

Water-Data Report 2012

**06172310 MILK RIVER AT TAMPICO, MT**

Milk Basin  
Lower Milk Subbasin

LOCATION.--Lat 48°18'28", long 106°49'20" referenced to North American Datum of 1983, in SW ¼ SW ¼ SW ¼ sec.32, T.30 N., R.38 E., Valley County, MT, Hydrologic Unit 10050012, on right bank, at county bridge 0.8 miles downstream from Buggy Creek and 0.3 miles northeast of Tampico, and at river mile 98.7.

DRAINAGE AREA.--21,078 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 1973 to September 1977, May 1987 to current year. Seasonal record beginning 1995 water year.

GAGE.--Water-stage recorder. Elevation of gage is 2,110 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are good except for estimated daily discharge, which are poor. Flow increased during irrigation season by water from St. Mary Canal which diverts from the St. Mary River near Babb. Flow is regulated by Fresno and Nelson Reservoirs, five reservoirs in Lodge Creek basin in Saskatchewan, and four reservoirs in Frenchman River basin in Saskatchewan. Many small dams for the diversion of irrigation canals occur upstream, the closest being Vandalia Dam 19 mi upstream. Diversions occur upstream from station for irrigation of about 126,000 acres of which about 17,000 acres lies downstream from station. Bureau of Reclamation satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Apr. 17, 1952 reached an observed stage of 38.67 ft at gage 200 ft downstream from Vandalia Dam furnished by the U.S. Army Corps of Engineers; discharge about 45,000 ft<sup>3</sup>/s.

## 06172310 MILK RIVER AT TAMPICO, 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	442					e250	505	179	3,050	875	175	123
2	402					e250	512	153	2,800	851	143	135
3	420					e250	500	141	2,420	776	136	145
4	459					e250	476	147	2,170	705	138	163
5	388					e250	465	144	2,040	573	148	166
6	411					e270	368	168	1,990	447	165	162
7	440					e300	324	382	1,850	308	168	160
8	466					e400	290	442	1,610	239	148	167
9	480					e750	265	545	1,510	153	127	174
10	493					e960	265	697	1,680	111	114	181
11	476					e1,000	331	800	1,360	156	114	147
12	466					e960	353	857	1,100	201	112	119
13	439					827	326	884	985	186	102	108
14	423					704	262	836	913	168	103	102
15	352					786	226	784	888	176	121	107
16	294					825	192	739	867	216	110	107
17	318					737	178	741	889	222	115	102
18	317					622	167	792	967	239	113	91
19	269					594	172	852	1,160	239	105	78
20	220					647	177	836	1,290	246	119	62
21	209					652	180	766	1,220	349	136	51
22	208					519	166	644	1,070	428	140	38
23	214					27	166	524	1,130	416	132	33
24	229					33	107	462	1,190	422	136	33
25	217					476	87	563	2,340	396	142	34
26	201					530	90	593	2,730	308	122	34
27	197					514	106	627	1,440	215	109	35
28	194					474	124	1,670	1,030	224	106	32
29	196					490	133	3,880	906	246	115	31
30	192					466	171	4,260	928	242	125	31
31	185					465	---	3,370	---	220	124	---
<b>Total</b>	10,217					16,278	7,684	28,478	45,523	10,553	3,963	2,951
<b>Mean</b>	330					525	256	919	1,517	340	128	98.4
<b>Max</b>	493					1,000	512	4,260	3,050	875	175	181
<b>Min</b>	185					27	87	141	867	111	102	31
<b>Ac-ft</b>	20,270					32,290	15,240	56,490	90,290	20,930	7,860	5,850

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2012, BY WATER YEAR (WY)\***

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	187	217	152	211	178	933	1,004	766	1,057	479	177	178
<b>Max</b>	906	710	363	791	433	3,809	11,080	6,112	11,760	2,515	769	903
<b>(WY)</b>	(1994)	(1976)	(1976)	(1974)	(1974)	(1994)	(2011)	(2011)	(2011)	(1991)	(1993)	(1993)
<b>Min</b>	29.1	90.0	66.9	55.2	49.3	46.6	3.35	6.59	11.7	8.35	4.63	6.52
<b>(WY)</b>	(2002)	(1989)	(1989)	(1989)	(1989)	(2002)	(1992)	(2001)	(1977)	(1977)	(1988)	(1988)

\*During periods of operation (1974-77, 1987 to current year. Seasonal records beginning with 1995 water year).

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1974 – 2012*	
Annual mean					400	
Highest annual mean					998	1975
Lowest annual mean					84.6	1988
Highest daily mean	19,200	Apr 15	4,260	May 30	19,200	Apr 15, 2011
Lowest daily mean	180	Sep 2	27	Mar 23	0.00	Aug 28, 1988
Annual seven-day minimum					0.00	Sep 7, 1988
Maximum peak flow			4,450	May 30	<sup>a</sup> 19,700 Apr 15, 2011	
Maximum peak stage			15.70	May 30	28.03	Apr 15, 2011
Annual runoff (ac-ft)					289,400	
10 percent exceeds					833	
50 percent exceeds					123	
90 percent exceeds					11	

\*During periods of operation (1974-77, 1987 to current year. Seasonal records beginning with 1995 water year).

<sup>a</sup>Estimated daily discharge, ungedaged bypass flow.

