09404450 EAST FORK VIRGIN RIVER NEAR GLENDALE, UT

LOCATION.--Lat 37°20'22", long 112°36'13", in SE¼NE¼NW¼ sec. 14, T. 40 S., R. 7 W., Kane County, Hydrologic Unit 15010008, on right bank 50 ft downstream from Lydiás Creek, and 1.0 mi north of Glendale on U.S. Highway 89.

DRAINAGE AREA.--74.2 mi^2.

PERIOD OF RECORD.--October 1966 to current year.

GAGE.--Water-stage recorder and artificial control. Elevation of gage is 5,900 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. A few small diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 640 ft^3/s, Jul 27, 1976, gage height, 4.14 ft, maximum gage height, 4.68 ft, Jul 10, 1999, affected by backwater, discharge unknown; minimum discharge, 2.9 ft^3/s, several days in May and Jun 1989.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug 19	1645	*125	*2.01	No other peak greater than base discharge.			

Minimum discharge, 2.4 ft^3/s, Oct 27, gage height, 0.91 ft.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

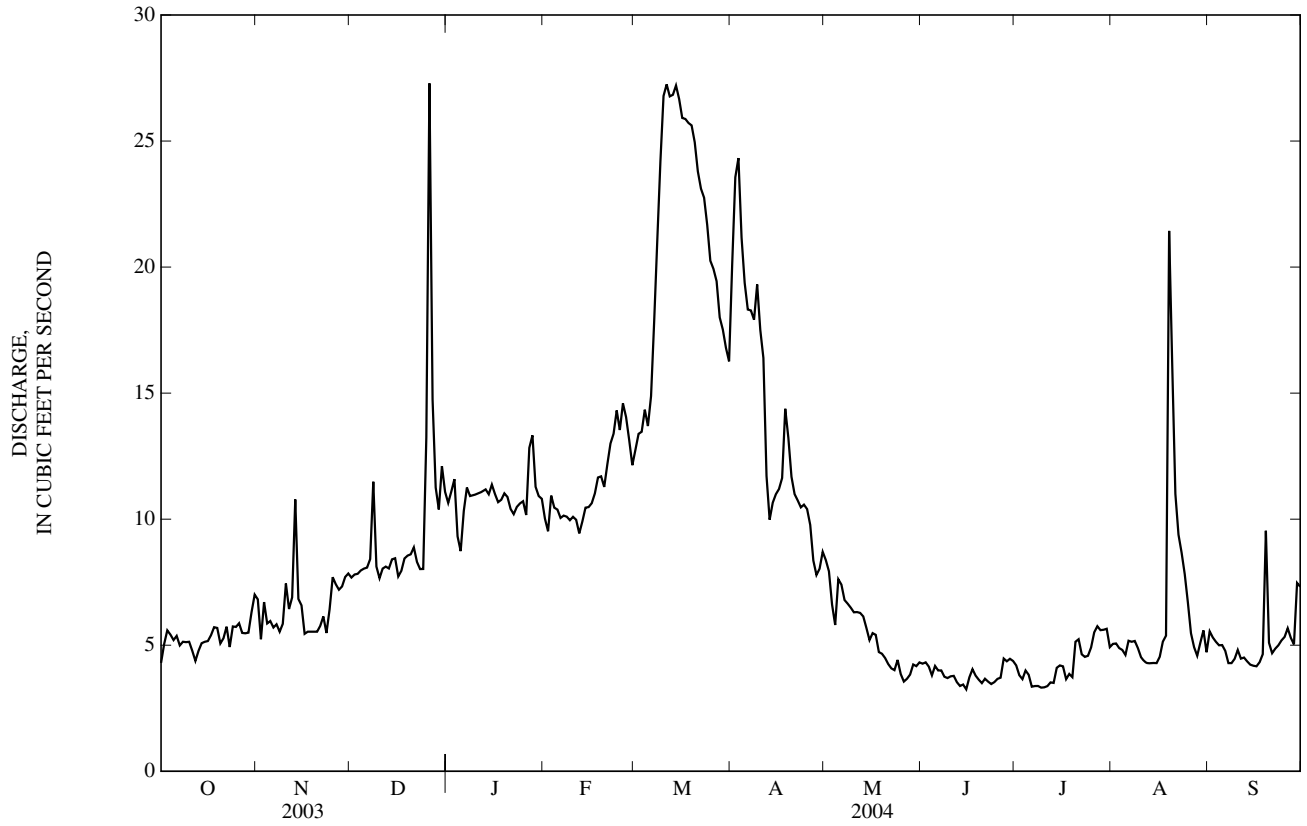
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	6.8	7.7	11	10	13	20	8.4	4.3	4.2	5.1	5.5
2	5.0	5.2	7.8	11	9.5	13	24	7.9	4.3	3.8	5.1	5.3
3	5.6	6.7	7.8	12	11	13	24	6.6	4.2	3.7	4.9	5.1
4	5.4	5.9	8.0	9.3	10	14	21	5.8	3.8	4.0	4.8	5.0
5	5.2	6.0	8.0	8.7	10	14	19	7.6	4.2	3.8	4.6	5.0
6	5.4	5.7	8.1	10	10	15	18	7.4	4.0	3.4	5.2	4.8
7	5.0	5.8	8.4	11	10	18	18	6.8	4.0	3.4	5.1	4.3
8	5.1	5.5	11	11	10	21	18	6.6	3.7	3.4	5.2	4.3
9	5.1	5.8	8.1	11	10	24	19	6.5	3.7	3.3	4.9	4.5
10	5.1	7.4	7.7	11	10	27	18	6.3	3.8	3.3	4.5	4.8
11	4.8	6.4	8.0	11	10	27	16	6.3	3.8	3.4	4.4	4.5
12	4.4	6.9	8.1	11	9.4	27	12	6.3	3.5	3.5	4.3	4.5
13	4.8	11	8.0	11	9.9	27	10	6.1	3.4	3.5	4.3	4.4
14	5.1	6.8	8.4	11	10	27	11	5.7	3.4	4.1	4.3	4.2
15	5.1	6.6	8.4	11	10	27	11	5.2	3.2	4.2	4.3	4.2
16	5.2	5.5	7.7	11	11	26	11	5.5	3.7	4.2	4.5	4.2
17	5.4	5.5	8.0	11	11	26	12	5.4	4.0	3.7	5.1	4.3
18	5.7	5.5	8.4	11	12	26	14	4.7	3.8	3.9	5.4	4.6
19	5.7	5.5	8.6	11	12	26	13	4.7	3.6	3.7	21	9.5
20	5.1	5.5	8.6	11	11	25	12	4.5	3.5	5.1	16	5.1
21	5.3	5.8	8.9	10	12	24	11	4.3	3.7	5.2	11	4.7
22	5.7	6.1	8.3	10	13	23	11	4.1	3.6	4.6	9.4	4.9
23	4.9	5.5	8.0	10	13	23	10	4.0	3.5	4.5	8.7	5.0
24	5.7	6.4	8.0	11	14	22	11	4.4	3.5	4.6	7.8	5.2
25	5.7	7.7	13	11	14	20	10	3.9	3.7	4.9	6.7	5.3
26	5.9	7.4	27	10	15	20	9.8	3.6	3.7	5.5	5.5	5.7
27	5.5	7.2	15	13	14	19	8.4	3.7	4.5	5.8	4.9	5.3
28	5.5	7.3	11	13	13	18	7.8	3.8	4.4	5.6	4.6	5.0
29	5.5	7.7	10	11	12	18	8.0	4.2	4.5	5.6	5.1	7.5
30	6.3	7.8	12	11	---	17	8.7	4.2	4.4	5.7	5.6	7.3
31	7.0	---	11	11	---	16	---	4.3	---	4.9	4.7	---
TOTAL	165.5	194.9	297.0	337.0	326.8	656	416.7	168.8	115.4	132.5	197.0	154.0
MEAN	5.34	6.50	9.58	10.9	11.3	21.2	13.9	5.45	3.85	4.27	6.35	5.13
MAX	7.0	11	27	13	15	27	24	8.4	4.5	5.8	21	9.5
MIN	4.3	5.2	7.7	8.7	9.4	13	7.8	3.6	3.2	3.3	4.3	4.2
AC-FT	328	387	589	668	648	1,300	827	335	229	263	391	305

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)

MEAN	13.0	14.7	15.5	16.1	18.4	24.0	34.5	27.2	13.9	10.6	10.4	10.5
MAX	22.5	24.6	30.2	26.2	36.4	54.3	145	131	43.6	28.3	26.6	24.7
(WY)	(1984)	(1984)	(1967)	(1980)	(1980)	(1993)	(1980)	(1980)	(1980)	(1983)	(1983)	(1980)
MIN	5.34	6.50	8.59	9.40	9.90	11.5	8.45	5.34	3.83	3.86	3.36	4.69
(WY)	(2004)	(2004)	(2003)	(1991)	(1991)	(1999)	(2002)	(2002)	(2002)	(2003)	(2002)	(2003)

09404450 EAST FORK VIRGIN RIVER NEAR GLENDALE, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004	
ANNUAL TOTAL	2,845.9		3,161.6			
ANNUAL MEAN	7.80		8.64		17.4	
HIGHEST ANNUAL MEAN					46.2	1980
LOWEST ANNUAL MEAN					8.26	1990
HIGHEST DAILY MEAN	30	Mar 16	27	Dec 26	285	Apr 21, 1980
LOWEST DAILY MEAN	3.0	Jul 13	3.2	Jun 15	3.0	Aug 7, 2002
ANNUAL SEVEN-DAY MINIMUM	3.2	Jul 8	3.4	Jul 6	3.0	Aug 28, 2002
ANNUAL RUNOFF (AC-FT)	5,640		6,270		12,590	
10 PERCENT EXCEEDS	12		16		26	
50 PERCENT EXCEEDS	6.8		6.6		14	
90 PERCENT EXCEEDS	4.2		3.9		6.4	



09404900 EAST FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat 37°09'51", long 112°57'28", in SE¼SW¼NW¼ 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^2.

PERIOD OF RECORD.-October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 3,940 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft^3/s, Aug 10, 1997, gage height, 11.38 ft from floodmark and rating curve extended above 200 ft^3/s on basis of slope-area measurements at gage heights, 6.41 ft and 9.70 ft; minimum daily discharge, 26 ft^3/s, Sep 14, 15, 2002.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jun 28	1515	*432	*6.23				

Minimum daily discharge, 34 ft^3/s, Jul 22, 24, 26.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	44	49	53	51	63	56	44	40	40	36	41
2	41	43	49	57	51	67	65	44	40	40	38	41
3	44	43	50	59	55	64	69	44	40	39	38	42
4	e38	43	50	50	54	65	65	43	40	40	37	42
5	e37	43	50	49	53	64	65	43	40	39	43	42
6	e37	43	49	48	50	63	55	43	40	39	41	42
7	e36	44	51	56	53	65	55	43	40	39	45	42
8	e35	44	56	53	53	69	56	43	40	38	38	42
9	e35	44	50	54	51	72	57	43	40	38	36	44
10	e36	46	50	54	52	72	54	43	40	38	37	49
11	e37	47	50	53	53	75	54	43	40	37	37	44
12	e36	51	51	53	51	71	53	43	39	37	37	43
13	e35	71	50	54	51	73	49	42	39	37	38	43
14	e35	50	51	54	54	72	49	43	39	37	38	42
15	e36	48	51	54	53	72	49	43	40	37	38	42
16	e35	48	48	53	53	70	48	43	40	42	38	42
17	e35	47	49	53	52	69	48	43	40	37	39	42
18	e36	47	51	53	55	69	50	42	40	36	42	42
19	e37	46	51	53	55	70	53	42	40	36	40	56
20	e36	47	51	53	54	69	50	42	40	35	68	51
21	e36	47	51	53	57	67	50	42	40	35	50	48
22	e38	47	50	52	66	67	48	41	40	34	42	44
23	e38	47	50	52	81	67	48	41	40	35	40	46
24	e37	47	51	52	73	67	47	41	40	34	39	44
25	37	49	58	55	66	62	46	41	40	35	40	42
26	37	49	119	50	106	59	46	41	41	34	40	41
27	37	49	57	50	99	60	45	41	41	35	41	41
28	37	49	49	54	75	58	43	41	56	35	41	43
29	38	49	51	53	65	58	44	41	42	35	41	52
30	38	50	56	53	---	58	44	40	40	35	41	52
31	41	---	53	55	---	58	---	40	---	36	41	---
TOTAL	1,146	1,422	1,652	1,645	1,742	2,055	1,561	1,309	1,217	1,144	1,260	1,327
MEAN	37.0	47.4	53.3	53.1	60.1	66.3	52.0	42.2	40.6	36.9	40.6	44.2
MAX	44	71	119	59	106	75	69	44	56	42	68	56
MIN	35	43	48	48	50	58	43	40	39	34	36	41
AC-FT	2,270	2,820	3,280	3,260	3,460	4,080	3,100	2,600	2,410	2,270	2,500	2,630

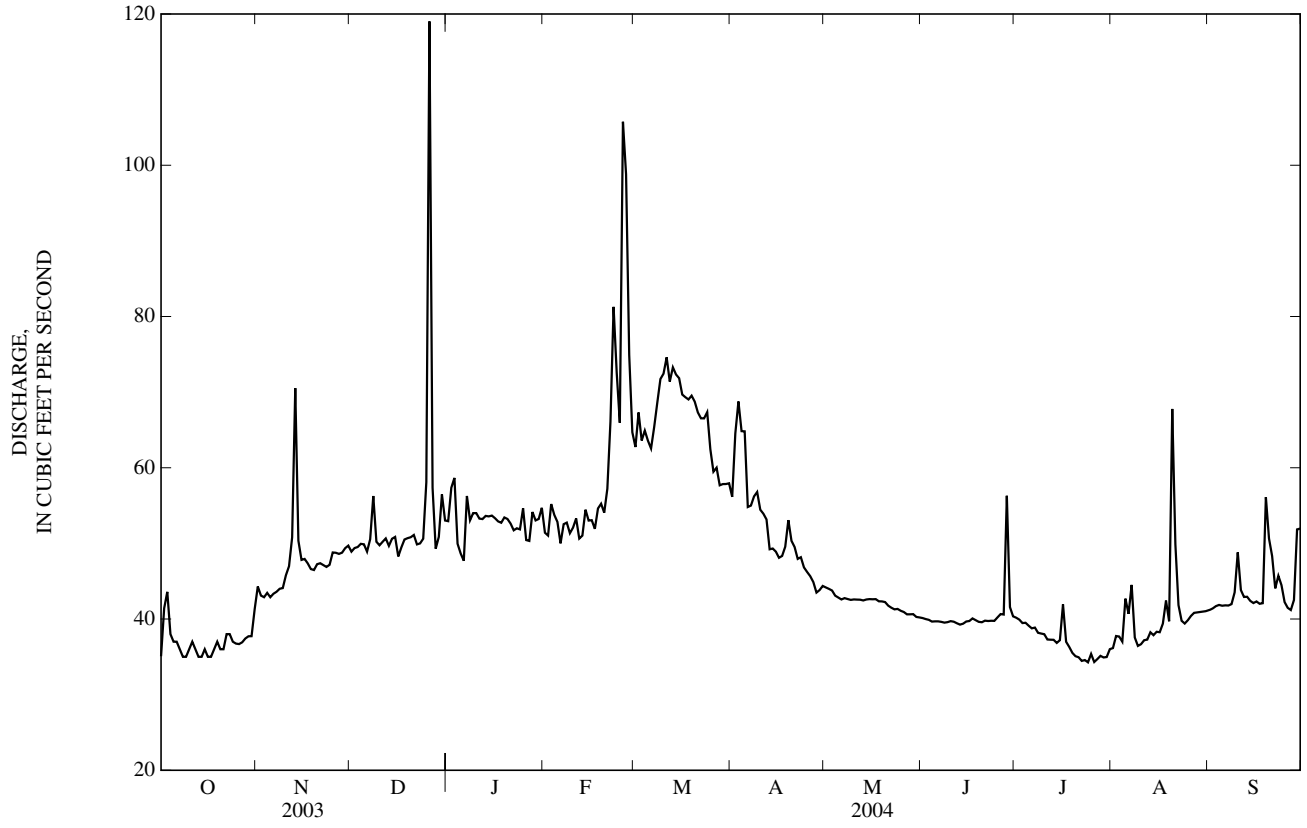
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	46.7	53.6	55.0	62.0	66.6	74.8	67.7	50.8	41.7	39.1	42.1	45.7
MAX	62.3	62.8	62.9	110	110	153	200	109	57.7	44.4	52.0	74.6
(WY)	(1998)	(1994)	(1997)	(1993)	(1993)	(1993)	(1993)	(1993)	(1993)	(1998)	(2001)	(1997)
MIN	37.0	47.0	44.7	43.3	53.8	45.6	36.8	35.4	34.4	31.7	36.3	29.6
(WY)	(2004)	(2003)	(2003)	(2003)	(2002)	(2002)	(2002)	(2002)	(1996)	(2002)	(2002)	(2002)

