

## WALLA WALLA RIVER BASIN

14018500 WALLA WALLA RIVER NEAR TOUCHET, WA

LOCATION.--Lat 46°01'40", long 118°43'43", in NW 1/4 SE 1/4 sec.6, T.6 N., R.33 E., Walla Walla County, Hydrologic Unit 17070102, on left bank 0.8 mi upstream from Gardena Creek, 2.8 mi southwest of Touchet, 3.4 mi downstream from Touchet River, and at mile 18.2.

DRAINAGE AREA.--1,657 mi<sup>2</sup>.

## WATER DISCHARGE RECORDS

PERIOD OF RECORD.--October 1951 to current year.

REVISED RECORDS.--WSP 1935: Drainage area. WDR WA-96-1: 1992(M), 1993(M), 1995 (M,P).

GAGE.--Water-stage recorder. Elevation of gage is 405 ft above NGVD of 1929, from topographic map. Prior to Nov. 27, 1951, nonrecording gage at same site and datum. U.S. Geological Survey satellite telemeter at station.

REMARKS.--No estimated daily discharges. Records good. Many diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--51 years (water years 1952-2002), 573 ft<sup>3</sup>/s, 415,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,400 ft<sup>3</sup>/s Dec. 22, 1964, gage height, 18.90 ft, from rating curve extended above 15,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; maximum gage height, 20.58 ft Feb. 10, 1996, from high-water mark; no flow July 30 to Aug. 8, Aug. 12, 13, 1968, Oct. 5-7, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Feb. 24	1700	*5,050	*10.99	Apr. 15	0300	4,960	*10.99
Mar. 25	1600	3,320	9.16				

Minimum discharge, 4.9 ft<sup>3</sup>/s Aug. 17.

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	52	205	396	422	719	1100	1260	864	868	178	21	8.8
2	44	171	402	427	670	976	1230	914	861	131	17	16
3	35	128	413	487	628	886	1110	968	790	112	16	18
4	31	109	469	592	604	827	1040	930	693	97	15	15
5	36	95	470	624	581	808	1060	852	597	90	20	18
6	27	93	453	615	570	855	1190	800	569	90	26	22
7	25	99	445	777	604	938	1310	714	517	80	22	28
8	27	104	470	1630	946	899	1260	694	494	76	19	32
9	36	105	473	2260	1030	868	1150	647	504	71	23	31
10	48	104	481	1630	926	847	1240	614	547	72	19	30
11	58	106	472	1200	852	862	1470	589	529	52	14	28
12	106	107	457	989	786	1760	1580	572	474	43	13	26
13	108	108	456	896	738	2570	1790	635	382	30	13	24
14	65	125	1600	806	684	1890	2910	791	328	29	e11	22
15	55	168	1760	726	645	1540	4200	844	333	30	8.4	28
16	70	173	1120	657	626	1360	2590	804	307	31	6.3	27
17	60	165	930	618	616	1220	1910	777	294	34	5.6	27
18	53	180	950	577	616	1090	1540	768	323	31	5.9	42
19	55	180	833	576	621	998	1290	845	471	29	6.5	51
20	54	166	719	576	720	1040	1100	1010	364	29	7.6	40
21	52	172	645	564	737	1020	1010	1050	300	30	9.0	34
22	61	225	586	577	999	975	965	895	268	29	8.5	35
23	80	724	547	562	1780	945	978	810	233	26	8.8	40
24	128	906	515	542	4250	1130	935	777	210	23	13	38
25	88	584	491	772	3310	2820	866	729	174	19	11	35
26	72	489	469	1820	2100	2710	841	728	151	18	9.0	38
27	70	417	452	1630	1570	2210	879	762	133	23	9.5	43
28	76	367	456	1250	1280	1810	833	904	121	24	11	41
29	96	372	450	1000	---	1520	777	1050	128	26	8.9	38
30	94	385	436	889	---	1340	802	1050	186	25	9.2	41
31	109	---	426	784	---	1260	---	931	---	23	8.3	---
TOTAL	1971	7332	19242	27475	30208	41074	41116	25318	12149	1601	395.5	916.8
MEAN	63.6	244	621	886	1079	1325	1371	817	405	51.6	12.8	30.6
MAX	128	906	1760	2260	4250	2820	4200	1050	868	178	26	51
MIN	25	93	396	422	570	808	777	572	121	18	5.6	8.8
AC-FT	3910	14540	38170	54500	59920	81470	81550	50220	24100	3180	784	1820

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2002, BY WATER YEAR (WY)

	MEAN	81.1	298	801	1090	1290	1199	1076	721	259	42.7	19.1	39.9
MAX	392	1056	2890	2698	3700	3105	2437	1544	1130	139	82.7	181	
(WY)	1952	1996	1965	1965	1996	1972	1974	1993	1974	1974	1974	1976	1959
MIN	9.20	55.3	190	306	286	339	242	60.6	21.2	5.85	3.07	3.07	
(WY)	1989	1988	1988	1979	1977	1973	1968	1968	1968	1968	1973	1994	

## SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1952 - 2002	
ANNUAL TOTAL	149425		208798.3			
ANNUAL MEAN	409		572		573	
HIGHEST ANNUAL MEAN					1212	
LOWEST ANNUAL MEAN					166	
HIGHEST DAILY MEAN	2180	Feb 6	4250	Feb 24	20300	Dec 23 1964
LOWEST DAILY MEAN	13	Aug 31	5.6	Aug 17	0.00	Jul 30 1968
ANNUAL SEVEN-DAY MINIMUM	14	Aug 28	7.0	Aug 15	0.00	Jul 30 1968
ANNUAL RUNOFF (AC-FT)	296400		414200		415000	
10 PERCENT EXCEEDS	1040		1260		1430	
50 PERCENT EXCEEDS	312		470		300	
90 PERCENT EXCEEDS	22		22		14	

e Estimated