Water-Data Report 2012

14308000 SOUTH UMPQUA RIVER AT TILLER, OR

Southern Oregon Coastal Basin
South Umpqua Subbasin

LOCATION.--Lat 42°55′50″, long 122°56′50″ referenced to North American Datum of 1927, in NE ¼ sec.33, T.30 S., R.2 W., Douglas County, OR, Hydrologic Unit 17100302, Umpqua National Forest, on left bank, 0.3 mi upstream from bridge on State Highway 227 at Tiller, 0.3 mi upstream from Elk Creek and at mile 187.31.

DRAINAGE AREA.--449 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1910 to December 1911, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1318. Prior to December 1911, published as South Fork of Umpqua River at Tiller.

REVISED RECORDS.--WSP 1448: 1911(M), 1912, drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 991.8 ft above NGVD of 1929 (river-profile survey). Prior to Oct. 1, 1939, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. No regulation. Small diversions for irrigation upstream from station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--74 years (water years 1911, 1940-2012), 1,029 ft^3/s, 31.14 in/yr, 745,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 60,200 ft^3/s Dec. 22, 1964, gage height, 25.72 ft; minimum discharge observed, 20 ft^3/s Sept. 3, 4, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 30	1430	7,640	8.97
Jan 19	1800	15,100	12.72
Jan 21	0845	9,380	9.96
Jan 26	1100	10,800	10.72
Mar 16	0930	7,400	8.83
Mar 22	0245	15,500	12.89
Mar 30	2015	*16,200	*13.20

Minimum discharge, 35 ft^3/s, Oct. 1, 2.

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 14308000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/14308000.2012.pdf

