

YAKIMA RIVER BASIN

12502500 AHTANUM CREEK AT UNION GAP, WA

LOCATION.--Lat 46°32'08", long 120°28'20", in SE 1/4 SW 1/4 sec.8, T.12 N., R.19 E., Yakima County, Hydrologic Unit 17030003, on right downstream wingwall of Union Pacific Railway bridge at Union Gap, 1.0 mi south of town of Union Gap, and at mile 0.6.

DRAINAGE AREA.--173 mi².

PERIOD OF RECORD.--May to November 1904, August 1907 to July 1908, March to October 1910, April 1911 to September 1914, May 1951 to April 1953, August 1960 to current year. Published as "near Yakima" 1904, 1907-08, 1910-12. Records for water years 1913-14 are published in WSP 1286.

REVISED RECORDS.--WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 940 ft above NGVD of 1929, from topographic map. Prior to Sept. 30, 1914, nonrecording gage at approximately same site at various datums. May 12, 1951, to Sept. 30, 1972, water-stage recorder at present site at datum 3.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Extreme high flows may include transbasin flow from Wide Hollow Creek. Diversions and ground-water withdrawals for irrigation of about 9,000 acres upstream from station. Return from transbasin irrigation flows contribute to base flow. Chemical data (irrigation seasons only) for 1975-76 water years. Water temperature records March to December 1981. Bureau of Reclamation satellite telemeter at station.

AVERAGE DISCHARGE.--42 years (water years 1961-2002), 78.1 ft³/s, 56,610 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,100 ft³/s Jan. 16, 1974, gage height, 10.36 ft; maximum gage height, 13.5 ft, from high-water mark, backwater from Yakima River; no flow many days during September and October 1904.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 380 ft³/s Apr. 15, gage height, 5.78 ft; minimum discharge, 9.2 ft³/s Oct. 1, 2.

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	9.8	22	36	25	35	75	82	100	227	46	18	27
2	10	23	41	27	32	71	88	112	209	35	20	28
3	10	23	35	25	30	72	82	134	208	28	23	28
4	11	24	29	24	28	73	80	139	201	26	28	28
5	14	22	27	26	32	73	79	132	206	23	28	29
6	13	22	26	28	32	71	87	121	215	21	27	29
7	14	24	26	35	35	68	104	105	187	18	28	29
8	13	25	25	151	39	60	108	91	171	18	24	30
9	13	25	24	151	35	66	112	86	164	18	21	29
10	16	24	23	89	34	62	111	82	153	23	23	27
11	16	25	22	73	34	59	108	76	145	15	21	26
12	15	26	22	69	31	73	114	75	135	16	19	24
13	15	26	22	67	30	73	120	74	130	18	19	19
14	15	26	28	65	33	74	250	76	136	16	16	20
15	15	27	24	57	33	83	346	80	138	16	18	24
16	16	26	20	51	32	78	267	78	141	16	19	26
17	16	25	22	50	34	76	211	83	129	17	19	29
18	15	26	24	43	34	71	163	96	120	16	21	32
19	15	31	21	48	35	72	140	103	107	15	26	31
20	15	34	20	46	38	68	123	131	87	31	25	29
21	16	34	22	43	37	68	118	163	81	41	26	29
22	16	34	20	40	53	67	112	162	73	37	28	31
23	16	30	18	43	95	67	105	154	71	17	28	31
24	17	29	20	38	117	64	92	149	68	14	27	29
25	17	29	21	39	106	66	91	153	56	13	26	26
26	17	29	24	38	95	67	89	169	50	12	25	26
27	17	27	25	34	89	69	103	187	46	11	30	30
28	17	32	25	34	84	68	103	212	46	12	30	32
29	17	31	25	29	---	69	96	241	58	13	27	31
30	18	30	26	31	---	69	103	258	53	16	26	34
31	19	---	26	34	---	74	---	244	---	12	27	---
TOTAL	463.8	811	769	1553	1342	2166	3787	4066	3811	630	743	843
MEAN	15.0	27.0	24.8	50.1	47.9	69.9	126	131	127	20.3	24.0	28.1
MAX	19	34	41	151	117	83	346	258	227	46	30	34
MIN	9.8	22	18	24	28	59	79	74	46	11	16	19
AC-FT	920	1610	1530	3080	2660	4300	7510	8060	7560	1250	1470	1670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2002, BY WATER YEAR (WY)

MEAN	20.8	29.5	51.7	75.0	122	136	135	164	139	33.9	15.7	20.1
MAX	34.4	96.7	210	413	564	408	270	383	438	124	26.7	31.8
(WY)	1983	1963	1978	1974	1996	1972	1974	1995	1972	1974	1999	1978
MIN	9.30	8.99	8.64	10.3	15.7	21.5	16.5	22.8	12.2	8.31	7.33	9.34
(WY)	1978	1995	1989	1993	1994	1994	1977	1977	1992	1994	1977	1981

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1961 - 2002	
ANNUAL TOTAL	8211.0		20984.8			
ANNUAL MEAN	22.5		57.5		78.1	
HIGHEST ANNUAL MEAN					171	
LOWEST ANNUAL MEAN					20.2	
HIGHEST DAILY MEAN	50		346		2560	
LOWEST DAILY MEAN	7.1		9.8		3.5	
ANNUAL SEVEN-DAY MINIMUM	7.5		12		5.1	
ANNUAL RUNOFF (AC-FT)	16290		41620		56610	
10 PERCENT EXCEEDS	34		133		199	
50 PERCENT EXCEEDS	22		32		35	
90 PERCENT EXCEEDS	12		16		12	