



Water-Data Report 2010

14319500 NORTH UMPQUA RIVER AT WINCHESTER, OR

Southern Oregon Coastal Basin
North Umpqua Subbasin

LOCATION.--Lat 43°16'20", long 123°24'40" referenced to North American Datum of 1927, in NW ¼ NE ¼ sec.33, T.26 S., R.6 W., Douglas County, OR, Hydrologic Unit 17100301, on left bank, 300 ft downstream from county bridge, 3.0 mi west of Winchester and at mile 1.8.

DRAINAGE AREA.--1,344 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1908 to December 1913, October 1923 to September 1929, August 1954 to current year. Prior to December 1908, monthly discharge only, published in WSP 1318.

REVISED RECORDS.--WSP 1448: 1909-12, drainage area. WDR OR-65-1: 1954(M). WDR OR-72-1: 1965(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 372.97 ft above NGVD of 1929 (Douglas County Road Department bench mark). Oct. 1, 1908 to Dec. 31, 1913 and Oct. 1, 1923 to Sept. 30, 1929, nonrecording gage at site 4.8 mi upstream at different datums. Aug. 27, 1954 to Aug. 12, 1965, water-stage recorder on right bank at same datum.

REMARKS.--Records fair. Occasional regulation caused by upstream powerplants; slight regulation by Lemolo Lake (station 14313000). Several small diversions for irrigation upstream from station. Continuous water-quality records for water years 1967-69, 1971-91 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--67 years (water years 1909-13, 1924-29, 1955-2010), 3,687 ft³/s, 37.28 in/yr, 2,671,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 150,000 ft³/s Dec. 22, 1964, gage height, 34.2 ft, from floodmark; minimum discharge, 235 ft³/s Aug. 27, 1987, result of regulation at Winchester Dam 5.2 mi upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 29, 1950, reached a stage of 23.2 ft, from floodmark, at site 4.8 mi upstream at different datum, discharge, 88,000 ft³/s. Flood of Nov. 23, 1953, reached a stage of 28.4 ft, from floodmarks, present site and datum, discharge, 93,300 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 20,000 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 1	1130	*26,200	*11.79
Jun 4	1630	24,600	11.35

