



Water-Data Report 2012

14337500 BIG BUTTE CREEK NEAR MCLEOD, OR

Southern Oregon Coastal Basin
Upper Rogue Subbasin

LOCATION.--Lat 42°39'05", long 122°41'25" referenced to North American Datum of 1927, in NE ¼ NW ¼ sec.3, T.34 S., R.1 E., Jackson County, OR, Hydrologic Unit 17100307, on right bank, 225 ft upstream from county road bridge, 0.9 mi south of McLeod and at mile 0.64.

DRAINAGE AREA.--245 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1945 to September 1957, October 1967 to current year.

REVISED RECORDS.--WSP 1738: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,525.95 ft above NGVD of 1929. Oct. 9, 1945 to Sept. 30, 1957, nonrecording gage at site 260 ft downstream at datum 0.53 ft higher.

REMARKS.--Records fair. Several diversions in the vicinity of Butte Falls, the two largest being the city of Medford diversion and Eagle Point Irrigation District Canal. Continuous water-quality records for period August 1970 to September 2000 have been collected at this location.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--57 years (water years 1946-57, 1968-2012), 244 ft³/s, 176,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,950 ft³/s Dec. 22, 1955, gage height, 12.75 ft, site and datum then in use, from rating curve extended above 3,300 ft³/s on basis of slope-area measurement of peak flow; minimum discharge, 6.4 ft³/s June 23, 24, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 22, 1964, reached a stage of 18.6 ft, present site, from floodmark by local resident, discharge, 16,800 ft³/s from rating curve at former site, extended above 9,000 ft³/s and field estimate of overflow.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan 19	1445	*1,990	*7.06
Mar 22	0315	1,960	7.02
Mar 31	1230	1,910	6.95

Minimum discharge, 47 ft³/s, Aug. 18.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	56	87	80	108	285	273	1,100	421	112	93	53	51
2	119	82	79	93	248	238	869	382	107	86	52	53
3	165	71	77	84	216	216	748	389	109	82	51	52
4	167	73	77	78	191	212	862	379	137	80	51	53
5	178	74	76	78	174	213	717	350	196	77	54	53
6	172	91	76	79	158	238	621	305	164	73	53	55
7	165	80	76	77	147	222	546	274	147	66	53	57
8	162	75	76	76	140	211	496	251	139	67	52	56
9	160	74	76	75	132	200	452	241	128	65	53	55
10	164	74	75	75	126	201	431	228	121	64	54	55
11	166	76	76	74	158	245	538	209	115	62	53	56
12	162	76	76	75	142	269	595	194	e110	62	52	55
13	160	76	72	74	198	407	547	184	106	63	51	54
14	158	75	72	73	179	426	554	172	101	61	52	54
15	158	76	73	74	163	536	500	168	101	60	51	55
16	158	76	72	73	145	1,290	508	162	91	59	50	56
17	157	87	72	70	140	1,080	550	155	89	62	49	55
18	156	110	72	189	153	776	564	149	85	63	49	54
19	156	96	71	1,350	155	619	701	142	82	59	51	52
20	156	82	71	980	244	869	682	138	78	58	50	52
21	156	80	70	760	402	882	608	133	76	57	52	54
22	156	103	69	448	358	1,400	565	147	80	57	51	54
23	156	101	71	374	355	904	534	137	140	56	52	54
24	156	108	72	302	309	721	522	137	127	57	52	54
25	148	108	72	329	314	624	486	225	103	57	52	54
26	122	94	72	763	282	555	733	189	152	57	52	55
27	93	84	72	537	249	490	627	178	117	57	52	55
28	84	82	77	379	231	480	528	154	99	56	52	54
29	85	80	109	322	288	454	478	138	95	55	52	55
30	86	79	325	327	---	1,240	451	127	91	54	51	58
31	89	---	170	264	---	1,370	---	117	---	54	51	---
Total	4,426	2,530	2,674	8,660	6,282	17,861	18,113	6,575	3,398	1,979	1,603	1,630
Mean	143	84.3	86.3	279	217	576	604	212	113	63.8	51.7	54.3
Max	178	110	325	1,350	402	1,400	1,100	421	196	93	54	58
Min	56	71	69	70	126	200	431	117	76	54	49	51
Ac-ft	8,780	5,020	5,300	17,180	12,460	35,430	35,930	13,040	6,740	3,930	3,180	3,230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	118	168	367	456	436	462	358	234	132	75.6	64.0	67.3
Max	330	535	1,542	1,325	1,234	1,362	752	492	450	148	121	106
(WY)	(1951)	(1974)	(1997)	(1956)	(1996)	(1972)	(2011)	(1953)	(1953)	(1948)	(1956)	(1948)
Min	64.4	39.2	58.0	64.2	63.3	90.8	73.4	57.0	42.3	36.7	33.1	42.9
(WY)	(1982)	(2003)	(1977)	(1977)	(2005)	(2005)	(1977)	(1968)	(2001)	(1968)	(2001)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1946 - 2012	
Annual total	98,203		75,731			
Annual mean	269		207		244	
Highest annual mean					501	1956
Lowest annual mean					74.7	2001
Highest daily mean	1,870	Jan 16	1,400	Mar 22	7,190	Jan 22, 1972
Lowest daily mean	56	Aug 17	49	Aug 17	15	Jun 24, 1977
Annual seven-day minimum	57	Aug 17	50	Aug 14	30	Jun 23, 1977
Annual runoff (ac-ft)	194,800		150,200		176,800	
10 percent exceeds	706		537		552	
50 percent exceeds	156		106		129	
90 percent exceeds	59		54		54	

