



Water-Data Report 2012

06307740 OTTER CREEK AT ASHLAND, MT

Tongue Basin
Lower Tongue Subbasin

LOCATION.--Lat 45°35'02", long 106°15'17" referenced to North American Datum of 1983, in NE ¼ NE ¼ SE ¼ sec.11, T.3 S., R.44 E., Rosebud County, MT, Hydrologic Unit 10090102, on left bank 200 ft downstream from bridge on U.S. Highway 212, 0.3 mi southeast of Ashland, and at river mile 2.7.

DRAINAGE AREA.--707 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1972 to November 1985, October 1987 to September 1995, October 2003 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,916.57 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are fair except estimated daily discharges, which are poor. Flow is regulated by Tongue River Reservoir (station number 06307000) and many small reservoirs in Wyoming (combined capacity, about 15,000 acre-ft). Numerous diversions for irrigation occur upstream from station. U.S. Geological Survey satellite telemeter is located at the station.

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06307740 OTTER CREEK AT ASHLAND, MT—Continued

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	4.5	6.0	7.9	7.4	e15	e25	14	11	8.0	3.1	2.5	1.6
2	4.6	5.9	7.6	7.2	e20	e20	13	10	7.7	3.0	2.4	1.5
3	4.7	5.9	7.6	7.4	e20	e15	13	10	7.6	3.0	2.3	1.5
4	4.8	6.0	7.5	7.5	e15	e15	12	10	7.6	2.8	2.4	1.5
5	4.8	6.1	7.1	7.5	14	e15	12	9.8	7.4	2.8	2.3	1.5
6	4.7	6.4	6.9	7.9	12	e20	12	9.7	6.8	3.1	2.2	1.5
7	6.1	5.8	6.7	7.3	9.8	e30	11	9.6	6.7	3.4	2.2	1.5
8	6.8	5.8	6.8	7.9	9.9	e60	11	9.0	6.5	3.4	2.1	1.4
9	6.4	6.4	6.9	7.8	9.7	e90	11	8.8	6.2	3.0	2.1	1.4
10	6.7	6.5	6.6	7.7	9.7	82	11	8.7	6.1	3.1	2.1	1.3
11	6.6	6.0	6.3	7.0	9.4	58	11	8.4	5.9	2.9	2.3	1.2
12	7.0	6.1	6.2	8.1	9.9	49	11	8.1	6.1	3.0	2.4	1.3
13	6.9	6.9	6.4	7.5	9.4	44	11	7.6	6.0	2.9	2.4	1.2
14	6.7	6.9	6.4	7.3	10	40	11	7.2	5.8	2.8	2.3	1.2
15	6.5	6.7	6.5	7.4	10	35	11	6.9	5.6	2.8	2.1	1.1
16	6.3	6.7	6.7	7.5	10	31	11	6.7	5.2	2.8	2.2	1.2
17	6.3	6.6	6.7	e6.5	10	29	11	6.4	4.9	2.8	2.1	1.2
18	6.0	6.4	6.7	e6.0	11	25	11	6.3	4.9	2.9	2.2	1.1
19	5.8	6.3	6.9	e5.5	10	25	11	6.4	4.6	2.9	2.1	1.0
20	5.7	5.0	6.8	e6.5	11	24	11	6.6	4.4	2.7	2.0	1.00
21	5.8	6.1	7.1	e7.5	11	22	10	6.5	4.5	2.9	2.0	1.1
22	5.8	6.0	6.8	8.2	e10	19	10	6.3	4.3	2.9	1.8	1.1
23	6.0	6.3	7.1	8.5	e20	19	9.8	6.2	4.1	3.0	1.9	1.2
24	5.9	6.4	7.0	9.3	e30	18	9.8	6.1	4.0	9.7	1.8	1.3
25	5.9	6.5	7.0	9.8	e40	17	9.6	6.2	3.8	5.7	1.8	1.3
26	5.9	6.7	7.0	10	e30	16	9.3	6.6	3.6	3.7	1.8	1.3
27	5.8	6.9	7.0	10	e25	17	9.0	7.1	3.4	3.2	1.8	1.5
28	5.8	7.1	7.1	10	e20	16	9.6	7.3	3.3	2.9	1.8	1.6
29	5.8	7.1	7.3	11	e25	16	10	7.3	3.3	2.9	1.6	1.6
30	6.0	7.5	7.3	11	---	15	11	7.7	3.2	2.8	1.6	1.6
31	5.9	---	7.6	11	---	15	---	8.0	---	2.6	1.6	---
Total	182.5	191.0	215.5	251.2	446.8	922	328.1	242.5	161.5	101.5	64.2	39.80
Mean	5.89	6.37	6.95	8.10	15.4	29.7	10.9	7.82	5.38	3.27	2.07	1.33
Max	7.0	7.5	7.9	11	40	90	14	11	8.0	9.7	2.5	1.6
Min	4.5	5.0	6.2	5.5	9.4	15	9.0	6.1	3.2	2.6	1.6	1.0
Ac-ft	362	379	427	498	886	1,830	651	481	320	201	127	79

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2012, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1.51	2.43	2.34	4.08	6.08	13.5	6.27	8.40	6.41	2.66	1.51	1.04
Max	5.89	6.37	7.03	30.2	34.9	107	28.1	60.2	44.5	14.0	5.97	4.52
(WY)	(2012)	(2012)	(1976)	(1975)	(1974)	(1975)	(1975)	(2011)	(2011)	(2011)	(2011)	(2011)
Min	0.18	0.71	0.44	0.10	0.36	1.26	0.99	0.71	0.36	0.28	0.00	0.00
(WY)	(1993)	(1992)	(2007)	(1991)	(1993)	(1992)	(1992)	(1992)	(1993)	(1977)	(1992)	(1992)

*During periods of operation (1973-85, 1988-95, October 2003 to current year).

06307740 OTTER CREEK AT ASHLAND, MT—Continued**SUMMARY STATISTICS**

	Calendar Year 2011	Water Year 2012	Water Years 1973 – 2012*
Annual total	5,856.5	3,146.60	
Annual mean	16.0	8.60	c4.69
Highest annual mean			19.0
Lowest annual mean			0.60
Highest daily mean	295	May 25	350 Mar 6, 1994
Lowest daily mean	1.5	Jan 1	0.00 Oct 14, 1976 ^d
Annual seven-day minimum	1.9	Jan 7	0.00 Jun 24, 1977
Maximum peak flow			e425 Mar 21, 1978
Maximum peak stage			f9.08 Mar 6, 1994
Annual runoff (ac-ft)	11,620	6,240	3,400
10 percent exceeds	34	15	8.4
50 percent exceeds	6.8	6.7	2.0
90 percent exceeds	2.5	1.8	0.40

*During periods of operation (1973-85, 1988-95, October 2003 to current year).

^aGage height, 3.64 ft.

^bBackwater from ice.

^cMedian of yearly mean discharge, 3.39 ft³/s, 2,460 ac-ft/yr.

^dNo flow at times most years.

^eGage height, 8.65 ft; backwater from ice and beaver dam, previous site and datum.

^fBackwater from ice and beaver dam, previous site and datum.