09404900 EAST FORK VIRGIN RIVER NEAR SPRINGDALE, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	16,172		17,480			
ANNUAL MEAN	44.3		47.8		53.7	
HIGHEST ANNUAL MEAN					85.1	1993
LOWEST ANNUAL MEAN					41.6	2002
HIGHEST DAILY MEAN	180	Feb 12	119	Dec 26	450	Sep 11, 1998
LOWEST DAILY MEAN	30	Aug 30	34	Jul 22	26	Sep 14, 2002
ANNUAL SEVEN-DAY MINIMUM	31	Aug 26	35	Jul 20	27	Sep 12, 2002
ANNUAL RUNOFF (AC-FT)	32,080		34,670		38,930	
10 PERCENT EXCEEDS	52		64		70	
50 PERCENT EXCEEDS	43		44		49	
90 PERCENT EXCEEDS	33		37		36	

e Estimated



09405500 NORTH FORK VIRGIN RIVER NEAR SPRINGDALE, UT

LOCATION.--Lat 37°12'35", long 112°58'40", in NW¼SW¼NW¼ sec. 22, T. 41 S., R. 10 W., Washington County, Hydrologic Unit 15010008, Zion National Park, on right bank 0.2 mi downstream from point of diversion of Springdale Canal, 0.5 mi downstream from Pine Creek, and 1.9 mi northeast of Springdale.

DRAINAGE AREA.--344 mi^2.

PERIOD OF RECORD.--May 1913 to June 1914, June to November 1923, April to June, August and September 1925 (fragmentary), October 1925 to current year. Published as Zion Creek near Springdale 1913-14, and as Mukuntuweap River near Springdale 1923 and 1925-32. Published as combined flow of river and Springdale canal 1932-88.

GAGE.--Water-stage recorder. Crest-stage gage since May 31, 1995. Elevation of gage is 3,970 ft above NGVD of 1929, from topographic map. May 13, 1913 to June 30, 1914, nonrecording gage at site 3.8 mi downstream at different datum. June 6, 1923 to August 20, 1932, nonrecording gage at site 0.8 mi upstream. November 3, 1932 to December 14, 1949, nonrecording gage 50 ft downstream at datum 0.34 ft higher.

REMARKS.-- Records good except for estimated daily discharges, which are poor. Some regulation of low flows by Kolob Reservoir (20 mi upstream) and several diversions for irrigation upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,150 ft^3/s, Dec 6, 1966, gage height, 12.98 ft, from rating curve extended above 2,000 ft^3/s on basis of drift measurement at gage height, 6.7 ft, and slope-area measurement at gage height, 10.25 ft; minimum estimated, less than 5.0 ft^3/s, Apr 12, 1995, result of landslide 1.0 mi upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jul 15	1930	*1,480	*4.43

Date	Time	Discharge (ft^3/s)	Gage height (ft)
No other peak greater than base discharge.			

Minimum daily discharge, 26 ft^3/s, on several days in Aug and Sep.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	40	42	44	39	56	139	146	49	32	39	26
2	30	39	42	50	41	64	167	160	47	32	40	26
3	50	41	40	57	51	62	188	170	45	32	40	26
4	38	40	40	43	46	60	142	175	44	32	40	28
5	34	39	47	34	46	54	157	176	43	31	39	28
6	32	40	46	36	41	53	203	161	43	31	42	28
7	31	40	45	42	44	61	208	144	41	30	40	27
8	30	39	55	47	47	69	180	131	40	29	38	26
9	30	39	37	46	42	76	163	119	e38	29	35	26
10	31	44	37	47	44	81	163	111	e39	30	33	30
11	30	44	41	47	44	82	124	101	e39	30	34	31
12	30	75	41	47	42	79	116	91	e38	28	34	30
13	30	84	38	47	40	81	133	85	e37	27	37	28
14	30	46	43	46	46	82	146	81	e38	27	47	27
15	30	45	41	47	47	83	130	79	37	93	42	26
16	30	46	34	47	47	81	139	76	37	52	46	26
17	31	45	34	45	47	82	144	71	38	37	45	27
18	34	44	40	45	48	86	146	68	39	35	43	29
19	34	44	44	47	48	89	121	67	37	33	35	73
20	33	44	45	46	47	95	113	65	35	31	31	42
21	34	44	48	42	51	107	112	63	35	33	31	35
22	37	42	46	42	61	119	110	61	34	38	31	33
23	34	32	42	43	77	135	108	61	33	37	29	32
24	34	38	45	45	71	148	116	59	33	37	28	31
25	33	44	119	47	58	149	126	57	33	42	28	31
26	32	37	130	39	90	143	137	55	35	41	28	30
27	33	37	41	39	91	111	146	53	34	43	28	29
28	34	39	38	47	70	99	154	52	40	42	27	31
29	34	42	38	47	62	92	164	57	39	39	27	43
30	34	43	47	47	---	98	140	58	35	38	26	47
31	37	---	49	48	---	117	---	53	---	40	26	---
TOTAL	1,021	1,316	1,475	1,396	1,528	2,794	4,335	2,906	1,155	1,131	1,089	952
MEAN	32.9	43.9	47.6	45.0	52.7	90.1	144	93.7	38.5	36.5	35.1	31.7
MAX	50	84	130	57	91	149	208	176	49	93	47	73
MIN	27	32	34	34	39	53	108	52	33	27	26	26
AC-FT	2,030	2,610	2,930	2,770	3,030	5,540	8,600	5,760	2,290	2,240	2,160	1,890

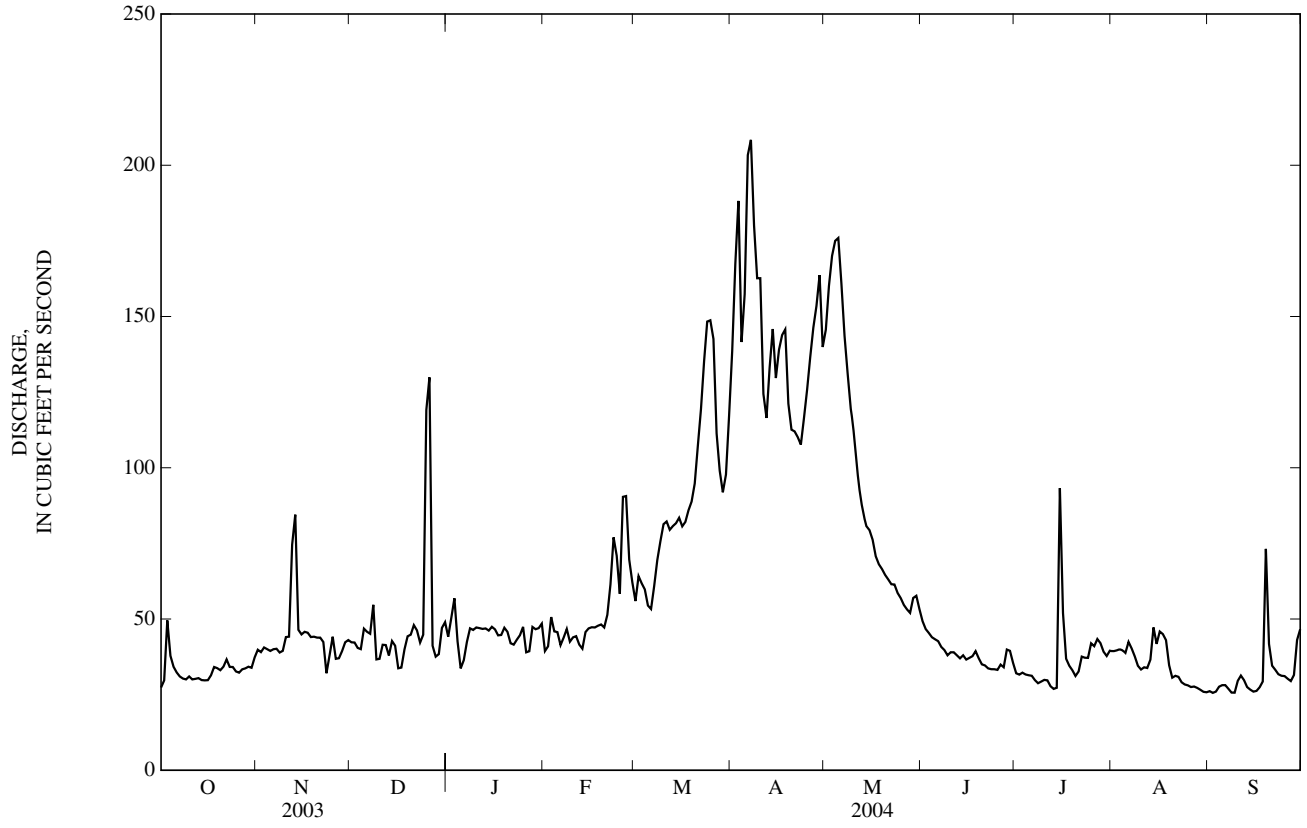
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2004, BY WATER YEAR (WY)

MEAN	48.0	52.7	51.6	58.4	67.7	109	185	230	94.2	51.4	45.8	46.9
MAX	79.8	75.5	73.5	96.3	110	271	644	813	404	113	71.1	115
(WY)	(1999)	(1999)	(1994)	(1997)	(1995)	(1995)	(1993)	(1993)	(1995)	(1995)	(1995)	(1998)
MIN	32.9	35.9	36.6	39.0	47.8	48.0	43.6	30.8	24.2	24.5	22.9	24.8
(WY)	(2004)	(1990)	(1990)	(1991)	(1990)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)	(1989)

09405500 NORTH FORK VIRGIN RIVER NEAR SPRINGDALE, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1989 - 2004	
ANNUAL TOTAL	18,106		21,098			
ANNUAL MEAN	49.6		57.6		86.8	
HIGHEST ANNUAL MEAN					207	1993
LOWEST ANNUAL MEAN					38.5	2002
HIGHEST DAILY MEAN	165	May 16	208	Apr 7	1,140	May 4, 1993
LOWEST DAILY MEAN	24	Jul 12	26	Aug 30	22	Aug 5, 1994
ANNUAL SEVEN-DAY MINIMUM	24	Jul 10	26	Aug 28	22	Aug 12, 2002
ANNUAL RUNOFF (AC-FT)	35,910		41,850		62,880	
10 PERCENT EXCEEDS	80		122		148	
50 PERCENT EXCEEDS	44		43		52	
90 PERCENT EXCEEDS	29		30		32	

e Estimated



09406000 VIRGIN RIVER AT VIRGIN, UT

LOCATION.--Lat 37°12'15", long 113°10'48", in SW¼NW¼SW¼ sec. 23, T. 41 S., R. 12 W., Washington County, Hydrologic Unit 15010008, on right bank 0.25 mi downstream from North Creek and 0.5 mi east of Virgin.

DRAINAGE AREA.--956 mi^2.

PERIOD OF RECORD.--April 1909 to September 1971, October 1978 to current year. Fragmentary prior to 1926, monthly discharge published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1942-43(M), 1947-48(M). WSP 1633: 1921(M), 1950-51. WDR-UT-89-1: Drainage area.

GAGE.--Water-stage recorder. Crest-stage gage since February 11, 1992. Elevation of gage is 3,500 ft above NGVD of 1929, from topographic map. October 1, 1978 to July 5, 1985, 2 mi downstream on left bank, December 19, 1949, to September 1971, across from previous site on right bank at different datum. Prior to December 19, 1949, several nonrecording gages within 3 mi of present site at various datums.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,800 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,800 ft^3/s, Dec 6, 1966, gage height, 18.00 ft, site and datum then in use, from rating curve extended above 5,000 ft^3/s on basis of a slope-area measurement and a float measurement ; minimum observed, 22 ft^3/s, Jul 10, 1920 and Jun 11, 1921.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jul 16	0000	*1,068	*10.49				

Minimum daily discharge, 50 ft^3/s, Jul 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	89	95	109	104	143	176	191	76	e63	e57	e58
2	61	91	95	118	100	139	280	208	73	e62	e57	e59
3	99	94	95	139	112	141	357	217	69	e62	e57	e60
4	80	93	93	108	111	150	256	226	68	e62	e57	e61
5	68	92	95	91	107	128	259	228	67	e62	e65	e61
6	66	89	95	94	103	120	330	213	65	e61	e57	e61
7	64	91	98	105	102	133	363	187	65	e61	e66	e61
8	61	92	123	108	107	155	296	169	65	e57	e62	e60
9	63	90	97	112	104	174	265	155	63	e57	e56	e65
10	63	99	90	115	103	177	256	144	64	e57	e55	e68
11	66	103	92	113	106	174	202	134	64	e57	e51	e60
12	63	162	99	110	103	158	184	122	61	e55	e64	e60
13	62	268	93	110	99	159	188	118	61	e53	e68	e57
14	63	107	96	110	105	155	208	110	62	e50	e72	e55
15	63	97	100	109	109	151	189	107	60	e64	e62	e55
16	61	98	89	109	105	143	196	104	60	e174	e68	e54
17	62	96	87	105	102	141	201	101	63	e64	e72	e51
18	68	93	93	105	107	141	239	94	61	e62	e70	e62
19	71	93	99	107	109	141	206	93	60	e62	e80	e100
20	68	93	99	108	109	143	178	92	57	e64	e120	e150
21	68	93	101	105	113	156	175	91	59	e58	e100	e90
22	70	92	101	102	153	171	168	88	57	e60	e75	e80
23	69	86	97	103	169	188	161	88	55	e63	e61	e71
24	70	86	99	107	192	208	171	88	57	e64	e55	e55
25	72	97	195	108	144	207	177	88	57	e65	e61	e54
26	73	92	389	103	286	198	187	84	58	e63	e57	e53
27	74	89	124	97	266	165	195	80	57	e65	e57	e52
28	73	88	98	106	207	143	204	78	72	e62	e57	e56
29	70	92	96	110	149	130	227	78	72	e58	e58	e82
30	72	94	114	107	---	134	195	85	e64	e55	e58	e107
31	81	---	113	111	---	150	---	82	---	e57	e58	---
TOTAL	2,117	3,039	3,450	3,344	3,786	4,816	6,689	3,943	1,892	1,979	2,013	2,018
MEAN	68.3	101	111	108	131	155	223	127	63.1	63.8	64.9	67.3
MAX	99	268	389	139	286	208	363	228	76	174	120	150
MIN	53	86	87	91	99	120	161	78	55	50	51	51
AC-FT	4,200	6,030	6,840	6,630	7,510	9,550	13,270	7,820	3,750	3,930	3,990	4,000

