

YAKIMA RIVER BASIN

12502500 AHTANUM CREEK AT UNION GAP, WA

LOCATION.--Lat 46°32'10", 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.--Records good, except for estimated daily discharges, which are poor. 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.--44 years (water years 1961-2004), 77.6 ft³/s, 56,210 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, 170 ft³/s, Mar. 19, Apr. 13, gage height, 4.35 ft; minimum discharge, 9.5 ft³/s, Oct. 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	22	18	29	16	33	52	91	110	97	25	23	21
2	25	23	31	e15	32	56	89	124	87	21	21	23
3	26	25	27	e14	31	57	89	149	86	19	21	25
4	25	25	27	e13	28	56	91	158	87	17	22	23
5	21	24	27	e12	26	65	101	160	93	17	22	22
6	21	26	22	15	26	73	111	147	96	17	25	21
7	22	24	22	16	26	68	121	130	92	19	28	21
8	26	26	20	18	25	74	132	123	101	19	27	20
9	24	26	21	22	24	96	134	122	101	19	25	21
10	25	26	24	27	23	126	132	115	90	18	23	22
11	26	26	24	29	27	127	133	110	83	19	21	23
12	26	29	24	29	28	126	143	97	81	25	19	22
13	27	27	24	29	25	128	157	92	75	26	18	23
14	23	27	24	29	32	125	161	81	68	25	19	25
15	23	27	22	30	36	132	147	82	59	22	20	27
16	28	27	23	31	36	132	125	96	50	21	20	27
17	25	28	23	26	38	145	109	92	41	20	19	26
18	16	28	23	25	40	158	101	107	37	20	19	28
19	14	32	22	24	40	163	89	104	35	25	18	28
20	14	37	23	24	42	149	91	130	35	27	18	28
21	14	33	23	24	41	137	80	148	31	23	18	28
22	13	23	23	24	36	130	72	147	28	18	22	28
23	12	24	24	25	36	133	64	145	26	16	25	29
24	11	29	25	26	39	137	66	142	30	15	24	29
25	12	28	25	26	49	134	65	132	28	13	28	30
26	12	28	22	25	45	144	88	129	26	13	31	29
27	14	27	18	27	50	130	81	146	23	12	29	28
28	13	27	18	26	50	115	109	140	21	14	26	26
29	10	28	21	28	48	110	109	128	22	14	25	25
30	14	29	17	40	---	105	107	116	20	17	23	24
31	16	---	16	40	---	100	---	110	---	22	22	---
TOTAL	600	807	714	755	1,012	3,483	3,188	3,812	1,749	598	701	752
MEAN	19.4	26.9	23.0	24.4	34.9	112	106	123	58.3	19.3	22.6	25.1
MAX	28	37	31	40	50	163	161	160	101	27	31	30
MIN	10	18	16	12	23	52	64	81	20	12	18	20
AC-FT	1,190	1,600	1,420	1,500	2,010	6,910	6,320	7,560	3,470	1,190	1,390	1,490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2004, BY WATER YEAR (WY)

MEAN	21.0	29.3	50.6	73.6	122	135	135	163	137	33.1	16.0	20.2
(WY)	34.4	96.7	210	413	564	408	270	383	438	124	26.7	31.8
(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)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1961 - 2004
ANNUAL TOTAL	29,500	18,171	
ANNUAL MEAN	80.8	49.6	
HIGHEST ANNUAL MEAN			77.6
LOWEST ANNUAL MEAN			171
HIGHEST DAILY MEAN	875	Feb 1	20.2
LOWEST DAILY MEAN	10	Oct 29	1994
ANNUAL SEVEN-DAY MINIMUM	12	Jul 25	1974
ANNUAL RUNOFF (AC-FT)	58,510	36,040	2,560
10 PERCENT EXCEEDS	185	128	Aug 7, 1978
50 PERCENT EXCEEDS	29	27	Aug 6, 1978
90 PERCENT EXCEEDS	16	18	Jan 16, 1974

e Estimated