

Water-Data Report 2013

14238000 COWLITZ RIVER BELOW MAYFIELD DAM, WA

Lower Columbia Basin
Lower Cowlitz Subbasin

LOCATION.--Lat 46°30'38", long 122°36'54" referenced to North American Datum of 1927, in SE ¼ NE ¼ sec.24, T.12 N., R.1 E., Lewis County, WA, Hydrologic Unit 17080005, on right bank 1.1 mi upstream from fish barrier dam, 1.4 mi downstream from Mayfield Dam, 1.5 mi upstream from Mill Creek, 2.1 mi downstream from Winston Creek, and at mile 50.6.

DRAINAGE AREA.--1,400 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August to October 1910, December 1910 to September 1911, October to November 1911 (monthly discharge only), April 1934 to current year. Published as "at Mayfield" water years 1910-11 and "near Mayfield" water years 1934-61.

REVISED RECORDS.--WSP 1318: 1949(M). WSP 1348: Drainage area. WSP 1718: 1943, 1947.

GAGE.--Water-stage recorder. Datum of gage is 226.6 ft above NGVD of 1929. August 1910 to November 1911 nonrecording gage at site 2.5 mi upstream at different datum. Apr. 27 to July 2, 1934, nonrecording gage at present site and datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Riffe Lake (station 14234800) at mile 65.5 and Mayfield Reservoir (station 14237800) at mile 52.0. Minor diversions for domestic and farm use upstream from station. U.S. Geological Survey satellite telemeter at station. Sediment records October 1978 to September 1980. Water temperatures October 1950 to September 1980.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--79 years (water years 1935-2013), 6,271 ft³/s, 60.83 in/yr, 4,543,300 acre-ft/yr, adjusted for storage in Mayfield Reservoir since April 1962, and Riffe Lake since April 1968.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 68,400 ft³/s, Nov. 28, 1995; gage height, 26.19 ft; minimum discharge, 37 ft³/s, Apr. 16, 1962, gage height, 6.42 ft; minimum daily discharge, 451 ft³/s, Apr. 16, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in December 1933 is known to have exceeded that of Nov. 28, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,100 ft³/s, Nov. 22-26, gage height 15.24 ft; minimum discharge, 2,690 ft³/s, Aug. 2-5, 9-12, gage height, 10.10 ft.

