



Water-Data Report 2011

14206950 FANNO CREEK AT DURHAM, OR

Willamette Basin
Tualatin Subbasin

LOCATION.--Lat 45°24'13", long 122°45'13" referenced to North American Datum of 1927, in NE ¼ NW ¼ sec.13, T.2 S., R.1 W., Washington County, OR, Hydrologic Unit 17090010, on right bank, under Durham Road bridge, at Durham and at mile 1.13.

DRAINAGE AREA.--31.50 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September to November 1966, September 1972 to September 1977 (discharge measurements only), October 1993 to February 1996, October 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 115.78 ft above NAVD of 1988 (levels by State of Oregon Water Resources Department).

COOPERATION.--Gage-height record collected and low-flow discharge measurements provided by Clean Water Services of Washington County.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Continuous water-quality records for periods October 1993 to February 1996 and September 2002 to September 2004 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--13 years (water years 1994-95, 2001-11), 43.9 ft³/s, 18.92 in/yr, 31,770 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,670 ft³/s Dec. 3, 2007, gage height, 11.89 ft; minimum discharge, 1.0 ft³/s, Sept. 13, 2001, Sept. 15, 2009.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 10	0100	*943	*8.74
Dec 29	0015	750	7.76
Jan 16	1400	646	7.19
Feb 28	1745	743	7.72

Minimum discharge, 1.6 ft³/s, Sept. 10, 11.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4.2	64	120	58	22	613	46	26	94	10	4.1	6.7
2	4.0	117	50	47	19	251	76	24	47	10	4.1	2.8
3	4.0	27	34	38	18	121	41	21	27	9.2	4.0	2.3
4	3.8	18	26	33	17	101	71	20	20	9.5	3.7	2.1
5	3.5	15	22	55	17	147	97	20	20	9.5	4.1	2.0
6	3.3	27	24	51	18	70	71	33	47	9.4	4.6	1.9
7	3.3	153	32	40	33	55	53	49	18	9.2	4.1	1.9
8	3.3	45	148	42	26	59	37	39	14	11	4.5	1.9
9	40	76	493	31	18	90	31	48	14	12	4.0	1.9
10	138	95	603	28	16	455	45	23	13	13	4.1	1.8
11	32	30	370	24	16	145	64	43	12	13	4.0	1.8
12	10	27	334	125	29	119	34	51	11	19	4.0	1.8
13	8.3	23	143	275	69	169	33	24	15	19	6.8	1.9
14	6.7	47	254	105	68	211	173	20	12	16	4.9	2.1
15	5.6	24	167	168	234	220	e420	114	11	15	4.0	e2.1
16	5.0	20	96	540	181	240	e220	52	11	24	4.3	2.1
17	4.8	92	60	271	101	210	e110	33	10	122	6.2	3.8
18	4.4	393	132	156	89	125	e80	27	16	42	5.4	7.5
19	4.0	181	89	157	103	88	e60	22	18	15	4.2	9.5
20	4.0	140	155	77	48	63	e50	20	11	12	3.5	4.8
21	3.9	75	85	208	40	55	e48	19	11	9.4	3.5	3.6
22	4.5	85	54	114	42	43	e42	22	9.0	8.5	3.2	3.0
23	17	54	41	68	40	45	e36	19	8.5	7.6	3.8	2.5
24	263	31	35	55	41	79	e42	18	8.1	6.7	4.0	2.4
25	154	25	37	45	32	56	e150	46	7.7	6.3	3.7	4.1
26	66	27	89	39	25	107	e70	51	7.2	6.9	3.5	6.8
27	25	48	162	34	25	79	e50	76	7.0	6.3	4.1	22
28	25	26	500	32	479	53	e50	56	33	5.6	3.9	9.2
29	53	24	500	30	---	85	42	27	14	4.7	3.5	4.3
30	21	121	150	27	---	143	29	23	11	4.9	3.2	2.9
31	104	---	80	24	---	57	---	23	---	4.6	3.9	---
Total	1,028.6	2,130	5,085	2,997	1,866	4,354	2,371	1,089	557.5	471.3	128.9	123.5
Mean	33.2	71.0	164	96.7	66.6	140	79.0	35.1	18.6	15.2	4.16	4.12
Max	263	393	603	540	479	613	420	114	94	122	6.8	22
Min	3.3	15	22	24	16	43	29	18	7.0	4.6	3.2	1.8
Ac-ft	2,040	4,220	10,090	5,940	3,700	8,640	4,700	2,160	1,110	935	256	245
Cfsm	1.05	2.25	5.21	3.07	2.12	4.46	2.51	1.12	0.59	0.48	0.13	0.13
In.	1.21	2.52	6.01	3.54	2.20	5.14	2.80	1.29	0.66	0.56	0.15	0.15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	21.9	60.8	107	105	66.0	62.6	43.5	27.8	18.3	6.83	6.93	8.29
Max	49.8	157	173	237	111	140	90.4	53.2	71.1	15.2	21.7	17.7
(WY)	(1995)	(2007)	(2008)	(2006)	(1995)	(2011)	(2003)	(2005)	(2010)	(2011)	(2004)	(2010)
Min	6.64	10.3	40.0	17.1	15.3	27.6	20.5	12.7	7.04	3.65	3.01	4.12
(WY)	(2003)	(1994)	(2001)	(2001)	(2005)	(2001)	(2004)	(2004)	(2007)	(2009)	(2006)	(2011)

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SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1994 - 2011	
Annual total	21,217.5		22,201.8			
Annual mean	58.1		60.8		43.9	
Highest annual mean					60.8	2011
Lowest annual mean					19.3	2001
Highest daily mean	603	Dec 10	613	Mar 1	1,410	Dec 3, 2007
Lowest daily mean	2.4	Aug 26	1.8	Sep 10	1.3	Oct 1, 1993
Annual seven-day minimum	3.1	Aug 25	1.9	Sep 6	1.9	Aug 24, 1994
Annual runoff (ac-ft)	42,080		44,040		31,770	
Annual runoff (cfsm)	1.85		1.93		1.39	
Annual runoff (inches)	25.06		26.22		18.92	
10 percent exceeds	149		151		109	
50 percent exceeds	27		27		17	
90 percent exceeds	4.4		3.9		3.5	

