

Water-Data Report 2007

06164000 FRENCHMAN RIVER AT INTERNATIONAL BOUNDARY

Upper Missouri Basin
Frenchman Subbasin

LOCATION.--Lat 49°00'00", long 107°18'06" referenced to North American Datum of 1927, in SE¼ sec.5, T.1, R.10 W., third meridian, in Saskatchewan, Hydrologic Unit 10050013, on left bank 50 ft north of international boundary, 22 mi northeast of Whitewater, MT, and at river mile 76.4.

DRAINAGE AREA.--2,120 mi², of which 343 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1917 to current season (seasonal records only for most years).

REVISED RECORDS.-- Water Supply Paper 1389: 1938, maximum discharge (M); 1939-41; 1942(M); 1943, 1950(M). Water Data Report 1983: Drainage area.

GAGE.--Water-stage recorder and concrete control since August 1949. Elevation of gage is 2,420 ft, referenced to the National Geodetic Vertical Datum of 1929. Prior to June 23, 1937, water-stage recorder at site 0.5 mi upstream at different elevation. June 23, 1937, to October 1952, water-stage recorder at site 100 ft downstream at present 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 those for estimated daily discharges, which are poor. Natural flow of stream is affected by several storage reservoirs, diversions for irrigation of about 14,500 acres, and return flow from irrigated areas. Water may be diverted into or from Battle Creek basin through Cypress Lake. Water Survey of Canada satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

06164000 FRENCHMAN RIVER AT INTERNATIONAL BOUNDARY—Continued

DISCHARGE, CUBIC FEET PER SECOND
CALENDAR YEAR JANUARY TO DECEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1			e3.5	353	78	52	0.04	0.00	0.57	0.00		
2			e3.2	52	63	55	0.04	0.00	0.32	0.00		
3			e3.5	185	67	42	0.07	0.00	0.21	0.00		
4			e4.2	263	69	44	0.04	0.00	0.11	0.00		
5			e3.5	271	43	30	0.04	0.00	0.07	0.00		
6			e3.9	189	40	133	0.04	0.00	0.04	0.00		
7			e4.2	122	50	122	0.04	20	0.04	0.00		
8			e11	80	49	141	0.04	28	0.04	0.00		
9			e32	66	48	210	0.00	29	0.04	0.00		
10			e88	67	48	88	0.00	28	0.04	0.00		
11			e247	69	43	56	0.00	27	0.04	0.00		
12			e388	94	31	38	0.00	25	0.04	0.00		
13			e777	104	31	25	0.00	27	0.00	0.00		
14			e848	77	33	17	0.00	19	0.00	0.00		
15			653	66	23	11	0.00	11	0.00	0.00		
16			498	64	13	6.8	0.00	6.5	0.00	0.00		
17			133	63	6.5	5.0	0.00	3.4	0.00	0.00		
18			75	63	3.8	8.3	0.00	1.7	0.00	0.00		
19			46	104	2.4	7.8	0.00	0.99	0.00	0.00		
20			33	112	1.5	5.2	0.00	0.64	0.00	0.00		
21			35	173	26	3.1	0.00	23	0.00	0.00		
22			31	284	38	1.8	0.00	36	0.00	0.00		
23			31	305	47	1.2	0.00	35	0.00	0.00		
24			27	308	49	0.74	0.00	35	0.00	0.00		
25			22	308	42	0.42	0.00	34	0.00	0.00		
26			19	309	40	0.25	0.00	23	0.00	0.00		
27			17	310	40	0.18	0.00	7.8	0.00	0.00		
28			15	309	38	0.11	0.00	5.3	0.00	0.00		
29			157	302	41	0.07	0.00	2.5	0.00	0.00		
30			323	177	42	0.04	0.00	1.4	0.00	52		
31			579	---	47	---	0.00	0.88	---	53		
Total			5,111.0	5,249	1,193.2	1,105.01	0.35	431.11	1.56	105.00		
Mean			165	175	38.5	36.8	0.01	13.9	0.05	3.39		
Max			848	353	78	210	0.07	36	0.57	53		
Min			3.2	52	1.5	0.04	0.00	0.00	0.00	0.00		
Ac-ft			10,140	10,410	2,370	2,190	0.7	855	3.1	208		

STATISTICS OF MONTHLY MEAN DATA FOR SEASONS 1917 - 2007, BY WATER YEAR *

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Mean			177	392	136	82.7	51.5	17.0	7.07	10.3		
Max			1,490	5,313	1,051	886	602	199	65.9	77.7		
(WY)			(1997)	(1952)	(1927)	(1923)	(1955)	(2002)	(1951)	(1966)		
Min			0.00	0.35	2.54	0.39	0.01	0.00	0.00	0.00		
(WY)			(2002)	(2000)	(1937)	(1937)	(2007)	(1934)	(1919)	(1932)		

* Seasonal records most years.

06164000 FRENCHMAN RIVER AT INTERNATIONAL BOUNDARY—Continued

SUMMARY STATISTICS

	2007 Season		Seasons 1917 - 2007*	
Highest daily mean	848	Mar 14	19,200	Apr 15, 1952
Lowest daily mean	0.0	Many days	0.00	Jul 28, 1919 ^a
Maximum peak flow	1,120	Mar 14	^b 22,700	Apr 15, 1952
Maximum peak stage	8.71	Mar 14	^c 19.90	Apr 15, 1952

* Seasonal records most years.

^a No flow most years.

^b From rating curve extended above 2,300 ft³/s on basis of slope-area measurement of peak flow.

^c From floodmarks.

