Water-Data Report 2011

12096500 PUYALLUP RIVER AT ALDERTON, WA

Puget Sound Basin
Puyallup Subbasin

LOCATION.--Lat 47°11′07″, long 122°13′42″ referenced to North American Datum of 1927, in SE ¼ SE ¼ sec.25, T.20 N., R.4 E., Pierce County, WA, Hydrologic Unit 17110014, at State Highway 162 road crossing, 1.0 mile north of Alderton, 1.0 mile south of Sumner, and at mile 12.2.

DRAINAGE AREA.--438 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1914 to February 1927, October 1943 to April 1957. October 1, 1981 to June 30, 2007 (annual maximum). July 1, 2007 to current year.

REVISED RECORDS.--WSP 870: Drainage area. WSP 1316: 1917(M), 1919-27(M). WSP 1396: 1945(P).

GAGE.--Water stage recorder and crest-stage gage. Datum of gage is NGVD 1929.

REMARKS.--No estimated daily discharges. Records fair. Water diverted and returned upstream by Puget Power for power generation. No other regulation. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--29 years (1915-26, 1944-56, 2008-11), 1,628 ft^3/s, 1,179,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--1914-27, 1943-57, 2008-09: Maximum discharge, 53,600 ft^3/s Jan. 7, 2009 (elevation, 61.27 ft); minimum daily, 150 ft^3/s Nov. 29, Dec. 1, 1952. Flood in 1906 reached a stage of 66.3 ft, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 9,000 ft^3/s and (or) maximum (*):

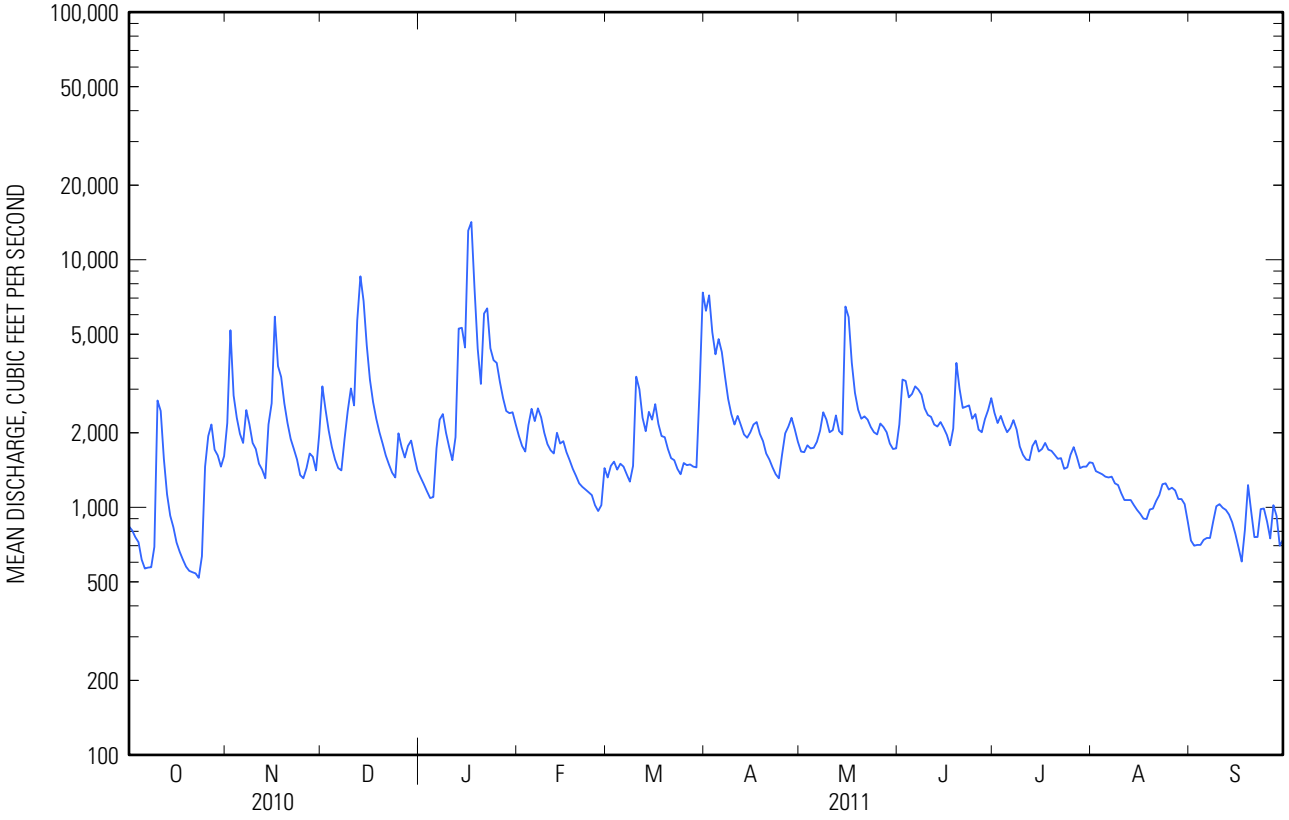
Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 13	1115	9,330	51.29
Jan 16	1645	*19,900	*54.54
Jan 21	1900	9,280	51.19
Mar 31	1715	9,780	51.38