14238000 COWLITZ RIVER BELOW MAYFIELD DAM, WA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4,770	6,700	15,000	8,500	5,250	8,000	5,230	8,490	5,920	6,610	2,710	2,720
2	4,670	5,910	15,000	9,670	4,970	6,440	5,230	9,260	5,560	6,850	2,700	2,880
3	4,420	5,890	14,900	9,960	4,940	6,420	5,240	9,240	7,350	5,550	2,700	3,450
4	4,400	5,940	14,900	8,400	4,930	6,360	6,140	7,900	8,690	4,300	2,700	3,520
5	4,400	5,980	15,000	6,650	4,920	8,690	6,040	7,020	6,610	4,010	3,110	3,530
6	4,390	6,510	15,000	6,650	4,920	8,970	6,600	10,400	6,590	3,810	3,500	3,540
7	4,380	6,720	15,000	6,690	4,950	9,040	6,710	9,680	5,920	3,820	3,500	3,530
8	4,650	6,710	15,000	6,650	4,960	6,650	6,710	8,300	5,300	5,820	3,430	3,520
9	4,770	6,690	15,000	7,780	4,960	6,720	7,840	8,290	5,270	5,890	2,740	3,870
10	4,810	6,650	13,500	7,790	5,280	8,340	7,790	7,330	5,270	4,760	2,690	4,260
11	4,800	6,650	12,300	6,600	5,810	7,980	6,660	6,610	6,220	3,740	2,690	4,260
12	4,800	8,440	12,200	7,430	4,990	7,780	7,600	6,590	5,570	3,730	2,970	3,680
13	4,830	10,300	12,100	8,820	5,010	6,470	6,630	5,460	5,280	3,700	3,350	3,520
14	4,860	10,300	12,000	10,000	5,040	6,400	6,670	6,290	5,270	3,720	3,350	3,090
15	4,870	10,200	12,400	10,100	5,040	6,410	7,640	5,410	5,260	4,460	3,430	3,050
16	4,870	11,700	13,000	10,100	5,020	6,420	8,850	5,340	5,260	5,510	3,500	3,060
17	4,850	12,700	13,100	10,000	5,040	6,420	9,190	5,340	5,260	5,380	2,870	3,060
18	4,830	12,800	12,500	8,530	5,040	6,390	8,410	5,360	6,370	4,310	2,710	3,050
19	4,830	14,200	12,500	8,560	5,030	8,840	6,640	5,390	5,570	3,700	2,750	3,050
20	4,870	15,000	11,700	8,580	6,170	10,100	6,600	6,030	5,350	3,720	3,050	3,040
21	4,900	15,000	11,200	8,560	7,400	6,800	6,710	5,540	5,340	3,740	3,470	3,040
22	4,900	15,000	10,300	10,600	6,380	6,340	12,700	7,250	5,330	3,750	3,470	3,040
23	4,870	15,100	10,200	8,710	6,380	7,550	10,200	6,020	5,340	5,210	2,780	3,050
24	4,890	15,100	10,200	8,600	6,470	9,060	9,510	5,240	5,960	5,700	2,720	3,040
25	4,940	15,100	10,200	7,250	6,450	10,500	8,880	5,260	5,680	5,180	2,720	3,330
26	4,930	15,000	10,100	5,600	8,350	9,280	7,450	5,260	5,350	3,780	3,210	4,180
27	4,930	14,900	10,100	5,590	9,040	7,460	5,890	5,540	5,350	2,740	3,520	4,840
28	4,950	14,800	10,100	5,590	9,110	5,330	5,920	6,540	5,740	2,710	3,520	4,860
29	6,080	14,800	10,200	5,600	---	5,230	8,500	5,320	6,020	2,710	3,530	4,780
30	6,830	14,800	10,200	5,610	---	5,220	8,480	5,270	6,030	2,710	3,210	7,250
31	6,770	---	9,260	5,610	---	5,230	---	5,290	---	2,710	2,720	---
Total	153,060	325,590	384,160	244,780	161,850	226,840	222,660	206,260	174,030	134,330	95,320	109,090
Mean	4,937	10,850	12,390	7,896	5,780	7,317	7,422	6,654	5,801	4,333	3,075	3,636
Max	6,830	15,100	15,000	10,600	9,110	10,500	12,700	10,400	8,690	6,850	3,530	7,250
Min	4,380	5,890	9,260	5,590	4,920	5,220	5,230	5,240	5,260	2,710	2,690	2,720
Ac-ft	303,600	645,800	762,000	485,500	321,000	449,900	441,600	409,100	345,200	266,400	189,100	216,400
Mean adjusted for change in contents in Riffe Lake and Mayfield Reservoir	4,063	10,250	14,390	5,797	5,895	7,291	11,510	10,720	7,180	3,415	1,777	3,436
CFSM adjusted for change in contents in Riffe Lake and Mayfield Reservoir	2.90	7.32	10.28	4.14	4.21	5.21	8.22	7.66	5.13	2.44	1.27	2.45
In. adjusted for change in contents in Riffe Lake and Mayfield Reservoir	3.35	8.17	11.86	4.77	4.38	6.01	9.17	8.83	5.72	2.81	1.46	2.74
Ac-ft adjusted for change in contents in Riffe Lake and Mayfield Reservoir	249,900	609,700	885,300	356,500	327,300	448,400	684,800	659,100	427,100	210,000	109,300	204,400

14238000 COWLITZ RIVER BELOW MAYFIELD DAM, WA—Continued

	Calendar Year 2012	Water Year 2013
Total	3,000,030	2,437,970
Mean	8,197	6,679
Max	15,100	15,100
Min	2,440	2,690
Ac-ft	5,951,000	4,836,000
Mean adjusted for change in contents in Riffe Lake and Mayfield Reservoir	8,141	6,806
CFSM adjusted for change in contents in Riffe Lake and Mayfield Reservoir	5.82	4.86
In. adjusted for change in contents in Riffe Lake and Mayfield Reservoir	79.12	66.00
Ac-ft adjusted for change in contents in Riffe Lake and Mayfield Reservoir	5,908,000	4,928,000

