Water-Data Report 2007

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 mi^2.

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 those 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 ofEngineers satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

06174500 MILK RIVER AT NASHUA, MT—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	100	161	e70	e60	e70	e80	27	435	2,440	732	41	76
2	87	140	e70	e70	e60	e80	22	490	4,050	648	31	83
3	82	124	e70	e80	e60	e90	22	490	4,370	583	31	80
4	81	140	e90	e90	e60	e90	22	501	3,940	491	34	77
5	79	147	e90	e90	e70	e90	23	493	3,450	434	40	78
6	79	144	e70	e80	e70	e90	98	532	2,800	341	55	70
7	73	141	e70	e50	e60	e100	260	537	2,360	270	65	64
8	53	139	e90	e50	e60	e100	271	510	2,460	217	90	63
9	47	152	e100	e50	e60	e100	323	447	2,990	173	111	79
10	87	144	e100	e40	e70	e100	351	421	2,930	141	113	95
11	66	135	e90	e50	e70	e300	317	387	2,650	110	97	95
12	82	129	e80	e30	e60	e400	277	343	2,420	73	92	94
13	115	132	e70	e30	e60	e500	244	319	2,050	50	102	93
14	114	141	e70	e30	e50	e800	207	304	1,660	33	123	107
15	105	141	e70	e30	e50	e1,400	181	320	1,480	32	136	114
16	99	152	e70	e40	e60	e2,000	156	337	1,450	42	109	115
17	94	139	e70	e70	e60	e2,100	137	333	2,160	75	66	110
18	91	141	e70	e70	e80	e2,200	119	292	3,590	94	58	107
19	89	122	e70	e70	e80	e2,100	134	235	4,810	e83	56	96
20	85	132	e70	e90	e90	e1,700	156	206	4,800	e85	61	91
21	85	133	e60	e90	e90	e1,000	148	204	3,990	e87	58	66
22	83	125	e60	e90	e100	722	128	215	2,990	e90	49	51
23	83	127	e50	e90	e100	440	309	474	2,280	e95	45	83
24	121	118	e50	e90	e90	288	647	1,660	1,910	89	39	212
25	175	e50	e50	e90	e90	211	539	3,680	1,800	82	37	199
26	185	e50	e50	e90	e80	170	415	4,450	1,720	91	53	187
27	182	e60	e50	e80	e80	144	394	4,130	1,760	98	61	178
28	178	e70	e50	e80	e80	134	396	3,410	1,470	92	76	170
29	170	e70	e50	e70	---	104	394	2,680	1,070	76	77	157
30	170	e70	e50	e70	---	61	387	2,300	845	53	71	138
31	162	---	e50	e70	---	38	---	1,990	---	42	67	---
Total	3,302	3,669	2,120	2,080	2,010	17,732	7,104	33,125	78,695	5,602	2,144	3,228
Mean	107	122	68.4	67.1	71.8	572	237	1,069	2,623	181	69.2	108
Max	185	161	100	90	100	2,200	647	4,450	4,810	732	136	212
Min	47	50	50	30	50	38	22	204	845	32	31	51
Ac-ft	6,550	7,280	4,210	4,130	3,990	35,170	14,090	65,700	156,100	11,110	4,250	6,400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	294	207	154	143	233	1,255	2,089	969	965	633	295	264
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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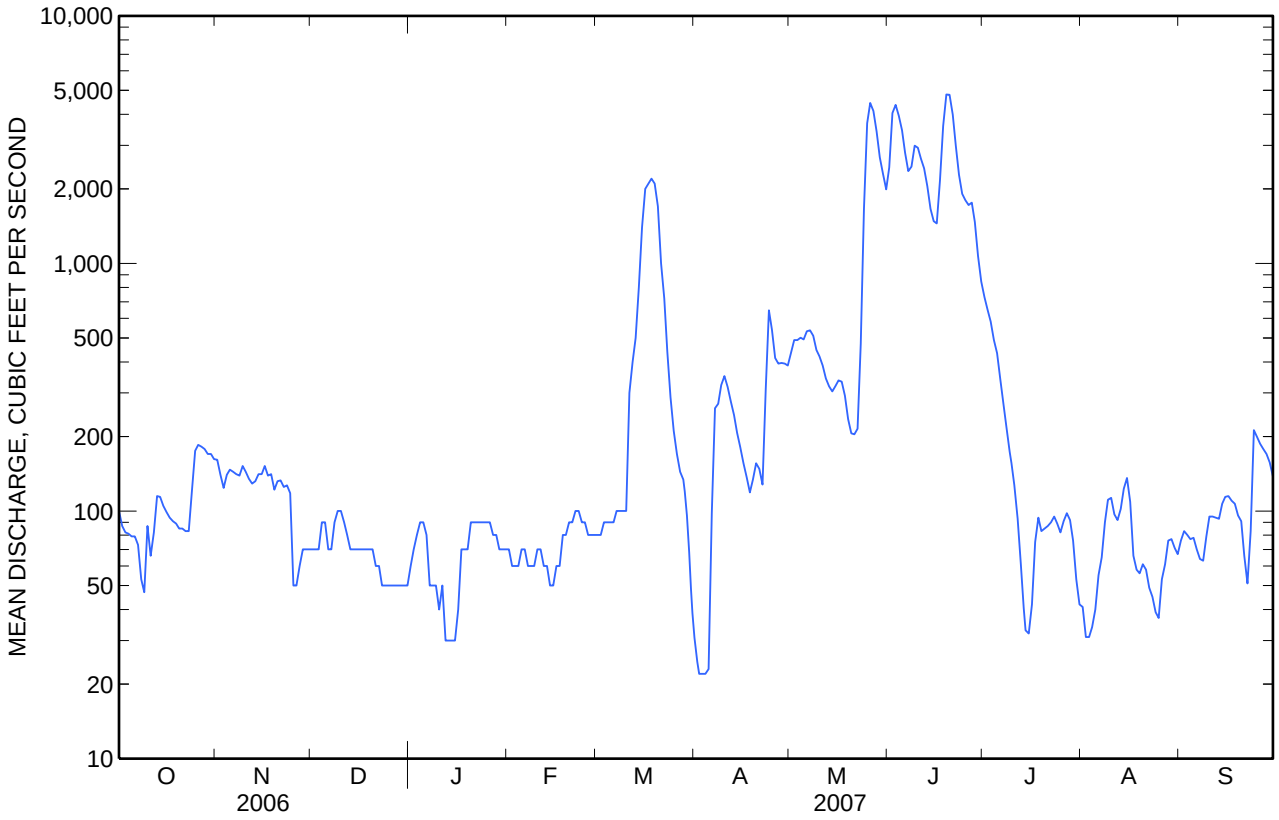
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1940 - 2007	
Annual total	64,403		160,811			
Annual mean	176		441		625*	
Highest annual mean					2,359	1952
Lowest annual mean					57.7	1984
Highest daily mean	1,990	Apr 4	4,810	Jun 19	44,200	Apr 18, 1952
Lowest daily mean	18	Jun 30	22	Apr 2	0.00	Jul 14, 1984
Annual seven-day minimum	28	Jun 27	31	Mar 30	0.00	Jul 17, 1984
Maximum peak flow			4,960	Jun 19	45,300	Apr 18, 1952
Maximum peak stage			12.44	Jun 19	31.38	Apr 18, 1952
Annual runoff (ac-ft)	127,700		319,000		453,000	
10 percent exceeds	300		1,680		1,230	
50 percent exceeds	123		95		173	
90 percent exceeds	52		50		58	

* Median of yearly discharge, 524 ft³/s, 379,600 ac-ft/yr.