Water-Data Report UT-2005

09408135 VIRGIN RIVER ABOVE QUAIL CREEK, NEAR HURRICANE, UT

Virgin River Basin

LOCATION.--Lat 37°11′28″, long 113°21′19″ referenced to North American Datum of 1927, in NE ¼ NE ¼ SW ¼ 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.

WATER-DISCHARGE RECORDS

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

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 period from Jan 10 to Sep 30 and estimated daily discharges, which are poor. Many diversion upstream of gage. Since June 1985 diversions are made about 11 mi upstream into a pipeline that feeds Quail Creek Reservoir 2.4 mi downstream of gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft^3/s, Jan. 10, 2005, gage height, 20.93 ft, from rating curve extended above 7,220 ft^3/s on basis of slope-area measurement at gage height 18.68 ft; minimum daily discharge,20 ft^3/s, Jul 25-27, 1990.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,200 ft^3/s, Jan 10, gage height, 20.93 ft; minimum daily discharge, 56 ft^3/s, Oct 14 .

09408135 VIRGIN RIVER ABOVE QUAIL CREEK, NEAR HURRICANE, UT—Continued

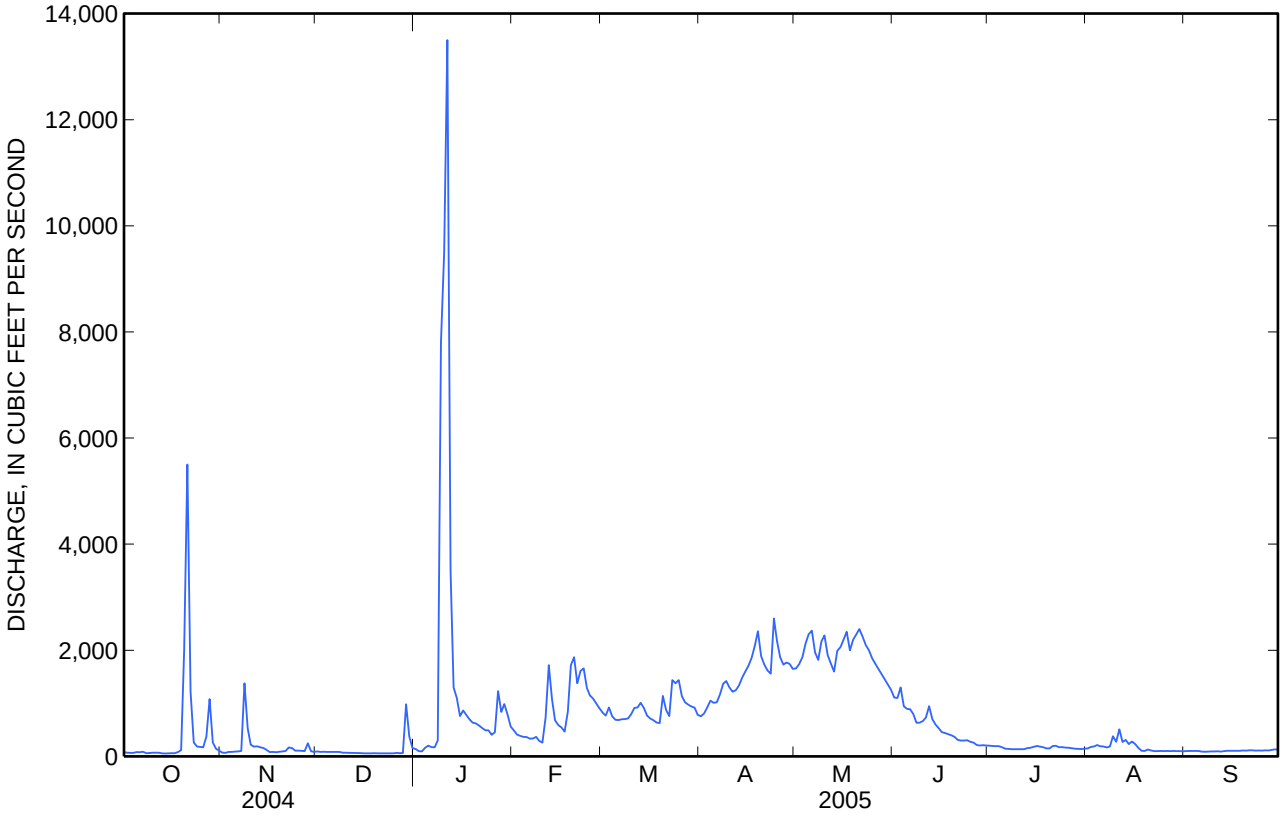
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	81	72	93	139	488	824	758	1,660	1,110	203	150	100
2	71	68	86	99	412	770	811	1,740	e1,100	198	180	102
3	66	86	87	95	386	923	923	1,870	e1,300	194	188	102
4	67	85	85	165	368	758	1,050	2,130	946	194	216	102
5	83	91	86	202	367	691	1,010	e2,300	e895	172	191	102
6	80	95	85	175	336	686	1,020	2,370	e889	145	189	91
7	88	104	86	172	338	699	1,170	1,960	e800	143	170	89
8	62	1,380	86	301	370	704	1,370	1,820	634	138	187	90
9	64	530	70	e7,800	293	717	1,420	2,170	637	138	380	93
10	69	221	70	e9,500	260	796	1,300	2,280	668	137	275	95
11	70	185	67	e13,500	732	913	1,220	1,910	732	138	511	96
12	70	192	66	e3,500	1,720	925	1,250	1,750	947	136	272	91
13	58	173	65	e1,300	1,080	1,010	1,340	e1,600	702	157	311	99
14	56	159	64	e1,100	682	913	1,480	1,990	e600	163	232	106
15	57	122	62	762	593	771	1,600	2,060	e530	182	281	107
16	62	83	57	867	546	717	1,710	e2,200	e460	198	233	107
17	62	84	57	779	468	683	1,860	2,350	e440	185	160	105
