Water-Data Report 2012

14200000 MOLALLA RIVER NEAR CANBY, OR

Willamette Basin
Molalla-Pudding Subbasin

LOCATION.--Lat 45°14′40″, long 122°41′10″ referenced to North American Datum of 1927, in NW ¼ NE ¼ sec.9, T.4 S., R.1 E., Clackamas County, OR, Hydrologic Unit 17090009, on left bank, at upstream side of Goods Bridge, 1.5 mi south of Canby and at mile 6.01.

DRAINAGE AREA.--323 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1928 to September 1959, October 1963 to September 1978, October 2000 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 94 ft above NGVD of 1929. Prior to Oct. 24, 1933, nonrecording gage and Oct. 24, 1933 to Sept. 26, 1955, water-stage recorder at present site at datum 11.00 ft higher. Sept. 27, 1955 to June 3, 1956, water-stage recorder at site 145 ft downstream at datum 10 ft higher. June 4, 1956 to Sept. 30, 1959, water-stage recorder at site 0.3 mi downstream at datum 8.02 ft higher. Oct. 1, 1963 to May 4, 1964, non-recording gage and May 5, 1964 to Sept. 30, 1978, Oct. 1, 2000, to Oct. 31, 2001, water-stage recorder at present site at datum 10 ft higher.

REMARKS.--No estimated daily discharges. Records fair. No regulation. Numerous small diversions for irrigation upstream from station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--58 years (water years 1929-59, 1964-78, 2001-12), 1,146 ft^3/s, 48.21 in/yr, 830,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 43,600 ft^3/s Dec. 22, 1964, gage height, 26.76 ft, present datum; minimum discharge, 20 ft^3/s Aug. 24, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,200 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 30	1300	11,200	18.84
Jan 19	2030	*24,400	*23.04
Jan 25	0800	7,310	16.98
Mar 16	0300	13,000	19.59
Mar 30	2000	15,900	20.53

Minimum discharge, 52 ft^3/s, Sept. 30, gage height, 9.87 ft.

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 14200000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/14200000.2012.pdf

14200000 MOLALLA RIVER NEAR CANBY, OR—Continued

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	66	272	1,070	3,570	2,140	1,290	6,440	2,600	516	514	136	64
2	73	221	889	2,590	1,710	1,140	4,190	2,280	548	503	129	71
3	88	239	755	2,400	1,390	1,120	3,210	2,500	518	482	124	86
4	106	242	648	2,000	1,160	1,330	2,790	3,090	571	499	119	81
5	113	212	565	1,910	991	1,490	2,440	2,750	1,360	455	110	84
6	134	192	504	1,660	869	1,650	2,100	2,250	1,370	416	106	77
7	144	180	449	1,420	775	1,350	1,790	1,880	1,160	387	104	79
8	141	173	409	1,220	727	1,190	1,570	1,650	1,170	357	104	71
9	141	164	378	1,070	1,010	1,220	1,440	1,500	1,550	331	105	65
10	140	159	349	1,040	1,060	1,300	1,420	1,290	1,470	308	104	67
11	342	154	329	906	2,060	1,800	1,540	1,130	1,220	291	102	78
12	435	191	310	819	1,730	1,740	1,580	1,000	1,050	273	100	74
13	291	211	287	743	1,390	3,440	1,410	935	1,020	263	94	69
14	231	263	274	692	1,140	3,000	1,340	945	922	247	87	65
15	198	358	270	692	1,010	6,430	1,230	961	807	239	84	61
16	181	332	260	621	878	11,000	1,680	889	710	235	82	60
17	166	1,700	244	655	845	6,200	2,370	791	637	228	79	60
18	152	1,380	238	2,330	1,330	4,000	2,220	702	617	223	78	58
19	142	946	238	15,700	1,230	2,800	2,330	630	632	221	82	56
20	135	663	226	14,200	1,160	2,780	3,140	581	573	216	84	57
21	131	552	224	9,670	1,970	4,900	2,890	570	518	208	80	61
22	127	3,740	210	5,990	3,020	4,750	2,580	762	482	195	78	63
23	124	4,020	201	4,760	3,200	3,780	2,540	878	545	193	79	64
24	123	3,190	192	3,980	2,200	3,020	2,390	920	688	178	76	62
25	120	2,630	190	6,640	2,050	2,810	1,960	1,120	625	159	73	59
26	116	1,830	221	5,680	1,670	2,470	2,520	951	624	156	71	57
27	114	1,410	208	4,230	1,440	2,180	2,670	850	646	152	71	56
28	114	2,030	1,440	2,900	1,240	2,200	2,340	751	577	154	71	55
29	123	1,580	4,820	2,230	1,260	2,390	1,970	676	526	146	69	54
30	153	1,280	8,190	3,530	---	10,800	2,040	604	484	145	66	53
31	253	---	6,010	2,680	---	10,200	---	548	---	141	65	---
Total	4,917	30,514	30,598	108,528	42,655	105,770	70,130	38,984	24,136	8,515	2,812	1,967
Mean	159	1,017	987	3,501	1,471	3,412	2,338	1,258	805	275	90.7	65.6
Max	435	4,020	8,190	15,700	3,200	11,000	6,440	3,090	1,550	514	136	86
Min	66	154	190	621	727	1,120	1,230	548	482	141	65	53
Ac-ft	9,750	60,520	60,690	215,300	84,610	209,800	139,100	77,320	47,870	16,890	5,580	3,900
Cfsm	0.49	3.15	3.06	10.8	4.55	10.6	7.24	3.89	2.49	0.85	0.28	0.20
In.	0.57	3.51	3.52	12.50	4.91	12.18	8.08	4.49	2.78	0.98	0.32	0.23

