10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK NEAR MARKLEEVILLE, CA

CARSON RIVER BASIN, UPPER CARSON RIVER BASIN

LOCATION.--Lat 38°42′53″, long 119°45′50″ referenced to North American Datum of 1927, in SW ¼ NE ¼ sec.15, T.10 N., R.20 E., Alpine County, Hydrologic Unit 16050201, on right bank, 0.5 mi downstream from Markleeville Creek, 1.5 mi northeast of Markleeville, and at mi 114.75 upstream from Lahontan Dam.

DRAINAGE AREA.--276 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Aug 1960 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct 1, 1967, at present site at datum 2.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. A few small diversions for irrigation above station. Flow slightly regulated by several small reservoirs, total capacity, about 5,000 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,900 ft^3/s, Jan 2, 1997, gage height, 11.78 ft; minimum daily, 12 ft^3/s, Sept 10-13, 23, 1997.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 09	0700	1,430	4.30
May 16	1330	*4,960	*6.88
Jun 15	0030	2,010	5.01

10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK NEAR MARKLEEVILLE, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	40	63	e73	73	111	140	344	923	2,300	1,160	219	106
2	39	67	e74	63	96	151	377	903	2,180	1,160	195	97
3	39	79	75	e64	101	149	370	1,040	1,950	1,060	181	94
4	39	80	74	e66	105	147	339	1,120	1,880	950	171	91
5	39	74	e74	e68	109	153	338	1,170	1,890	920	165	80
6	41	77	e76	e70	109	169	477	1,040	1,670	968	172	78
7	41	80	78	e73	109	186	593	863	1,440	966	171	76
8	37	94	84	e75	105	228	464	961	1,340	908	155	75
9	37	108	98	79	101	292	396	1,240	1,400	860	143	78
10	38	105	91	e80	99	377	354	888	1,440	801	140	79
11	39	100	95	e80	102	449	379	780	1,480	766	145	80
12	39	99	101	e80	106	505	459	818	1,500	743	140	83
13	39	93	103	e80	110	506	461	1,010	1,540	712	134	82
14	39	84	97	e80	114	434	393	1,260	1,690	669	133	82
15	38	82	92	e80	115	362	407	1,600	1,770	634	132	80
16	37	85	91	e80	116	336	501	3,610	1,670	595	130	78
17	42	83	81	e80	107	298	689	2,120	1,490	559	131	78
18	78	85	e80	80	104	275	752	3,050	1,210	534	125	76
19	65	85	e80	81	103	311	633	3,470	1,080	505	118	75
20	75	79	e79	e81	111	305	516	3,760	1,100	464	116	73
21	55	66	e77	e81	121	269	482	3,150	1,210	437	116	84
22	63	71	76	e81	129	429	554	2,800	1,250	415	112	77
23	69	e69	e80	e81	129	372	573	2,870	1,270	388	111	71
24	73	e70	85	119	129	309	567	2,780	1,280	352	118	66
25	71	e72	93	134	135	273	538	2,670	1,250	327	116	69
26	72	e72	91	159	134	273	648	2,740	1,150	305	114	69
27	64	e72	77	153	134	376	803	2,930	1,130	290	111	79
28	66	70	75	134	146	493	755	2,900	1,100	281	103	75
29	67	75	74	110	---	366	699	2,490	1,080	270	98	69
30	71	e72	e73	113	---	322	828	2,070	1,110	250	95	66
31	71	---	e71	99	---	310	---	2,140	---	235	101	---
Total	1,623	2,411	2,568	2,777	3,190	9,565	15,689	61,166	43,850	19,484	4,211	2,366
Mean	52.4	80.4	82.8	89.6	114	309	523	1,973	1,462	629	136	78.9
Max	78	108	103	159	146	506	828	3,760	2,300	1,160	219	106
Min	37	63	71	63	96	140	338	780	1,080	235	95	66
Ac-ft	3,220	4,780	5,090	5,510	6,330	18,970	31,120	121,300	86,980	38,650	8,350	4,690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	77.4	106	129	188	201	287	547	1,142	988	389	141	86.3
Max	346	476	718	1,722	917	983	1,121	2,447	2,996	1,721	477	239
(WY)	(1983)	(1984)	(1965)	(1997)	(1986)	(1986)	(1982)	(1969)	(1983)	(1995)	(1983)	(1983)
Min	24.0	32.6	41.4	44.2	43.9	58.7	183	197	135	58.0	33.0	18.0
(WY)	(1978)	(1977)	(1991)	(1977)	(1991)	(1977)	(1977)	(1977)	(1992)	(1977)	(1977)	(1987)

