

Water-Data Report 2010

06174500 MILK RIVER AT NASHUA, MT

Milk Basin
Lower Milk Subbasin

LOCATION.--Lat 48°07'47", long 106°21'50" referenced to North American Datum of 1927, in NE ¼ NE ¼ sec.1, T.27 N., R.41 E., Valley County, MT, Hydrologic Unit 10050012, on right bank at downstream side of former highway bridge site, 0.6 mi southwest of Nashua, 2.0 mi upstream from Porcupine Creek, and at river mile 22.7.

DRAINAGE AREA.--22,332 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to current year.

REVISED RECORDS.-- Water Supply Paper 1729: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 2,027.75 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are good except for estimated daily discharges, 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 Reservoir (station number 06136500), two reservoirs in Lodge Creek basin in Saskatchewan, and four reservoirs in Frenchman River basin in Saskatchewan. Diversions for irrigation include about 140,000 acres upstream from station. U.S. Army Corps of Engineers satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	94	175	e138	e104	e123	e120	521	128	4,050	4,310	378	276
2	86	181	e124	e104	e123	e125	279	143	3,510	4,240	378	298
3	93	183	e119	e104	e122	e127	173	171	3,240	4,240	348	381
4	97	180	e115	e105	e123	e130	278	441	3,100	4,120	317	435
5	96	174	e112	e107	e124	e141	440	467	3,060	4,000	294	470
6	93	172	e108	e102	e123	e139	470	779	3,090	3,900	243	505
7	91	168	e110	e100	e122	e137	432	929	3,120	3,630	189	533
8	92	172	e116	e101	e123	e141	367	1,070	3,160	3,270	168	540
9	96	182	e112	e105	e123	e141	308	1,280	3,210	2,930	156	533
10	95	192	e110	e109	e122	e141	256	1,280	3,210	2,640	159	547
11	96	189	e109	e110	e121	e150	281	1,250	3,180	2,300	196	581
12	99	179	e118	e111	e119	e150	275	1,390	3,070	2,020	242	945
13	98	175	e113	e113	e119	e153	224	1,620	2,980	1,830	281	1,960
14	100	170	e110	e113	e116	e148	185	1,860	2,950	1,640	301	2,390
15	101	149	e108	e111	e117	e158	161	2,080	2,630	1,520	301	2,380
16	102	138	e108	e109	e114	e164	161	2,190	2,240	1,470	293	2,070
17	108	169	e111	e107	e112	e162	164	2,200	1,970	1,410	277	1,610
18	112	184	e107	e104	e111	e167	129	2,170	2,640	1,360	251	1,250
19	110	191	e105	e103	e110	e160	145	2,090	4,430	1,130	254	1,130
20	116	177	e104	e106	e110	e162	154	2,040	5,350	793	273	1,030
21	166	179	e109	e111	e114	e178	119	2,010	5,900	568	272	875
22	204	168	e104	e114	e112	e185	130	2,060	5,710	429	228	754
23	206	149	e102	e116	e111	e213	133	2,080	5,420	329	209	713
24	203	149	e101	e116	e112	e227	128	2,120	4,940	227	225	714
25	201	140	e98	e116	e113	e250	115	2,250	4,540	175	239	698
26	197	e141	e97	e118	e115	e345	118	3,180	4,530	192	230	665
27	195	e150	e100	e119	e115	e428	129	5,280	4,430	239	230	639
28	195	e146	e98	e119	e125	e551	139	6,050	4,340	251	229	612
29	187	e140	e103	e119	---	620	135	5,860	4,280	245	243	609
30	177	e144	e101	e120	---	656	125	5,390	4,310	275	259	609
31	172	---	e102	e121	---	651	---	4,630	---	291	273	---
Total	4,078	5,006	3,372	3,417	3,294	7,220	6,674	66,488	112,590	55,974	7,936	26,752
Mean	132	167	109	110	118	233	222	2,145	3,753	1,806	256	892
Max	206	192	138	121	125	656	521	6,050	5,900	4,310	378	2,390
Min	86	138	97	100	110	120	115	128	1,970	175	156	276
Ac-ft	8,090	9,930	6,690	6,780	6,530	14,320	13,240	131,900	223,300	111,000	15,740	53,060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	287	204	152	142	228	1,219	2,015	974	996	635	290	269
Max	6,837	768	487	843	2,337	6,678	20,930	5,207	6,611	3,578	1,754	2,138
(WY)	(1987)	(1987)	(1987)	(1974)	(1996)	(1986)	(1952)	(1975)	(1953)	(1962)	(1993)	(1978)
Min	34.4	61.2	39.7	36.0	38.9	56.5	15.1	10.5	28.0	3.56	3.42	12.6
(WY)	(2002)	(2002)	(1984)	(1950)	(1949)	(2002)	(1981)	(1992)	(1984)	(1984)	(1984)	(1988)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1940 - 2010	
Annual total	115,932		302,801			
Annual mean	318		830		^a 618	
Highest annual mean					2,359	1952
Lowest annual mean					57.7	1984
Highest daily mean	2,750	Mar 25	6,050	May 28	44,200	Apr 18, 1952
Lowest daily mean	11	Apr 28	86	Oct 2	0.00	Jul 14, 1984
Annual seven-day minimum	39	Apr 24	93	Oct 2	0.00	Jul 17, 1984
Maximum peak flow			6,180	May 28	45,300	Apr 18, 1952
Maximum peak stage			14.56	May 28	31.38	Apr 18, 1952
Annual runoff (ac-ft)	230,000		600,600		447,400	
10 percent exceeds	1,090		3,080		1,230	
50 percent exceeds	140		182		170	
90 percent exceeds	89		105		59	

^aMedian of yearly discharge, 516 ft³/s, 373,800 ac-ft/yr.

