

## VIRGIN RIVER BASIN

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## 09409880 SANTA CLARA RIVER AT GUNLOCK, UT

LOCATION.--Lat  $37^{\circ}16'55''$ , long  $113^{\circ}46'00''$ , in SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 28, T. 40 S., R. 17 W., Washington County, Hydrologic Unit 15010008, on right bank at downstream side of bridge on county road at Gunlock, 0.5 mi downstream from tailrace of powerhouse.

DRAINAGE AREA.--271 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1969 to current year.

GAGE.--Water-stage recorder. Crest-stage gage since May 24, 1989. Elevation of gage is 3,628 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for daily discharges less than 2 ft<sup>3</sup>/s, which are poor. Many diversions for irrigation upstream of gage. Some regulation of low flow by several reservoirs and powerplant upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,830 ft<sup>3</sup>/s, estimated, Mar 11, 1995, gage height, 8.07 ft; no flow several days during 1977 and July 10 and 18, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 65 ft<sup>3</sup>/s, Mar 17, gage height, 3.71 ft; minimum daily discharge, no flow, Jul 10 and 18.

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	3.5	6.2	6.1	7.0	11	12	10	6.9	9.8	0.78	0.61	0.44
2	3.2	6.0	6.3	7.7	11	15	9.4	6.3	6.9	0.85	2.5	0.82
3	4.3	5.3	5.7	6.8	11	10	9.6	6.3	4.9	0.42	2.0	0.73
4	4.2	5.5	6.0	7.8	10	9.7	9.5	6.3	5.8	0.25	0.32	0.81
5	5.1	5.7	5.9	8.4	11	9.7	9.9	6.5	4.8	0.81	0.24	0.66
6	5.1	5.6	6.2	13	11	9.5	10	6.0	3.3	0.74	0.78	0.91
7	4.0	5.7	7.0	8.6	11	9.4	9.9	4.6	3.8	0.27	0.18	1.2
8	3.3	7.9	8.6	9.7	11	11	10	5.3	2.6	0.15	0.29	1.1
9	2.9	18	8.8	13	11	12	9.6	4.2	4.7	0.03	1.4	1.1
10	4.5	8.9	9.2	13	11	13	7.9	5.1	2.3	0.00	0.98	1.0
11	4.7	4.2	9.2	15	11	13	7.2	6.8	1.1	0.01	0.53	0.65
12	5.2	3.5	8.9	13	11	13	6.7	5.5	1.6	0.44	0.04	0.65
13	5.1	3.0	7.8	12	12	13	6.0	4.2	1.8	0.22	0.04	1.0
14	4.0	2.8	6.1	12	13	12	6.6	3.7	2.0	0.13	0.19	0.98
15	2.7	2.8	7.4	14	14	13	9.6	3.8	2.5	0.07	0.07	0.71
16	2.3	3.2	8.6	10	13	27	10	4.6	1.6	0.04	1.2	0.81
17	2.9	3.1	9.1	12	12	46	9.5	5.9	1.6	0.09	0.70	0.55
18	2.7	3.0	8.7	12	11	29	8.4	6.5	1.0	0.00	0.49	0.33
19	3.5	2.8	8.3	11	9.2	22	9.7	4.0	1.0	0.34	0.18	0.64
20	3.8	3.2	8.9	10	9.2	17	9.0	2.7	1.3	0.47	0.25	0.91
21	4.8	3.4	9.4	11	9.5	15	8.4	3.1	1.4	0.23	0.42	0.88
22	3.6	3.3	9.8	11	9.2	13	8.1	2.8	1.5	0.50	0.04	0.56
23	2.8	3.8	9.7	10	9.1	14	6.8	5.2	0.99	0.08	0.20	0.50
24	3.7	4.1	8.6	10	9.3	13	5.8	14	1.1	0.18	0.89	0.72
25	4.5	3.4	7.8	10	12	13	6.8	12	1.0	0.83	0.33	0.74
26	5.6	4.3	7.6	10	12	12	8.0	12	0.71	0.89	0.58	0.91
27	5.7	5.0	7.5	9.9	13	11	7.2	13	0.84	0.71	0.08	0.94
28	4.6	5.2	7.4	10	12	11	6.6	12	1.3	0.53	0.52	0.91
29	3.9	5.2	7.4	9.7	---	11	4.8	11	1.2	0.33	0.60	0.68
30	4.5	5.7	7.8	11	---	11	6.8	14	1.0	0.49	1.0	0.99
31	5.4	---	6.9	11	---	11	---	15	---	0.54	0.82	---
TOTAL	126.1	149.8	242.7	329.6	310.5	451.3	247.8	219.3	75.44	11.42	18.47	23.83
MEAN	4.07	4.99	7.83	10.6	11.1	14.6	8.26	7.07	2.51	0.37	0.60	0.79
MAX	5.7	18	9.8	15	14	46	10	15	9.8	0.89	2.5	1.2
MIN	2.3	2.8	5.7	6.8	9.1	9.4	4.8	2.7	0.71	0.00	0.04	0.33
AC-FT	250	297	481	654	616	895	492	435	150	23	37	47

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2003, BY WATER YEAR (WY)

MEAN	10.6	15.2	15.6	21.1	36.8	51.0	38.7	40.2	29.5	11.6	8.82	8.39
MAX	28.0	30.9	26.0	95.4	372	211	150	222	138	40.4	30.5	26.5
(WY)	(1984)	(1981)	(1981)	(1980)	(1980)	(1979)	(1973)	(1973)	(1973)	(1995)	(1980)	(1980)
MIN	3.14	4.99	7.72	4.73	7.69	5.54	6.05	5.14	2.51	0.37	0.60	0.79
(WY)	(1992)	(2003)	(1978)	(1972)	(1972)	(2002)	(1977)	(1989)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR	FOR 2003 WATER YEAR	WATER YEARS 1970 - 2003
ANNUAL TOTAL	2,226.84	2,206.26	
ANNUAL MEAN	6.10	6.04	23.9
HIGHEST ANNUAL MEAN			86.8
LOWEST ANNUAL MEAN			6.04
HIGHEST DAILY MEAN	24	Sep 8	1980
LOWEST DAILY MEAN	0.35	Aug 15	Feb 15, 1980
ANNUAL SEVEN-DAY MINIMUM	0.68	Aug 14	Jul 26, 1977
ANNUAL RUNOFF (AC-FT)	4,420	4,380	17,290
10 PERCENT EXCEEDS	13	12	47
50 PERCENT EXCEEDS	5.1	5.5	13
90 PERCENT EXCEEDS	1.2	0.46	4.4