

14171000 MARYS RIVER NEAR PHILOMATH, OR

Willamette Basin
Upper Willamette Subbasin

LOCATION.--Lat 44°31'35", long 123°20'00" referenced to North American Datum of 1927, in NE ¼ SE ¼ sec.18, T.12 S., R.5 W., Benton County, OR, Hydrologic Unit 17090003, on right bank, 15 ft downstream from bridge on Bellfountain Road, 0.6 mi downstream from Newton Creek, 2.0 mi southeast of Philomath and at mile 9.4.

DRAINAGE AREA.--159 mi², including drainage area of Evergreen Creek, upstream from Bellfountain Road, 1.4 mi south of station.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1940 to September 1985, October 2000 to current year.

REVISED RECORDS.--WSP 1218: Drainage area. WSP 1935: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 224.01 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1961, nonrecording gage at bridge 50 ft upstream at same datum. October 1, 1961 to Sept. 30, 1985, gage on left bank, 35 ft downstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Records include flow of Evergreen Creek at Bellfountain Road crossing, 1.4 mi south of station, with which overflow from Marys River may at times be mingled. Slight regulation by small storage reservoir on Rock Creek from which municipal supply is diverted for city of Corvallis. Other small diversions upstream from station for irrigation.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--52 years (water years 1941-85, 2001-07), 448 ft³/s, 38.24 in/yr, 324,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,600 ft³/s Dec. 22, 1964, gage height, 20.72 ft; maximum gage height, 21.07 ft Dec. 30, 2005; minimum discharge, 0.60 ft³/s Aug. 23, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 15	0030	*6,320	*20.38
Dec 26	1800	4,620	19.40

Minimum discharge, 9.9 ft³/s, Oct. 1, 6, Nov. 1, gage height, 2.24 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	13	934	634	212	1,740	244	198	78	43	20	14
2	11	35	809	573	200	1,730	231	221	76	38	19	14
3	11	96	676	1,630	192	1,890	221	236	74	37	19	14
4	11	e280	566	2,430	184	1,660	214	216	72	34	19	15
5	11	e750	484	2,000	178	1,340	205	196	72	33	19	15
6	11	e1,000	417	2,310	171	1,050	198	184	72	32	18	14
7	11	e2,000	365	2,020	169	872	201	176	72	31	18	15
8	11	e3,600	327	1,810	173	732	203	168	71	30	18	14
9	11	e2,000	323	1,510	174	662	239	160	69	28	18	14
10	11	e1,000	378	1,350	171	608	240	153	73	27	18	13
11	11	e1,500	601	1,150	229	542	219	148	76	26	17	13
12	11	e1,300	886	912	272	496	275	143	70	26	17	13
13	11	e1,700	1,680	755	240	458	325	140	62	25	17	13
14	11	e1,600	3,250	646	218	410	307	135	60	25	16	13
15	11	e1,100	5,760	557	698	374	281	131	60	25	16	14
16	19	e1,300	3,760	517	2,140	347	257	125	60	25	16	14
17	20	e950	2,110	493	1,750	324	269	122	59	25	16	14
18	25	e750	1,310	443	1,250	304	302	116	55	29	16	14
19	20	e700	938	416	925	291	312	114	53	29	18	14
20	19	e800	754	430	1,130	318	300	115	50	28	20	14
21	17	e750	842	422	1,290	308	297	119	49	28	19	14
22	19	e1,200	720	400	1,040	277	320	117	47	27	18	13
23	16	e1,800	777	376	882	260	295	108	47	26	18	13
24	15	e2,200	754	351	1,350	247	273	106	47	26	17	13
25	14	e2,200	1,460	329	2,280	332	258	102	46	24	16	13
26	14	e1,700	2,980	310	2,470	353	244	98	46	23	16	13
27	14	e1,800	2,720	288	2,360	331	233	95	43	22	15	13
28	14	e1,500	1,740	267	2,180	302	226	93	41	22	15	14
29	14	1,050	1,230	251	---	279	213	89	44	22	15	15
30	14	932	938	238	---	266	203	85	44	21	15	20
31	14	---	759	225	---	254	---	81	---	21	14	---
Total	433	37,606	41,248	26,043	24,528	19,357	7,605	4,290	1,788	858	533	419
Mean	14.0	1,254	1,331	840	876	624	254	138	59.6	27.7	17.2	14.0
Max	25	3,600	5,760	2,430	2,470	1,890	325	236	78	43	20	20
Min	11	13	323	225	169	247	198	81	41	21	14	13
Ac-ft	859	74,590	81,820	51,660	48,650	38,390	15,080	8,510	3,550	1,700	1,060	831
Cfs/m	0.09	7.88	8.37	5.28	5.51	3.93	1.59	0.87	0.37	0.17	0.11	0.09
In.	0.10	8.80	9.65	6.09	5.74	4.53	1.78	1.00	0.42	0.20	0.12	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	67.0	463	1,057	1,195	1,018	765	450	215	94.3	35.8	17.9	19.6
Max	568	1,897	2,360	2,524	2,398	1,736	1,133	660	295	89.6	35.8	51.9
(WY)	(1948)	(1974)	(1982)	(2006)	(1949)	(1961)	(1963)	(1963)	(1984)	(1984)	(1968)	(1941)
Min	8.24	21.9	29.9	37.6	83.2	190	160	90.9	43.1	16.4	4.89	6.02
(WY)	(1953)	(1953)	(1977)	(1977)	(1977)	(1941)	(1977)	(1966)	(1966)	(1973)	(1967)	(1967)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1941 - 2007	
Annual total	215,521.2		164,708			
Annual mean	590		451		448	
Highest annual mean					816	1974
Lowest annual mean					104	1977
Highest daily mean	5,760	Dec 15	5,760	Dec 15	11,300	Dec 22, 1964
Lowest daily mean	9.2	Aug 28	11	Oct 1	1.4	Aug 29, 1967
Annual seven-day minimum	10	Aug 23	11	Oct 1	2.4	Aug 26, 1967
Annual runoff (ac-ft)	427,500		326,700		324,200	
Annual runoff (cfsm)	3.71		2.84		2.81	
Annual runoff (inches)	50.42		38.54		38.24	
10 percent exceeds	1,850		1,500		1,230	
50 percent exceeds	161		171		155	
90 percent exceeds	11		14		15	