Minimum discharge, 709 ft³/s, Aug. 26, 27, 28, gage height, 1.83 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	874	1,760	2,290	21,900	2,730	2,610	7,290	7,270	3,410	1,660	964	908
2	872	1,500	1,970	13,700	3,120	2,400	6,640	6,300	4,190	1,580	946	845
3	860	1,240	1,740	7,570	3,250	2,380	8,580	5,540	16,700	1,580	923	838
4	861	1,100	1,620	5,250	3,030	2,400	6,730	5,930	20,000	1,530	919	838
5	859	1,030	1,520	4,310	2,900	2,310	5,610	5,310	15,200	1,460	919	802
6	859	1,070	1,440	7,350	2,730	2,190	4,940	4,570	9,810	1,430	915	784
7	861	2,080	1,360	9,700	2,610	2,070	4,730	4,020	7,590	1,410	917	797
8	852	1,940	1,270	6,830	2,450	2,040	5,420	3,580	6,130	1,360	912	847
9	840	1,830	1,240	5,630	2,330	1,980	5,350	3,310	5,290	1,320	910	1,010
10	828	1,520	1,210	4,710	2,210	2,060	4,490	3,340	5,710	1,300	905	1,040
11	819	1,600	1,190	3,970	2,190	2,020	4,750	4,270	6,620	1,270	899	981
12	827	1,650	1,270	3,680	2,410	2,590	5,040	4,390	5,740	1,260	869	935
13	941	1,820	1,230	4,350	3,040	4,410	5,280	3,840	4,820	1,250	854	909
14	1,030	1,680	1,220	4,800	3,240	3,800	5,460	3,510	4,180	1,230	850	890
15	1,390	1,450	1,410	4,270	4,030	3,340	5,980	3,320	3,730	1,200	846	901
16	1,210	1,320	3,950	4,280	4,100	3,370	5,410	3,170	3,360	1,170	839	859
17	985	e1,400	3,890	5,240	3,600	3,300	4,900	3,240	3,080	1,150	829	862
18	927	e4,500	3,320	5,050	3,180	2,910	4,550	3,210	2,800	1,140	808	914
19	926	e4,000	2,700	4,490	2,850	2,610	4,250	3,020	2,660	1,120	791	1,160
20	885	e3,500	2,460	3,760	2,580	2,390	4,340	3,240	2,520	1,120	789	1,690
21	876	e3,000	2,920	3,250	2,370	2,230	5,040	3,570	2,380	1,110	786	1,390
22	886	e3,800	4,660	2,980	2,150	2,390	4,650	4,730	2,250	1,090	782	1,150
23	903	e5,500	3,750	2,690	2,040	2,450	3,990	4,950	2,160	1,060	779	1,050
24	956	e2,800	2,990	2,580	2,190	2,310	3,490	4,560	2,030	1,030	772	988
25	1,020	2,330	2,750	4,270	2,860	2,500	3,150	4,110	1,960	1,010	748	935
26	950	2,300	2,580	4,470	3,410	4,120	2,900	4,690	1,880	993	719	895
27	1,170	3,860	2,330	4,120	3,270	5,350	4,670	5,480	1,810	973	722	885
28	1,520	5,580	2,110	3,660	2,920	4,800	8,870	5,330	1,770	972	724	911
29	1,290	3,560	1,980	3,220	---	6,180	8,680	4,590	1,730	989	737	873
30	1,820	2,720	2,300	2,960	---	13,600	8,570	3,920	1,710	990	759	853
31	1,810	---	3,840	2,830	---	10,400	---	3,520	---	980	877	---
Total	31,707	73,440	70,510	167,870	79,790	109,510	163,750	133,830	153,220	37,737	26,009	28,740
Mean	1,023	2,448	2,275	5,415	2,850	3,533	5,458	4,317	5,107	1,217	839	958
Max	1,820	5,580	4,660	21,900	4,100	13,600	8,870	7,270	20,000	1,660	964	1,690
Min	819	1,030	1,190	2,580	2,040	1,980	2,900	3,020	1,710	972	719	784
Ac-ft	62,890	145,700	139,900	333,000	158,300	217,200	324,800	265,500	303,900	74,850	51,590	57,010
Cfsm	0.76	1.82	1.69	4.03	2.12	2.63	4.06	3.21	3.80	0.91	0.62	0.71
In.	0.88	2.03	1.95	4.65	2.21	3.03	4.53	3.70	4.24	1.04	0.72	0.80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,326	3,914	6,283	6,804	6,047	5,525	4,829	3,889	2,479	1,321	985	973
Max	2,752	12,550	23,640	15,220	13,250	12,880	8,881	7,147	5,107	2,824	1,578	1,689
(WY)	(1963)	(1974)	(1965)	(1965)	(1986)	(1972)	(1993)	(1963)	(2010)	(1913)	(1976)	(1986)
Min	683	931	1,005	1,125	1,019	1,681	1,605	1,401	913	717	635	695
(WY)	(1988)	(1994)	(1977)	(1977)	(1977)	(1992)	(1926)	(1926)	(1926)	(1926)	(1992)	(2001)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1909 - 2010	
Annual total	1,116,272		1,076,113			
Annual mean	3,058		2,948		3,687	
Highest annual mean					6,116 1974	
Lowest annual mean					1,639 1977	
Highest daily mean	24,400	Jan 2	21,900	Jan 1	117,000	Dec 23, 1964
Lowest daily mean	770	Sep 11	719	Aug 26	549	Aug 22, 1994
Annual seven-day minimum	792	Sep 10	740	Aug 24	600	Oct 1, 1908
Annual runoff (ac-ft)	2,214,000		2,134,000		2,671,000	
Annual runoff (cfsm)	2.28		2.19		2.74	
Annual runoff (inches)	30.90		29.79		37.28	
10 percent exceeds	6,200		5,440		7,450	
50 percent exceeds	2,290		2,330		2,410	
90 percent exceeds	845		861		878	

