

Water-Data Report 2013

14163900 MCKENZIE RIVER NEAR WALTERVILLE, OR

Willamette Basin
Mckenzie Subbasin

LOCATION.--Lat 44°04'12", long 122°46'12" referenced to North American Datum of 1927, in NW ¼ NE ¼ sec.26, T.17 S., R.1 W., Lane County, OR, Hydrologic Unit 17090004, on right bank, 0.8 mi downstream from Walterville power canal diversion, 1.7 mi east of Walterville and at mile 27.7.

DRAINAGE AREA.--1,081 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 600 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated since 1963 by Smith River Reservoir (station 14158795) and Cougar Lake (active capacity, 164,800 acre-ft) and since 1968 by Blue River Lake (active capacity, 85,550 acre-ft). Diversion upstream from station through the Walterville power canal. Records given herein include flows in the fish bypass conduit. Published records for water years 2003-04 do not include flows in the fish bypass conduit. Continuous water-quality records for periods June 1992 to September 1993, August 2001 to September 2003 and September 2004 to October 2005 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--24 years (water years 1990-2013), 3,014 ft³/s, 2,183,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,100 ft³/s Feb. 7, 1996, gage height, 16.18 ft; minimum discharge, 420 ft³/s Nov. 8, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,600 ft³/s Dec. 5, gage height, 11.42 ft; minimum discharge, 919 ft³/s July 18.

14163900 MCKENZIE RIVER NEAR WALTERVILLE, OR—Continued

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

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,110	4,490	8,200	2,410	3,880	3,160	2,310	1,830	1,920	1,040	1,080	1,100
2	1,110	3,980	14,800	2,290	3,680	2,840	2,630	2,220	1,540	1,040	1,090	1,090
3	1,110	3,580	13,100	2,080	3,250	2,520	2,520	2,400	1,340	1,060	1,090	1,080
4	1,110	3,120	13,900	1,700	2,950	2,420	2,510	2,380	1,300	1,040	1,070	1,090
5	1,110	2,760	22,700	1,700	2,630	2,220	4,080	2,380	1,230	1,040	1,090	1,090
6	1,110	2,940	17,400	1,670	2,650	2,160	5,040	2,410	1,150	1,040	1,100	1,100
7	1,110	3,200	13,600	2,200	2,540	2,090	7,350	2,250	1,090	1,040	1,100	1,100
8	1,120	3,210	12,400	3,580	2,290	1,940	7,690	1,980	2,270	1,040	1,100	1,100
9	1,130	3,240	10,400	4,390	2,040	1,720	6,440	1,920	3,090	1,040	1,100	1,100
10	1,160	3,060	8,760	4,200	1,870	1,450	5,370	1,920	3,090	1,040	1,090	1,100
11	1,150	2,790	8,320	3,530	1,830	1,410	4,460	2,140	3,300	1,040	1,070	1,100
12	1,120	2,840	8,340	2,870	1,620	1,530	3,660	2,100	3,450	1,040	1,070	1,100
13	1,110	3,220	7,880	2,270	1,490	1,430	3,190	2,000	3,470	1,040	1,070	1,100
14	1,110	2,840	7,470	2,080	1,370	1,720	2,920	1,790	3,460	1,040	1,070	1,100
15	1,140	2,560	6,640	1,950	1,450	1,600	2,650	1,660	3,440	1,050	1,070	1,100
16	3,130	2,960	5,970	1,820	1,510	1,760	3,110	1,680	3,330	1,040	1,070	1,100
17	1,660	2,870	9,150	1,690	1,380	1,940	3,020	2,030	3,200	1,040	1,070	1,100
18	1,190	2,920	8,120	1,770	1,380	1,700	2,720	1,770	3,020	1,050	1,080	1,090
19	1,260	2,850	6,240	1,960	1,360	1,600	2,870	1,800	1,980	1,040	1,070	1,080
20	1,760	15,200	6,210	2,040	1,340	2,450	3,840	1,780	1,670	1,040	1,070	1,090
21	1,450	15,200	6,280	2,070	1,370	3,240	3,560	1,770	1,130	1,040	1,070	1,080
22	1,540	11,900	5,530	1,980	1,510	2,710	3,150	2,200	1,120	1,040	1,100	1,090
23	1,560	9,390	5,050	1,980	2,020	2,410	2,530	2,180	1,150	1,040	1,090	1,080
24	1,580	10,600	4,620	e2,000	1,590	2,050	2,330	1,810	1,200	1,060	1,080	1,110
25	2,020	10,900	4,480	e3,000	1,750	1,890	2,070	1,430	1,290	1,080	1,080	1,200
26	1,940	9,250	4,870	4,620	1,780	1,850	2,060	1,480	1,310	1,090	e1,080	1,080
27	2,040	8,870	5,130	4,060	1,710	1,790	2,050	1,930	1,080	1,080	e1,080	1,090
28	4,030	8,160	4,540	4,140	1,950	1,700	2,040	2,800	1,050	1,090	1,080	2,140
29	6,990	7,890	3,750	6,230	---	1,790	2,000	2,610	1,040	1,090	1,080	5,410
30	5,890	8,100	3,100	5,240	---	1,850	1,960	2,820	1,040	1,090	1,090	9,700
31	4,760	---	2,770	4,390	---	1,990	---	2,320	---	1,090	1,080	---
Total	59,610	174,890	259,720	87,910	56,190	62,930	102,130	63,790	59,750	32,630	33,530	46,890
Mean	1,923	5,830	8,378	2,836	2,007	2,030	3,404	2,058	1,992	1,053	1,082	1,563
Max	6,990	15,200	22,700	6,230	3,880	3,240	7,690	2,820	3,470	1,090	1,100	9,700
Min	1,110	2,560	2,770	1,670	1,340	1,410	1,960	1,430	1,040	1,040	1,070	1,080
Ac-ft	118,200	346,900	515,200	174,400	111,500	124,800	202,600	126,500	118,500	64,720	66,510	93,010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,419	3,359	5,215	5,815	3,498	3,463	3,787	3,292	2,474	1,341	1,304	1,201
Max	2,756	7,816	13,640	14,610	12,560	7,079	7,133	5,841	5,993	2,926	2,295	1,834
(WY)	(1998)	(1997)	(1997)	(2006)	(1996)	(1997)	(1993)	(2008)	(2008)	(2011)	(1995)	(2002)
Min	683	1,363	1,249	1,071	1,164	1,408	1,777	1,420	1,117	1,016	964	648
(WY)	(1990)	(1990)	(1990)	(2001)	(2005)	(1992)	(2004)	(1994)	(1994)	(2006)	(1990)	(1990)

14163900 MCKENZIE RIVER NEAR WALTERVILLE, OR—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1990 - 2013	
Annual total	1,698,450		1,039,970			
Annual mean	4,641		2,849		3,014	
Highest annual mean					5,034	
Lowest annual mean					1,471	
Highest daily mean	27,300	Jan 25	22,700	Dec 5	44,600	Feb 7, 1996
Lowest daily mean	1,100	Aug 20	1,040	Jun 29	499	Dec 22, 1989
Annual seven-day minimum	1,110	Aug 14	1,040	Jul 4	516	Dec 22, 1989
Annual runoff (ac-ft)	3,369,000		2,063,000		2,183,000	
10 percent exceeds	10,200		6,220		6,430	
50 percent exceeds	3,000		1,930		1,800	
90 percent exceeds	1,110		1,070		1,070	

