Water-Data Report 2012

14202000 PUDDING RIVER AT AURORA, OR

Willamette Basin
Molalla-Pudding Subbasin

LOCATION.--Lat 45°14′00″, long 122°44′56″ referenced to North American Datum of 1927, in SW ¼ SE ¼ sec.12, T.4 S., R.1 W., Clackamas County, OR, Hydrologic Unit 17090009, upstream side of bridge on Oregon Route 99E, at Aurora, 0.9 mi upstream from Mill Creek and at mile 8.11.

DRAINAGE AREA.--479 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1928 to September 1964, October 1993 to September 1997, October 2002 to current year.

REVISED RECORDS.--WDR OR-95-1: 1994(M). WDR OR-96-1: 1938(M), 1949(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 72.23 ft above NGVD of 1929. Prior to Sept. 30, 1961, staff or wire-weight gage at same site at datum 5.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Many diversions for irrigation upstream from station. Additional data for period July to September 1993 available in the files of the Portland Field Office. Continuous water-quality records for period August 1993 to November 1997 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--50 years (water years 1929-64, 1994-97, 2003-12), 1,242 ft^3/s, 35.22 in/yr, 899,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,700 ft^3/s Feb. 8, 1996, gage height, 30.72 ft, from rating curve extended above 23,000 ft^3/s; minimum daily discharge, 3.5 ft^3/s Aug. 6, 20, 28, 1994, but may have been less during period of missing record.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Jan. 7, 1923, reached a stage of 30.0 ft, present datum, from floodmarks, discharge, 37,000 ft^3/s, from rating curve extended above 23,000 ft^3/s. Flood of Dec. 23, 1964, reached a stage of 29.57 ft, discharge, 34,000 ft^3/s, from rating curve extended above 23,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22,900 ft^3/s Jan. 20, gage height, 27.90 ft; minimum discharge, 40 ft^3/s Sept. 14-16, 21.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 14202000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/14202000.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	60	223	1,460	5,490	3,610	2,550	9,210	1,660	545	360	106	50
2	58	249	1,230	4,890	3,130	2,870	9,000	1,700	510	384	101	53
3	65	208	1,050	3,780	2,700	2,400	7,290	1,650	499	376	97	60
4	73	217	914	2,990	2,340	2,090	6,130	1,990	480	360	91	60
5	91	244	806	2,550	2,030	1,940	5,400	2,060	601	348	87	57
6	119	203	721	2,300	1,760	2,030	4,730	1,910	878	313	85	54
7	119	176	651	1,980	1,560	2,070	4,080	1,700	839	285	82	53
8	107	170	593	1,690	1,380	1,870	3,540	1,520	813	261	75	52
9	102	158	544	1,470	1,430	1,690	3,080	1,360	906	247	68	51
10	104	152	501	1,360	1,590	1,560	2,670	1,220	1,010	224	63	54
11	102	144	464	1,340	1,680	1,600	2,260	1,090	953	206	65	58
12	182	136	435	1,220	1,880	2,000	2,010	982	851	192	69	60
13	311	144	407	1,100	1,730	3,010	1,900	892	784	176	71	51
14	225	188	383	998	1,590	4,710	1,900	822	739	167	70	41
15	167	256	363	956	1,460	4,940	1,750	766	669	164	64	41
16	138	303	354	949	1,350	6,170	1,530	715	601	166	60	41
17	121	415	348	915	1,270	8,240	1,800	662	547	168	57	43
18	108	1,330	332	2,090	1,320	8,290	1,910	613	498	161	55	45
19	98	1,470	319	5,670	1,540	7,140	1,920	571	485	158	54	46
20	92	1,260	313	18,600	1,550	5,770	2,140	535	476	156	58	44
21	86	988	300	14,500	1,650	5,220	2,330	518	445	150	65	42
22	82	1,120	289	11,800	2,010	5,980	2,120	570	409	152	60	42
23	79	2,470	276	9,600	2,530	6,730	1,880	733	394	151	55	46
24	78	2,910	263	7,850	2,600	6,260	1,700	791	429	146	52	52
25	77	2,860	255	7,430	2,440	5,280	1,520	922	470	133	49	55
26	76	2,600	257	7,280	2,370	4,370	1,480	1,030	440	130	48	53
27	76	2,150	280	6,570	2,130	3,650	1,770	957	433	121	52	50
28	71	2,000	359	5,720	1,920	3,180	1,780	828	431	117	52	48
29	71	2,030	2,220	4,880	1,840	2,920	1,630	725	386	116	52	47
30	77	1,730	3,890	4,360	---	3,770	1,510	652	360	115	53	47
31	110	---	5,140	4,090	---	6,350	---	594	---	112	53	---
Total	3,325	28,504	25,717	146,418	56,390	126,650	91,970	32,738	17,881	6,315	2,069	1,496
Mean	107	950	830	4,723	1,944	4,085	3,066	1,056	596	204	66.7	49.9
Max	311	2,910	5,140	18,600	3,610	8,290	9,210	2,060	1,010	384	106	60
Min	58	136	255	915	1,270	1,560	1,480	518	360	112	48	41
Ac-ft	6,600	56,540	51,010	290,400	111,800	251,200	182,400	64,940	35,470	12,530	4,100	2,970
Cfsm	0.22	1.98	1.73	9.86	4.06	8.53	6.40	2.20	1.24	0.43	0.14	0.10
In.	0.26	2.21	2.00	11.37	4.38	9.84	7.14	2.54	1.39	0.49	0.16	0.12

