

## VIRGIN RIVER BASIN

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09409100 SANTA CLARA RIVER ABOVE BAKER RESERVOIR, NEAR CENTRAL, UT

LOCATION.--Lat 37°23'05", long 113°37'52", in SW<sup>1</sup>/4NW<sup>1</sup>/4NE<sup>1</sup>/4 sec. 22, T. 39 S., R. 16 W., Washington County, Hydrologic Unit 15010008, on left bank 0.6 mi downstream from Kane Spring Draw, 0.8 mi upstream from Baker Dam, 2.6 mi south of Central, Utah, and 4.0 mi north of Veyo, Utah.

DRAINAGE AREA.--116 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,875 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges and flows less than 2.0 ft<sup>3</sup>/s, which are poor. Diversion 0.5 mi upstream for power generation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft<sup>3</sup>/s (estimated), Mar 11, 1995, gage height, 5.79 ft, from rating curve extended above 100 ft<sup>3</sup>/s on basis of slope-area measurement at gage height, 2.28 ft and velocity-area measurement at gage height, 2.78 ft; minimum daily discharge, 0.08 ft<sup>3</sup>/s, Aug 9-14, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec 6, 1966 reached a discharge of 2,080 ft<sup>3</sup>/s, from flow over dam measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7.8 ft<sup>3</sup>/s, Apr 25, 26, gage height, 0.93 ft; minimum daily discharge, 0.08 ft<sup>3</sup>/s, on several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e0.25	0.47	0.45	0.51	0.36	0.35	0.30	6.2	0.13	0.13	0.11	4.8
2	e0.25	0.49	0.40	0.53	0.35	0.28	0.30	6.5	0.14	0.13	0.11	5.4
3	0.26	0.49	0.44	0.69	0.33	0.27	0.29	6.3	0.14	0.12	0.11	5.2
4	0.26	0.45	0.45	0.66	0.34	0.26	0.28	6.5	0.15	0.12	0.10	4.9
5	0.25	0.50	0.40	0.67	0.35	0.27	0.28	6.4	0.17	0.12	0.10	5.1
6	0.27	0.45	0.42	0.69	0.36	0.27	0.28	6.3	0.18	0.11	0.10	5.2
7	0.27	0.52	0.39	0.66	0.40	0.28	0.28	6.2	0.18	0.11	0.09	5.2
8	0.28	0.53	0.35	0.63	0.43	0.30	0.28	6.2	0.16	0.11	0.09	4.9
9	0.28	0.50	0.44	0.55	0.36	0.29	0.28	6.3	0.19	0.11	0.08	4.9
10	0.27	0.50	0.44	0.54	0.38	0.30	0.28	6.3	0.20	0.12	0.08	5.0
11	0.30	0.45	0.42	0.46	0.40	0.30	0.28	6.5	0.20	0.12	0.08	5.2
12	0.31	0.46	0.30	0.49	0.44	0.30	0.28	6.4	0.18	0.12	0.08	5.0
13	0.27	0.63	0.30	0.46	0.40	0.30	0.28	6.3	0.17	0.11	0.08	4.9
14	0.27	0.63	0.38	0.43	0.39	0.30	0.28	6.2	0.17	0.10	0.08	4.8
15	0.27	0.51	0.42	0.47	0.35	0.29	0.29	6.1	0.17	0.10	2.0	4.9
16	0.27	0.55	0.32	0.34	0.36	0.29	0.35	6.1	0.17	0.12	4.6	4.8
17	0.28	0.54	0.37	0.34	0.37	0.27	0.35	6.0	0.17	0.14	4.6	5.0
18	0.31	0.50	0.37	0.35	0.41	0.26	0.35	5.9	0.16	0.12	4.6	5.0
19	0.28	0.50	0.36	0.34	0.35	0.25	0.35	6.0	0.17	0.11	4.6	4.8
20	0.29	0.48	0.39	0.37	0.42	0.27	0.35	6.1	0.16	0.10	4.6	4.7
21	0.28	0.50	0.38	0.44	0.41	0.34	0.35	6.3	0.18	0.10	4.6	4.7
22	0.28	0.50	0.38	0.57	0.38	0.35	0.35	6.3	0.18	0.10	4.5	4.7
23	0.30	0.50	0.44	0.41	0.35	0.35	0.33	6.3	0.17	0.10	4.6	4.8
24	0.30	0.68	0.37	0.39	0.35	0.36	0.30	6.1	0.14	0.10	4.6	4.9
25	0.30	1.0	0.37	0.41	0.33	0.36	4.6	6.1	0.12	0.11	4.5	4.9
26	0.30	0.62	0.39	0.45	0.36	0.35	7.3	6.2	0.12	0.10	4.4	4.8
27	0.35	0.41	0.53	0.40	0.37	0.37	7.1	6.0	0.13	0.09	4.4	4.6
28	0.52	0.40	0.50	0.40	0.38	0.35	6.4	6.0	0.12	0.10	4.4	4.6
29	0.53	0.57	0.50	0.38	---	0.35	6.2	6.0	0.12	0.09	4.5	4.9
30	0.50	0.49	0.50	0.38	---	0.32	6.2	2.2	0.13	0.09	4.6	4.9
31	0.55	---	0.54	0.36	---	0.30	---	0.13	---	0.10	4.6	---
TOTAL	9.70	15.82	12.71	14.77	10.48	9.50	45.14	182.43	4.77	3.40	75.99	147.5
MEAN	0.313	0.527	0.410	0.476	0.374	0.306	1.505	5.885	0.159	0.110	2.451	4.917
MAX	0.55	1.0	0.54	0.69	0.44	0.37	7.3	6.5	0.20	0.14	4.6	5.4
MIN	0.25	0.40	0.30	0.34	0.33	0.25	0.28	0.13	0.12	0.09	0.08	4.6
AC-FT	19	31	25	29	21	19	90	362	9.5	6.7	151	293

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2002, BY WATER YEAR (WY)

MEAN	2.786	3.771	3.194	2.681	3.112	11.29	9.912	21.19	17.54	6.346	2.664	3.997
MAX	14.6	12.9	10.6	12.9	11.8	63.7	35.1	77.8	84.1	32.1	7.36	15.5
(WY)	1996	1996	1993	1993	1993	1995	1993	1993	1995	1995	1995	1995
MIN	0.31	0.50	0.40	0.47	0.37	0.31	0.87	0.47	0.16	0.11	0.18	0.23
(WY)	2002	1990	1990	2000	2002	2002	1996	1990	2002	2002	2001	2001

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1990 - 2002

ANNUAL TOTAL	2112.75	532.21		
ANNUAL MEAN	5.788	1.458	7.390	
HIGHEST ANNUAL MEAN			24.5	1995
LOWEST ANNUAL MEAN			1.39	1990
HIGHEST DAILY MEAN	76	May 14	393	Mar 11 1995
LOWEST DAILY MEAN	0.12	Jul 19	0.08	Aug 9 2002
ANNUAL SEVEN-DAY MINIMUM	0.13	Jul 18	0.08	Aug 8 2002
ANNUAL RUNOFF (AC-FT)	4190		5350	
10 PERCENT EXCEEDS	20	5.2	18	
50 PERCENT EXCEEDS	0.50	0.37	1.2	
90 PERCENT EXCEEDS	0.20	0.12	0.34	

e Estimated