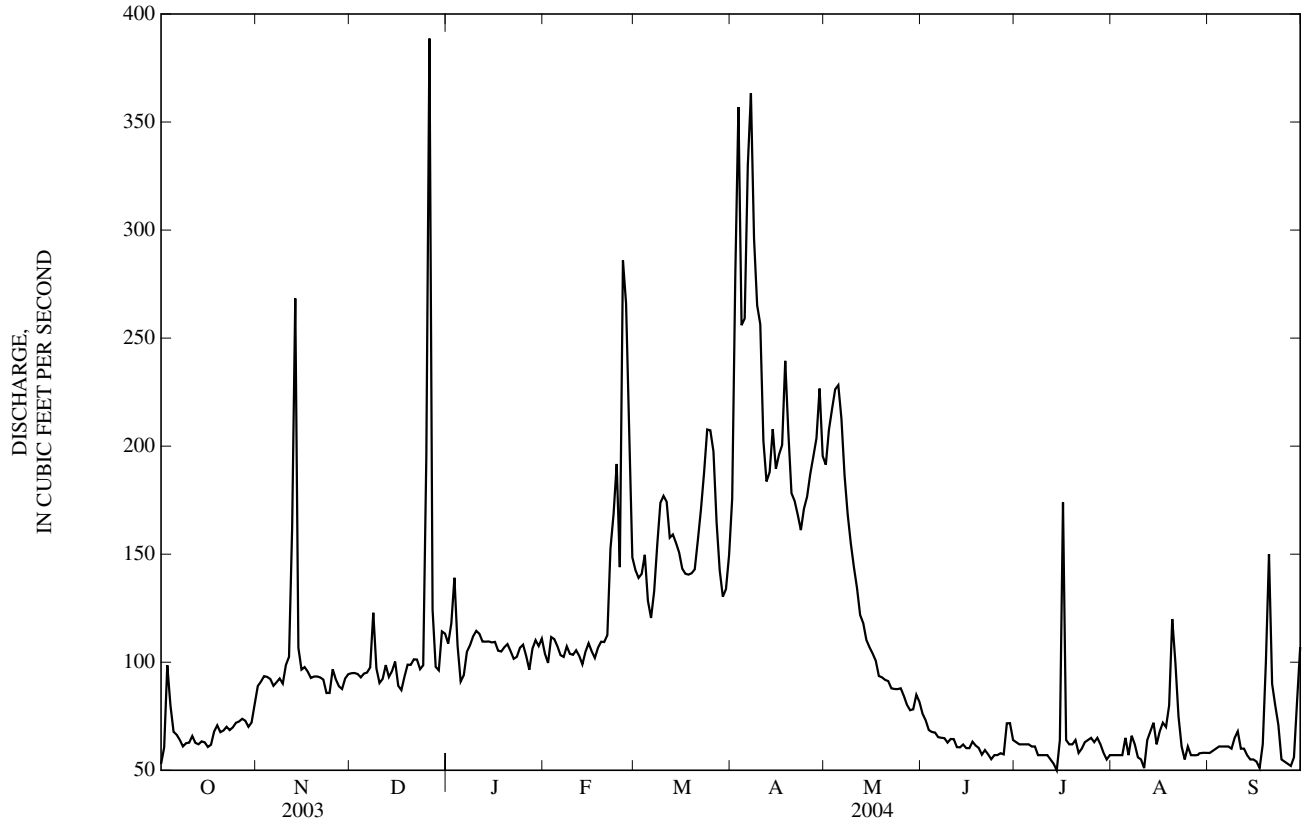
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2004, BY WATER YEAR (WY)

MEAN	128	145	154	161	187	247	381	418	154	118	133	135
MAX	528	606	648	791	833	822	981	1,582	762	484	441	504
(WY)	(1923)	(1923)	(1967)	(1911)	(1980)	(1910)	(1993)	(1979)	(1983)	(1911)	(1916)	(1911)
MIN	61.3	82.9	77.4	70.9	90.9	91.7	86.3	64.8	50.8	30.4	43.5	53.1
(WY)	(1929)	(1926)	(1932)	(1932)	(1926)	(1924)	(2002)	(2002)	(2002)	(1928)	(1928)	(1956)

09406000 VIRGIN RIVER AT VIRGIN, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1910 - 2004	
ANNUAL TOTAL	37,052		39,086			
ANNUAL MEAN	102		107		197	
HIGHEST ANNUAL MEAN					465	1922
LOWEST ANNUAL MEAN					84.6	2002
HIGHEST DAILY MEAN	389	Dec 26	389	Dec 26	10,600	Sep 30, 1911
LOWEST DAILY MEAN	42	Jul 12	50	Jul 14	22	Jul 10, 1920
ANNUAL SEVEN-DAY MINIMUM	43	Jul 9	55	Jul 8	23	Jun 8, 1921
ANNUAL RUNOFF (AC-FT)	73,490		77,530		142,500	
10 PERCENT EXCEEDS	158		188		371	
50 PERCENT EXCEEDS	95		93		128	
90 PERCENT EXCEEDS	55		57		69	

e Estimated



09407810 VIRGIN RIVER BELOW ASH CREEK, NEAR LAVERKIN, UT

LOCATION.--Lat 37°12'05", long 113°17'28", in SW¼SW¼SW¼ sec. 23, T. 41 S., R. 13 W., Washington County, Hydrologic Unit 15010008, on right bank. Located 0.2 mi downstream from Ash Creek and 1 mi west of LaVerkin.

DRAINAGE AREA.-- 1,290 mi^2.

PERIOD OF RECORD.--April to September 2004.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,980 ft above NGVD of 1929, from topographic map.

REMARKS.--Records fair except for estimated flows, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 805 ft^3/s, gage height, 8.50 ft, from rating curve extended above 250 ft^3/s on basis of slope-area measurement at 7,220 ft^3/s at station 09408135 about 6 mi downstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 805 ft^3/s, Jul 16, gage height, 8.50 ft; minimum daily discharge, 18 ft^3/s, Jul 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	81	54	32	48	23
2	---	---	---	---	---	---	---	e90	50	32	48	28
3	---	---	---	---	---	---	---	e100	52	27	48	21
4	---	---	---	---	---	---	---	126	51	e30	45	22
5	---	---	---	---	---	---	---	128	52	e28	43	31
6	---	---	---	---	---	---	---	112	53	e26	55	31
7	---	---	---	---	---	---	---	e78	55	e21	46	29
8	---	---	---	---	---	---	---	e70	e48	26	43	21
9	---	---	---	---	---	---	---	e75	e48	27	40	26
10	---	---	---	---	---	---	---	e70	e48	26	31	38
11	---	---	---	---	---	---	---	e65	e50	29	31	37
12	---	---	---	---	---	---	---	e63	e48	36	35	40
13	---	---	---	---	---	---	---	61	e46	25	42	33
14	---	---	---	---	---	---	---	59	e46	18	52	27
15	---	---	---	---	---	---	92	60	39	25	51	30
16	---	---	---	---	---	---	91	67	36	166	60	28
17	---	---	---	---	---	---	93	63	45	82	66	27
18	---	---	---	---	---	---	141	63	39	57	116	30
19	---	---	---	---	---	---	108	63	39	40	83	94
20	---	---	---	---	---	---	68	63	37	36	95	95
21	---	---	---	---	---	---	66	59	42	32	103	62
22	---	---	---	---	---	---	e56	68	28	37	80	56
23	---	---	---	---	---	---	e62	76	21	32	51	52
24	---	---	---	---	---	---	e60	72	29	29	33	42
25	---	---	---	---	---	---	75	64	29	39	31	41
26	---	---	---	---	---	---	92	63	29	42	34	53
27	---	---	---	---	---	---	95	62	33	43	28	44
28	---	---	---	---	---	---	99	55	30	43	26	38
29	---	---	---	---	---	---	e115	56	48	41	36	62
30	---	---	---	---	---	---	94	59	38	41	33	105
31	---	---	---	---	---	---	---	57	---	30	29	---
TOTAL	---	---	---	---	---	---	---	2,248	1,263	1,198	1,562	1,266
MEAN	---	---	---	---	---	---	---	72.5	42.1	38.6	50.4	42.2
MAX	---	---	---	---	---	---	128	55	166	116	105	
MIN	---	---	---	---	---	---	55	21	18	26	21	

e Estimated

09408000 LEEDS CREEK NEAR LEEDS, UT

LOCATION.--Lat 37°16'03", long 113°22'12", in SW¼SE¼NE¼ sec. 36, T. 40 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on left bank 1,150 ft upstream from Leeds Ditch diversion, 2.1 mi north of Leeds, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--15.5 mi^2.

PERIOD OF RECORD.--October 1915 to June 1920 (fragmentary) in reports of Geological Survey; October 1964 to current year.

GAGE.--Water-stage recorder. Crest-stage gage since May 30, 1989. Elevation of gage is 4,000 ft above NGVD of 1929, from topographic map. Prior to June 1920, at various sites and datums about 600 ft downstream; October 28, 1964, to August 20, 1967, water-stage recorder at site 1,000 ft downstream at different datum.

REMARKS.--Records good except estimated daily discharges, which are poor. Diversion of spring area for domestic use about 4 mi upstream of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,420 ft^3/s, Aug 3, 1988, gage height, 9.41 ft, from rating curve extended above 33 ft^3/s on basis of slope-area measurement; minimum daily discharge, 0.79 ft^3/s, Aug 22, 23, 25, and 26, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug 12, 1964 reached a stage of 6.00 ft, former site and datum, discharge 2,980 ft^3/s from slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 10	1800	*35	*2.46				

Minimum daily discharge, 1.9 ft^3/s, on many days in Oct.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.1	2.2	2.5	2.8	3.7	6.1	8.5	9.3	9.2	5.9	3.8
2	1.9	2.1	2.2	2.5	2.9	4.0	6.7	8.4	9.4	9.1	5.9	3.7
3	2.0	2.1	2.2	2.5	2.9	3.9	6.7	8.4	9.5	9.1	5.8	3.7
4	2.0	2.1	2.2	2.7	2.7	4.0	6.5	8.4	9.6	8.8	5.7	3.8
5	2.0	2.1	2.2	e3.5	2.7	3.8	6.6	8.4	9.8	8.7	5.6	3.7
6	2.0	2.1	2.2	e4.7	2.7	3.9	6.5	8.3	10	8.5	5.5	3.7
7	1.9	2.1	2.2	3.6	2.7	5.3	6.5	8.3	10	8.4	5.5	3.5
8	1.9	2.1	2.6	2.5	2.7	9.5	6.6	8.2	10	8.3	5.3	3.5
9	1.9	2.1	2.4	2.5	2.8	14	7.0	8.2	11	8.2	5.1	3.5
10	1.9	2.1	2.3	2.5	2.8	18	6.8	8.1	11	8.1	5.0	3.6
11	1.9	2.1	2.3	2.5	2.9	14	6.9	8.1	11	7.9	4.9	3.4
12	1.9	2.2	2.3	2.5	e3.0	12	6.9	8.1	11	7.8	4.9	3.4
13	1.9	2.9	2.3	2.5	e2.9	10	7.0	8.1	11	7.7	4.9	3.3
14	1.9	2.5	2.3	e2.5	e2.8	8.8	7.1	8.0	11	7.6	4.9	3.3
15	1.9	2.5	2.3	2.6	2.7	8.0	7.1	8.0	11	7.6	5.0	3.2
16	1.9	2.5	e2.3	2.6	2.7	7.3	7.3	7.9	11	7.4	4.9	3.2
17	1.9	2.5	e2.4	2.6	2.7	6.8	7.5	7.9	11	7.4	5.0	3.2
18	1.9	2.5	2.5	2.6	2.8	6.7	8.3	7.9	11	7.3	5.6	3.1
19	1.9	2.5	2.5	2.6	2.9	6.6	8.3	7.8	11	7.2	5.0	3.9
20	1.9	2.5	2.5	2.6	2.9	6.6	8.2	7.9	11	7.1	4.8	3.6
21	1.9	2.5	2.4	2.6	3.1	6.6	8.2	7.9	11	6.9	4.7	3.6
22	1.9	2.4	2.3	2.7	3.8	6.6	8.3	8.0	11	6.7	4.6	3.6
23	1.9	2.4	2.3	2.8	4.4	6.6	8.4	8.0	11	6.7	4.5	3.6
24	1.9	2.3	2.3	2.7	4.2	6.6	8.4	8.1	10	6.7	4.4	3.5
25	1.9	2.3	3.1	2.7	3.7	6.6	8.4	8.1	10	6.7	4.3	3.4
26	2.0	2.3	5.2	e2.7	6.3	6.6	8.4	8.2	10	6.6	4.3	3.4
27	2.0	2.3	2.8	e2.7	5.3	6.6	8.4	8.1	10	6.6	4.2	3.3
28	2.0	2.3	e3.5	2.7	4.6	6.5	8.4	8.2	10	6.4	4.1	3.4
29	2.0	2.3	e4.0	2.7	3.9	6.4	8.5	8.5	10	6.3	4.0	4.0
30	2.0	2.3	2.7	2.7	---	6.3	8.5	8.8	9.6	6.2	4.0	3.8
31	2.1	---	2.5	2.7	---	6.1	---	9.2	---	6.0	3.9	---
TOTAL	60.0	69.1	79.5	84.8	95.3	228.4	224.5	254.0	312.2	233.2	152.2	105.7
MEAN	1.94	2.30	2.56	2.74	3.29	7.37	7.48	8.19	10.4	7.52	4.91	3.52
MAX	2.1	2.9	5.2	4.7	6.3	18	8.5	9.2	11	9.2	5.9	4.0
MIN	1.9	2.1	2.2	2.5	2.7	3.7	6.1	7.8	9.3	6.0	3.9	3.1
AC-FT	119	137	158	168	189	453	445	504	619	463	302	210

