

Water-Data Report 2012

06164000 FRENCHMAN RIVER AT INTERNATIONAL BOUNDARY

Upper Missouri Basin
Frenchman Subbasin

LOCATION.--Lat 49°00'00", long 107°18'10" referenced to North American Datum of 1983, 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 September 6-19 and October 3-25, which are fair, and 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 Several unpublished observations of water temperature and specific conductance were made during the year.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
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	11					e7.8	112	75	171	60	17	2.4
2	12					e8.5	102	65	211	53	17	1.6
3	12					e9.2	130	78	224	48	17	1.2
4	12					e11	134	80	212	44	19	0.95
5	13					e12	136	73	201	41	25	0.81
6	14					e13	123	95	195	35	45	0.28
7	20					e16	164	152	190	34	40	0.14
8	17					e18	254	212	191	22	24	0.11
9	17					e20	218	124	214	16	13	0.11
10	17					e22	148	77	191	15	7.7	0.14
11	15					e25	113	54	144	23	17	0.11
12	13					e28	85	42	312	4.9	5.8	0.07
13	13					e32	64	61	315	2.8	3.5	0.07
14	12					e35	46	50	269	2.1	25	0.07
15	13					e44	49	47	201	1.7	24	0.07
16	12					e71	51	77	121	1.6	20	0.07
17	13					e115	51	37	103	1.4	36	0.07
18	14					e124	48	22	115	3.5	33	0.04
19	14					e141	56	16	121	2.5	28	0.18
20	14					e177	58	11	184	1.8	30	0.11
21	14					e198	59	8.2	137	2.3	24	0.07
22	14					e106	65	82	91	4.1	21	0.07
23	15					e88	69	114	80	3.4	24	0.04
24	14					130	54	73	65	2.7	20	0.04
25	13					127	39	99	46	2.4	13	0.04
26	14					122	31	103	64	2.3	10	0.04
27	16					89	31	340	74	2.3	8.2	0.04
28	16					108	42	583	73	2.8	5.4	0.04
29	14					163	57	544	90	12	4.4	0.04
30	13					160	103	325	76	17	6.3	0.04
31	13					143	---	124	---	17	4.1	---
Total	434					2,363.5	2,692	3,843.2	4,681	481.6	587.4	9.06
Mean	14.0					76.2	89.7	124	156	15.5	18.9	0.30
Max	20					198	254	583	315	60	45	2.4
Min	11					7.8	31	8.2	46	1.4	3.5	0.04
Ac-ft	861					4,690	5,340	7,620	9,280	955	1,170	18

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	10.5					169	389	140	89.0	50.9	17.1	7.70
Max	77.7					1,490	5,313	1,051	886	602	199	65.9
(WY)	(1966)					(1997)	(1952)	(1927)	(1923)	(1955)	(2002)	(1951)
Min	0.00					0.00	0.35	2.54	0.39	0.01	0.00	0.00
(WY)	(1932)					(2002)	(2000)	(1937)	(1937)	(2007)	(1934)	(1919)

*Seasonal records most years.

06164000 FRENCHMAN RIVER AT INTERNATIONAL BOUNDARY—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1917 – 2012*	
Highest daily mean	3,340	Apr 16	583	May 28	19,200	Apr 15, 1952
Lowest daily mean	3.4	Sep 10	0.04	Sep 18	0.00	Jul 28, 1919 ^a
Maximum peak flow			671	May 28	^b 22,700	Apr 15, 1952
Maximum peak stage			7.17	May 28	^c 19.90	Apr 15, 1952

*Seasonal records most years.

^aNo flow most years.

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

^cFrom floodmarks.

