

Water-Data Report 2008

14207500 TUALATIN RIVER AT WEST LINN, OR

Willamette Basin
Tualatin Subbasin

LOCATION.--Lat 45°21'03", long 122°40'30" referenced to North American Datum of 1927, in SW ¼ sec.34, T.2 S., R.1 E., Clackamas County, OR, Hydrologic Unit 17090010, on left bank, 300 ft upstream from bridge on State Highway 212, 0.4 mi west of West Linn city limits and at mile 1.8.

DRAINAGE AREA.--706 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1928 to current year. Prior to October 1960, published as "near Willamette."

REVISED RECORDS.--WSP 1014: 1943. WSP 1184: 1947. WSP 1248: 1941. WSP 1935: Drainage area. WDR OR-75-1: 1974(M). WDR OR-77-1: 1971-73, 1975, 1976(M).

GAGE.--Water-stage recorder. Datum of gage is 85.61 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to June 12, 1941, nonrecording gage at datum 1.02 ft higher.

REMARKS.--Records good. October 1951 to September 1970, records published for this station included daily flow in Oswego Canal, which diverts at a point 5.0 mi upstream from station for development of power between outlet of Lake Oswego and Willamette River. Adjustment for diversion to Lake Oswego are published for water years 1971-95. Some regulation in low-water season by flashboards on crest of diversion dam for Oswego Canal and regulation by Henry Hagg Lake since January 1975. Several diversions upstream from station for irrigation. Periodic suspended sediment data are available for period October 1974 to September 1995.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--47 years (water years 1929-1975), 1,482 ft³/s, 1,074,000 acre-ft/yr; 80 years (water years 1929-2008), 1,465 ft³/s, 1,061,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 26,400 ft³/s Feb. 10, 1996, gage height, 18.32 ft, does not include an estimated 3,600 ft³/s flowing in Oswego Canal; minimum daily discharge, 0.20 ft³/s July 30 to Aug. 2, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,840 ft³/s Dec. 7, gage height, 11.10 ft; minimum discharge, 196 ft³/s Aug. 7.

14207500 TUALATIN RIVER AT WEST LINN, OR—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	496	262	846	4,410	3,630	1,290	2,250	1,420	431	310	220	252
2	501	283	1,370	4,440	4,240	1,290	2,130	1,280	404	301	219	272
3	525	286	4,630	e4,660	4,480	1,300	1,970	1,170	562	300	213	272
4	494	285	6,540	e4,650	4,300	1,280	1,840	1,130	737	290	219	247
5	433	281	6,570	4,930	4,140	1,210	1,750	1,080	733	295	220	237
6	366	271	8,100	e5,040	4,040	1,140	1,720	1,030	613	305	204	235
7	319	268	8,780	e5,040	4,550	1,080	1,700	974	530	311	200	233
8	301	278	8,350	e5,390	4,530	1,110	1,650	928	510	309	208	235
9	277	295	7,450	e5,600	4,570	1,170	1,620	897	526	286	218	240
10	283	342	6,570	5,840	4,500	1,140	1,610	842	479	258	225	230
11	308	339	5,690	6,020	4,460	1,070	1,560	798	441	251	245	212
12	294	354	4,830	6,150	4,420	1,050	1,460	779	443	248	250	220
13	282	380	3,970	6,180	4,360	1,250	1,360	753	435	263	233	233
14	267	402	3,200	6,240	4,210	1,650	1,310	721	389	272	211	242
15	261	454	2,530	6,350	4,000	2,020	1,300	696	363	266	210	249
16	271	509	1,990	6,200	3,710	2,270	1,280	678	339	257	219	252
17	313	911	1,730	5,990	3,410	2,270	1,200	632	305	255	215	254
18	382	1,240	1,680	5,670	3,100	2,260	1,130	597	284	261	235	238
19	609	e1,360	2,040	5,330	2,770	2,200	1,070	568	276	256	272	238
20	962	1,570	2,940	4,980	2,430	2,150	1,040	555	255	261	336	240
21	1,020	1,370	3,150	4,570	2,130	2,120	1,030	553	255	280	372	252
22	928	1,080	3,280	4,170	1,890	2,030	1,050	553	265	298	355	288
23	718	862	3,600	e3,700	1,730	1,930	1,310	541	275	275	313	290
24	538	723	4,310	e3,200	1,620	1,880	1,520	526	276	249	275	282
25	423	621	4,260	e2,800	1,550	1,830	1,710	540	262	251	324	257
26	352	556	4,380	e2,400	1,470	1,890	1,770	692	247	242	344	242
27	308	574	4,460	e2,300	1,390	1,970	1,700	691	246	238	314	231
28	285	594	4,690	e2,200	1,340	2,090	1,590	597	271	236	271	235
29	287	721	4,640	e2,200	1,290	2,170	1,540	589	295	245	239	252
30	273	790	4,610	2,350	---	2,270	1,530	540	339	247	219	253
31	252	---	4,540	3,040	---	2,300	---	486	---	230	220	---
Total	13,328	18,261	135,726	142,040	94,260	52,680	45,700	23,836	11,786	8,346	7,818	7,413
Mean	430	609	4,378	4,582	3,250	1,699	1,523	769	393	269	252	247
Max	1,020	1,570	8,780	6,350	4,570	2,300	2,250	1,420	737	311	372	290
Min	252	262	846	2,200	1,290	1,050	1,030	486	246	230	200	212
Ac-ft	26,440	36,220	269,200	281,700	187,000	104,500	90,650	47,280	23,380	16,550	15,510	14,700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	213	1,124	3,143	3,910	3,660	2,727	1,602	684	298	123	85.4	113
Max	995	4,654	8,476	8,860	9,490	6,400	3,968	2,437	762	292	286	420
(WY)	(1998)	(1974)	(1956)	(2006)	(1996)	(1961)	(1963)	(1996)	(1984)	(1998)	(2004)	(1997)
Min	9.17	39.5	158	163	180	638	354	175	63.1	4.64	2.02	3.92
(WY)	(1965)	(1937)	(1977)	(1977)	(1977)	(2001)	(1977)	(1939)	(1965)	(1965)	(1966)	(1966)

14207500 TUALATIN RIVER AT WEST LINN, OR—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1929 - 2008	
Annual total	487,688		561,194			
Annual mean	1,336		1,533		1,465	
Highest annual mean					2,787	1999
Lowest annual mean					278	1977
Highest daily mean	8,780	Dec 7	8,780	Dec 7	25,900	Feb 10, 1996
Lowest daily mean	201	Aug 30	200	Aug 7	0.20	Jul 30, 1966
Annual seven-day minimum	207	Aug 25	212	Aug 3	0.27	Jul 28, 1966
Annual runoff (ac-ft)	967,300		1,113,000		1,061,000	
10 percent exceeds	4,100		4,510		4,380	
50 percent exceeds	525		694		501	
90 percent exceeds	236		241		31	

