

VIRGIN RIVER BASIN

1

09413000 SANTA CLARA RIVER AT ST. GEORGE, UT

LOCATION.--Lat 37°04'31", long 113°35'32", in SE^{1/4}SW^{1/4}NE^{1/4} sec. 1, T. 43 S., R. 16 W., Washington County, Hydrologic Unit 15010008 on right bank 0.8 mi upstream from mouth and 2 mi south of St. George.

DRAINAGE AREA.--541 mi².

PERIOD OF RECORD.--October 1950 to September 1956, November 1984 to current year.

GAGE.--Water-stage recorder. Crest-stage gage since January 27, 1993. Elevation of gage is 2,560 ft above NGVD of 1929, from topographic map. October 1950 to September 1956, gage located 0.25 mi downstream and November 1984 to September 1989, 0.5 mi downstream from present site, both at different datum.

REMARKS.--Records fair except for discharges less than 2.0 ft³/s and estimated daily discharges, which are poor. Flow regulated by reservoirs and many diversions for irrigation upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,000 ft³/s, Mar 12, 1995, gage height, 14.60 ft, from rating curve extended above 2,800 ft³/s; no flow at times in 1951, 1953, 1955, 1956, 1989, 1991, and 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 53 ft³/s, Nov 9, gage height, 5.61 ft; minimum daily discharge, no flow, Jul 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	1.2	2.3	6.7	3.3	3.2	19	1.7	1.7	0.05	0.06	0.89	1.2
2	1.7	2.8	4.5	3.3	3.3	10	1.4	1.1	0.05	0.03	0.56	0.84
3	2.2	2.8	4.3	3.3	3.3	5.8	2.1	2.1	0.06	0.02	0.40	1.00
4	1.3	2.3	4.1	3.3	3.1	5.2	2.8	4.2	0.07	0.04	0.40	1.4
5	1.3	2.3	3.9	3.3	4.2	4.9	3.4	2.1	0.06	0.05	0.18	1.2
6	0.89	2.0	4.0	2.9	3.9	5.2	7.7	1.9	0.25	0.09	0.48	1.4
7	1.3	1.7	3.7	2.9	2.3	5.2	4.1	1.3	0.36	e0.01	0.16	0.60
8	1.3	7.0	3.9	2.2	1.8	4.9	3.3	0.71	0.25	e0.01	0.07	0.92
9	1.4	15	3.7	1.5	e1.8	4.7	3.0	0.84	0.20	e0.01	0.07	0.57
10	1.8	6.8	3.7	2.4	e1.9	4.3	2.9	0.67	0.38	e0.01	0.07	0.65
11	1.4	2.7	4.8	4.1	e2.0	4.0	2.7	1.4	0.54	e0.01	0.42	0.46
12	1.5	2.3	4.6	2.7	4.9	3.0	1.9	1.2	0.16	e0.02	0.02	0.49
13	2.1	2.6	3.1	3.2	18	3.0	1.9	1.2	0.13	e0.03	0.02	0.44
14	2.2	2.7	2.2	3.3	4.6	2.5	3.1	0.68	0.03	e0.02	0.02	0.45
15	2.1	2.4	2.0	3.3	3.4	3.3	4.6	0.69	0.04	e0.01	4.0	0.47
16	2.4	3.2	1.9	3.1	2.9	7.0	3.1	0.84	0.11	0.01	2.5	0.47
17	2.0	3.2	2.3	3.4	2.6	6.8	2.5	0.96	0.05	0.01	0.45	0.44
18	1.6	2.5	5.5	3.5	2.4	4.6	2.8	0.93	0.02	0.00	0.28	0.67
19	1.3	2.5	2.6	3.5	2.1	3.5	3.3	1.1	0.06	0.01	0.22	0.82
20	1.4	2.5	3.9	4.2	2.1	3.2	2.3	0.63	0.12	e0.03	0.31	1.0
21	1.6	2.3	3.4	4.0	2.0	3.2	2.1	0.88	0.46	e0.01	0.58	0.78
22	1.7	2.6	3.2	3.2	2.2	4.3	2.8	0.62	0.39	0.07	2.0	0.75
23	1.4	2.6	3.4	2.6	2.2	4.4	3.7	0.48	0.40	1.1	0.85	0.77
24	1.7	2.6	3.2	1.9	2.0	3.5	2.3	1.0	0.84	0.37	0.37	0.52
25	1.7	4.8	3.0	1.9	13	3.4	2.1	0.79	0.92	0.67	0.37	0.80
26	2.1	3.9	2.9	2.3	12	2.7	2.6	0.55	0.54	0.43	0.31	1.1
27	2.5	4.4	2.9	2.3	9.5	3.1	1.7	0.74	0.29	0.25	0.46	1.2
28	2.1	4.4	3.1	2.8	6.1	2.5	2.2	0.49	0.16	0.29	0.35	1.1
29	2.4	4.0	3.7	2.8	---	3.1	1.5	0.21	0.13	0.69	0.42	1.3
30	2.8	5.2	3.3	2.8	---	2.3	1.7	0.08	0.16	0.74	0.33	1.1
31	2.6	---	3.4	2.9	---	1.8	---	0.06	---	1.4	0.42	---
TOTAL	54.99	108.4	110.9	92.2	122.8	144.4	83.3	32.15	7.28	6.50	17.98	24.91
MEAN	1.77	3.61	3.58	2.97	4.39	4.66	2.78	1.04	0.24	0.21	0.58	0.83
MAX	2.8	15	6.7	4.2	18	19	7.7	4.2	0.92	1.4	4.0	1.4
MIN	0.89	1.7	1.9	1.5	1.8	1.8	1.4	0.06	0.02	0.00	0.02	0.44
AC-FT	109	215	220	183	244	286	165	64	14	13	36	49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2003, BY WATER YEAR (WY)

