12484500 YAKIMA RIVER AT UMTANUM, WA

LOCATION.--Lat 46°51'46", long 120°28'44", in SW ¼ NW ¼ 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^2.

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.--70 years (water years 1934-2003), 2,447 ft^3/s, 1,773,000 acre-ft/yr, unadjusted.

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,100 ft^3/s Feb. 1, gage height, 34.75 ft; minimum discharge, 804 ft^3/s Dec. 6.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,420	971	873	926	8,330	1,590	4,020	2,340	2,420	3,310	4,400	3,120
2	1,410	980	868	965	5,560	1,510	3,720	2,560	2,340	3,500	4,400	3,090
3	1,460	963	865	1,130	4,170	1,470	3,280	2,680	2,220	3,570	4,470	3,000
4	1,500	961	863	1,300	3,420	1,420	2,920	2,680	2,380	3,630	4,490	2,910
5	1,500	956	856	1,550	2,930	1,400	2,620	2,530	2,840	3,720	4,450	2,810
6	1,480	946	813	1,410	2,550	1,580	2,430	2,310	3,670	3,750	4,440	2,530
7	1,470	949	822	1,270	2,280	1,620	2,230	2,110	4,320	3,780	4,280	2,200
8	1,370	998	829	1,200	2,090	1,520	2,120	2,000	4,690	3,760	4,190	1,940
9	1,220	968	828	1,150	1,940	1,490	2,150	1,910	4,260	3,790	4,080	1,740
10	1,210	951	828	1,090	1,830	1,540	2,310	1,880	4,020	3,760	4,010	1,570
11	1,220	931	870	1,070	1,750	1,970	2,390	1,900	3,730	3,750	3,990	1,460
12	1,220	930	905	1,070	1,670	2,820	2,550	1,980	3,440	3,750	3,940	1,400
13	1,260	943	898	1,040	1,630	3,810	2,830	2,000	3,080	3,730	3,980	1,340
14	1,260	953	974	1,030	1,590	4,300	3,170	2,060	3,070	3,880	3,970	1,350
15	1,240	930	1,080	1,040	1,540	4,290	3,010	2,160	3,000	3,920	3,940	1,340
16	1,240	924	1,370	1,020	1,600	4,330	2,700	2,170	2,790	3,990	3,890	1,290
17	1,170	930	1,290	994	1,590	3,870	2,390	2,070	2,620	4,030	3,870	1,260
18	1,080	938	1,110	985	1,550	3,430	2,160	1,940	2,610	4,080	3,840	1,220
19	1,040	945	1,020	977	1,510	3,100	1,980	1,810	2,740	4,120	3,750	1,220
20	1,020	1,010	990	965	1,500	2,860	1,920	1,730	2,780	4,150	3,720	1,190
21	1,000	975	969	976	1,710	2,730	1,790	1,730	2,940	4,220	3,700	1,200
22	1,020	949	941	999	3,150	2,890	1,920	1,780	2,990	4,210	3,690	1,190
23	1,080	928	917	995	2,930	3,170	2,070	1,930	3,160	4,200	3,660	1,140
24	1,100	910	916	1,000	2,380	3,000	2,350	2,310	3,250	4,340	3,600	1,140
25	1,090	899	917	1,040	2,050	2,780	2,650	2,960	3,310	4,380	3,540	1,140
26	1,080	890	907	1,340	1,920	2,660	2,510	2,890	3,340	4,380	3,470	1,110
27	1,080	889	939	3,290	1,800	2,490	2,350	2,510	3,290	4,340	3,420	1,120
28	1,070	884	931	2,720	1,680	2,330	2,210	2,450	3,220	4,340	3,350	1,150
29	1,060	879	924	2,280	---	2,230	2,170	2,570	3,180	4,340	3,260	1,160
30	1,010	876	916	2,330	---	2,350	2,280	2,540	3,160	4,390	3,250	1,150
31	982	---	947	5,830	---	3,300	---	2,500	---	4,410	3,200	---
TOTAL	37,362	28,156	29,176	44,982	68,650	79,850	75,200	68,990	94,860	123,520	120,240	49,480
MEAN	1,205	939	941	1,451	2,452	2,576	2,507	2,225	3,162	3,985	3,879	1,649
MAX	1,500	1,010	1,370	5,830	8,330	4,330	4,020	2,960	4,690	4,410	4,490	3,120
MIN	982	876	813	926	1,500	1,400	1,790	1,730	2,220	3,310	3,200	1,110
AC-FT	74,110	55,850	57,870	89,220	136,200	158,400	149,200	136,800	188,200	245,000	238,500	98,140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 2003, BY WATER YEAR (WY)

MEAN	1,159	1,072	1,713	1,618	1,857	2,133	3,214	3,954	3,872	3,288	3,338	2,106
MAX	3,197	3,596	9,214	7,166	8,547	8,355	8,831	8,215	9,077	4,485	4,221	3,235
(WY)	(1950)	(1960)	(1934)	(1934)	(1996)	(1972)	(1972)	(1997)	(1948)	(1985)	(1978)	(1950)
MIN	412	352	331	337	463	541	1,370	1,493	1,556	2,075	1,521	1,053
(WY)	(1974)	(1953)	(1953)	(1979)	(1944)	(1977)	(2001)	(2001)	(1941)	(1941)	(1979)	(1994)

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1934 - 2003	
ANNUAL TOTAL	850,133		820,466			
ANNUAL MEAN	2,329		2,248		2,447	
HIGHEST ANNUAL MEAN					4,204	1972
LOWEST ANNUAL MEAN					1,335	1941
HIGHEST DAILY MEAN	7,130	Apr 15	8,330	Feb 1	29,600	Dec 23, 1933
LOWEST DAILY MEAN	805	Jan 5	813	Dec 6	151	Apr 16, 1944
ANNUAL SEVEN-DAY MINIMUM	834	Dec 4	834	Dec 4	217	Dec 31, 1978
ANNUAL RUNOFF (AC-FT)	1,686,000		1,627,000		1,773,000	
10 PERCENT EXCEEDS	4,260		4,010		4,370	
50 PERCENT EXCEEDS	1,710		2,000		2,170	
90 PERCENT EXCEEDS	916		940		642	