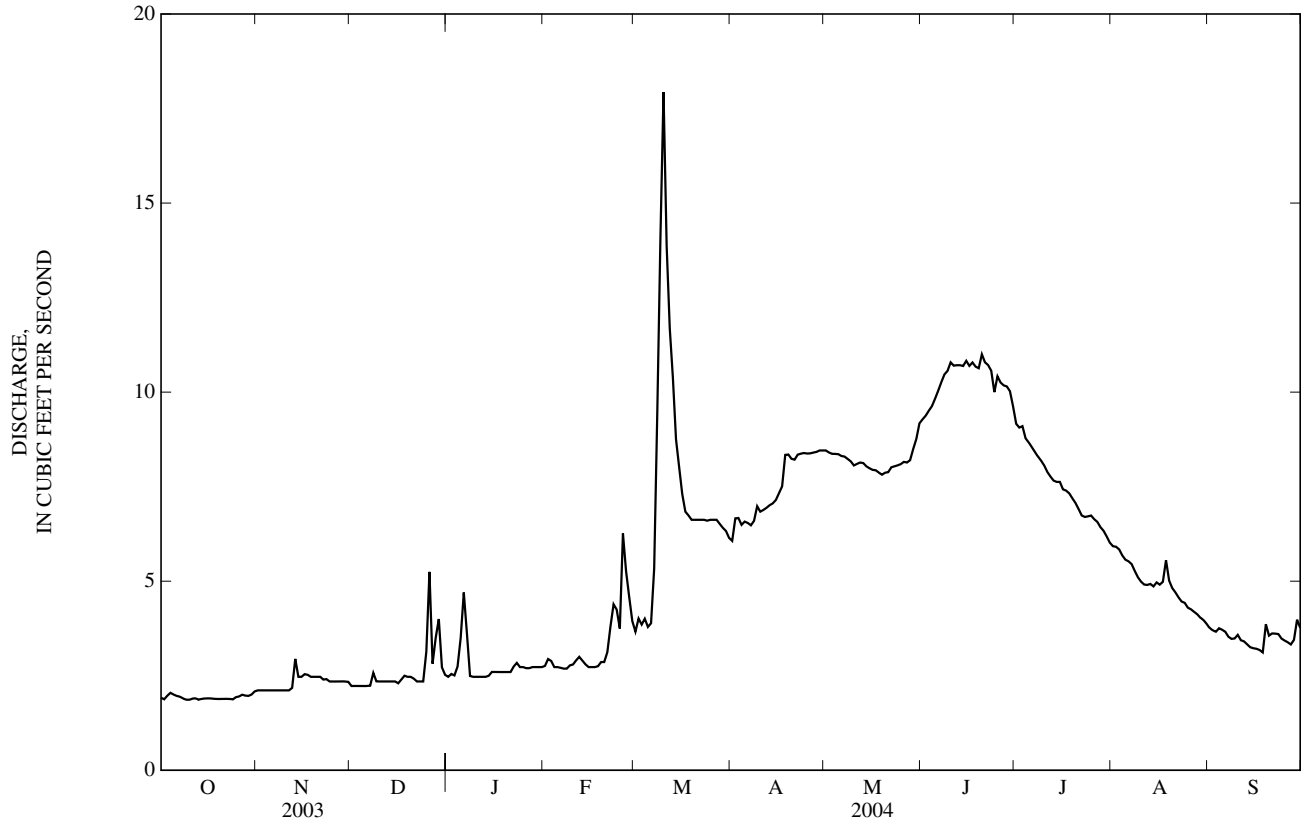
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2004, BY WATER YEAR (WY)

MEAN	3.88	4.01	4.47	4.45	6.24	8.98	9.38	10.3	12.7	10.3	6.80	4.52
MAX	9.16	10.8	26.6	12.2	52.0	36.3	33.1	28.7	38.1	34.3	21.6	12.5
(WY)	(1984)	(1988)	(1967)	(1993)	(1980)	(1983)	(1969)	(1969)	(1973)	(1983)	(1988)	(1983)
MIN	1.17	1.58	1.60	1.61	2.00	2.37	2.00	1.95	1.37	0.98	0.84	0.99
(WY)	(2003)	(2003)	(2003)	(2003)	(2003)	(2002)	(1977)	(2002)	(2002)	(2002)	(2002)	(2002)

09408000 LEEDS CREEK NEAR LEEDS, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1965 - 2004	
ANNUAL TOTAL	949.6		1,898.9			
ANNUAL MEAN	2.60		5.19		7.18	
HIGHEST ANNUAL MEAN					18.1	1980
LOWEST ANNUAL MEAN					2.07	2002
HIGHEST DAILY MEAN	8.2	Mar 17	18	Mar 10	412	Dec 6, 1966
LOWEST DAILY MEAN	1.5	Jan 1	1.9	Oct 1	0.79	Aug 22, 2002
ANNUAL SEVEN-DAY MINIMUM	1.5	Jan 1	1.9	Oct 7	0.79	Aug 22, 2002
ANNUAL RUNOFF (AC-FT)	1,880		3,770		5,200	
10 PERCENT EXCEEDS	3.7		9.2		15	
50 PERCENT EXCEEDS	2.4		4.0		4.5	
90 PERCENT EXCEEDS	1.7		2.1		2.3	

e Estimated



09408135 VIRGIN RIVER ABOVE QUAIL CREEK, NEAR HURRICANE, UT

LOCATION.--Lat 37°11'28", long 113°21'19", in NE¼NE¼SW¼ sec. 30, T. 41 S., R. 13 W., Washington County, Hydrologic Unit 15010008, with permission of Interstate Rock Products, on left bank. Located 2.4 mi upstream of Quail Creek, 3.9 mi northwest of Hurricane, and 4.3 mi upstream of State Highway 9 bridge over Virgin River.

DRAINAGE AREA.--1,314 mi^2.

PERIOD OF RECORD.--February 1989 to September 1990, April 1992 to September 1993, April to September 2004.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,820 ft above NGVD of 1929, from topographic map. February 15, 1989 to September 30, 1990 at site 1.0 mi downstream at different datum. April 9, 1992 to September 30, 1990 at site 2.0 mi downstream at different datum.

REMARKS.--Records good except for Sep 6-21, which are fair, and estimated daily discharges, which are poor. Many diversion upstream of gage. Since June 1985, flow diverted about 11 mi upstream into pipeline that feed Quail Creek Reservoir, an offstream site 2.4 mi downstream of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,540 ft^3/s, Feb 20, 1993, gage height, 9.60 ft, datum then in use, from rating curve extended above 2,800 ft^3/s on basis of slope-area measurement at gage height 9.60 ft; minimum daily discharge, 20 ft^3/s, Jul 25-27, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 412 ft^3/s, Jul 16, gage height 11.35 ft from rating curve extended above 180 ft^3/s on basis of slope-area measurement at gage height 18.68 ft. Minimum daily discharge, 26 ft^3/s, Jul 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	85	52	38	56	34
2	---	---	---	---	---	---	---	99	45	39	59	35
3	---	---	---	---	---	---	---	103	50	34	58	34
4	---	---	---	---	---	---	---	118	48	37	56	34
5	---	---	---	---	---	---	---	119	50	40	53	39
6	---	---	---	---	---	---	---	107	50	e31	63	40
7	---	---	---	---	---	---	---	91	52	e27	53	42
8	---	---	---	---	---	---	---	73	45	e29	52	33
9	---	---	---	---	---	---	---	78	44	e30	48	36
10	---	---	---	---	---	---	---	73	43	e29	42	45
11	---	---	---	---	---	---	---	71	46	e30	37	44
12	---	---	---	---	---	---	---	70	44	36	43	48
13	---	---	---	---	---	---	---	68	42	e30	45	46
14	---	---	---	---	---	---	---	65	42	e26	53	42
15	---	---	---	---	---	---	---	63	42	e28	55	50
16	---	---	---	---	---	---	---	65	41	135	59	45
17	---	---	---	---	---	---	---	63	46	84	62	44
18	---	---	---	---	---	---	---	61	43	68	121	47
19	---	---	---	---	---	---	---	61	43	48	e76	101
20	---	---	---	---	---	---	---	64	41	46	e86	96
21	---	---	---	---	---	---	---	59	45	43	e86	58
22	---	---	---	---	---	---	---	67	37	46	e70	e56
23	---	---	---	---	---	---	---	73	e27	45	e49	e49
24	---	---	---	---	---	---	---	73	36	41	e39	e46
25	---	---	---	---	---	---	---	65	35	48	37	e43
26	---	---	---	---	---	---	---	64	35	55	42	e51
27	---	---	---	---	---	---	---	62	38	54	37	e46
28	---	---	---	---	---	---	---	55	37	55	36	e40
29	---	---	---	---	---	---	---	57	50	52	41	e55
30	---	---	---	---	---	---	94	59	43	52	41	e98
31	---	---	---	---	---	---	---	57	---	42	37	---
TOTAL	---	---	---	---	---	---	---	2,288	1,292	1,398	1,692	1,477
MEAN	---	---	---	---	---	---	---	73.8	43.1	45.1	54.6	49.2
MAX	---	---	---	---	---	---	119	52	135	121	101	
MIN	---	---	---	---	---	---	55	27	26	36	33	
AC-FT	---	---	---	---	---	---	---	4,540	2,560	2,770	3,360	2,930

09408150 VIRGIN RIVER NEAR HURRICANE, UT

LOCATION.--Lat 37°10'20", long 113°23'07", in NE¼SE¼SE¼ sec. 35, T. 41 S., R. 14 W., Washington County, Hydrologic Unit 15010008, Bureau of Land Management, on right bank 0.6 mi downstream from Quail Creek Reservoir Dam, 1.2 mi upstream from State Highway 9, and 5.2 mi west of Hurricane.

DRAINAGE AREA.--1,493 mi^2.

PERIOD OF RECORD.--March 1967 to February 1989, October 1990 to current year.

REVISED RECORDS.--WDR UT-78-1 and WDR UT-94-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,800 ft above NGVD of 1929, from topographic map. March 20, 1967 to February 14, 1989 at site 1.2 mi downstream at different datum and October 1, 1990 to March 30, 1993 at site 1.3 mi downstream at different datum.

REMARKS.--Records good except for May 8 to May 20, which are poor. Since 1985, flow diverted about 14 mi upstream into a pipeline that feeds Quail Creek Reservoir, an offstream site 0.6 mi upstream of gage. Flow subject to releases from Quail Creek Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 66,000 ft^3/s, Jan 1, 1989, from slope-area measurement of Quail Creek Reservoir dike failure; minimum daily discharge, 22 ft^3/s, Aug 29, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1909, 17.34 ft, Dec 6, 1966, from floodmarks; discharge, 20,100 ft^3/s, site and datum established in Mar 1967, from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 26	0530	*2,280	*9.30

Date	Time	Discharge (ft^3/s)	Gage height (ft)
No other peak greater than base discharge.			

Minimum daily discharge, 34 ft^3/s, Nov 4.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

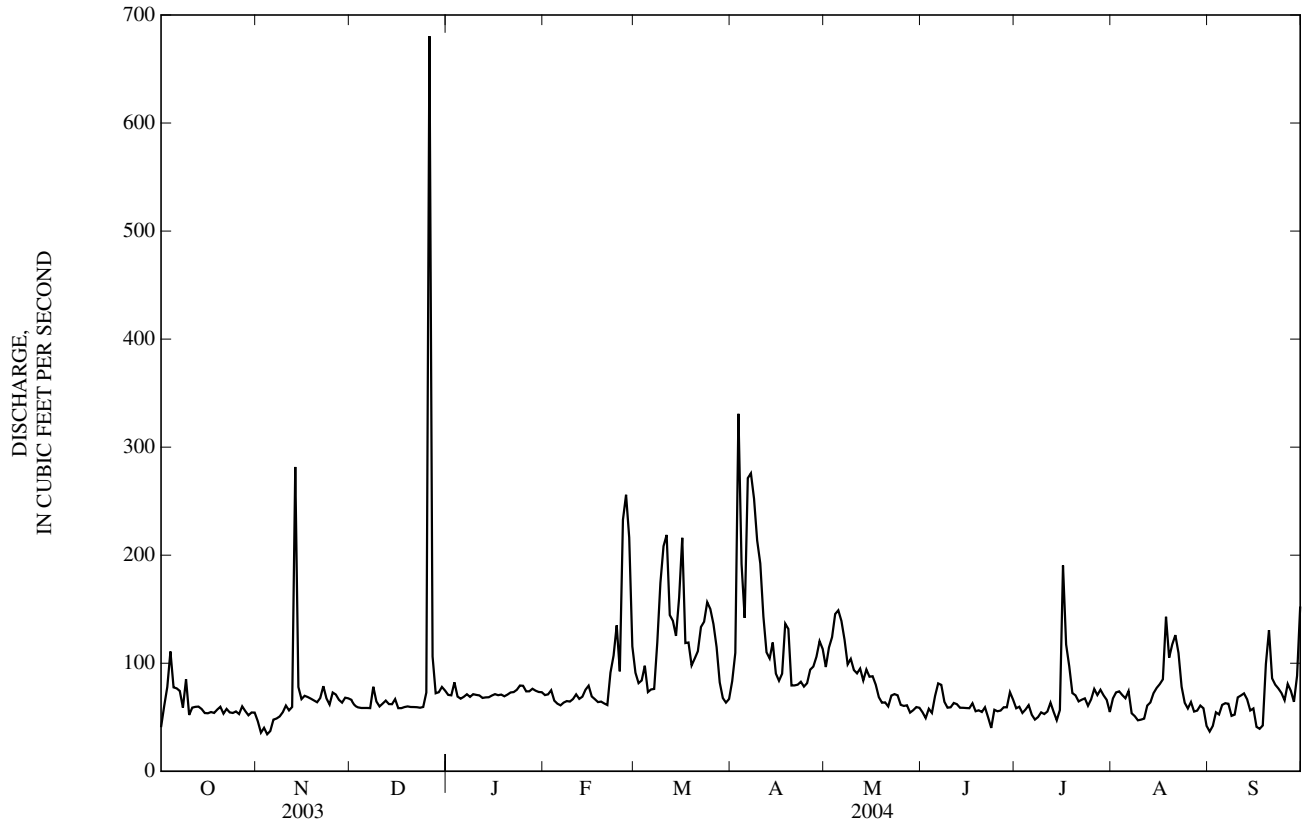
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	46	66	71	71	91	83	96	55	58	67	37
2	60	36	61	70	71	82	110	115	49	60	73	42
3	78	40	59	82	75	84	331	124	58	54	74	55
4	111	34	59	69	65	98	192	146	54	57	71	53
5	78	37	59	67	63	73	142	149	70	61	68	61
6	77	48	58	69	61	76	271	139	81	52	74	63
7	74	49	58	71	64	76	276	122	80	48	54	62
8	59	51	78	69	65	119	252	99	64	50	51	51
9	85	55	65	71	65	174	214	104	59	55	47	52
10	52	61	60	71	67	208	192	94	59	53	48	68
11	59	56	63	70	71	219	143	91	63	55	49	70
12	60	60	65	68	67	145	110	95	62	63	61	72
13	60	282	62	68	69	139	104	84	59	55	64	67
14	58	78	62	68	75	125	119	94	59	47	72	56
15	54	67	67	70	79	161	90	88	59	57	77	58
16	54	70	58	71	69	216	84	88	58	190	81	41
17	55	69	58	70	67	119	90	80	63	117	85	39
18	54	67	59	71	64	119	137	69	56	97	143	42
19	57	66	60	69	64	98	132	63	56	72	105	99
20	60	64	59	71	63	104	79	64	55	70	117	131
21	53	68	59	73	61	111	79	60	59	65	126	86
22	58	79	59	73	91	134	80	70	50	66	110	80
23	54	67	59	75	107	138	83	71	40	67	78	77
24	54	62	60	79	135	156	78	70	57	61	63	72
25	55	73	73	79	92	150	82	61	56	67	58	66
26	53	71	680	74	233	136	94	60	56	76	64	81
27	60	66	106	74	256	115	97	61	59	71	55	75
28	56	64	72	76	216	82	106	54	59	75	56	64
29	52	68	73	75	116	68	120	57	73	70	61	88
30	54	67	78	73	---	64	113	59	66	66	58	153
31	54	---	75	73	---	67	---	59	---	55	42	---
TOTAL	1,889	2,021	2,630	2,230	2,662	3,747	4,083	2,686	1,794	2,110	2,252	2,061
MEAN	60.9	67.4	84.8	71.9	91.8	121	136	86.6	59.8	68.1	72.6	68.7
MAX	111	282	680	82	256	219	331	149	81	190	143	153
MIN	41	34	58	67	61	64	78	54	40	47	42	37
AC-FT	3,750	4,010	5,220	4,420	5,280	7,430	8,100	5,330	3,560	4,190	4,470	4,090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2004, BY WATER YEAR (WY)

