
30	4.1	26	36	39	---	4.5	8.7	4.0	13	3.4	3.2	3.1
31	4.0	---	35	40	---	6.9	---	3.8	---	3.4	3.1	---
TOTAL	159.2	394.6	988	1,153	1,217	1,071.7	158.6	126.7	1,755.2	178.7	98.6	97.7
MEAN	5.14	13.2	31.9	37.2	43.5	34.6	5.29	4.09	58.5	5.76	3.18	3.26
MAX	7.3	27	37	40	49	54	9.3	10	142	40	3.6	4.3
MIN	4.0	3.2	27	34	40	4.5	3.3	3.2	3.5	2.9	3.0	3.0
AC-FT	316	783	1,960	2,290	2,410	2,130	315	251	3,480	354	196	194

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2003, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
MEAN	85.0	99.3	125	138	130	122	188	307	403	449	266	111												
MAX	184	306	479	886	495	608	1,138	2,470	2,196	2,144	775	430												
(WY)	(1984)	(1998)	(1998)	(1998)	(1998)	(1998)	(1987)	(1999)	(1987)	(1995)	(1999)	(1984)												
MIN	4.15	9.68	31.9	37.2	43.5	22.7	5.29	4.09	9.39	5.76	3.18	3.26												
(WY)	(1993)	(1982)	(2003)	(2003)	(2003)	(1994)	(2003)	(2003)	(1981)	(2003)	(2003)	(2003)												

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1981 - 2003

ANNUAL TOTAL	17,660.0	7,399.0	
ANNUAL MEAN	48.4	20.3	208
HIGHEST ANNUAL MEAN			597
LOWEST ANNUAL MEAN			20.3
HIGHEST DAILY MEAN	1,240	Aug 29	4,070
LOWEST DAILY MEAN	2.9	Aug 13	a2.7
ANNUAL SEVEN-DAY MINIMUM	3.1	Aug 13	3.0
MAXIMUM PEAK FLOW			151
MAXIMUM PEAK STAGE			6.03
ANNUAL RUNOFF (AC-FT)	35,030	14,680	150,600
10 PERCENT EXCEEDS	91	46	513
50 PERCENT EXCEEDS	18	5.5	102
90 PERCENT EXCEEDS	3.6	3.2	6.6

a Also occurred Aug 18-19, 1990; minimum daily for period of record, 1 ft³/s, many days in 1903.

b From rating curve extended above 3,470 ft³/s.

c Maximum gage height, 12.38 ft, May 27, 1996.

07134990 WILD HORSE CREEK ABOVE HOLLY, CO

LOCATION.--Lat 38°03'24", long 102°08'16", in NE¹/₄NE¹/₄ sec. 16, T.23 S., R.42 W., Prowers County, Hydrologic Unit 11020009, on left bank 1,000 ft downstream from County Road No. 34, 0.7 mi northwest of Holly, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--270 mi², approximately, of which about 60 mi² is probably noncontributing.

PERIOD OF RECORD.--June 1995 to current year (seasonal records only). For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07134990