Minimum discharge, 503 ft^3/s, Oct. 23, 24.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 12096500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/12096500.2011.pdf

12096500 PUYALLUP RIVER AT ALDERTON, WA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	837	2,190	3,080	1,320	1,940	1,320	6,220	1,680	2,160	2,410	1,510	734
2	807	5,190	2,480	1,240	1,770	1,470	7,180	1,670	3,280	2,190	1,400	700
3	758	2,830	2,040	1,160	1,680	1,530	5,100	1,780	3,240	2,340	1,380	705
4	723	2,300	1,750	1,090	2,150	1,420	4,150	1,730	2,780	2,150	1,360	705
5	615	1,980	1,560	1,100	2,500	1,500	4,780	1,740	2,870	2,010	1,330	739
6	566	1,820	1,440	1,730	2,230	1,460	4,240	1,840	3,080	2,090	1,320	752
7	571	2,470	1,410	2,260	2,510	1,360	3,380	2,040	2,990	2,250	1,330	752
8	573	2,160	1,890	2,380	2,310	1,270	2,740	2,420	2,850	2,060	1,250	876
9	692	1,820	2,450	2,000	2,000	1,470	2,380	2,260	2,510	1,760	1,230	1,010
10	2,700	1,720	3,020	1,750	1,800	3,370	2,160	2,010	2,360	1,630	1,140	1,030
11	2,450	1,500	2,580	1,550	1,700	3,000	2,340	2,050	2,320	1,560	1,070	996
12	1,570	1,420	5,690	1,920	1,650	2,300	2,150	2,350	2,160	1,550	1,070	976
13	1,130	1,310	8,570	5,270	2,000	2,030	1,970	2,030	2,120	1,770	1,070	935
14	926	2,160	6,810	5,310	1,810	2,430	1,910	1,970	2,210	1,860	1,020	870
15	831	2,630	4,510	4,420	1,850	2,260	2,010	6,470	2,090	1,680	976	781
16	721	5,890	3,280	13,100	1,670	2,610	2,160	5,870	1,960	1,720	941	688
17	661	3,720	2,660	14,200	1,550	2,170	2,210	3,840	1,780	1,820	900	604
18	615	3,360	2,280	7,630	1,430	1,940	1,980	2,900	2,080	1,710	897	809
19	576	2,630	2,010	4,370	1,340	1,920	1,850	2,480	3,830	1,690	980	1,230
20	554	2,190	1,810	3,150	1,250	1,720	1,650	2,280	3,010	1,630	988	960
21	547	1,890	1,620	6,060	1,210	1,580	1,560	2,330	2,520	1,570	1,060	758
22	541	1,720	1,490	6,360	1,180	1,550	1,450	2,260	2,550	1,580	1,120	759
23	519	1,560	1,380	4,390	1,150	1,430	1,360	2,110	2,580	1,430	1,240	984
24	634	1,350	1,320	3,930	1,120	1,360	1,310	2,010	2,280	1,450	1,250	989
25	1,460	1,310	1,990	3,830	1,020	1,510	1,630	1,970	2,380	1,630	1,180	876
26	1,940	1,440	1,750	3,210	966	1,480	1,990	2,180	2,060	1,750	1,200	749
27	2,160	1,650	1,590	2,760	1,020	1,490	2,120	2,110	2,010	1,600	1,170	1,020
28	1,710	1,600	1,770	2,450	1,440	1,460	2,300	2,010	2,270	1,440	1,080	923
29	1,620	1,410	1,860	2,400	---	1,450	2,070	1,810	2,470	1,460	1,080	700
30	1,460	1,970	1,610	2,420	---	3,010	1,840	1,720	2,760	1,460	1,030	738
31	1,610	---	1,410	2,160	---	7,370	---	1,730	---	1,520	874	---
Total	33,077	67,190	79,110	116,920	46,246	62,240	80,190	73,650	75,560	54,770	35,446	25,348
Mean	1,067	2,240	2,552	3,772	1,652	2,008	2,673	2,376	2,519	1,767	1,143	845
Max	2,700	5,890	8,570	14,200	2,510	7,370	7,180	6,470	3,830	2,410	1,510	1,230
Min	519	1,310	1,320	1,090	966	1,270	1,310	1,670	1,780	1,430	874	604
Ac-ft	65,610	133,300	156,900	231,900	91,730	123,500	159,100	146,100	149,900	108,600	70,310	50,280
Cfsm	2.44	5.11	5.83	8.61	3.77	4.58	6.10	5.42	5.75	4.03	2.61	1.93
In.	2.81	5.71	6.72	9.93	3.93	5.29	6.81	6.26	6.42	4.65	3.01	2.15

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