Water-Data Report 2013

06098500 CUT BANK CREEK NEAR BROWNING, MT

Marias Basin
Cut Bank Subbasin

LOCATION.--Lat 48°37'01", long 113°02'10" referenced to North American Datum of 1983, in NE ¼ NW ¼ SW ¼ sec.15, T.33 N., R.11 W., Glacier County, MT, Hydrologic Unit 10030202, Blackfeet Indian reservation, on right bank 20 ft downstream from bridge on Montana Secondary Highway 464, 4.0 mi north of Browning, and at river mile 73.3.

DRAINAGE AREA.--123 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1918 to October 1925 (seasonal records only); April 1991 to September 2007; annual maximums water year 2008, October 2008 to current year.

REVISED RECORDS.--Water Data Report MT-93-1: 1992, maximum discharge.

GAGE.--Water-stage recorder. Elevation of gage is 4,380 ft, referenced to the North American Vertical Datum of 1988. April 1918 to October 1925, water-stage recorder at site about 120 ft upstream at different elevation. April 1991 to September 1995 at elevation 1.00 ft higher.

REMARKS.--Records are fair except below 200 ft^3/s and for estimated daily discharges, which are poor. Diversions for irrigation of about 1,200 acres occur upstream from station. Bureau of Reclamation satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 06098500, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/06098500.2013.pdf

06098500 CUT BANK CREEK NEAR BROWNING, 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	e30	369	98	e30	e30	e40	63	210	400	356	43	27
2	e25	253	99	e30	e35	e45	67	191	373	369	63	26
3	e35	195	105	e35	e35	e40	81	184	429	360	66	27
4	e35	170	97	e40	e35	e35	87	184	428	358	53	27
5	e30	202	e100	e40	e35	e30	95	171	396	325	49	27
6	e29	369	e100	e40	e30	e30	150	180	410	299	48	30
7	e28	429	e80	e40	e30	e35	156	227	472	242	47	39
8	e28	461	e50	e40	e25	e35	142	333	537	224	46	37
9	e28	e400	e50	e40	e25	e30	e120	410	541	211	46	35
10	e26	e300	e60	e20	e20	e35	119	464	511	185	45	33
11	e26	e200	e70	e20	e20	e30	108	501	458	161	45	31
12	e26	e150	e55	e25	e25	e30	106	615	414	149	43	30
13	e25	e130	e55	e30	e25	e40	102	858	397	138	42	30
14	e40	e120	e60	e30	e20	e50	95	1,170	352	124	41	29
15	e50	e110	e60	e35	e25	e60	87	906	319	104	39	29
16	e60	117	e55	e35	e25	e60	82	636	305	94	37	28
17	e100	110	e50	e35	e20	e50	75	526	306	82	35	27
18	e90	103	e45	e30	e20	e40	76	495	322	77	34	29
19	91	98	e55	e30	e20	e40	74	478	590	79	33	28
20	142	e100	e45	e25	e20	e50	75	455	1,080	79	32	27
21	192	e100	e35	e25	e20	e55	87	432	829	73	31	26
22	148	e90	e30	e30	e25	e50	78	450	605	70	31	26
23	129	e110	e25	e30	e25	53	80	622	496	65	30	27
24	113	e100	e30	e35	e25	53	80	691	464	58	30	29
25	102	e100	e30	e35	e30	51	83	555	442	54	29	35
26	94	e110	e25	e30	e30	52	88	457	409	52	28	43
27	93	e100	e25	e30	e35	50	114	416	384	50	27	39
28	92	100	e35	e25	e35	52	192	422	371	48	27	38
29	97	97	e35	e20	---	54	246	417	384	46	28	43
30	153	96	e30	e25	---	58	e251	432	367	47	28	102
31	250	---	e30	e25	---	63	---	438	---	47	28	---
Total	2,407	5,389	1,719	960	745	1,396	3,259	14,526	13,791	4,626	1,204	1,004
Mean	77.6	180	55.5	31.0	26.6	45.0	109	469	460	149	38.8	33.5
Max	250	461	105	40	35	63	251	1,170	1,080	369	66	102
Min	25	90	25	20	20	30	63	171	305	46	27	26
Ac-ft	4,770	10,690	3,410	1,900	1,480	2,770	6,460	28,810	27,350	9,180	2,390	1,990