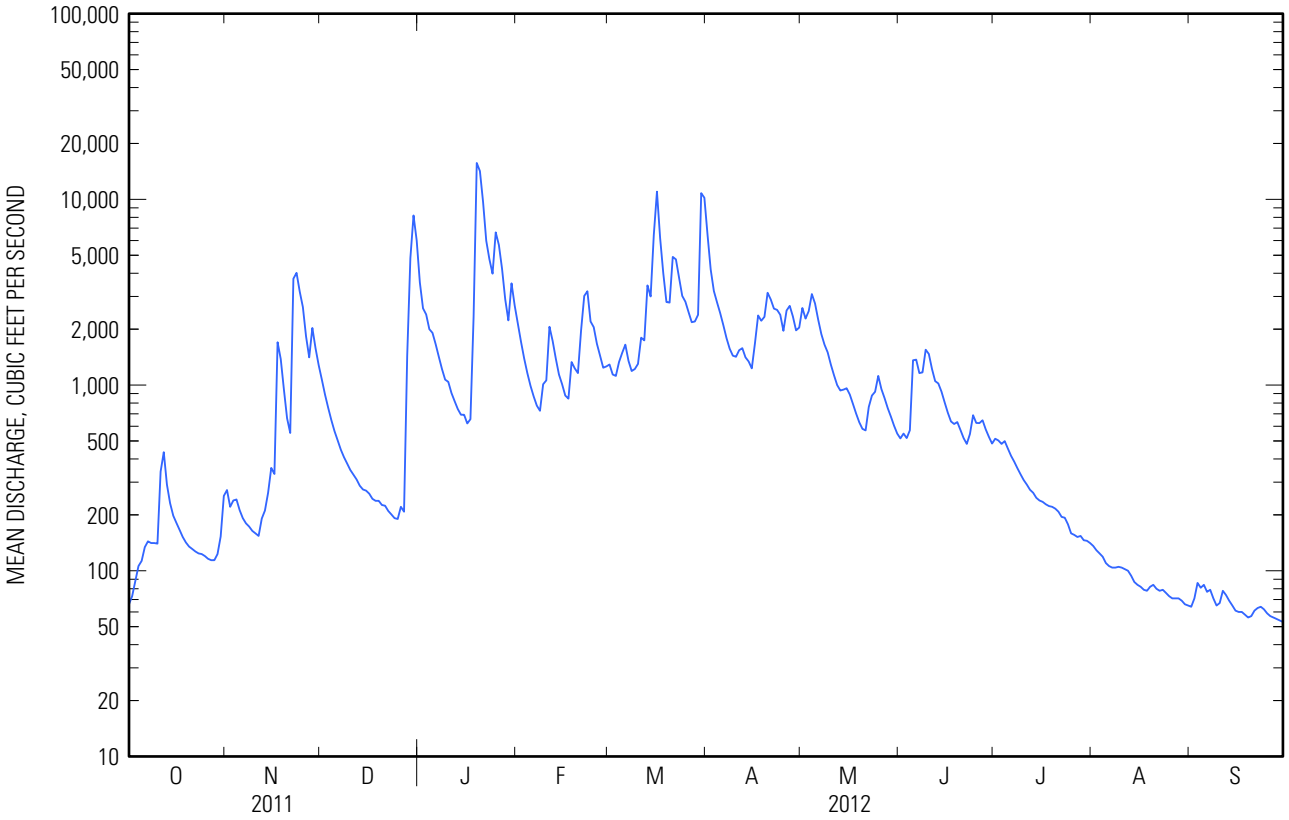
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	400	1,436	2,235	2,444	1,805	1,742	1,509	1,115	646	200	100	133
Max	2,201	3,864	5,835	5,124	4,265	3,559	2,954	2,376	1,888	491	378	555
(WY)	(1948)	(1974)	(1965)	(1953)	(1949)	(1972)	(1937)	(1945)	(2010)	(1952)	(1968)	(1978)
Min	59.9	52.7	211	303	271	505	383	275	164	73.2	38.1	46.0
(WY)	(1953)	(1937)	(1977)	(1977)	(1977)	(1941)	(1941)	(1931)	(1940)	(2003)	(2003)	(2003)