MEAN	119	139	158	193	231	310	381	451	181	110	119	126
MAX	304	280	440	662	1,200	1,178	1,230	1,657	869	248	316	330
(WY)	(1987)	(1988)	(1972)	(1989)	(1980)	(1978)	(1993)	(1983)	(1983)	(1983)	(1983)	(1998)
MIN	54.2	56.4	51.4	58.9	59.8	64.0	62.5	56.5	41.3	44.3	41.0	52.4
(WY)	(1991)	(1991)	(1987)	(1991)	(1991)	(2002)	(1977)	(2002)	(2003)	(2003)	(2002)	(2003)

09408150 VIRGIN RIVER NEAR HURRICANE, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1967 - 2004	
ANNUAL TOTAL	24,768		30,165			
ANNUAL MEAN	67.9		82.4		209	
HIGHEST ANNUAL MEAN					515	1980
LOWEST ANNUAL MEAN					71.7	2002
HIGHEST DAILY MEAN	680	Dec 26	680	Dec 26	13,200	Jan 1, 1989
LOWEST DAILY MEAN	26	Jun 22	34	Nov 4	22	Aug 29, 2002
ANNUAL SEVEN-DAY MINIMUM	32	Jun 18	41	Nov 1	26	Aug 23, 2002
ANNUAL RUNOFF (AC-FT)	49,130		59,830		151,500	
10 PERCENT EXCEEDS	87		128		384	
50 PERCENT EXCEEDS	60		68		125	
90 PERCENT EXCEEDS	40		54		61	



09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT

LOCATION.--Lat 37°06'54", long 113°26'24", in NE¼SE¼SE¼ sec. 20, T. 42 S., R. 14 W., Washington County, Hydrologic Unit 15010008, on right bank immediately upstream from concrete flume, 0.2 mi downstream from diversion, 2.2 mi southeast of Washington.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Parshall flume since November 8, 1991. Elevation of gage is 2,680 ft above NGVD of 1929, from topographic map. Prior to November 8, 1991 at site 150 ft downstream at same datum. Water-quality monitoring equipment located 5 ft downstream.

REMARKS.-- Records good except for estimated daily discharges, which are poor. Completely regulated canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 116 ft^3/s, Oct 22, 1989; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 115 ft^3/s, Apr 3, gage height, 8.57 ft; no flow, Oct 14, Feb 28, 29.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	50	43	43	43	e30	80	69	58	60	63	40
2	53	40	42	43	43	e45	85	72	52	60	72	39
3	67	43	42	43	43	e45	83	76	58	56	72	55
4	72	40	42	43	43	e47	69	79	56	57	71	50
5	69	36	42	42	30	e45	67	67	65	62	67	59
6	69	47	42	42	15	e45	71	78	79	57	72	61
7	71	47	42	43	41	e45	72	73	79	50	59	62
8	66	48	43	43	41	e50	71	64	67	51	53	53
9	61	48	44	43	41	e55	70	64	61	56	49	52
10	53	53	43	43	41	e60	69	44	61	55	49	63
11	53	59	42	43	42	e55	67	57	63	54	48	66
12	54	57	42	43	41	e50	65	65	64	61	59	66
13	23	53	42	43	41	e50	71	60	60	59	62	65
14	0.00	43	42	42	42	e50	77	68	59	51	68	55
15	11	42	43	43	42	e55	76	68	60	54	73	60
16	51	42	31	43	42	e60	75	69	59	70	71	44
17	51	43	14	43	41	e55	77	69	62	73	77	40
18	50	42	40	43	41	e55	88	63	58	80	81	42
19	51	42	41	43	42	e55	91	61	57	73	79	55
20	51	42	41	43	41	e55	71	64	57	71	75	69
21	51	42	42	43	41	e60	67	61	60	65	71	65
22	52	43	42	43	42	e65	65	67	55	64	70	61
23	53	43	42	43	43	e70	72	72	44	69	67	58
24	53	42	42	43	44	e80	65	71	57	61	63	54
25	55	43	42	43	43	e75	68	63	58	63	58	47
26	54	43	50	43	44	e75	70	62	57	75	63	56
27	55	43	44	43	e28	e75	72	62	59	72	56	54
28	55	43	43	43	e0.00	e75	75	57	62	72	55	45
29	55	43	42	43	e0.00	e70	73	56	64	71	59	51
30	54	43	43	43	---	e70	78	60	66	67	61	49
31	55	---	43	43	---	e70	---	60	---	59	46	---
TOTAL	1,606.00	1,345	1,278	1,330	1,081.00	1,792	2,200	2,021	1,817	1,948	1,989	1,636
MEAN	51.8	44.8	41.2	42.9	37.3	57.8	73.3	65.2	60.6	62.8	64.2	54.5
MAX	72	59	50	43	44	80	91	79	79	80	81	69
MIN	0.00	36	14	42	0.00	30	65	44	44	50	46	39
AC-FT	3,190	2,670	2,530	2,640	2,140	3,550	4,360	4,010	3,600	3,860	3,950	3,250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

MEAN	62.4	45.9	42.2	30.1	29.6	48.5	77.0	77.4	73.8	73.7	72.5	71.6
MAX	76.6	66.0	62.4	54.8	48.2	79.6	94.9	93.8	97.0	99.5	95.0	93.4
(WY)	(1996)	(2000)	(2002)	(1999)	(1994)	(1997)	(1989)	(1997)	(1993)	(1995)	(1993)	(1988)
MIN	47.7	27.3	30.8	1.74	0.00	0.00	58.9	61.6	41.3	42.5	50.8	46.4
(WY)	(1988)	(1999)	(1996)	(1989)	(1989)	(1989)	(1988)	(2003)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1988 - 2004	
ANNUAL TOTAL	17,123.80		20,043.00			
ANNUAL MEAN	46.9		54.8		58.9	
HIGHEST ANNUAL MEAN					70.2	1994
LOWEST ANNUAL MEAN					47.2	2003
HIGHEST DAILY MEAN	79	Apr 16	91	Apr 19	116	Oct 22, 1989
LOWEST DAILY MEAN	0.00	Feb 11	0.00	Oct 14	0.00	Feb 9, 1988
ANNUAL SEVEN-DAY MINIMUM	0.00	Feb 11	27	Feb 24	0.00	Jan 2, 1989
ANNUAL RUNOFF (AC-FT)	33,970		39,760		42,640	
10 PERCENT EXCEEDS	64		72		91	
50 PERCENT EXCEEDS	48		55		63	
90 PERCENT EXCEEDS	34		42		21	

e Estimated

09408175 ST. GEORGE-WASHINGTON CANAL NEAR WASHINGTON, UT—Continued

REVISED WATER-QUALITY RECORDS FOR 2003 WATER YEAR

PERIOD OF RECORD.--October 1987 to September 2003 (discontinued).
SPECIFIC CONDUCTANCE: December 1987 to September 2003 (discontinued).
WATER TEMPERATURE: December 1987 to September 2003 (discontinued).

REMARKS.--Records for specific conductance are good except for July 29, August 1, and August 21-25, which are fair, and August 2-13 and August 26-September 6, which are poor. Records for temperature are excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 7,730 microsiemens/cm, Jul 18, 2003 (revised); minimum recorded, 450 microsiemens/cm, May 21, 1998.
WATER TEMPERATURE: Maximum, 34.9°C, Jul 3, 2001; minimum, 0.0°C, Dec 21, 1990.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 7,730 microsiemens/cm, Jul 18; minimum, 1,090 microsiemens/cm, Feb 26 (revised).
WATER TEMPERATURE: Maximum, 34.7°C, Jul 23; minimum, 1.9°C, Feb 8 (revised).

09408195 FORT PEARCE WASH NEAR ST. GEORGE, UT

LOCATION.--Lat 37°00'06", long 113°28'05", in NE¼NE¼SW¼ sec. 31, T. 43 S., R. 14 W., Washington County, Hydrologic Unit 15010009, on left bank 20 ft upstream of road crossing, 0.12 mi north of Arizona-Utah boundary, and about 10 mi southeast of St. George.

DRAINAGE AREA.--1,349 mi^2.

REVISED RECORD.--WDR UT-88-1: Drainage area. WDR UT-03-1: 2002(M).

PERIOD OF RECORD.--October 1984 to September 1989, May 2001 to current year. Published as Fort Pierce Wash near St. George, October 1984 to September 1989.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 2,800 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,790 ft^3/s, Aug 15, 2003, gage height, 12.17 ft; no flow for extended periods most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,540 ft^3/s, Aug 12, gage height, 10.92 ft; no flow on many days.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	4.3	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	2.7	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	261	25
13	0.00	19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	194	25
14	0.00	41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.5	7.5
15	0.00	12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.6	0.00	1.4
16	0.00	2.1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	97	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	64	0.90	0.00
18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.3	0.00	0.00
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.00
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	80
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	172
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
TOTAL	0.00	74.10	0.00	0.00	0.00	0.00	7.00	0.00	0.00	173.90	463.58	310.90
MEAN	0.00	2.47	0.00	0.00	0.00	0.00	0.23	0.00	0.00	5.61	15.0	10.4
MAX	0.00	41	0.00	0.00	0.00	0.00	4.3	0.00	0.00	97	261	172
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC-FT	0.00	147	0.00	0.00	0.00	0.00	14	0.00	0.00	345	920	617

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2004, BY WATER YEAR (WY)

MEAN	0.76	0.65	0.02	0.02	0.03	0.03	0.08	0.06	0.22	1.91	9.06	1.58
MAX	3.25	2.47	0.16	0.15	0.10	0.10	0.36	0.44	1.77	8.45	60.8	10.4
(WY)	(2003)	(2004)	(1985)	(1985)	(1986)	(2003)	(1988)	(1987)	(1988)	(2003)	(2003)	(2004)
MIN	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1989)	(1986)	(1986)	(1986)	(1987)	(1987)	(1986)	(1986)	(1986)	(1989)	(1985)	(1985)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1985 - 2004	
ANNUAL TOTAL	2,258.25		1,029.48			
ANNUAL MEAN	6.19		2.81		1.34	
HIGHEST ANNUAL MEAN					6.44	2003
LOWEST ANNUAL MEAN					0.07	1986
HIGHEST DAILY MEAN	498	Aug 22	261	Aug 12	498	Aug 22, 2003
LOWEST DAILY MEAN	0.00	Jan 1	0.00	Oct 1	0.00	Oct 26, 1984
ANNUAL SEVEN-DAY MINIMUM	0.00	Jan 1	0.00	Oct 1	0.00	Oct 26, 1984
ANNUAL RUNOFF (AC-FT)	4,480		2,040		970	
10 PERCENT EXCEEDS	0.05		0.00		0.06	
50 PERCENT EXCEEDS	0.00		0.00		0.00	
90 PERCENT EXCEEDS	0.00		0.00		0.00	

09408400 SANTA CLARA RIVER NEAR PINE VALLEY, UT

LOCATION.--Lat 37°23'00" long 113°28'57", in NW¼SE¼NE¼ sec. 24, T. 39 S., R. 15 W., Washington County, Hydrologic Unit 15010008, Dixie National Forest, on right bank 150 ft upstream from highway bridge, 0.6 mi downstream from Pine Valley Reservoir, 1.6 mi southeast of town of Pine Valley, and 2.5 mi upstream from Grass Valley Creek.

DRAINAGE AREA.--18.7 mi^2.

PERIOD OF RECORD.--July 1959 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,640 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for discharges less than 2 ft^3/s and estimated daily discharges, which are poor. Flow slightly regulated by Pine Valley Reservoir. No diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 776 ft^3/s, Dec 6, 1966, gage height, 6.85 ft; minimum daily discharge, 0.19 ft^3/s, Aug 15, 2002.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 60 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 5	2145	*35	*2.45				

Minimum daily discharge, 0.82 ft^3/s, Oct 10, 15.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.87	0.93	1.0	1.5	e1.3	1.6	14	17	14	5.9	3.5	2.4
2	0.88	0.97	0.98	e1.4	1.3	1.7	19	19	14	5.7	3.6	2.4
3	0.99	1.0	0.98	e1.4	1.4	1.7	22	23	14	5.6	3.5	2.4
4	1.1	1.0	0.98	e1.4	1.4	1.9	18	27	14	5.4	3.4	2.5
5	1.1	1.0	0.98	1.4	1.3	1.9	16	31	14	5.3	3.3	2.5
6	1.0	1.0	0.98	1.4	1.3	1.9	16	30	13	5.1	3.3	2.4
7	0.98	1.0	1.00	1.5	1.3	2.8	17	27	13	5.0	3.2	2.3
8	0.93	0.98	1.4	1.4	1.3	4.2	19	25	12	4.9	3.2	2.2
9	0.89	0.98	e1.1	1.6	1.2	6.5	21	27	11	4.8	3.1	2.6
10	0.82	1.0	1.1	1.8	1.3	7.5	19	26	11	4.7	3.1	3.1
11	0.85	1.0	e1.0	1.9	1.3	7.3	16	25	10	4.6	3.0	2.5
12	0.89	1.2	e0.90	1.9	e1.2	7.3	14	21	9.6	4.5	3.0	2.4
13	0.85	2.2	e1.0	1.9	e1.2	7.4	15	18	9.1	4.4	3.1	2.3
14	0.85	1.3	e1.0	1.9	e1.3	7.9	15	17	8.8	4.4	3.1	2.2
15	0.82	1.2	e1.0	1.9	e1.3	8.4	15	17	8.6	4.9	3.1	2.2
16	0.85	1.4	e0.90	1.8	1.3	8.0	16	17	8.5	5.6	3.1	2.3
17	0.87	1.2	e1.0	e1.6	1.3	8.2	17	17	8.3	4.9	3.3	2.2
18	0.83	1.2	1.0	e1.5	1.5	9.1	15	18	8.0	4.4	3.7	2.1
19	0.83	1.1	1.1	1.6	1.4	11	13	19	7.7	4.3	3.3	2.6
20	0.85	1.1	1.1	e1.4	1.4	12	12	19	7.5	4.2	3.1	2.4
21	0.87	1.1	1.2	e1.4	1.5	15	11	18	7.3	4.0	3.0	2.3
22	0.87	e1.0	1.1	e1.4	1.5	19	12	17	7.2	4.0	2.9	2.3
23	0.87	e0.90	e1.0	e1.4	1.6	23	11	15	6.9	3.9	2.8	2.3
24	0.87	e1.0	1.0	1.5	1.6	23	11	15	6.8	3.9	2.8	2.2
25	0.86	1.1	1.5	1.4	1.5	21	12	14	6.8	4.2	2.7	2.2
26	0.87	e1.0	3.1	e1.3	1.8	19	e14	14	6.6	4.2	2.7	2.2
27	0.88	1.0	e1.3	1.4	1.9	15	17	13	6.5	4.0	2.7	2.1
28	0.88	1.0	e1.2	1.4	1.8	12	20	14	6.3	3.8	2.6	2.3
29	0.88	1.1	e1.4	1.4	1.6	11	22	16	6.3	3.8	2.6	2.5
30	0.84	1.1	1.6	1.4	---	11	18	15	6.1	3.6	2.5	2.5
31	0.87	---	1.5	1.4	---	12	---	14	---	3.6	2.5	---
TOTAL	27.61	33.06	36.40	47.6	41.1	299.3	477	605	282.9	141.6	94.8	70.9
MEAN	0.89	1.10	1.17	1.54	1.42	9.65	15.9	19.5	9.43	4.57	3.06	2.36
MAX	1.1	2.2	3.1	1.9	1.9	23	22	31	14	5.9	3.7	3.1
MIN	0.82	0.90	0.90	1.3	1.2	1.6	11	13	6.1	3.6	2.5	2.1
AC-FT	55	66	72	94	82	594	946	1,200	561	281	188	141

