

SEVIER LAKE BASIN

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10173450 MAMMOTH CREEK ABOVE WEST HATCH DITCH, NEAR HATCH, UT

LOCATION.--Lat 37°37'22", long 112°30'58", in SW¹/₄SE¹/₄NW¹/₄ sec. 3, T. 37 S., R. 6 W., Garfield County, Hydrologic Unit 16030001, on left bank 0.5 mi upstream from West Hatch ditch diversion, 2 mi upstream from Spring Hollow, 4.5 mi upstream from mouth, and 5 mi southwest of Hatch.

DRAINAGE AREA.--105 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 7,300 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. One small diversion for irrigation upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 838 ft³/s, Jun 19, 1983, gage height, 5.13 ft, from rating curve extended above 640 ft³/s; minimum daily, 0.40 ft³/s, Nov 29, Dec 4, 5, 8, 22, 23, 24, and 25, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 28	0115	*332	*3.54	No other peak greater than base discharge.			

Minimum daily discharge, 0.40 ft³/s, on Nov 29, Dec 4, 5, 8, 22, 23, 24, and 25.

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

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	4.4	e0.80	e0.60	e1.4	e1.4	1.7	22	142	15	8.5	5.0
2	5.2	e4.0	e0.70	e0.70	1.6	e1.0	2.1	21	129	14	8.6	5.1
3	5.2	e3.0	e0.50	e0.90	e1.4	e1.0	2.6	21	115	14	7.9	5.2
4	4.7	e3.0	e0.40	e1.2	e1.2	e1.4	e2.2	26	101	14	7.4	5.1
5	4.2	e3.5	e0.40	e1.0	e1.2	e1.2	2.5	23	86	13	7.8	4.9
6	3.7	e3.5	e0.50	e0.90	e1.0	e1.6	e2.0	20	75	12	7.9	5.2
7	3.9	e4.0	e0.50	e0.90	e0.70	e1.8	2.2	21	66	12	7.7	5.1
8	4.6	4.0	e0.40	e1.0	e0.70	e2.0	1.9	22	62	12	7.5	5.0
9	5.4	4.7	e0.50	e1.2	e0.80	3.0	1.6	20	57	12	7.3	5.1
10	5.1	4.7	e0.60	e1.2	e0.90	4.9	1.5	17	52	11	7.7	5.3
11	4.8	4.5	e0.50	e1.2	e0.90	5.4	1.7	15	48	9.9	7.1	5.4
12	4.8	e4.0	e0.60	e1.0	e1.0	4.1	2.1	16	43	9.5	6.8	4.9
13	4.4	4.1	e0.70	e1.4	e1.0	3.9	4.9	23	40	9.2	6.8	4.5
14	4.1	4.0	e0.80	e1.6	e1.2	3.7	8.9	32	37	9.0	6.6	4.5
15	4.0	e3.5	e1.0	e1.0	e0.90	3.2	10	42	34	8.9	7.4	4.3
16	3.9	e3.0	e1.0	e1.0	e1.0	3.6	8.0	63	31	8.9	12	4.0
17	4.1	e3.0	e1.0	e1.2	e1.6	e2.8	5.7	115	29	9.7	12	4.0
18	4.2	e2.5	e0.90	e1.2	e1.4	e2.6	4.9	144	28	11	8.6	4.4
19	4.2	e2.0	e0.80	e1.0	e1.2	e2.6	4.3	187	27	10	7.8	4.4
20	4.0	e2.0	e0.90	e0.90	1.6	e2.6	3.7	200	26	11	7.4	4.2
21	3.9	e2.5	e0.50	e0.80	e1.2	2.6	3.3	209	25	12	6.8	4.0
22	4.3	e2.5	e0.40	e0.80	e1.2	2.4	4.3	235	25	13	6.2	3.9
23	4.1	e2.5	e0.40	e0.80	e1.4	2.3	4.1	235	25	11	6.6	3.8
24	4.0	e2.5	e0.40	e0.90	e1.8	2.3	3.4	221	25	9.6	6.4	3.7
25	4.1	e2.0	e0.40	e1.0	e2.0	2.3	2.9	249	25	9.0	6.3	3.6
26	4.3	e1.0	e0.50	e1.0	e2.2	2.1	5.7	252	23	8.7	6.2	3.5
27	4.9	e0.70	e0.50	e0.90	e2.0	2.1	11	250	21	8.4	5.8	3.4
28	4.7	e0.50	e0.50	e0.90	e1.8	e1.8	16	246	19	8.5	5.5	3.3
29	4.6	e0.40	e0.60	e1.0	---	e1.6	20	209	16	9.2	5.5	3.2
30	4.5	e0.50	e0.60	e1.0	---	e1.6	22	189	15	9.2	5.4	3.1
31	4.5	---	e0.60	e1.2	---	1.7	---	166	---	9.1	5.0	---
TOTAL	137.5	86.50	18.90	31.40	36.30	76.6	167.2	3,511	1,447	333.8	226.5	131.1
MEAN	4.44	2.88	0.61	1.01	1.30	2.47	5.57	113	48.2	10.8	7.31	4.37
MAX	5.4	4.7	1.0	1.6	2.2	5.4	22	252	142	15	12	5.4
MIN	3.7	0.40	0.40	0.60	0.70	1.0	1.5	15	15	8.4	5.0	3.1
AC-FT	273	172	37	62	72	152	332	6,960	2,870	662	449	260

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

MEAN	20.5	17.0	13.3	11.3	11.1	12.6	28.1	171	163	56.8	31.5	24.5
MAX	56.8	44.5	34.9	24.2	23.0	24.7	75.4	373	616	284	105	65.1
(WY)	(1984)	(1984)	(1984)	(1984)	(1973)	(1973)	(1985)	(1969)	(1983)	(1983)	(1983)	(1983)
MIN	4.35	2.88	0.61	1.01	1.30	2.47	5.57	9.69	5.17	2.97	1.46	2.62
(WY)	(1978)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(1977)	(2002)	(2002)	(2002)	(2002)

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SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1965 - 2003	
ANNUAL TOTAL	2,200.90		6,203.80			
ANNUAL MEAN	6.03		17.0		46.9	
HIGHEST ANNUAL MEAN					112	1983
LOWEST ANNUAL MEAN					8.11	2002
HIGHEST DAILY MEAN	30	Apr 15	252	May 26	720	Jun 19, 1983
LOWEST DAILY MEAN	0.40	Nov 29	0.40	Nov 29	0.40	Nov 29, 2002
ANNUAL SEVEN-DAY MINIMUM	0.44	Dec 21	0.44	Dec 21	0.44	Dec 21, 2002
ANNUAL RUNOFF (AC-FT)	4,370		12,310		33,970	
10 PERCENT EXCEEDS	12		27		111	
50 PERCENT EXCEEDS	4.7		4.1		18	
90 PERCENT EXCEEDS	1.1		0.80		7.0	

e Estimated