REVISED RECORDS.--WDR CO-01-1: Drainage area

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,405 ft above NGVD of 1929, from topographic map. Prior to Apr. 29, 1997, at site 1,050 ft upstream at datum 3.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges and those below 0.75 ft³/s, which are poor. Natural flow of stream affected by diversions for irrigation, ground-water withdrawals, and return flows from irrigated areas, the Buffalo Canal, and the Amity Canal. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 1,270 ft³/s, May 26, 1996, from slope-area measurement of peak flow, gage height, 6.90 ft, from floodmark, site and datum then in use; maximum gage height, 8.63 ft, Aug. 7, 1997, from floodmark; no flow, Aug. 20-21, 2002.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 104 ft³/s, June 9, gage height, 4.45 ft; minimum daily, 0.08 ft³/s, July 20.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	27	---	---	---	---	1.1	2.9	11	0.55	0.98	1.2
2	1.4	27	---	---	---	---	e1.1	1.9	29	0.91	0.91	0.84
3	1.2	27	---	---	---	---	e1.1	1.6	35	1.0	0.75	0.62
4	0.82	26	---	---	---	---	e1.0	1.4	34	1.6	0.62	0.55
5	0.72	28	---	---	---	---	e1.0	1.4	82	0.94	0.71	0.56
6	0.67	26	---	---	---	---	e0.80	1.2	48	2.0	0.92	0.41
7	0.64	26	---	---	---	---	e0.50	1.1	65	3.5	1.7	0.71
8	0.76	25	---	---	---	---	e0.50	0.85	77	0.89	2.2	0.59
9	0.96	23	---	---	---	---	e0.40	0.84	71	0.42	1.1	6.9
10	0.82	16	---	---	---	---	e0.30	0.84	40	0.50	1.0	12
11	1.1	2.0	---	---	---	---	e0.30	0.88	6.2	0.58	1.0	0.61
12	1.3	1.9	---	---	---	---	e0.30	0.97	1.8	0.28	1.0	0.47
13	1.3	1.8	---	---	---	---	e0.30	1.0	1.0	0.50	0.98	0.75
14	1.0	1.5	---	---	---	---	e0.30	1.0	0.76	0.43	0.97	0.95
15	1.1	1.6	---	---	---	---	e0.30	1.2	0.56	0.34	1.1	1.1
16	0.70	1.8	---	---	---	---	3.4	1.4	4.5	0.20	0.90	0.71
17	0.73	1.6	---	---	---	---	0.79	1.0	13	0.11	0.81	0.52
18	1.0	1.0	---	---	---	---	3.0	0.98	2.1	0.26	0.81	0.49
19	1.1	0.90	---	---	---	---	1.4	3.0	2.2	0.11	0.75	0.49
20	0.87	0.79	---	---	---	---	6.5	0.90	1.8	0.08	0.71	0.44
21	1.1	0.75	---	---	---	---	5.0	0.78	1.7	0.39	0.67	0.46
22	1.4	0.75	---	---	---	---	3.0	0.69	1.7	0.68	0.71	0.52
23	1.4	0.74	---	---	---	---	3.4	0.54	1.5	0.63	0.48	0.51
24	1.3	0.50	---	---	---	---	3.9	0.81	1.5	0.59	0.54	0.44
25	1.3	0.50	---	---	---	---	4.0	1.1	1.4	0.48	0.74	0.63
26	1.2	0.50	---	---	---	---	3.8	1.7	1.2	0.48	0.68	0.64
27	1.3	0.50	---	---	---	---	2.0	1.2	1.2	0.61	0.59	0.81
28	8.4	0.50	---	---	---	---	1.5	13	1.9	0.81	0.12	0.89
29	17	0.50	---	---	---	---	0.94	23	1.4	0.92	9.6	0.78
30	24	0.50	---	---	---	---	2.8	24	0.75	0.97	12	0.75
31	20	---	---	---	---	---	---	15	---	0.93	1.2	---
TOTAL	97.99	271.63	---	---	---	---	54.73	108.18	540.17	22.69	47.25	37.34
MEAN	3.16	9.05	---	---	---	---	1.82	3.49	18.0	0.73	1.52	1.24
MAX	24	28	---	---	---	---	6.5	24	82	3.5	12	12
MIN	0.64	0.50	---	---	---	---	0.30	0.54	0.56	0.08	0.12	0.41
AC-FT	194	539	---	---	---	---	109	215	1,070	45	94	74

e Estimated.

ARKANSAS RIVER BASIN

07137000 FRONTIER DITCH NEAR COOLIDGE, KS

LOCATION.--Lat 38°02'18", long 102°02'19", in SW ¼ SE ¼ NE ¼ sec.21, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on left bank 0.3 mi east of Colorado-Kansas State line, 0.5 mi downstream from Holly drain diversion, 1.5 mi west of Coolidge, and 2.3 mi downstream from diversion of the Arkansas River.

PERIOD OF RECORD.--October 1950 to current year. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/ks/nwis/inventory/?site_no=07137000

REVISED RECORDS.--WSP 1731: 1951.

