

Water-Data Report 2012

06135000 MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY

Milk Basin
Upper Milk Subbasin

LOCATION.--Lat 48°58'31", long 110°25'22" referenced to North American Datum of 1983, in NW ¼ SW ¼ SE ¼ sec.9, T.37 N., R.9 E., Hill County, MT, Hydrologic Unit 10050002, on left bank 1.6 mi south of international boundary, 1.7 mi upstream from Lost River, 10 mi northwest of Simpson, 35.5 mi north of Rudyard, and at river mile 479.6.

DRAINAGE AREA.--2,525 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Sporadic records August 1909 to September 1915, water-year records 1916 and 1917, seasonal records October 1918 to September 1934, water-year records 1935-38, and seasonal records October 1938 to current season. Monthly discharge only for April 1912, published in Water Supply Paper (WSP) 1309.

REVISED RECORDS.--WSP 1086: 1927, 1935. WSP 1559: 1920, maximum discharge(M); 1922 (M); 1926; 1928 (M); 1929; 1930 (M); 1932 (M). WSP 1729: 1912-13, 1921-22, 1929 (M). Water Data Report (WDR) MT-94-1 (M). WDR 1983: Drainage area. WDR MT-98-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 2,660 ft, referenced to the National Geodetic Vertical Datum of 1929. Prior to Mar. 1, 1998, water-stage recorder or nonrecording gages at several sites within 15 mi upstream at different elevation.

COOPERATION.--This is one of a number of stations which are maintained jointly by the United States and Canada.

REMARKS.--Records are good except for estimated daily discharges, which are poor. Beginning in 1917, flow has increased during irrigation season by water from St. Mary Canal (station number 05018500). Many diversions for irrigation occur upstream from station. Bureau of Reclamation satellite telemeter is located at the station.

06135000 MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY—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	489					e75	180	796	832	999	554	537
2	565					e70	288	e667	830	1,010	558	523
3	610					e70	515	e687	808	922	560	518
4	620					e75	623	e666	e802	875	570	534
5	639					e80	707	e642	e899	844	574	550
6	654					e85	535	627	894	814	602	561
7	693					e85	409	612	991	789	600	566
8	760					e100	328	634	909	740	562	582
9	681					e150	295	616	992	707	557	592
10	e670					e250	266	618	1,010	677	564	584
11	e570					e550	249	593	1,030	619	563	537
12	e466					e400	222	598	906	587	569	544
13	e388					e310	209	628	960	563	566	556
14	e348					e280	202	697	1,100	562	565	576
15	e314					308	e231	766	1,050	604	564	540
16	e240					367	e433	750	929	e671	566	480
17	e191					535	e546	732	871	e705	543	394
18	e171					638	e602	702	e886	e703	540	318
19	e160					513	e549	699	e931	e672	532	269
20	e158					419	e447	696	981	625	512	214
21	144					317	e429	750	966	630	517	181
22	e142					458	507	814	966	616	523	152
23	e138					362	e591	792	1,070	614	513	129
24	133					284	e679	765	1,200	627	519	115
25	132					276	e785	729	1,130	602	527	104
26	132					260	e948	717	1,080	584	541	96
27	126					244	e906	930	1,070	577	554	96
28	124					257	e766	934	1,090	574	566	83
29	e120					228	675	834	1,000	616	560	74
30	e123					203	797	855	960	578	550	67
31	e125					186	---	825	---	564	531	---
Total	10,826					8,435	14,919	22,371	29,143	21,270	17,122	11,072
Mean	349					272	497	722	971	686	552	369
Max	760					638	948	934	1,200	1,010	602	592
Min	120					70	180	593	802	562	512	67
Ac-ft	21,470					16,730	29,590	44,370	57,810	42,190	33,960	21,960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 2012, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	125	58.3	31.4	22.9	100	368	571	720	800	612	544	382
Max	566	136	72.3	64.0	456	1,522	1,691	1,943	2,561	1,046	886	740
(WY)	(1990)	(1917)	(1917)	(1935)	(1935)	(1978)	(1965)	(1927)	(2002)	(1951)	(1927)	(1972)
Min	0.16	2.50	2.00	0.50	0.00	9.88	80.1	257	200	260	77.4	2.21
(WY)	(2002)	(1936)	(1936)	(1936)	(1922)	(2002)	(1945)	(1918)	(1952)	(2011)	(1982)	(2001)

*During periods of operation (seasonal records most years, except 1916, 1917, and 1935-38 when data was collected for entire water year).

06135000 MILK RIVER AT EASTERN CROSSING OF INTERNATIONAL BOUNDARY—Continued**SUMMARY STATISTICS**

	Calendar Year 2011		Water Year 2012		Water Years 1917 – 2012*	
Annual mean					339	
Highest annual mean					385	1917
Lowest annual mean					279	1936
Highest daily mean	3,490	Jun 10	1,200	Jun 24	12,400	Jun 12, 2002
Lowest daily mean	20	Mar 8	67	Sep 30	0.00	Feb 1, 1922
Maximum peak flow			^a 1,350	Jun 10	^c 14,400	Jun 12, 2002
Maximum peak stage			^b 4.54	Mar 11	^b 15.03	Mar 13, 1996
Annual runoff (ac-ft)					245,600	
10 percent exceeds					767	
50 percent exceeds					160	
90 percent exceeds					2.0	

*During periods of operation (seasonal records most years, except 1916, 1917, and 1935–38 when data was collected for entire water year).

^aGage height, 4.47 ft.

^bBackwater from ice jam.

^cGage height, 10.78 ft, from floodmarks.