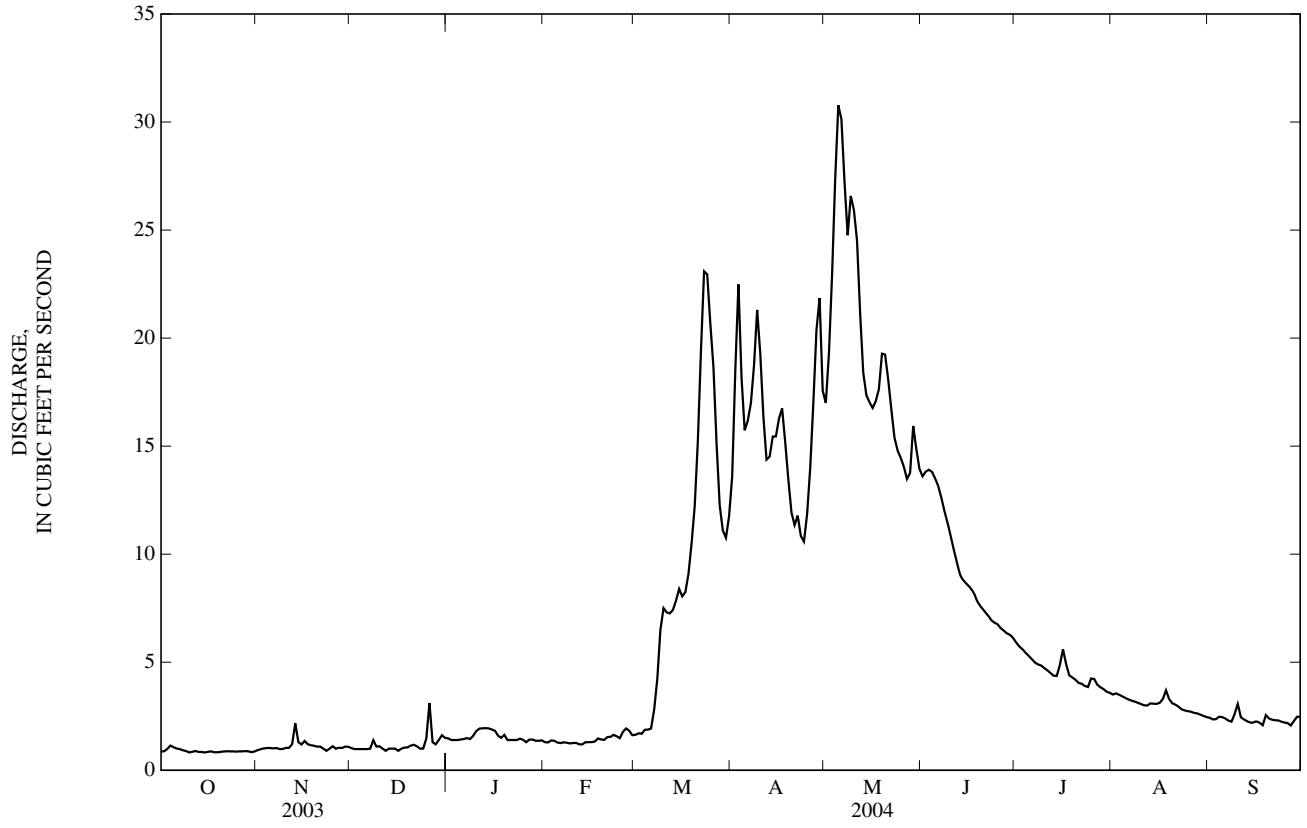
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1960 - 2004, BY WATER YEAR (WY)

MEAN	3.34	3.63	3.46	2.56	3.03	6.38	16.4	32.0	23.6	10.3	5.73	3.89
MAX	12.5	21.4	30.3	5.08	8.29	24.8	43.4	122	126	47.9	23.2	12.1
(WY)	(1973)	(1988)	(1967)	(1979)	(1995)	(1995)	(1969)	(1973)	(1983)	(1983)	(1983)	(1983)
MIN	0.65	0.95	0.96	0.85	0.68	1.20	1.20	0.67	0.33	0.27	0.23	0.43
(WY)	(2003)	(1978)	(2003)	(2002)	(1990)	(1977)	(2002)	(2002)	(2002)	(2002)	(2002)	(2002)

09408400 SANTA CLARA RIVER NEAR PINE VALLEY, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1960 - 2004	
ANNUAL TOTAL	1,097.04		2,157.27			
ANNUAL MEAN	3.01		5.89		9.56	
HIGHEST ANNUAL MEAN					29.4	1983
LOWEST ANNUAL MEAN					1.17	2002
HIGHEST DAILY MEAN	21	May 16	31	May 5	397	Dec 6, 1966
LOWEST DAILY MEAN	0.70	Feb 5	0.82	Oct 10	0.19	Aug 15, 2002
ANNUAL SEVEN-DAY MINIMUM	0.80	Feb 3	0.84	Oct 13	0.21	Aug 12, 2002
ANNUAL RUNOFF (AC-FT)	2,180		4,280		6,930	
10 PERCENT EXCEEDS	7.3		17		22	
50 PERCENT EXCEEDS	1.4		2.5		3.7	
90 PERCENT EXCEEDS	0.89		0.98		1.4	

e Estimated



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

LOCATION.--Lat 37°23'05", long 113°37'52", in SW¼NW¼NE¼ 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 and 4.0 mi north of Veyo.

DRAINAGE AREA.--116 mi^2.

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^3/s, which are poor. Diversion 0.5 mi upstream for power generation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,160 ft^3/s (estimated), Mar 11, 1995, gage height, 5.79 ft, from rating curve extended above 100 ft^3/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^3/s, Aug 9-14, 2002 and Aug 10, 11, 2003.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 43 ft^3/s, Sep 9, gage height, 1.53 ft; minimum daily discharge, 0.20 ft^3/s, Oct 9, 10.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.96	0.40	6.2	7.9	0.41	0.30	0.51	2.4	0.79	3.9	4.9	5.0
2	1.2	0.40	6.2	8.4	0.41	0.29	0.79	2.7	1.0	6.3	4.8	5.1
3	1.5	0.46	6.1	8.3	0.28	0.29	8.0	7.3	0.81	7.1	5.4	5.3
4	1.7	3.8	6.0	8.0	0.28	0.29	4.0	12	0.92	6.6	5.3	5.4
5	1.7	6.2	6.0	7.5	0.27	0.29	1.5	18	0.96	5.5	5.0	4.9
6	1.6	6.2	6.0	7.7	0.25	0.31	1.0	21	0.97	5.7	5.0	5.3
7	0.80	6.2	6.0	7.6	0.26	0.34	1.5	19	0.72	5.4	5.0	5.8
8	0.21	6.4	6.2	7.7	0.29	0.52	4.6	16	0.58	5.4	4.8	5.9
9	0.20	6.5	6.0	7.5	0.27	1.3	11	15	0.63	4.5	4.8	6.5
10	0.20	6.2	6.0	7.2	0.30	1.6	7.3	14	1.6	4.5	4.5	4.4
11	0.22	5.6	6.0	6.3	0.30	1.3	4.9	13	5.2	4.6	4.5	4.2
12	0.22	5.6	6.0	7.1	0.30	0.85	3.5	9.0	7.4	5.2	4.5	4.5
13	0.23	5.8	6.2	6.9	0.29	0.57	2.2	5.0	5.9	5.3	4.5	4.3
14	0.24	5.5	6.3	6.9	0.30	0.54	2.1	3.7	5.4	5.2	4.9	4.3
15	0.25	5.5	6.4	7.0	0.28	0.64	1.4	3.1	5.7	5.3	5.2	4.2
16	0.24	5.5	6.6	6.8	0.30	0.65	2.0	2.3	6.1	5.6	5.0	4.1
17	0.25	5.5	6.6	6.9	0.27	0.55	1.6	2.6	6.6	7.3	5.0	4.1
18	0.25	5.5	6.7	6.7	0.35	0.65	3.0	3.7	7.5	6.9	5.9	4.0
19	0.26	5.6	6.6	6.7	0.36	0.91	1.6	5.3	6.9	6.8	5.7	4.8
20	0.26	6.0	6.8	6.4	0.28	1.3	0.94	4.8	5.8	6.5	5.8	4.5
21	0.26	6.0	7.6	6.4	0.30	2.2	1.1	5.1	5.1	6.0	5.9	4.9
22	0.27	6.0	7.8	6.2	0.36	6.0	1.4	2.8	6.0	6.0	5.6	5.2
23	0.28	6.0	7.6	6.3	0.36	12	0.91	2.0	6.0	4.9	5.5	4.9
24	0.33	6.0	8.0	6.6	0.39	15	0.74	1.8	6.8	5.1	5.4	4.8
25	0.57	6.3	8.1	6.5	0.30	6.6	0.84	1.1	7.3	5.5	5.4	4.7
26	1.0	6.2	11	6.1	0.39	3.7	1.4	0.82	6.8	5.9	5.3	4.8
27	1.4	6.2	8.2	6.2	0.38	1.2	1.3	0.60	6.1	5.6	5.1	4.5
28	1.5	6.1	7.5	6.4	0.36	1.1	3.0	0.57	5.8	5.5	5.0	4.4
29	0.97	6.2	7.8	6.3	0.33	0.84	7.4	0.81	5.7	4.9	4.9	4.5
30	0.31	6.2	8.1	6.3	---	0.54	4.5	0.93	2.3	4.8	4.9	4.6
31	0.39	---	8.1	2.7	---	0.49	---	1.1	---	5.1	4.9	---
TOTAL	19.77	160.06	214.7	211.5	9.22	63.16	86.03	197.53	129.38	172.9	158.4	143.9
MEAN	0.64	5.34	6.93	6.82	0.32	2.04	2.87	6.37	4.31	5.58	5.11	4.80
MAX	1.7	6.5	11	8.4	0.41	15	11	21	7.5	7.3	5.9	6.5
MIN	0.20	0.40	6.0	2.7	0.25	0.29	0.51	0.57	0.58	3.9	4.5	4.0
AC-FT	39	317	426	420	18	125	171	392	257	343	314	285

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

MEAN	2.78	4.04	3.65	3.01	2.74	9.94	8.80	18.9	15.6	5.88	2.66	3.81
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	0.30	0.31	0.35	0.47	0.16	0.11	0.10	0.23
(WY)	(2002)	(1990)	(1990)	(2000)	(2003)	(2002)	(2003)	(1990)	(2002)	(2002)	(2003)	(2001)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1990 - 2004	
ANNUAL TOTAL	645.34		1,566.55			
ANNUAL MEAN	1.77		4.28		6.83	
HIGHEST ANNUAL MEAN					24.5	1995
LOWEST ANNUAL MEAN					1.39	1990
HIGHEST DAILY MEAN	11	Dec 26	21	May 6	393	Mar 11, 1995
LOWEST DAILY MEAN	0.08	Aug 10	0.20	Oct 9	0.08	Aug 9, 2002
ANNUAL SEVEN-DAY MINIMUM	0.09	Aug 8	0.22	Oct 8	0.08	Aug 8, 2002
ANNUAL RUNOFF (AC-FT)	1,280		3,110		4,950	
10 PERCENT EXCEEDS	6.2		7.3		16	
50 PERCENT EXCEEDS	0.30		4.9		1.2	
90 PERCENT EXCEEDS	0.12		0.30		0.30	

09409880 SANTA CLARA RIVER AT GUNLOCK, UT

LOCATION.--Lat 37°16'55", long 113°46'00", in SW¼SW¼NW¼ 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^2.

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

GAGE.--Water-stage recorder. Crest-stage gage installed 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^3/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^3/s, estimated, Mar 11, 1995, gage height, 8.07 ft; no flow several days during 1977 and Jul 10, 18, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,520 ft^3/s, Sep 9, gage height, 6.37 ft; minimum daily discharge, 0.12 ft^3/s, Jul 11.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.74	2.3	3.1	6.7	9.7	16	9.2	16	11	2.3	0.41	0.82
2	1.0	2.2	3.2	7.3	5.7	16	14	12	10	1.7	0.56	0.66
3	1.1	1.9	3.2	8.0	6.0	14	20	16	11	1.5	0.34	0.63
4	1.2	1.9	3.3	7.0	5.7	18	18	15	9.5	0.66	0.52	2.0
5	0.98	2.0	3.5	6.6	5.7	18	18	15	9.7	0.32	0.39	2.0
6	1.1	1.9	3.5	6.4	5.8	16	16	15	9.4	0.41	0.28	1.9
7	1.1	2.0	3.8	6.4	5.7	20	16	13	9.5	0.26	0.24	2.0
8	0.88	2.4	4.8	6.3	5.7	26	17	14	9.2	0.55	0.29	1.8
9	0.59	2.6	4.6	6.3	5.6	37	18	11	7.7	0.79	0.29	32
10	0.63	2.5	4.9	6.3	5.6	36	18	22	7.6	0.33	0.32	8.9
11	0.94	2.3	5.1	6.1	5.7	37	15	28	7.5	0.12	0.36	3.6
12	0.86	2.4	5.2	6.1	6.2	27	18	26	5.2	0.34	0.48	4.4
13	0.75	2.7	5.7	6.0	5.9	23	18	27	3.3	0.30	0.32	3.4
14	1.1	2.6	6.5	6.0	5.7	22	19	26	4.8	0.23	0.30	1.7
15	1.1	2.3	6.5	6.0	5.7	20	16	22	4.1	0.29	0.49	1.5
16	0.95	2.6	6.4	6.2	5.7	17	15	17	3.4	0.74	0.95	1.9
17	0.70	2.9	6.5	6.4	5.6	13	13	19	3.0	1.0	0.63	1.8
18	0.99	3.1	6.6	6.6	5.4	13	14	18	3.3	1.5	0.74	1.6
19	0.86	3.1	6.5	6.6	5.5	15	19	18	3.0	1.2	0.63	3.5
20	0.89	3.2	6.1	7.4	5.6	14	18	17	2.1	0.49	0.55	2.7
21	1.5	2.9	6.3	9.5	6.0	12	17	17	3.1	0.63	0.62	3.0
22	1.2	2.6	6.3	9.7	6.3	13	16	17	3.6	0.43	8.5	2.7
23	1.5	2.6	6.4	8.0	6.4	17	16	16	3.2	0.40	2.4	2.4
24	1.1	2.8	6.5	9.0	7.2	24	15	18	2.9	0.32	1.6	2.3
25	1.7	3.0	7.1	10	10	23	13	16	3.2	0.93	1.4	1.7
26	1.6	3.0	29	9.1	24	19	13	15	2.7	0.64	1.5	1.9
27	1.1	3.0	11	9.6	29	14	15	13	2.2	0.36	1.4	2.6
28	1.6	3.0	7.8	9.9	23	11	15	11	2.8	0.44	1.6	3.5
29	1.5	3.0	7.3	10	17	13	17	12	2.5	0.32	1.4	3.4
30	1.7	2.8	7.4	9.7	---	12	17	9.0	2.3	0.18	1.5	3.5
31	1.2	---	7.0	12	---	9.5	---	12	---	0.24	0.94	---
TOTAL	34.16	77.6	201.1	237.2	247.1	585.5	483.2	523.0	162.8	19.92	31.95	105.81
MEAN	1.10	2.59	6.49	7.65	8.52	18.9	16.1	16.9	5.43	0.64	1.03	3.53
MAX	1.7	3.2	29	12	29	37	20	28	11	2.3	8.5	32
MIN	0.59	1.9	3.1	6.0	5.4	9.5	9.2	9.0	2.1	0.12	0.24	0.63
AC-FT	68	154	399	470	490	1,160	958	1,040	323	40	63	210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2004, BY WATER YEAR (WY)