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	314	1,404	2,434	2,893	2,567	2,125	1,590	887	458	147	66.4	89.0
Max	1,774	4,643	6,090	6,873	6,948	4,235	3,355	2,192	1,645	364	120	329
(WY)	(1948)	(1951)	(1997)	(2006)	(1996)	(1961)	(1963)	(1963)	(2010)	(1952)	(1943)	(2004)
Min	63.8	78.9	436	759	497	599	456	242	158	53.2	11.3	32.8
(WY)	(1953)	(1937)	(1945)	(2005)	(2005)	(1941)	(1941)	(1939)	(1940)	(2003)	(1994)	(1994)

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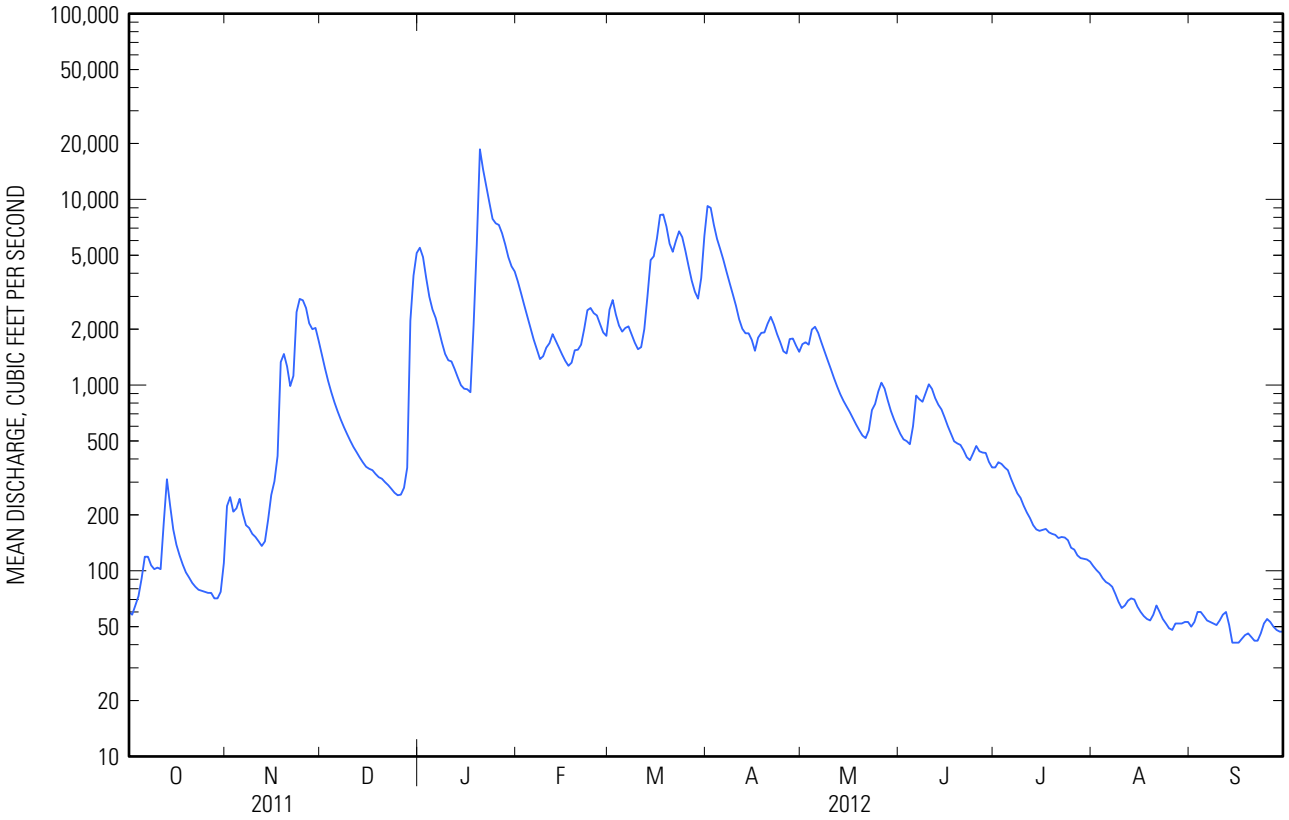
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1929 - 2012	
Annual total	447,231		539,473			
Annual mean	1,225		1,474		1,242	
Highest annual mean					2,037	1997
Lowest annual mean					692	2005
Highest daily mean	7,790	Jan 19	18,600	Jan 20	36,100	Feb 8, 1996
Lowest daily mean	42	Sep 16	41	Sep 14	3.5	Aug 6, 1994
Annual seven-day minimum	46	Sep 12	43	Sep 14	6.4	Aug 17, 1994
Annual runoff (ac-ft)	887,100		1,070,000		899,500	
Annual runoff (cfsm)	2.56		3.08		2.59	
Annual runoff (inches)	34.73		41.90		35.22	
10 percent exceeds	3,250		4,080		3,440	
50 percent exceeds	715		594		636	
90 percent exceeds	65		56		62