

Water-Data Report 2007

10163000 PROVO RIVER AT PROVO, UT

Jordan Basin
Provo Subbasin

LOCATION.--Lat 40°14'16", long 111°41'55" referenced to North American Datum of 1927, in NE ¼ NW ¼ SE ¼ sec.3, T.7 S., R.2 E., Utah County, UT, Hydrologic Unit 16020203, on left bank 1,300 ft downstream from bridge on State Highway 114, 2.1 mi west of Provo, and 2.1 mi upstream from mouth.

DRAINAGE AREA.--673 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1903 to June 1905, May 1933 to September 1934, January 1937 to current year. Monthly discharge only for some periods, published in WSP 1314. Published as "at San Pedro, Los Angeles and Salt Lake Railroad bridge, near Provo" 1903-04, and as "at Rio Grande Western Railroad bridge, near Provo" 1905.

REVISED RECORDS.--WSP 1564: 1904, 1934. WDR UT-77-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,510 ft above sea level, from topographic map. May 1903 to June 1905, nonrecording gages at site 0.8 mi upstream at different datums. May 1933 to September 1934, non-recording gage at present site at different datum. January 1937 to November 1938, water-stage recorder at site 1,000 ft upstream at different datum. November 1938 to August 1957, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records good. Station is below all diversions. At times entire flow is diverted above station for irrigation. Flow regulated by Deer Creek Reservoir since October 1940, Jordanelle Reservoir, and small lakes at headwaters that serve as reservoirs. Small transmountain diversions from Strawberry River drain into Daniels Creek. Flow affected by Weber-Provo diversion canal and Duchesne Tunnel, a transbasin diversion. Certain diversions for industrial use which reach Provo Bay, an arm of Utah Lake, are made above station; however, part of this flow is used for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,520 ft³/s, May 6, 1952, gage height, 6.37 ft, datum then in use; no flow for several periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 845 ft³/s, May 12, gage height 5.86 ft; minimum daily discharge, 20 ft³/s, Sep 20.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	52	169	140	219	204	302	332	72	77	38	35	36
2	54	156	139	222	216	306	335	84	80	34	39	36
3	58	144	139	213	235	303	325	114	80	38	40	45
4	74	144	132	214	235	304	312	92	78	33	39	48
5	96	143	122	214	235	304	280	80	75	35	37	70
6	126	144	124	212	238	304	263	78	177	48	35	65
7	112	147	127	212	241	309	263	81	150	49	33	57
8	93	146	137	213	237	336	273	77	122	51	33	51
9	88	155	145	217	238	321	245	230	94	51	38	51
10	100	164	149	230	239	320	174	590	89	42	35	53
11	96	169	160	236	280	313	139	714	194	50	35	46
12	97	168	175	237	271	311	169	683	284	56	34	46
13	94	169	184	238	260	307	157	605	294	52	33	42
14	96	173	186	242	255	310	136	431	292	52	33	45
15	112	161	189	248	255	311	130	228	301	45	34	49
16	130	159	196	245	253	308	127	124	293	45	33	49
17	135	159	184	240	244	310	91	87	290	47	36	47
18	129	157	173	240	243	313	79	63	257	48	49	30
19	127	156	195	240	260	314	76	74	188	51	46	27
20	128	151	204	237	247	315	72	61	136	48	46	20
21	129	151	202	237	248	323	69	79	79	43	42	22
22	132	152	201	234	247	295	73	80	55	45	44	45
23	132	153	202	232	249	301	82	79	55	47	37	46
24	137	152	202	234	246	314	73	75	56	51	34	51
25	157	157	207	234	234	313	67	70	51	56	36	e36
26	158	163	213	235	266	315	67	72	47	55	39	e37
27	160	160	223	237	300	323	70	76	44	44	43	e38
28	171	157	218	236	302	297	68	72	39	41	57	e36
29	171	148	218	236	---	325	78	72	35	38	47	e37
30	169	e144	220	221	---	315	75	78	38	42	44	e38
31	168	---	218	205	---	331	---	78	---	37	38	---
Total	3,681	4,671	5,524	7,110	6,978	9,673	4,700	5,399	4,050	1,412	1,204	1,299
Mean	119	156	178	229	249	312	157	174	135	45.5	38.8	43.3
Max	171	173	223	248	302	336	335	714	301	56	57	70
Min	52	143	122	205	204	295	67	61	35	33	33	20
Ac-ft	7,300	9,260	10,960	14,100	13,840	19,190	9,320	10,710	8,030	2,800	2,390	2,580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	141	198	239	233	246	267	292	322	346	49.1	23.0	53.5
Max	512	585	574	629	818	1,257	1,345	1,396	1,571	390	210	278
(WY)	(1984)	(1983)	(1983)	(1997)	(1986)	(1986)	(1986)	(1952)	(1983)	(1965)	(1983)	(1986)
Min	10.9	25.6	39.4	24.7	35.5	40.9	24.3	2.22	2.33	0.68	1.12	1.56
(WY)	(1961)	(1963)	(1993)	(1989)	(1989)	(1961)	(1961)	(1961)	(1977)	(1946)	(1960)	(1960)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1944 - 2007	
Annual total	77,501		55,701			
Annual mean	212		153		200	
Highest annual mean					553	1986
Lowest annual mean					41.5	1989
Highest daily mean	672	Apr 15	714	May 11	2,420	May 6, 1952
Lowest daily mean	10	Jul 27	20	Sep 20	0.10	Aug 25, 1992
Annual seven-day minimum	13	Jul 23	34	Aug 10	0.46	Jul 24, 1946
Annual runoff (ac-ft)	153,700		110,500		145,100	
10 percent exceeds	532		302		413	
50 percent exceeds	160		139		130	
90 percent exceeds	21		38		7.3	