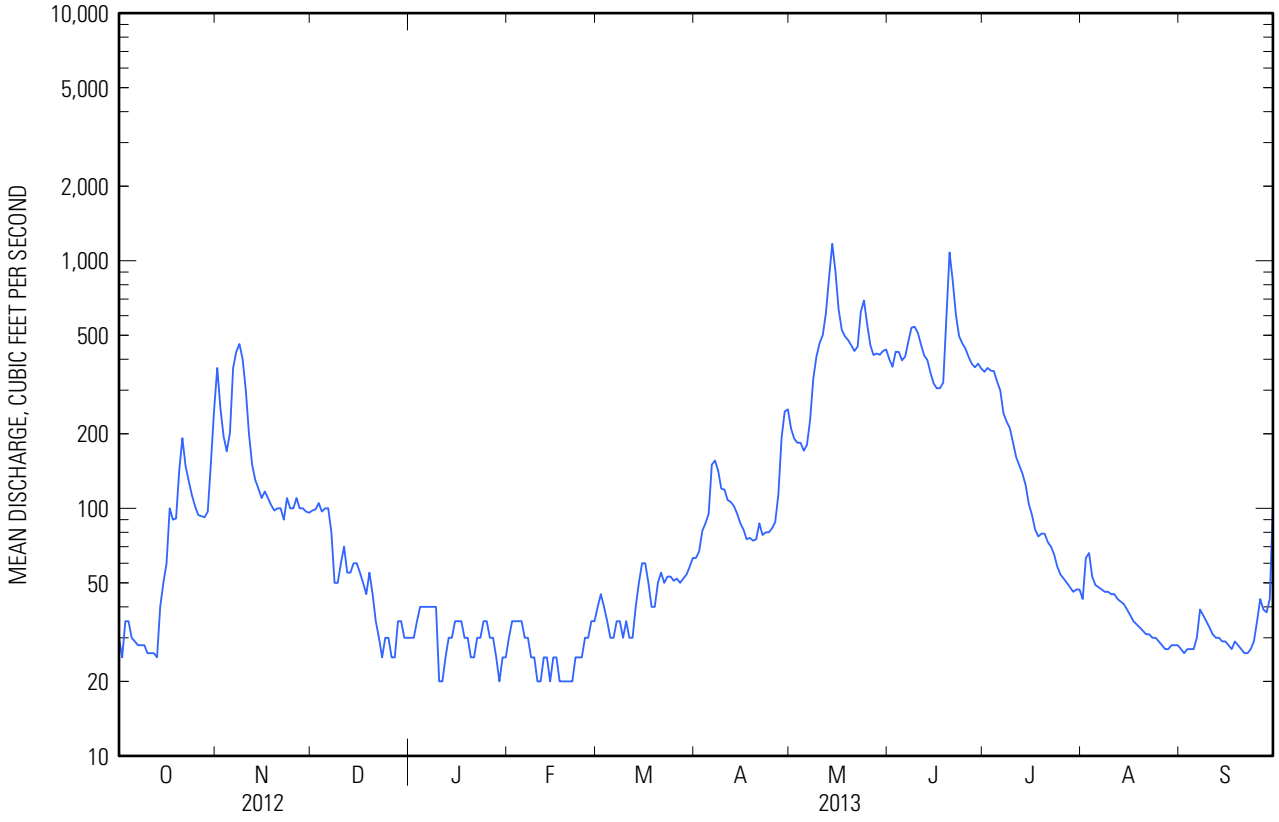
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2013, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	57.1	72.1	42.0	33.7	35.4	53.7	133	396	481	177	60.9	41.0
Max	142	230	157	76.9	139	147	263	740	955	344	140	106
(WY)	(2006)	(2007)	(1996)	(2005)	(1996)	(2007)	(2012)	(1991)	(2002)	(2002)	(1923)	(2010)
Min	15.2	25.4	17.3	18.5	15.4	17.8	57.1	187	184	57.9	9.11	11.7
(WY)	(2002)	(2001)	(2001)	(2001)	(2001)	(2001)	(2001)	(2010)	(1992)	(2001)	(2007)	(2001)

*During periods of operation April 1918 to October 1925 (seasonal records only); April 1991 to September 2007; annual maximums stage water year 2008; October 2008 to current year.

06098500 CUT BANK CREEK NEAR BROWNING, MT—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1918 – 2013*	
Annual total	58,963		51,026			
Annual mean	161		140		127	
Highest annual mean					201	1996
Lowest annual mean					69.0	2001
Highest daily mean	1,060	Apr 27	1,170	May 14	3,400	Jun 7, 1995
Lowest daily mean	10	Jan 17	20	Jan 10	6.4	Sep 12, 2006
Annual seven-day minimum	18	Jan 13	21	Feb 14	6.7	Sep 7, 2006
Maximum peak flow			1,280	May 14	[a]5,480	Jun 7, 1995
Maximum peak stage			4.30	May 14	[b]5.59	Jun 7, 1995
Instantaneous low flow					[c]4.9	Nov 22, 1994
Annual runoff (ac-ft)	117,000		101,200		91,970	
10 percent exceeds	456		419		342	
50 percent exceeds	79		55		51	
90 percent exceeds	25		26		22	

*During periods of operation April 1918 to October 1925 (seasonal records only); April 1991 to September 2007; annual maximums stage water year 2008; October 2008 to current year.
[a]From rating curve extended above 2,500 ft³/s.
[b]Previous datum.
[c]Gage height, 0.60 ft, result of freezeup.