18	83	80	57	696	845	641	2,090	e2,000	e420	173	106	107
19	117	89	61	636	1,720	628	2,360	e2,200	e400	151	103	112
20	e2,000	93	58	621	1,870	1,140	1,890	e2,300	e370	151	131	109
21	e5,500	103	57	582	1,380	874	1,730	e2,400	e310	197	112	115
22	1,220	169	57	536	1,610	760	1,620	2,260	e300	200	101	115
23	264	157	57	492	1,660	1,440	1,560	e2,100	e300	172	100	110
24	188	109	57	492	1,290	1,380	2,600	e2,000	306	175	104	113
25	178	108	59	409	1,150	1,440	2,180	e1,850	276	166	101	109
26	171	105	67	457	1,090	1,130	1,870	e1,750	260	163	102	114
27	374	99	62	1,230	995	1,020	1,730	e1,650	216	153	99	113
28	1,080	247	64	839	906	974	1,770	e1,550	207	144	102	122
29	264	97	984	986	---	943	1,740	e1,450	212	142	100	133
30	144	85	377	792	---	919	1,650	e1,350	205	139	99	129
31	108	---	157	562	---	783	---	e1,250	---	147	98	---
Total	12,857	5,271	3,446	49,786	23,955	27,572	46,082	60,270	17,172	5,094	5,584	3,178
Mean	415	176	111	1,606	856	889	1,536	1,944	572	164	180	106
Max	5,500	1,380	984	13,500	1,870	1,440	2,600	2,400	1,300	203	511	133
Min	56	68	57	95	260	628	758	1,250	205	136	98	89
Ac-ft	25,500	10,460	6,840	98,750	47,510	54,690	91,400	119,500	34,060	10,100	11,080	6,300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2005, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	204	111	81.8	687	542	575	898	661	182	75.8	98.8	80.5
Max	415	176	111	1,606	856	889	1,536	1,944	572	164	180	112
(WY)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(2005)	(1993)
Min	75.1	54.7	46.7	104	76.2	54.6	53.1	44.0	40.8	34.5	54.6	49.2
(WY)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(1990)	(2004)	(2004)

09408135 VIRGIN RIVER ABOVE QUAIL CREEK, NEAR HURRICANE, UT—Continued

SUMMARY STATISTICS

	Water Year 2005		Water Years 1990 - 2005	
Annual total	260,267			
Annual mean	713		392	
Highest annual mean			713	2005
Lowest annual mean			58.9	1990
Highest daily mean	13,500	Jan 11	13,500	Jan 11, 2005
Lowest daily mean	56	Oct 14	20	Jul 25, 1990
Annual seven-day minimum	58	Dec 16	22	Jul 21, 1990
Annual runoff (ac-ft)	516,200		283,700	
10 percent exceeds	1,760		1,170	
50 percent exceeds	272		103	
90 percent exceeds	80		43