14200000 MOLALLA RIVER NEAR CANBY, OR—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1929 - 2012	
Annual total	465,586		469,526			
Annual mean	1,276		1,283		1,146	
Highest annual mean					1,822	1956
Lowest annual mean					511	2001
Highest daily mean	10,900	Jan 17	15,700	Jan 19	34,100	Dec 22, 1964
Lowest daily mean	55	Sep 10	53	Sep 30	22	Aug 27, 1959
Annual seven-day minimum	56	Sep 8	57	Sep 24	28	Aug 31, 2003
Annual runoff (ac-ft)	923,500		931,300		830,300	
Annual runoff (cfsm)	3.95		3.97		3.55	
Annual runoff (inches)	53.62		54.08		48.21	
10 percent exceeds	3,390		2,930		2,670	
50 percent exceeds	605		631		679	
90 percent exceeds	72		78		79	



14200000 MOLALLA RIVER NEAR CANBY, OR—Continued

CLIMATOLOGICAL RECORDS

PERIOD OF RECORD.--
PRECIPITATION: January 2010 to current year.

INSTRUMENTATION.--Unshielded, standard 8-in diameter, tipping-bucket precipitation gage, mounted atop gage house with top of collector 20 ft above land surface.

REMARKS.--
PRECIPITATION: Collection, computation, and publication of precipitation data do not necessarily conform to standards used by the National Weather Service. Records published in this report are for general scientific use.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	0.07	0.03	0.25	0.25	0.03	0.08	0.26	0.00	0.00
2	---	---	---	0.07	0.00	0.11	0.00	0.06	0.12	0.02	0.00	0.00
3	---	---	---	0.07	0.00	0.06	0.40	0.45	0.00	0.04	0.00	0.00
4	---	---	---	0.05	0.00	0.01	0.35	0.07	0.78	0.00	0.00	0.00
5	---	---	---	0.04	0.00	0.02	0.12	0.00	0.19	0.00	0.00	0.00
6	---	---	---	0.25	0.00	0.02	0.05	0.00	0.00	0.00	0.00	0.00
7	---	---	---	0.09	0.00	0.38	0.00	0.00	0.42	0.00	0.00	0.00
8	---	---	---	0.26	0.61	0.00	0.00	0.00	0.28	0.00	0.00	0.00
9	---	---	---	0.12	0.13	0.00	0.00	0.00	0.01	0.00	0.00	0.00
10	---	---	---	0.07	0.17	0.15	0.02	0.00	0.00	0.00	0.00	0.04
11	---	---	---	0.43	0.00	0.32	0.45	0.00	0.00	0.00	0.00	0.00
12	---	---	---	0.00	0.08	0.89	0.02	0.00	0.11	0.00	0.00	0.00
13	---	---	---	0.00	0.07	0.75	0.00	0.00	0.00	0.00	0.00	0.00
14	---	---	---	0.17	0.12	0.32	0.00	0.00	0.00	0.00	0.00	0.00
15	---	---	---	0.01	0.01	0.97	0.03	0.00	0.00	0.00	0.00	0.00
16	---	---	---	0.04	0.04	0.23	0.45	0.00	0.00	0.03	0.00	0.00
17	---	---	---	1.27	0.17	0.19	0.13	0.00	0.00	0.01	0.00	0.00
18	---	---	---	1.03	0.09	0.03	0.23	0.00	0.00	0.00	0.00	0.00
19	---	---	---	2.30	0.02	0.05	0.40	0.00	0.00	0.06	0.00	0.00
20	---	---	---	0.21	0.14	0.90	0.01	0.09	0.00	0.01	0.00	0.00
21	---	---	---	0.17	0.09	0.79	0.00	0.46	0.00	0.00	0.00	0.01
22	---	---	---	0.11	0.13	0.54	0.00	0.28	0.08	0.00	0.00	0.00
23	---	---	---	0.08	0.06	0.05	0.00	0.03	0.16	0.00	0.10	0.00
24	---	---	---	0.13	0.04	0.00	0.00	0.42	0.20	0.00	0.00	0.00
25	---	---	0.12	0.11	0.07	0.01	0.23	0.49	0.00	0.00	0.00	0.00
26	---	---	0.04	0.06	0.06	0.00	0.45	0.15	0.14	0.00	0.00	0.00
27	---	---	0.48	0.03	0.05	0.12	0.03	0.01	0.00	0.00	0.00	0.00
28	---	---	1.29	1.18	0.65	0.13	0.00	0.00	0.00	0.00	0.00	0.00
29	---	---	0.28	0.52	0.31	0.74	0.02	0.00	0.00	0.00	0.00	0.00
30	---	---	0.41	0.16	---	1.35	0.41	0.00	0.29	0.00	0.00	0.00
31	---	---	0.10	0.00	---	0.57	---	0.00	---	0.00	0.00	---
Total	---	---	---	9.10	3.14	9.95	4.05	2.54	2.86	0.43	0.10	0.05