CLOSED BASIN IN SAN LUIS VALLEY, CO

08224500 KERBER CREEK ABOVE LITTLE KERBER CREEK NEAR VILLA GROVE, CO

LOCATION.--Lat 38°13'13", long 106°05'21", in SW$^1/_4$SE$^1/_4$ sec.21, T.46 N., R.8 E., Saguache County, Hydrologic Unit 13010003, on left bank 3.0 mi upstream from Little Kerber Creek, and 7 mi west of Villa Grove.

DRAINAGE AREA.--45.4 mi^2.

PERIOD OF RECORD.--November 1911 to June 1912 and June 1923 to September 1926 (published as Kerber Creek near Villa Grove). May 1936 to September 1982, October 1998 to current year. Published as "at Ashley Ranch" May 1936 to September 1982 and October 1998 to September 2001. Monthly discharge only for some periods, published in WSP 1312. For a complete listing of historical data available for this site, see http://waterdata.usgs.gov/co/nwis/inventory/?site_no=08224500

REVISED RECORDS.--WSP 1312: 1943. WSP 1512: 1943.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 8,640 ft above NGVD of 1929, from topographic map. Prior to June 1, 1923, nonrecording gage at site 2.5 mi downstream at different datum. June 1, 1923 to Sept. 16, 1926, and May 2, 1936 to June 24, 2002, at several sites 1.5 mi upstream, at different datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by several small diversions for irrigation, and return flow from irrigated areas.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1872, that of May 14, 1941, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.7	e2.8	e1.8	e2.2	e2.6	8.1	19	28	7.6	4.7	2.3
2	3.8	3.1	e2.9	e2.0	e2.3	e2.8	8.6	20	27	6.8	4.4	2.3
3	5.1	3.9	e2.6	e1.8	e2.3	e2.7	8.7	21	27	6.3	4.4	2.1
4	6.1	2.8	e2.5	e1.6	e2.3	e3.0	8.2	27	27	5.9	3.9	3.4
5	4.6	1.9	e2.6	e1.5	e2.1	e2.9	8.9	35	28	5.7	4.0	3.2
6	4.3	2.7	e2.7	e1.7	e1.9	e2.9	11	41	28	5.5	3.7	2.6
7	3.7	3.2	e2.7	e2.2	e1.8	e3.2	9.3	46	28	5.2	3.3	2.2
8	3.2	2.9	e2.6	e2.5	e2.0	e3.0	11	51	26	5.1	3.0	2.0
9	3.1	2.8	e2.4	e2.3	e1.9	e3.2	11	55	26	4.8	2.7	2.0
10	3.0	2.8	e2.2	e2.4	e1.9	e3.2	9.1	59	24	4.7	2.8	2.0
11	3.0	2.7	e2.3	e2.3	e2.0	e3.1	9.1	63	21	4.6	2.6	1.9
12	2.8	2.7	e2.2	e2.2	e1.8	e3.1	8.9	63	19	4.4	2.6	1.9
13	2.8	3.2	e2.3	e2.2	e1.6	e3.5	8.8	54	18	5.4	2.6	1.8
14	2.5	2.9	e2.3	e2.3	e1.8	e3.5	9.3	48	17	5.3	2.6	1.7
15	2.7	2.4	e2.4	e2.4	e1.9	e5.0	9.3	43	16	9.3	2.7	1.6
16	2.7	2.1	e2.3	e2.5	e1.8	e5.0	10	40	15	8.5	2.8	1.6
17	2.7	2.7	e2.3	e2.4	e2.0	e5.0	11	40	15	7.4	3.2	1.6
18	2.7	2.5	e2.4	e2.2	e2.2	e5.4	12	41	14	6.3	3.6	1.6
19	2.7	3.5	e2.5	e2.2	e2.3	e6.0	11	45	13	6.3	4.9	3.2
20	2.9	3.0	e2.3	e2.4	e2.2	e8.0	11	47	12	6.8	4.3	3.9
21	2.9	3.0	e2.4	e2.2	e2.4	e7.8	12	49	12	6.4	4.8	2.7
22	2.6	2.7	e2.5	e2.1	e2.4	e7.8	12	49	11	6.3	4.7	2.6
23	2.5	e2.5	e2.2	e2.0	e2.3	e7.8	10	46	9.6	7.5	4.3	2.3
24	2.4	e2.4	e1.9	e2.1	e2.6	e11	14	44	9.0	8.9	3.4	2.4
25	2.4	e2.5	e2.0	e2.2	e2.4	10	13	40	9.1	6.9	2.9	2.4
26	1.9	e2.6	e2.1	e2.1	e2.3	9.9	12	37	9.1	8.7	2.6	2.6
27	2.6	e2.5	e1.8	e2.1	e2.4	9.2	13	35	9.7	9.7	2.5	2.5
28	2.6	e2.4	e1.9	e2.2	e2.5	8.0	14	35	8.6	7.4	2.9	2.5
29	2.7	e2.5	e1.8	e2.3	e2.5	7.5	15	36	8.2	8.3	2.5	2.6
30	2.6	e2.7	e1.8	e2.3	---	7.4	18	35	9.4	6.2	2.2	2.8
31	2.4	---	e1.9	e2.4	---	7.6	---	32	---	5.5	2.3	---
TOTAL	94.8	82.3	71.6	66.9	62.1	171.1	327.3	1,296	524.7	203.7	103.9	70.3
MEAN	3.06	2.74	2.31	2.16	2.14	5.52	10.9	41.8	17.5	6.57	3.35	2.34
MAX	6.1	3.9	2.9	2.5	2.6	11	18	63	28	9.7	4.9	3.9
MIN	1.9	1.9	1.8	1.5	1.6	2.6	8.1	19	8.2	4.4	2.2	1.6
AC-FT	188	163	142	133	123	339	649	2,570	1,040	404	206	139