GAGE.--Water-stage recorders and Parshall flume. Datum of gage is 3,343.14 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are fair. This ditch diverts water from the Arkansas River in Colorado for use in Kansas. These records and records for the Arkansas River near Coolidge represent total flow of the Arkansas River at the Colorado-Kansas State line. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 84 ft³/s Aug. 1, 1975; no flow many days each year.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19	27	18	15	14
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19	29	21	13	13
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19	31	25	13	13
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18	30	25	13	13
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18	31	24	14	12
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	19	31	26	13	12
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18	19	24	11	15
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	0.06	20	13	18
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17	0.00	19	12	17
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16	0.00	19	14	22
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16	0.00	19	14	16
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18	0.00	18	13	14
13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18	0.00	17	12	14
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20	0.00	19	10	16
15	0.00	0.00	0.00	0.00	0.00	0.00	11	19	0.00	17	11	16
16	0.00	0.00	0.00	0.00	0.00	0.00	19	20	0.00	17	13	16
17	0.00	0.00	0.00	0.00	0.00	0.00	19	19	0.00	16	13	15
18	0.00	0.00	0.00	0.00	0.00	0.00	25	25	0.00	15	12	14
19	0.00	0.00	0.00	0.00	0.00	0.00	25	21	0.00	14	14	14
20	0.00	0.00	0.00	0.00	0.00	0.00	28	20	0.00	15	12	14
21	0.00	0.00	0.00	0.00	0.00	0.00	28	19	0.00	15	12	15
22	0.00	0.00	0.00	0.00	0.00	0.00	27	20	0.00	13	15	15
23	0.00	0.00	0.00	0.00	0.00	0.00	29	21	0.00	13	13	14
24	0.00	0.00	0.00	0.00	0.00	0.00	31	22	0.00	14	12	13
25	0.00	0.00	0.00	0.00	0.00	0.00	31	24	0.00	14	11	13
26	0.00	0.00	0.00	0.00	0.00	0.00	0.08	24	0.00	13	9.9	13
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21	0.00	14	9.6	13
28	0.00	0.00	0.00	0.00	0.00	0.00	12	20	0.00	16	9.2	14
29	0.00	0.00	0.00	0.00	---	0.00	19	25	9.5	19	11	16
30	0.00	0.00	0.00	0.00	---	0.00	19	25	19	20	e21	19
31	0.00	---	0.00	0.00	---	0.00	---	26	---	18	16	---
MEAN	0.000	0.000	0.000	0.000	0.000	0.000	10.8	20.1	7.55	18.0	12.7	14.8
MAX	0.00	0.00	0.00	0.00	0.00	0.00	31	26	31	26	21	22
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16	0.00	13	9.2	12
AC-FT	0.00	0.00	0.00	0.00	0.00	0.00	641	1,240	449	1,100	783	879
CAL YR	2002	MEAN 10.0	MAX 37	MIN 0.00	AC-FT 7,260							
WTR YR	2003	MEAN 7.03	MAX 31	MIN 0.00	AC-FT 5,090							

e Estimated.

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS

LOCATION.--Lat 38°01'34", long 102°00'41", in NW ¼ NE ¼ NW ¼ sec.26, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on right bank at downstream side of county highway bridge, 1.0 mi south of Coolidge, 1.9 mi downstream from Colorado-Kansas State line, and at mile 1,099.3 .

DRAINAGE AREA.--25,410 mi², of which 1,708 mi² is probably noncontributing.

PERIOD OF RECORD.--May to October 1903, March to May 1921, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1311. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/ks/nwis/inventory/?site_no=07137500

