

VIRGIN RIVER BASIN

09404900 EAST FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat 37°09'51", long 112°57'28", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 2, T. 42 S., R. 10 W., Washington County, Hydrologic Unit 15010008, Zion National Park, on right bank 0.7 mi upstream from Zion National Park boundary, 1.2 mi upstream from Shunes Creek, 2.7 mi southeast of Springdale, and 3.4 mi south-southeast of Zion National Park headquarters.

DRAINAGE AREA.--343 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,940 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Numerous irrigation diversions upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft<sup>3</sup>/s, Aug 10, 1997, gage height, 11.38 ft, from floodmarks, from rating curve extended above 200 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights, 6.41 ft and 9.70 ft; minimum daily discharge, 33 ft<sup>3</sup>/s, Sep 7-9, 1993.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug 3	2015	*1,430	*8.74	Aug 22	0130	1,310	8.50

Minimum daily discharge, 31 ft<sup>3</sup>/s, Aug 16, 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	47	51	54	63	79	59	51	40	39	e36	e36
2	36	45	52	55	63	75	58	50	40	38	e37	e36
3	36	44	52	54	65	78	54	50	40	38	e150	e36
4	35	45	52	55	66	66	54	50	39	38	e65	e36
5	35	44	51	56	68	61	56	50	39	38	e42	e36
6	36	44	51	57	69	59	60	51	40	59	e40	e36
7	36	44	52	58	68	62	63	51	40	43	e38	e36
8	36	46	53	58	65	57	90	50	40	40	e38	e36
9	37	47	53	61	61	65	68	47	40	60	e38	e36
10	40	50	53	60	63	79	69	44	40	45	100	e36
11	53	49	53	65	64	71	67	44	40	39	85	e36
12	44	49	54	64	64	64	67	44	40	37	45	e36
13	42	48	53	61	64	62	67	44	39	36	36	e36
14	38	49	53	61	64	64	67	45	39	37	35	e37
15	38	50	54	63	62	64	65	44	40	37	32	36
16	38	50	53	63	62	63	64	43	40	36	31	36
17	38	49	53	60	61	62	62	44	40	35	31	36
18	38	50	53	60	62	64	59	43	40	e35	33	36
19	39	48	53	63	61	65	58	43	39	e35	33	36
20	39	50	54	63	59	68	57	45	40	e35	34	35
21	66	50	54	63	62	70	58	44	40	e35	86	35
22	66	50	55	64	68	71	64	42	40	e35	191	35
23	50	51	54	65	72	71	62	42	41	e35	50	35
24	50	51	54	66	68	70	60	41	41	e35	e42	35
25	47	51	54	68	69	67	58	41	40	e35	e38	35
26	47	50	53	66	68	65	54	41	46	e37	e37	35
27	111	51	53	67	69	62	55	41	50	e38	e36	35
28	69	51	54	67	101	61	56	40	47	e36	e38	35
29	51	51	54	64	---	61	54	40	42	e36	e37	35
30	112	51	54	64	---	61	55	40	39	e36	e40	35
31	59	---	54	61	---	59	---	40	---	e36	e38	---
TOTAL	1498	1455	1646	1906	1851	2046	1840	1385	1221	1194	1612	1070
MEAN	48.3	48.5	53.1	61.5	66.1	66.0	61.3	44.7	40.7	38.5	52.0	35.7
MAX	112	51	55	68	101	79	90	51	50	60	191	37
MIN	35	44	51	54	59	57	54	40	39	35	31	35
AC-FT	2970	2890	3260	3780	3670	4060	3650	2750	2420	2370	3200	2120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

MEAN	48.8	55.2	56.6	65.9	69.7	80.6	74.4	53.7	42.5	40.3	43.3	48.6
MAX	62.3	62.8	62.9	110	110	153	200	109	57.7	44.4	52.0	74.6
(WY)	1998	1994	1993	1993	1993	1993	1993	1993	1998	1998	2001	1997
MIN	38.8	48.5	51.3	53.3	58.1	51.5	41.2	36.1	34.4	36.0	36.7	35.7
(WY)	1992	2001	2000	2000	1999	1999	2000	2000	1996	1996	1996	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1992 - 2001	
ANNUAL TOTAL	17182		18724			
ANNUAL MEAN	46.9		51.3		56.5	
HIGHEST ANNUAL MEAN					85.1	
LOWEST ANNUAL MEAN					46.6	
HIGHEST DAILY MEAN	112	Oct 30	191	Aug 22	450	Sep 11 1998
LOWEST DAILY MEAN	30	Aug 11	31	Aug 16	30	Aug 11 2000
ANNUAL SEVEN-DAY MINIMUM	32	Aug 10	33	Aug 14	32	Aug 10 2000
ANNUAL RUNOFF (AC-FT)	34080		37140		40970	
10 PERCENT EXCEEDS	57		67		76	
50 PERCENT EXCEEDS	48		50		52	
90 PERCENT EXCEEDS	36		36		36	

e Estimated