MEAN	10.4	14.8	15.4	20.7	36.0	50.1	38.1	39.5	28.8	11.3	8.59	8.25
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	1.10	2.59	6.49	4.73	7.69	5.54	6.05	5.14	2.51	0.37	0.60	0.79
(WY)	(2004)	(2004)	(2004)	(1972)	(1972)	(2002)	(1977)	(1989)	(2003)	(2003)	(2003)	(2003)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1970 - 2004	
ANNUAL TOTAL	2,000.52		2,709.34			
ANNUAL MEAN	5.48		7.40		23.4	
HIGHEST ANNUAL MEAN					86.8	1980
LOWEST ANNUAL MEAN					6.04	2003
HIGHEST DAILY MEAN	46	Mar 17	37	Mar 9	2,040	Feb 15, 1980
LOWEST DAILY MEAN	0.00	Jul 10	0.12	Jul 11	0.00	Jul 26, 1977
ANNUAL SEVEN-DAY MINIMUM	0.13	Jul 13	0.31	Aug 5	0.02	Aug 1, 1977
ANNUAL RUNOFF (AC-FT)	3,970		5,370		16,950	
10 PERCENT EXCEEDS	12		18		45	
50 PERCENT EXCEEDS	3.3		5.6		12	
90 PERCENT EXCEEDS	0.46		0.61		4.2	

09413000 SANTA CLARA RIVER AT ST. GEORGE, UT

LOCATION.--Lat 37°04'31", long 113°35'32", in SE¼SW¼NE¼ 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 mi^2.

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

GAGE.--Water-stage recorder. Crest-stage gage installed 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 good except for discharges less than 2.0 ft^3/s and estimated daily discharge, which are poor. Flow regulated by reservoirs and many diversions for irrigation upstream of station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,000 ft^3/s, Mar 12, 1995, gage height, 14.60 ft, from rating curve extended above 2,800 ft^3/s; no flow at times in 1951, 1953, 1955, 1956, 1989, 1991, and 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 191 ft^3/s, Dec 26, gage height, 7.15 ft; minimum daily discharge, 0.14 ft^3/s, Jun 23.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.4	2.8	4.2	3.6	5.4	2.1	1.9	0.28	0.27	0.64	1.9
2	0.91	1.3	2.5	4.2	3.5	7.0	17	1.9	0.25	0.35	0.95	0.87
3	0.87	1.5	2.4	4.8	6.9	4.6	13	1.4	0.26	0.22	0.84	1.1
4	0.98	1.6	2.2	3.8	3.9	4.3	5.0	0.30	0.23	0.20	0.77	0.93
5	1.1	1.6	3.1	4.0	3.5	4.1	3.1	0.24	0.23	0.65	0.47	1.7
6	1.1	1.8	3.1	5.1	3.4	4.0	2.5	0.27	0.17	0.23	0.38	1.7
7	e1.0	1.7	3.1	6.7	3.5	3.8	4.0	0.36	0.15	e0.23	0.49	1.3
8	1.0	1.8	9.3	5.4	3.4	3.8	3.4	0.23	0.16	e0.23	0.37	1.0
9	1.3	1.7	4.4	3.9	3.4	4.1	4.6	0.19	0.20	e0.24	0.84	1.8
10	1.3	1.7	4.3	3.2	3.5	3.8	3.0	0.17	0.17	e0.24	0.53	21
11	1.3	1.6	4.7	3.5	3.1	2.4	2.4	0.18	0.19	0.24	0.29	6.8
12	1.3	1.9	4.5	3.4	3.5	2.5	2.5	0.28	0.17	0.23	2.9	5.2
13	1.5	4.7	6.0	3.2	3.5	2.4	2.4	0.30	0.17	0.22	15	4.0
14	1.6	2.3	5.3	3.0	3.6	2.6	1.9	0.32	0.24	0.23	4.7	4.1
15	1.7	2.1	5.8	3.5	3.6	2.8	1.9	0.56	0.23	0.32	3.0	3.3
16	1.5	3.9	5.3	3.6	3.8	2.3	2.4	0.43	0.18	0.73	3.2	3.5
17	1.7	3.4	5.4	3.4	3.7	2.0	2.4	0.18	0.17	0.25	4.4	3.1
18	1.6	3.1	4.7	3.3	3.7	2.3	2.9	0.19	0.20	0.33	4.2	3.5
19	1.6	2.9	4.5	3.4	3.2	2.4	2.5	0.19	0.18	0.87	2.6	18
20	1.5	2.4	5.4	3.3	3.6	2.6	2.8	0.17	0.17	0.46	3.9	6.2
21	1.4	2.1	5.7	3.3	7.1	1.7	3.4	0.21	0.26	0.29	2.5	5.5
22	1.1	2.7	5.9	3.6	13	2.1	2.5	0.41	0.15	0.29	2.1	4.7
23	1.3	2.7	4.6	3.8	11	2.3	2.1	0.34	0.14	0.66	1.9	4.7
24	1.4	2.8	4.6	3.4	8.4	2.4	1.4	0.23	0.17	0.31	1.9	4.5
25	1.7	2.6	5.7	3.4	4.9	2.3	0.96	0.27	0.24	0.27	1.9	3.8
26	1.8	2.4	33	3.5	41	1.7	1.6	0.36	0.16	0.28	1.7	4.0
27	1.6	2.5	6.7	3.4	20	2.2	1.7	0.25	0.16	0.24	1.9	2.8
28	1.3	2.6	5.3	3.1	13	1.8	1.4	0.24	0.56	0.63	1.5	3.3
29	1.2	2.6	5.4	2.9	5.9	1.8	0.76	0.20	0.44	0.35	1.5	7.5
30	1.2	2.6	7.5	4.0	---	1.5	1.6	0.21	0.29	0.36	1.6	5.5
31	1.5	---	4.9	5.2	---	1.9	---	0.24	---	0.39	1.7	---
TOTAL	41.66	70.0	178.1	118.5	198.2	90.9	99.22	12.72	6.57	10.81	70.67	137.30
MEAN	1.34	2.33	5.75	3.82	6.83	2.93	3.31	0.41	0.22	0.35	2.28	4.58
MAX	1.8	4.7	33	6.7	41	7.0	17	1.9	0.56	0.87	15	21
MIN	0.87	1.3	2.2	2.9	3.1	1.5	0.76	0.17	0.14	0.20	0.29	0.87
AC-FT	83	139	353	235	393	180	197	25	13	21	140	272

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	3.33	5.15	6.52	12.0	15.6	31.9	20.4	13.5	9.28	4.68	5.67	3.75
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	0.41	0.22	0.21	0.05	0.29
(WY)	(1991)	(1991)	(1992)	(1991)	(1991)	(1991)	(1991)	(2004)	(2004)	(2003)	(1956)	(1953)

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

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL TOTAL	821.28		1,034.65			
ANNUAL MEAN	2.25		2.83		11.1	
HIGHEST ANNUAL MEAN					56.0	1993
LOWEST ANNUAL MEAN					1.18	1991
HIGHEST DAILY MEAN	33	Dec 26	41	Feb 26	2,910	Mar 12, 1995
LOWEST DAILY MEAN	0.00	Jul 18	0.14	Jun 23	0.00	Sep 21, 1951
ANNUAL SEVEN-DAY MINIMUM	0.01	Jul 15	0.17	Jun 6	0.00	Aug 2, 1956
ANNUAL RUNOFF (AC-FT)	1,630		2,050		8,050	
10 PERCENT EXCEEDS	4.7		5.3		20	
50 PERCENT EXCEEDS	1.7		2.1		3.3	
90 PERCENT EXCEEDS	0.07		0.23		0.40	

e Estimated

09413200 VIRGIN RIVER NEAR BLOOMINGTON, UT

LOCATION.--Lat 37°04'14", long 113°34'55", in SE¼NW¼SW¼ sec. 6, T. 43 S., R. 15 W., Washington County, Hydrologic Unit 15010010, on left bank 0.2 mi downstream from mouth of Santa Clara River, 0.2 mi upstream from I-15 bridge, about 1.5 mi northeast of Bloomington, and 2.5 mi south of St. George. Gage was temporarily moved to right bank in April 2004.

DRAINAGE AREA.--3,853 mi^2 (revised).

PERIOD OF RECORD.--September 1977 to current year.

REVISED RECORD.--WDR-UT-92-1: Drainage area.

GAGE.--Water-stage recorder. Crest-stage gage installed May 9, 1989. Elevation of gage is 2,530 ft above NGVD of 1929, from topographic map. Datum lowered 10 ft on Apr 26, 2004. Prior to Apr 26, 2004 on left bank. May 18, 1992 to February 20, 1993 at site 180 ft upstream. Prior to September 19, 1978 at site 1.5 mi downstream at different datum.

REMARKS.--Records are good except for Nov 15 to Dec 25 and discharges greater than 300 ft^3/s, which are fair, and estimated daily discharges, which are poor. Natural flow affected by diversions upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,000 ft^3/s (estimated on basis of slope conveyance), Jan 1, 1989, gage height, 25.70 ft, result of Quail Creek reservoir dike failure; minimum daily discharge, 5.1 ft^3/s, Jul 11, 2003.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,570 ft^3/s, Aug 13, gage height, 18.00 ft; minimum daily discharge, 8.6 ft^3/s, Jul 14.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	41	76	e92	73	101	46	37	20	12	12	17
2	14	32	72	e86	73	102	116	37	15	11	16	12
3	18	33	72	e92	97	103	284	45	18	11	13	17
4	48	34	69	e92	77	116	188	45	16	8.8	16	20
5	41	32	63	e86	77	95	e130	50	17	10	18	19
6	46	54	61	81	76	101	e190	42	19	9.5	18	19
7	54	46	67	87	75	96	216	29	26	9.7	18	19
8	52	47	90	78	72	137	174	27	19	9.1	11	21
9	47	58	85	73	66	169	165	22	20	8.9	11	26
10	52	72	74	77	68	195	164	33	19	8.8	10	50
11	33	76	76	78	79	228	e130	19	19	9.3	9.7	32
12	39	80	73	75	66	149	e100	17	16	9.7	14	35
13	59	222	78	70	68	104	77	e20	18	9.3	475	57
14	71	106	75	65	71	e100	73	e17	19	8.6	31	35
15	65	75	72	69	78	e95	55	e30	19	11	23	26
16	29	76	67	68	77	138	36	e28	25	85	29	29
17	25	71	74	69	77	95	47	e27	13	197	36	24
18	28	68	67	68	70	73	52	e20	13	42	64	19
19	28	67	75	65	60	54	113	19	13	18	60	47
20	32	64	78	61	57	50	e80	18	12	13	65	77
21	29	67	80	68	61	56	e50	21	12	11	84	38
22	27	80	78	71	110	79	e53	20	13	12	76	39
23	32	76	74	69	168	94	e50	27	10	15	44	40
24	23	69	75	73	160	105	e48	34	9.5	10	26	25
25	24	69	88	80	110	105	e51	27	9.2	11	20	31
26	25	79	e540	78	299	92	e46	22	8.9	19	21	36
27	41	77	e150	61	307	85	e65	27	8.8	12	19	36
28	53	77	e92	66	270	61	59	27	9.7	14	19	24
29	45	73	e90	66	141	57	44	18	15	13	23	37
30	32	79	e94	67	---	40	63	15	15	14	31	292
31	33	---	e92	83	---	39	---	18	---	13	23	---
TOTAL	1,158	2,100	2,917	2,314	3,083	3,114	2,965	838	467.1	645.7	1,335.7	1,199
MEAN	37.4	70.0	94.1	74.6	106	100	98.8	27.0	15.6	20.8	43.1	40.0
MAX	71	222	540	92	307	228	284	50	26	197	475	292
MIN	13	32	61	61	57	39	36	15	8.8	8.6	9.7	12
AC-FT	2,300	4,170	5,790	4,590	6,120	6,180	5,880	1,660	926	1,280	2,650	2,380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2004, BY WATER YEAR (WY)

MEAN	117	156	168	217	280	360	391	436	161	81.0	91.9	104
MAX	322	286	350	695	1,642	1,124	1,335	1,839	1,146	244	246	422
(WY)	(1984)	(1984)	(1984)	(1989)	(1980)	(1995)	(1993)	(1983)	(1983)	(1984)	(1982)	(1998)
MIN	37.4	51.4	71.5	64.7	56.1	48.8	42.0	25.0	13.3	11.6	13.7	20.8
(WY)	(2004)	(1991)	(1991)	(1991)	(1991)	(1990)	(2003)	(2002)	(2003)	(2003)	(2002)	(2003)

09413200 VIRGIN RIVER NEAR BLOOMINGTON, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1978 - 2004	
ANNUAL TOTAL	20,630.0		22,136.5			
ANNUAL MEAN	56.5		60.5		213	
HIGHEST ANNUAL MEAN					628	1980
LOWEST ANNUAL MEAN					58.0	2002
HIGHEST DAILY MEAN	540	Dec 26	540	Dec 26	13,000	Jan 1, 1989
LOWEST DAILY MEAN	5.1	Jul 11	8.6	Jul 14	5.1	Jul 11, 2003
ANNUAL SEVEN-DAY MINIMUM	5.4	Jul 10	9.1	Jul 8	5.4	Jul 10, 2003
ANNUAL RUNOFF (AC-FT)	40,920		43,910		154,400	
10 PERCENT EXCEEDS	96		103		446	
50 PERCENT EXCEEDS	45		50		115	
90 PERCENT EXCEEDS	7.6		13		28	

e Estimated

09413500 VIRGIN RIVER NEAR ST. GEORGE, UT

LOCATION.--Lat 37°00'52", long 113°40'47", in NW¼NE¼SE¼ sec. 30, T. 43 S., R. 16 W., Washington County, Hydrologic Unit 15010010, Bureau of Land Management, on right bank immediately upstream from Beaver Dam Mountains Wilderness Area, and 8.0 mi southwest of St. George.