REVISED RECORDS.--WSP 1341: 1903, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,330.84 ft above NGVD of 1929. May 5 to Oct. 31, 1903, nonrecording gage, and Mar. 1 to May 31, 1921, water-stage recorder at present site at different datum. Oct. 1, 1950, to Mar. 31, 1966, water-stage recorder at site 0.3 mi upstream at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Combined flow of river and Frontier Ditch (station 07137000) represents entire flow that enters Kansas. Flow regulated since 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 500,000 acres, and return flow from irrigated areas. Satellite telemeter at station.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	48	59	57	59	59	62	36	36	28	39	4.5	25
2	49	59	59	59	59	62	36	40	29	34	4.3	19
3	50	60	59	59	59	60	35	41	37	29	3.6	9.2
4	51	61	58	59	58	60	35	41	38	31	3.4	9.2
5	48	59	59	59	59	59	34	42	90	25	3.0	16
6	47	59	59	59	59	59	36	37	95	18	4.3	11
7	46	59	60	59	57	57	37	32	122	16	3.2	17
8	46	59	58	60	58	57	37	30	153	14	2.6	24
9	46	60	61	59	60	57	37	29	153	12	10	14
10	46	58	60	59	60	59	36	27	142	11	6.0	9.9
11	49	55	59	59	59	59	37	26	127	11	4.1	5.2
12	48	56	60	60	58	58	37	28	116	11	3.0	4.1
13	49	56	61	60	59	56	37	28	109	12	5.5	3.9
14	44	57	60	60	60	54	35	25	130	9.4	3.7	3.7
15	41	57	59	59	60	52	31	24	105	13	12	3.4
16	38	60	60	58	59	52	29	30	98	11	8.0	3.2
17	39	61	58	60	60	52	28	27	91	9.4	8.3	2.7
18	44	56	58	60	60	52	30	31	86	10	6.0	2.5
19	44	56	56	60	60	55	30	29	127	8.8	6.2	2.5
20	41	57	56	60	60	53	32	26	149	7.0	4.4	2.5
21	46	58	58	60	60	52	31	25	163	5.9	3.3	2.9
22	46	59	57	59	60	48	30	26	151	5.6	5.1	2.6
23	50	59	58	e50	61	48	31	28	125	6.0	3.4	3.2
24	50	56	57	e48	59	49	31	31	111	5.5	4.1	3.2
25	50	56	53	62	53	57	32	35	97	4.6	4.4	4.5
26	46	57	52	61	52	52	45	35	83	4.5	5.4	10
27	49	59	51	58	62	44	45	36	81	4.5	6.5	14
28	52	59	57	59	63	44	40	34	78	5.0	5.7	12
29	55	59	61	59	---	41	37	30	62	8.2	4.7	18
30	59	58	60	58	---	38	37	29	45	13	41	15
31	58	---	59	58	---	38	---	28	---	8.0	21	---
MEAN	47.6	58.1	58.1	58.7	59.0	53.1	34.8	31.2	101	13.0	6.80	9.11
MAX	59	61	61	62	63	62	45	42	163	39	41	25
MIN	38	55	51	48	52	38	28	24	28	4.5	2.6	2.5
AC-FT	2,930	3,460	3,570	3,610	3,280	3,260	2,070	1,920	5,990	798	418	542

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

MEAN	134	122	127	134	140	134	214	318	484	357	329	179
MAX	332	424	534	972	602	658	1,221	2,478	8,221	2,255	1,979	1,079
(WY)	(1998)	(1998)	(1998)	(1998)	(1966)	(1998)	(1987)	(1999)	(1965)	(1995)	(1965)	(1965)
MIN	1.97	1.53	3.94	3.14	5.52	5.63	9.43	6.61	4.20	3.59	1.94	0.90
(WY)	(1979)	(1979)	(1979)	(1979)	(1978)	(1978)	(1979)	(1963)	(1954)	(1974)	(1964)	(1960)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1951 - 2003
ANNUAL MEAN	83.4	44.0	223
HIGHEST ANNUAL MEAN			1,012
LOWEST ANNUAL MEAN			19.8
HIGHEST DAILY MEAN	985	Aug 30	101,000
LOWEST DAILY MEAN	12	Aug 11	0.00
ANNUAL SEVEN-DAY MINIMUM	14	Aug 16	0.00
MAXIMUM PEAK FLOW			187
MAXIMUM PEAK STAGE			3.32
ANNUAL RUNOFF (AC-FT)	60,340	31,840	161,700
10 PERCENT EXCEEDS	135	61	458
50 PERCENT EXCEEDS	59	48	126
90 PERCENT EXCEEDS	24	5.2	10

e Estimated.