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2004, BY WATER YEAR (WY)

MEAN	4.79	4.16	2.95	2.64	3.02	5.01	14.6	45.4	37.8	11.8	7.73	4.99
MAX	16.1	10.0	6.50	6.00	6.00	12.0	44.4	130	102	61.9	42.3	25.6
(WY)	(1939)	(1958)	(1966)	(1966)	(1958)	(1924)	(1924)	(1942)	(1941)	(1957)	(1957)	(1957)
MIN	1.97	1.82	0.60	0.00	0.86	1.50	5.79	5.28	2.63	0.73	0.40	1.08
(WY)	(2003)	(1956)	(2003)	(1977)	(1972)	(1964)	(2002)	(2002)	(2002)	(2002)	(2002)	(1956)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		(a)WATER YEARS 1923 - 2004	
ANNUAL TOTAL	2,582.72		3,074.7			
ANNUAL MEAN	7.08		8.40		12.1	
HIGHEST ANNUAL MEAN					25.4	1924
LOWEST ANNUAL MEAN					2.49	2002
HIGHEST DAILY MEAN	53	May 30	63	May 11	363	May 14, 1941
LOWEST DAILY MEAN	e0.00	Jan 5	e1.5	Jan 5	b0.00	Dec 30, 1976
ANNUAL SEVEN-DAY MINIMUM	e0.00	Jan 5	1.7	Sep 12	c0.00	Dec 30, 1976
MAXIMUM PEAK FLOW			65	May 11	d407	May 14, 1941
MAXIMUM PEAK STAGE			1.32	May 11	f3.88	May 14, 1941
ANNUAL RUNOFF (AC-FT)	5,120		6,100		8,740	
10 PERCENT EXCEEDS	17		26		30	
50 PERCENT EXCEEDS	3.1		3.0		4.5	
90 PERCENT EXCEEDS	1.2		2.0		2.2	

e Estimated.
a Water years 1983, and 1994 to 1998 data were published by the Colorado Division of Water Resources. Station was not operated during water years 1984 to 1993.
b Also occurred Dec 31, 1976 to Jan 31, 1977, and Jan 5-19, 2003 (no flow estimated).
c Also occurred Jan 5-19, 2003 (no flow estimated).
d From rating curve extended above 140 ft^3/s.
f Maximum gage-height, 5.04 ft, May 11, 1947, site and datum then in use, backwater from beaver dam.