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SUMMARY STATISTICS

	Calendar Year 2004		Water Year 2005		Water Years 1960 - 2005	
Annual total	85,005		168,900			
Annual mean	232		463		357	
Highest annual mean					809	1983
Lowest annual mean					83.7	1977
Highest daily mean	1,330	May 5	3,760	May 20	12,500	Jan 2, 1997
Lowest daily mean	33	Sep 13	37	Oct 8	12	Sep 10, 1987
Annual seven-day minimum	35	Sep 12	38	Oct 8	12	Sep 7, 1987
Maximum peak flow			4,960	May 16	18,900	Jan 2, 1997
Maximum peak stage			6.88	May 16	11.78	Jan 2, 1997
Annual runoff (ac-ft)	168,600		335,000		258,800	
10 percent exceeds	672		1,260		958	
50 percent exceeds	85		121		141	
90 percent exceeds	42		69		50	

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2001 to current year.
CHEMICAL DATA: Water years 2001 to current year.
SEDIMENT DATA: Water years 2001 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 1 of 2

[Remark codes: <, less than; E, estimated.]

Date	Time	Instantaneous discharge, cfs (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Chloride, water, fltrd, mg/L (00940)	Sulfate water, fltrd, mg/L (00945)	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total at 105 deg. C, suspended, mg/L (00530)
Nov													
24...	1000	86	<2.0	628	12.2	101	8.2	138	.0	4.03	8.2	96	<10
Feb													
25...	1230	128	2.2	623	10.2	100	8.2	166	6.0	3.38	14.8	118	<10
May													
26...	1100	2,500	40	628	10.4	104	7.7	48	7.0	.33	1.3	45	93
Aug													
25...	1120	119	<2.0	630	9.2	110	8.1	101	14.5	1.19	2.8	79	<10

WATER-QUALITY DATA
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Part 2 of 2

[Remark codes: <, less than; E, estimated.]

Date	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Nitrite + nitrate water fltrd, mg/L as N (00631)	Phosphorus, water, unfltrd mg/L (00665)	Fecal coliform, M-FC 0.7u MF col/ 100 mL (31625)	Arsenic water, fltrd, ug/L (01000)	Boron, water, fltrd, ug/L (01020)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)
Nov								
24...	.08	.003	.028	E3	7.2	162	5	.99
Feb								
25...	.13	.002	.031	E1	--	136	16	5.7
May								
26...	.19	.015	.201	E9	--	16	297	2,000
Aug								
25...	.06	.003	.030	--	--	62	2	.64

10308200 EAST FORK CARSON RIVER BELOW MARKLEEVILLE CREEK NEAR MARKLEEVILLE, CA—Continued

CROSS SECTION ANALYSES
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	DepthTo bottom at sample location, feet (81903)	Sampling depth, feet (00003)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specif. conductance, wat unf uS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Location in X-sect. looking dwnstrm ft from l bank (00009)
Aug										
25...*	1100	.00	--	--	--	--	--	--	--	2.00
25...*	1101	1.00	.50	630	9.2	110	8.1	101	14.5	4.00
25...*	1102	1.30	.50	630	9.2	110	8.1	101	14.5	8.00
25...*	1103	1.80	1.00	630	9.2	110	8.1	101	14.5	12.0
25...*	1104	2.00	1.00	630	9.2	110	8.1	101	14.5	16.0
25...*	1105	1.80	1.00	630	9.2	110	8.1	100	14.5	20.0
25...*	1106	1.40	.70	630	9.1	108	8.1	100	14.5	24.0
25...*	1107	1.00	.50	630	9.1	108	8.1	100	14.5	28.0
25...*	1108	.00	--	--	--	--	--	--	--	30.0

* Instantaneous discharge at time of cross-sectional measurement: Aug. 25, 119 ft^3/s.