

YAKIMA RIVER BASIN

12484500 YAKIMA RIVER AT UMTANUM, WA

LOCATION.--Lat 46°51'46", long 120°28'44", in SW 1/4 NW 1/4 sec.20, T.16 N., R.19 E., Kittitas County, Hydrologic Unit 17030001, on right bank at Umtanum railway siding, 0.5 mi upstream from Umtanum Creek, 4.2 mi upstream from McPherson Canyon, 10 mi south of Ellensburg, and at mile 140.4.

DRAINAGE AREA.--1,594 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1906 to current year. Monthly discharge for some months during the 1907, 1908, 1916-31 water years, published in WSP 1316.

REVISED RECORDS.--WSP 412: 1914. WSP 1286: 1910. WSP 1933: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,300.00 ft above NGVD of 1929. Prior to Sept. 28, 1911, nonrecording gage at approximately same site at various datums. Sept. 28, 1911, to Nov. 23, 1936, water-stage recorder at site about 300 ft upstream at datum 26.70 ft higher.

REMARKS.--No estimated daily discharges. Records good. Flow partly regulated by Keechelus, Kachess, and Cle Elum Lakes. Diversions upstream from station for irrigation of about 105,000 acres. Bureau of Reclamation satellite telemeter at station.

COOPERATION.--2 discharge measurements were provided by the Bureau of Reclamation.

AVERAGE DISCHARGE.--69 years (water years 1934-2002), 2,450 ft<sup>3</sup>/s, 1,775,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,000 ft<sup>3</sup>/s Nov. 15 or 16, 1906, gage height, 41.1 ft, from floodmarks, present datum; minimum recorded discharge, 138 ft<sup>3</sup>/s Oct. 3, 1915, gage height, 2.86 ft, datum then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,550 ft<sup>3</sup>/s Apr. 14, gage height, 34.58 ft; minimum discharge, 532 ft<sup>3</sup>/s Oct. 2-6.

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	567	1020	980	840	1130	1600	2180	3050	5440	4810	4260	3820
2	557	1050	993	850	1080	1500	2390	3800	5450	3520	4190	3620
3	539	1030	947	833	1050	1420	2310	3850	5400	2680	4210	3290
4	543	987	905	815	1010	1380	2240	3330	5580	2760	4180	2870
5	536	948	884	805	993	1370	2340	2930	5590	3180	4150	2560
6	557	926	881	818	977	1400	2460	2640	5560	3040	4090	2310
7	616	891	913	945	987	1370	2680	2360	5340	2990	4060	2080
8	639	850	907	2600	1020	1290	2680	2120	5100	3120	3980	1840
9	638	822	865	3130	987	1260	2690	2010	4510	3050	4040	1730
10	629	792	852	2580	955	1230	2800	1960	3970	3110	4110	1610
11	630	762	834	2190	939	1240	3010	1880	3820	3140	4140	1490
12	637	744	818	1970	900	1710	3200	2040	3900	3150	4080	1460
13	645	741	847	1960	894	1750	3740	2440	4360	3260	4020	1440
14	656	997	1380	1800	894	1630	6710	2810	5300	3370	4110	1410
15	678	2200	1430	1620	876	1540	7130	2770	6510	3420	4120	1410
16	671	1890	1290	1500	872	1490	5020	2630	6810	3460	4120	1420
17	645	1580	1570	1420	878	1440	3870	2590	6490	3570	4160	1410
18	630	1370	1720	1330	871	1360	3140	2780	5210	3750	4170	1370
19	625	1250	1530	1290	888	1360	2760	2900	4770	3860	4210	1360
20	624	1190	1370	1270	924	1480	2650	3580	4480	3980	4190	1350
21	631	1150	1250	1300	948	1460	2690	4010	4150	3940	4120	1350
22	651	1200	1160	1220	1250	1350	2610	3680	4310	3950	4070	1360
23	699	1250	1090	1160	2640	1320	2500	3380	4580	3980	3950	1360
24	891	1290	1030	1170	2780	1410	2300	3100	5000	4170	3880	1340
25	962	1210	987	1440	2430	1620	2090	3050	4690	4190	3870	1320
26	895	1120	949	1500	2100	1720	2070	3220	4490	4230	3850	1320
27	804	1050	923	1370	1890	1760	2270	3460	4570	4260	3850	1340
28	789	1060	911	1280	1740	1730	2350	3930	5050	4270	3900	1370
29	768	1020	889	1190	---	1800	2390	4590	4800	4270	3850	1390
30	770	974	866	1170	---	1850	2540	4860	5270	4230	3870	1420
31	837	---	858	1150	---	1990	---	5050	---	4260	3890	---
TOTAL	20959	33364	32829	44516	34903	46830	89810	96800	150500	112970	125690	53420
MEAN	676	1112	1059	1436	1247	1511	2994	3123	5017	3644	4055	1781
MAX	962	2200	1720	3130	2780	1990	7130	5050	6810	4810	4260	3820
MIN	536	741	818	805	871	1230	2070	1880	3820	2680	3850	1320
AC-FT	41570	66180	65120	88300	69230	92890	178100	192000	298500	224100	249300	106000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2002, BY WATER YEAR (WY)

MEAN	1158	1074	1725	1620	1848	2127	3225	3979	3882	3278	3330	2113
MAX	3197	3596	9214	7166	8547	8355	8831	8215	9077	4485	4221	3235
(WY)	1950	1960	1934	1934	1996	1972	1972	1997	1948	1985	1978	1950
MIN	412	352	331	337	463	541	1370	1493	1556	2075	1521	1053
(WY)	1974	1953	1953	1979	1944	1977	2001	2001	1941	1941	1979	1994

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1934 - 2002

ANNUAL TOTAL	533850	842591	
ANNUAL MEAN	1463	2308	
HIGHEST ANNUAL MEAN			4204
LOWEST ANNUAL MEAN			1335
HIGHEST DAILY MEAN	3110	7130	29600
LOWEST DAILY MEAN	536	536	151
ANNUAL SEVEN-DAY MINIMUM	552	559	217
ANNUAL RUNOFF (AC-FT)	1059000	1671000	1775000
10 PERCENT EXCEEDS	2860	4260	4380
50 PERCENT EXCEEDS	1200	1730	2170
90 PERCENT EXCEEDS	719	829	640