14308000 SOUTH UMPQUA RIVER AT TILLER, OR—Continued

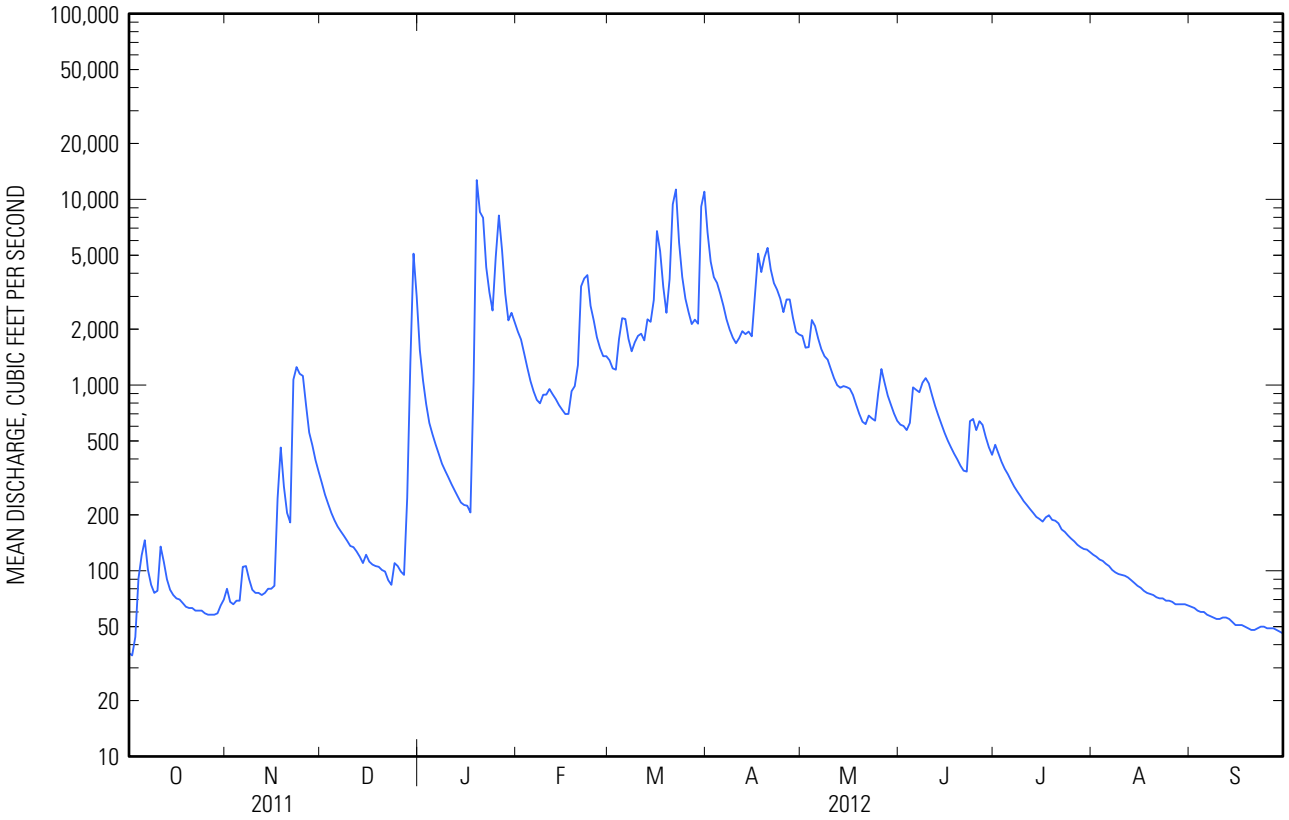
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	36	80	297	1,540	1,940	1,360	6,640	1,840	612	477	122	64
2	35	68	257	1,060	1,760	1,230	4,620	1,590	602	429	119	63
3	44	66	229	790	1,480	1,210	3,810	1,600	572	386	115	61
4	91	69	205	625	1,240	1,770	3,550	2,240	626	354	113	60
5	121	69	187	543	1,050	2,290	3,110	2,080	972	331	109	60
6	146	105	173	478	923	2,270	2,680	1,780	942	306	106	58
7	101	106	163	425	832	1,770	2,260	1,560	915	284	101	57
8	84	90	154	377	797	1,520	1,990	1,430	1,030	267	98	56
9	76	79	145	346	887	1,700	1,800	1,370	1,090	252	96	55
10	78	76	136	319	888	1,840	1,680	1,220	1,020	237	95	55
11	135	76	134	293	952	1,890	1,790	1,090	883	226	94	56
12	112	74	127	271	892	1,740	1,950	999	771	215	92	56
13	90	76	119	251	840	2,260	1,880	967	686	205	89	55
14	79	80	110	233	781	2,190	1,940	987	615	195	86	53
15	74	80	122	226	737	2,870	1,830	975	552	190	83	51
16	71	83	112	224	698	6,750	3,060	956	502	184	81	51
17	70	245	108	206	699	5,270	5,100	885	462	194	78	51
18	67	461	106	1,040	927	3,380	4,060	784	427	199	76	50
19	64	284	105	12,700	987	2,450	4,870	699	398	188	75	49
20	63	205	101	8,550	1,280	3,720	5,480	635	368	186	74	48
21	63	182	99	7,960	3,400	9,400	4,190	616	346	180	72	48
22	61	1,070	89	4,310	3,750	11,300	3,540	685	342	167	71	49
23	61	1,250	84	3,160	3,910	5,850	3,260	661	639	162	71	50
24	61	1,150	110	2,520	2,670	3,820	2,920	643	657	155	69	50
25	59	1,120	106	4,880	2,230	2,920	2,470	909	572	149	69	49
26	58	781	99	8,190	1,810	2,470	2,890	1,220	639	144	68	49
27	58	555	95	5,320	1,580	2,130	2,890	1,030	610	138	66	49
28	58	474	247	3,120	1,430	2,250	2,310	878	525	134	66	48
29	59	394	1,320	2,230	1,430	2,140	1,930	784	462	131	66	47
30	65	341	5,100	2,450	---	9,150	1,870	702	421	130	66	46
31	70	---	3,000	2,180	---	11,000	---	642	---	126	65	---
Total	2,310	9,789	13,439	76,817	42,800	111,910	92,370	34,457	19,258	6,921	2,651	1,594
Mean	74.5	326	434	2,478	1,476	3,610	3,079	1,112	642	223	85.5	53.1
Max	146	1,250	5,100	12,700	3,910	11,300	6,640	2,240	1,090	477	122	64
Min	35	66	84	206	698	1,210	1,680	616	342	126	65	46
Ac-ft	4,580	19,420	26,660	152,400	84,890	222,000	183,200	68,350	38,200	13,730	5,260	3,160
Cfsm	0.17	0.73	0.97	5.52	3.29	8.04	6.86	2.48	1.43	0.50	0.19	0.12
In.	0.19	0.81	1.11	6.36	3.55	9.27	7.65	2.85	1.60	0.57	0.22	0.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	184	983	2,007	2,140	1,918	1,754	1,468	1,091	533	154	75.8	72.1
Max	1,791	3,976	7,480	4,719	4,907	4,776	3,079	2,093	1,643	301	206	364
(WY)	(1951)	(1974)	(1965)	(2006)	(1986)	(1972)	(2012)	(1963)	(1953)	(1953)	(1976)	(1986)
Min	34.5	48.2	66.6	89.7	95.1	328	433	231	108	49.5	29.9	36.9
(WY)	(1988)	(1940)	(1977)	(1977)	(1977)	(1992)	(1968)	(1992)	(1992)	(1940)	(1940)	(2009)

14308000 SOUTH UMPQUA RIVER AT TILLER, OR—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1911 - 2012	
Annual total	426,175		414,316			
Annual mean	1,168		1,132		1,029	
Highest annual mean					1,762	1974
Lowest annual mean					268	1977
Highest daily mean	24,100	Jan 16	12,700	Jan 19	36,500	Dec 22, 1964
Lowest daily mean	35	Oct 2	35	Oct 2	20	Sep 3, 1911
Annual seven-day minimum	38	Sep 26	48	Sep 24	26	Aug 27, 1940
Annual runoff (ac-ft)	845,300		821,800		745,400	
Annual runoff (cfsm)	2.60		2.52		2.29	
Annual runoff (inches)	35.31		34.33		31.14	
10 percent exceeds	2,940		3,020		2,430	
50 percent exceeds	621		390		514	
90 percent exceeds	57		61		57