MEAN	3.41	5.27	6.55	12.3	16.0	33.0	21.0	14.0	9.65	4.86	5.81	3.72
MAX	10.5	22.1	26.5	128	136	313	136	80.8	73.5	29.1	38.8	12.7
(WY)	(1999)	(1999)	(1999)	(1993)	(1993)	(1995)	(1952)	(1993)	(1995)	(1995)	(1955)	(1998)
MIN	0.22	0.59	0.91	0.82	0.79	1.44	1.50	1.04	0.24	0.21	0.055	0.29
(WY)	(1991)	(1991)	(1992)	(1991)	(1991)	(1991)	(1991)	(2003)	(2003)	(2003)	(1956)	(1953)

SUMMARY STATISTICS

FOR 2002 CALENDAR YEAR

FOR 2003 WATER YEAR

WATER YEARS 1951 - 2003

ANNUAL TOTAL		800.09		805.81								
ANNUAL MEAN		2.19		2.21						11.5		
HIGHEST ANNUAL MEAN										56.0		1993
LOWEST ANNUAL MEAN										1.18		1991
HIGHEST DAILY MEAN		15	Nov 9		19	Mar 1				2,910	Mar 12, 1995	
LOWEST DAILY MEAN		0.04	Aug 22		0.00	Jul 18				0.00	Sep 21, 1951	
ANNUAL SEVEN-DAY MINIMUM		0.05	Aug 20		0.01	Jul 15				0.00	Aug 2, 1956	
ANNUAL RUNOFF (AC-FT)		1,590		1,600						8,300		
10 PERCENT EXCEEDS		4.7		4.3						21		
50 PERCENT EXCEEDS		2.1		2.0						3.3		
90 PERCENT EXCEEDS		0.12		0.07						0.45		

VIRGIN RIVER BASIN

09413000 SANTA CLARA RIVER AT ST. GEORGE, UT—Continued

e Estimated