DRAINAGE AREA.--4,123 mi^2.

PERIOD OF RECORD.--October 1950 to December 1956, October 1991 to current year.

REVISED RECORDS.--WDR UT-92-1: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 2,400 ft above NGVD of 1929, from topographic map. October 1950 to December 1956, gage located about 400 ft downstream at different datum.

REMARKS.--Records good except for daily discharges greater than 400 ft^3/s and estimated daily discharges, which are poor. Many diversions upstream of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft^3/s, Aug 25, 1955, gage height 12.70 ft, site and datum then in use; no flow at times in some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge, 60,000 ft^3/s (estimated), Jan 1, 1989, gage height, about 30.0 ft, result of Quail Creek reservoir dike failure.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,700 ft^3/s, Aug 13, gage height, 7.53 ft; minimum daily discharge, 13 ft^3/s, Jul 9.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	45	94	109	87	149	54	53	29	17	18	23
2	17	39	87	104	85	148	140	42	24	18	26	21
3	20	43	86	110	109	143	318	53	24	18	25	19
4	43	40	88	112	100	159	272	48	26	15	28	24
5	47	40	80	98	89	139	176	56	25	15	29	24
6	45	55	78	96	102	123	244	51	24	14	31	26
7	55	52	82	108	82	127	300	35	31	16	29	26
8	59	54	118	100	87	154	270	35	25	14	21	29
9	44	60	114	87	80	194	232	31	26	13	18	29
10	60	74	92	95	78	201	205	39	22	14	17	59
11	35	82	96	97	92	257	247	33	29	14	15	50
12	40	87	93	97	82	190	170	26	23	16	15	43
13	54	240	101	89	80	127	104	29	23	14	e400	67
14	77	161	97	81	86	121	90	25	24	14	45	48
15	71	103	95	84	89	106	103	38	28	19	31	34
16	41	104	90	84	101	162	49	35	32	80	48	34
17	27	98	103	87	93	130	56	35	23	238	46	31
18	29	91	84	86	88	88	59	27	21	83	65	27
19	27	86	91	85	69	105	119	25	19	45	79	51
20	35	79	90	76	68	84	81	24	20	24	76	89
21	31	87	91	81	74	73	47	28	18	19	113	51
22	28	105	90	83	123	97	51	28	18	19	113	42
23	35	103	87	82	181	121	49	33	19	24	70	47
24	31	95	86	84	188	151	47	36	15	16	35	32
25	32	87	98	96	143	176	49	33	14	21	28	33
26	39	104	470	94	269	127	45	31	e14	31	27	41
27	48	106	196	70	331	137	72	29	e14	23	28	43
28	56	101	114	76	294	81	92	37	e16	24	24	29
29	49	91	105	77	181	73	66	27	e22	22	27	81
30	34	96	116	75	---	55	75	24	e21	22	32	e290
31	39	---	110	99	---	48	---	26	---	22	30	---
TOTAL	1,266	2,608	3,422	2,802	3,531	4,046	3,882	1,072	669	944	1,589	1,443
MEAN	40.8	86.9	110	90.4	122	131	129	34.6	22.3	30.5	51.3	48.1
MAX	77	240	470	112	331	257	318	56	32	238	400	290
MIN	17	39	78	70	68	48	45	24	14	13	15	19
AC-FT	2,510	5,170	6,790	5,560	7,000	8,030	7,700	2,130	1,330	1,870	3,150	2,860

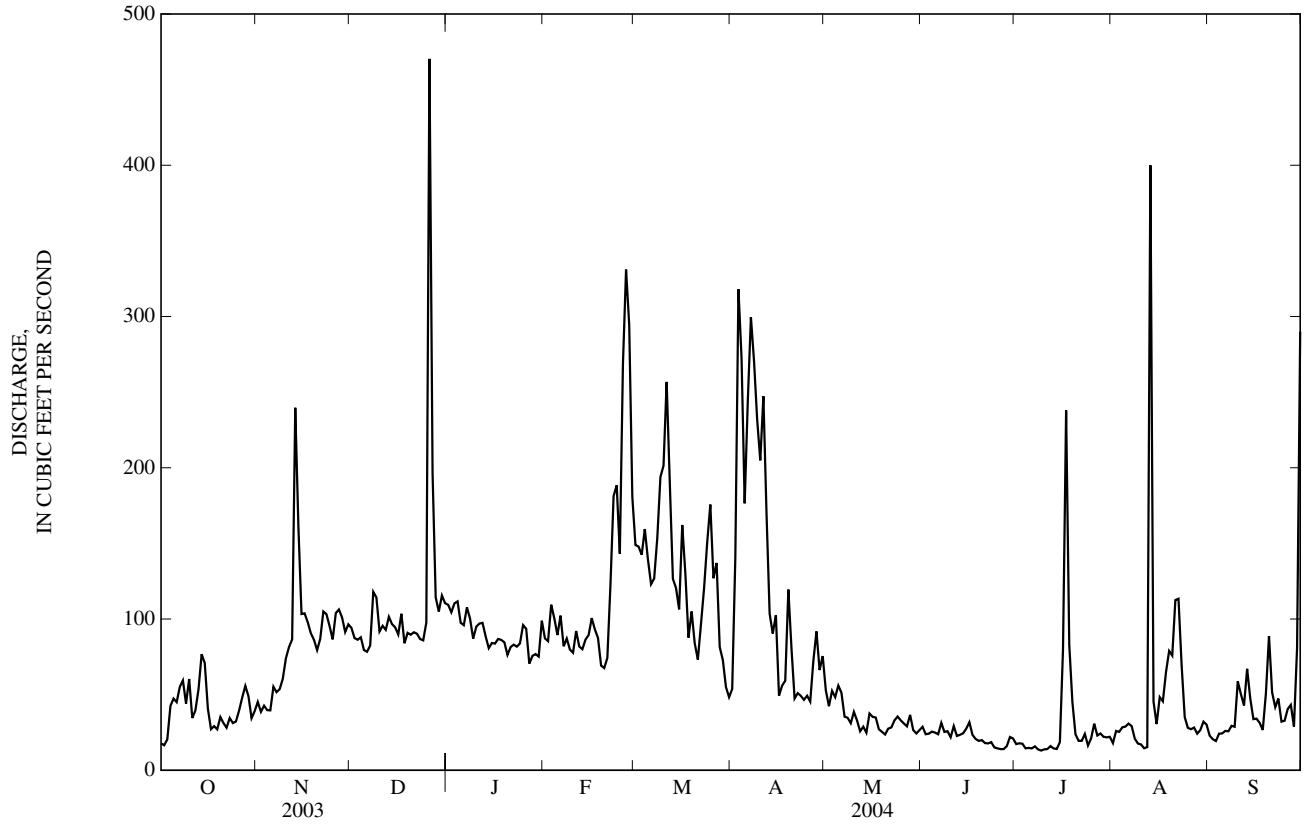
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

MEAN	88.3	133	152	184	215	277	311	310	89.1	65.2	105	91.0
MAX	179	237	287	519	869	1,232	1,312	1,300	543	232	522	475
(WY)	(1999)	(1999)	(1994)	(1993)	(1993)	(1995)	(1952)	(1993)	(1995)	(1998)	(1955)	(1998)
MIN	22.8	65.2	64.5	84.2	62.3	61.6	38.3	6.86	0.00	10.1	4.30	0.00
(WY)	(1951)	(1992)	(1957)	(2003)	(2002)	(2002)	(1953)	(1953)	(1951)	(1952)	(1956)	(1956)

09413500 VIRGIN RIVER NEAR ST. GEORGE, UT—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1951 - 2004	
ANNUAL TOTAL	25,028.6		27,274			
ANNUAL MEAN	68.6		74.5		169	
HIGHEST ANNUAL MEAN					472	1993
LOWEST ANNUAL MEAN					61.6	2002
HIGHEST DAILY MEAN	908	Aug 23	470	Dec 26	5,490	Aug 25, 1955
LOWEST DAILY MEAN	4.2	Jul 12	13	Jul 9	0.00	Apr 17, 1951
ANNUAL SEVEN-DAY MINIMUM	4.7	Jul 10	14	Jul 8	0.00	May 29, 1951
ANNUAL RUNOFF (AC-FT)	49,640		54,100		122,500	
10 PERCENT EXCEEDS	116		141		318	
50 PERCENT EXCEEDS	52		56		97	
90 PERCENT EXCEEDS	8.2		20		12	

e Estimated



09413900 BEAVER DAM WASH NEAR ENTERPRISE, UT

LOCATION.--Lat 37°28'12", long 114°02'45", in NW¼SW¼NW¼ sec. 24, T. 38 S., R. 20 W., Washington County, Hydrologic Unit 15010010, Bureau of Land Management, on left bank 0.4 mi downstream from Nevada-Utah State line and about 19 mi southwest of Enterprise.

DRAINAGE AREA.--58 mi^2.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 4,760 ft above NGVD of 1929, from topographic map.

REMARKS.-- Records fair except for daily discharges less than 2.0 ft^3/s and estimated daily discharge, which are poor. Some regulation of low flow by Schroeder Reservoir (capacity about 200 acre-ft) 3 miles upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,760 ft^3/s, Feb 24, 1998, gage height, 10.16 ft, from floodmarks, from rating curve extended above 70 ft^3/s on basis of slope-area measurement at gage height, 9.56 ft; no flow Aug 8, 10, 1994.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 26	0415	*246	*6.86

Date	Time	Discharge (ft^3/s)	Gage height (ft)
No other peak greater than base discharge.			

Minimum daily discharge, 0.08 ft^3/s, Jul 6.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.52	1.5	2.7	e4.8	3.3	19	7.8	3.8	1.3	0.73	0.21	0.34
2	0.53	1.0	2.3	e4.8	3.3	17	8.9	3.1	1.4	0.71	0.13	0.39
3	0.55	1.8	2.3	e4.8	3.8	16	9.6	3.4	1.5	0.62	0.24	0.47
4	0.50	1.8	2.2	e4.1	3.5	20	8.9	3.5	1.6	0.35	0.30	0.48
5	0.46	1.7	2.2	e3.7	3.4	20	8.4	3.5	1.1	0.17	0.35	0.62
6	0.36	1.7	2.2	e3.4	3.4	20	7.7	3.4	0.90	0.08	0.36	0.60
7	0.34	1.7	2.2	e3.4	3.4	28	7.7	3.2	0.82	0.20	0.33	0.51
8	0.54	1.7	2.3	e3.4	3.4	44	8.0	3.1	1.1	0.30	0.27	0.60
9	0.65	1.8	2.2	e3.4	3.4	63	8.1	2.6	1.2	0.37	0.31	0.65
10	0.76	1.9	2.2	e3.4	3.3	57	7.8	2.7	1.3	0.37	0.39	0.68
11	0.73	1.9	2.2	e3.2	3.4	45	7.1	2.3	1.4	0.24	0.39	0.76
12	0.55	1.9	2.1	e3.2	3.3	32	6.8	2.4	1.2	0.19	0.40	0.77
13	0.56	2.6	2.1	e3.2	3.3	28	6.4	2.6	0.74	0.22	0.42	0.49
14	0.63	2.3	2.1	3.3	3.3	26	6.3	2.6	0.48	0.29	0.40	0.47
15	0.73	2.1	2.2	3.4	3.3	24	6.0	2.5	0.50	0.63	0.35	0.56
16	0.82	2.6	2.1	3.4	3.3	22	5.9	2.1	0.71	0.80	0.28	0.65
17	0.89	2.4	2.1	3.3	3.3	19	4.6	2.3	0.90	0.85	0.28	0.71
18	0.86	2.2	2.1	3.3	3.4	17	3.7	2.2	1.0	0.85	0.34	0.83
19	0.76	2.1	2.1	3.3	3.5	16	4.7	2.2	0.94	0.71	0.41	0.84
20	0.95	2.1	2.1	3.3	3.5	16	5.1	2.2	0.62	0.71	0.38	0.89
21	1.1	2.1	2.2	3.3	4.0	14	5.1	2.2	0.75	0.72	0.49	1.1
22	1.1	2.1	2.2	3.3	4.9	15	5.0	2.1	0.81	0.71	0.52	1.1
23	1.1	2.0	2.2	3.3	8.0	13	5.0	1.1	0.81	0.66	0.41	1.1
24	1.1	1.6	2.3	3.3	12	13	4.8	1.4	0.98	0.54	0.43	1.1
25	1.1	1.7	5.7	3.3	13	12	4.5	1.7	0.98	0.40	0.49	1.1
26	1.0	1.9	78	3.3	36	11	4.4	1.8	0.87	0.21	0.52	1.2
27	1.2	1.9	16	3.3	41	10	4.4	1.9	0.56	0.31	0.50	1.3
28	1.3	1.7	e9.2	3.3	26	9.5	4.4	1.9	0.47	0.35	0.36	1.4
29	1.5	1.4	e7.3	3.3	21	8.6	4.0	2.0	0.69	0.34	0.26	1.4
30	1.5	2.2	6.8	3.3	---	8.3	4.3	1.7	0.72	0.33	0.21	1.6
31	1.6	---	e5.2	3.4	---	7.9	---	1.2	---	0.30	0.29	---
TOTAL	26.29	57.4	181.1	108.5	233.7	671.3	185.4	74.7	28.35	14.26	11.02	24.71
MEAN	0.85	1.91	5.84	3.50	8.06	21.7	6.18	2.41	0.94	0.46	0.36	0.82
MAX	1.6	2.6	78	4.8	41	63	9.6	3.8	1.6	0.85	0.52	1.6
MIN	0.34	1.0	2.1	3.2	3.3	7.9	3.7	1.1	0.47	0.08	0.13	0.34
AC-FT	52	114	359	215	464	1,330	368	148	56	28	22	49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2004, BY WATER YEAR (WY)

MEAN	2.60	3.54	4.35	10.2	24.9	35.0	16.1	5.00	2.23	0.90	1.98	1.57
MAX	7.75	6.66	9.59	55.2	115	128	97.6	14.6	5.44	2.86	14.0	5.82
(WY)	(2001)	(2001)	(1995)	(1993)	(1993)	(1993)	(1998)	(1998)	(1995)	(1998)	(2000)	(1997)
MIN	0.85	1.91	2.43	3.12	3.10	2.98	2.95	2.18	0.65	0.15	0.16	0.56
(WY)	(2004)	(2004)	(1992)	(2002)	(2002)	(2002)	(2002)	(1996)	(1996)	(1997)	(2003)	(2001)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1992 - 2004	
ANNUAL TOTAL	836.89		1,616.73			
ANNUAL MEAN	2.29		4.42		8.94	
HIGHEST ANNUAL MEAN					29.0	1993
LOWEST ANNUAL MEAN					2.00	2002
HIGHEST DAILY MEAN	78	Dec 26	78	Dec 26	1,140	Feb 24, 1998
LOWEST DAILY MEAN	0.01	Jul 22	0.08	Jul 6	0.00	Aug 8, 1994
ANNUAL SEVEN-DAY MINIMUM	0.02	Aug 11	0.25	Jul 5	0.02	Aug 11, 2003
ANNUAL RUNOFF (AC-FT)	1,660		3,210		6,480	
10 PERCENT EXCEEDS	3.8		9.5		11	
50 PERCENT EXCEEDS	2.1		2.1		3.1	
90 PERCENT EXCEEDS	0.13		0.37		0.46	

e Estimated