

Water-Data Report 2013

**06139500 BIG SANDY CREEK NEAR HAVRE, MT**

Milk Basin  
Big Sandy Subbasin

LOCATION.--Lat 48°31'36", long 109°50'30" referenced to North American Datum of 1983, in SW ¼ SW ¼ SW ¼ sec.18, T.32 N., R.15 E., Hill County, MT, Hydrologic Unit 10050005, on right bank, 6 mi upstream from mouth, 7.7 mi west southwest of Havre post office, and 22 mi downstream from Sage Creek.

DRAINAGE AREA.--1,805 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--February 1946 to November 1953 (monthly discharge only for February 1946, published in Water Supply Paper 1309 as "Big Sandy Creek near Assiniboine"), annual maximums only for water years 1955-67 (published as "Big Sandy Creek near Assiniboine"), and May 1984 to current year (seasonal records only).

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 2,510 ft, referenced to the North American Vertical Datum of 1988.

REMARKS.--Records are fair except for October and above 200 ft<sup>3</sup>/s, which are poor. Diversions for irrigation of about 1,000 acres occur upstream from station. Bureau of Reclamation satellite telemeter is located at the station. Several unpublished observations of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 30, 1978, reached a stage of 15.15 ft, from floodmarks, discharge, about 6,000 ft<sup>3</sup>/s.

## 06139500 BIG SANDY CREEK NEAR HAVRE, MT—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	6.7						35	34	215	132	24	18
2	8.8						32	33	340	110	29	18
3	15						30	29	546	77	26	18
4	15						26	27	963	69	25	18
5	14						22	26	1,240	71	23	17
6	13						21	25	1,530	75	22	17
7	13						27	23	952	102	21	17
8	13						27	20	776	102	22	18
9	18						28	18	664	93	24	20
10	19						26	18	574	87	26	21
11	15						29	14	523	82	33	20
12	15						31	10	479	80	33	19
13	16						30	6.6	417	73	38	18
14	18						31	5.5	369	70	46	18
15	18						33	5.1	357	69	46	17
16	18						35	5.1	340	62	45	17
17	18						36	5.2	324	59	44	17
18	18						36	5.3	305	56	43	17
19	18						37	6.4	279	55	42	16
20	18						36	5.9	210	47	42	11
21	18						36	4.6	200	39	41	8.0
22	19						35	3.7	250	37	41	6.3
23	21						35	6.2	252	35	42	5.3
24	20						36	12	238	33	41	4.9
25	20						37	11	227	30	41	6.3
26	e18						37	11	205	30	35	6.6
27	e20						36	12	154	27	23	6.1
28	e22						34	10	139	29	20	5.5
29	20						33	8.2	e140	24	20	5.0
30	21						32	14	e135	22	19	4.7
31	20						---	37	---	23	18	---
<b>Total</b>	526.5						959	451.8	13,343	1,900	995	410.7
<b>Mean</b>	17.0						32.0	14.6	445	61.3	32.1	13.7
<b>Max</b>	22						37	37	1,530	132	46	21
<b>Min</b>	6.7						21	3.7	135	22	18	4.7
<b>Ac-ft</b>	1,040						1,900	896	26,470	3,770	1,970	815

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2013, BY WATER YEAR (WY)\***

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	8.79	0.04	0.02	0.48	6.68	61.3	56.0	26.2	67.8	27.3	7.50	5.07
<b>Max</b>	54.5	0.31	0.14	3.39	19.5	343	1,218	283	538	189	85.9	54.4
<b>(WY)</b>	(1987)	(1953)	(1953)	(1947)	(1947)	(1947)	(1952)	(2010)	(2011)	(2010)	(1993)	(1993)
<b>Min</b>	0.00	0.00	0.00	0.00	0.00	0.63	0.16	0.00	0.00	0.00	0.00	0.00
<b>(WY)</b>	(1947)	(1947)	(1947)	(1948)	(1948)	(1949)	(2002)	(1949)	(1949)	(1946)	(1946)	(1946)

\*During periods of operation, February 1946 to November 1953, May 1984 to current year (seasonal records only).

06139500 BIG SANDY CREEK NEAR HAVRE, MT—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1946 – 2013*	
<b>Annual mean</b>					25.3	
<b>Highest annual mean</b>					110	1952
<b>Lowest annual mean</b>					0.09	1949
<b>Highest daily mean</b>	152	May 15	1,530	Jun 6	5,100	Apr 3, 1952
<b>Lowest daily mean</b>	0.00	Sep 21	3.7	May 22	0.00	Feb 1, 1946
<b>Maximum peak flow</b>					2,240	Jun 6
<b>Maximum peak stage</b>					<sup>a</sup> 11.70	Jun 6
<b>Instantaneous low flow</b>					0.00	Feb 1, 1946
<b>Annual runoff (ac-ft)</b>					18,320	
<b>10 percent exceeds</b>					12	
<b>50 percent exceeds</b>					0.00	
<b>90 percent exceeds</b>					0.00	

\*During periods of operation, February 1946 to November 1953, May 1984 to current year (seasonal records only).

<sup>a</sup>From floodmarks.

