

Water-Data Report 2006

**06061500 Prickly Pear Creek near Clancy, MT**

Upper Missouri Basin  
Upper Missouri Subbasin

LOCATION.--Lat 46°31'09", long 111°56'45" referenced to North American Datum of 1927, Jefferson County, MT, Hydrologic Unit 10030101, on right bank 3.5 mi downstream from Lump Gulch Creek, 4 mi northeast of Clancy, 7 mi southeast of Helena, and at river mile 24.4.

DRAINAGE AREA.--192 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--July 1908 to September 1916, July 1921 to September 1933, October 1945 to October 1953, October 1954 to September 1969, October 1978 to September 2002, October 2005 to September 2006. Record for October 1969 to September 1980 was collected by the Montana Department of Natural Resources and Conservation. Monthly discharge only for some periods, published in Water Supply Paper (WSP) 1309.

REVISED RECORDS.--WSP 1806: 1946, minimum discharge. WSP 1309: 1925; 1927; 1931, maximum discharge (M); 1933; 1948 (M). WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 4,067.1 ft, referenced to the National Geodetic Vertical Datum of 1929. Prior to July 12, 1910, nonrecording gage at site 1.2 mi upstream at different datum. July 12, 1910 to Sept. 30, 1916, and July 28, 1921 to Aug. 12, 1933, nonrecording gage at site 2.2 mi upstream at different datum.

REMARKS.--Records are good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 700 acres occur upstream from station. U.S. Geological Survey satellite telemeter is located at the station. Several unpublished observations of specific conductance and water temperature were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Flood of June 19, 1975 reached a discharge of 1,200 ft<sup>3</sup>/s, gage height, 6.56 ft.

## 06061500 Prickly Pear Creek near Clancy, MT—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	15	18	e13	20	16	24	27	80	73	44	16	13
2	17	19	e13	19	16	e17	29	70	69	40	15	13
3	19	21	e13	19	15	e16	26	61	68	39	15	13
4	23	20	e14	18	16	16	30	55	66	38	15	12
5	22	19	e14	16	15	e16	41	53	63	36	15	12
6	21	19	e12	e17	e14	16	99	54	57	38	15	12
7	21	19	e10	18	e15	16	79	58	56	35	14	12
8	21	19	e12	18	16	15	65	56	79	32	15	11
9	21	17	e14	e15	16	15	63	51	120	30	16	11
10	20	19	e15	18	e13	e14	56	48	254	32	16	11
11	19	20	e16	19	e14	e14	48	48	216	32	15	11
12	19	21	e16	18	e16	14	45	51	162	32	14	11
13	18	18	e16	17	e18	e12	52	54	137	36	15	11
14	19	19	e16	18	e17	e13	54	57	124	30	15	11
15	19	17	e16	18	e15	13	62	64	121	27	14	14
16	19	19	e14	e14	e13	e12	69	75	103	25	15	23
17	18	20	e14	17	e12	13	63	84	94	23	19	22
18	18	19	e12	17	e13	14	48	92	86	23	19	20
19	18	19	e11	16	e14	14	45	101	83	21	17	19
20	18	18	e12	15	e15	13	44	109	82	21	15	20
21	18	19	e15	e15	e16	14	46	105	72	20	14	19
22	18	19	e17	e14	e14	14	58	97	66	19	13	22
23	18	18	e19	16	e16	15	70	91	62	18	13	24
24	18	18	e20	16	e15	17	57	80	58	18	13	22
25	17	18	e21	e15	e15	20	52	74	54	18	13	e21
26	17	21	22	e14	e17	28	58	73	51	17	14	e20
27	17	19	22	e15	e20	21	62	98	48	17	14	e20
28	19	17	21	e15	23	20	61	99	47	16	13	e19
29	19	16	26	e15	---	23	67	100	45	15	12	18
30	19	15	21	16	---	25	81	89	51	15	12	17
31	18	---	21	16	---	26	---	79	---	15	13	---
<b>Total</b>	583	560	498	514	435	520	1,657	2,306	2,667	822	454	484
<b>Mean</b>	18.8	18.7	16.1	16.6	15.5	16.8	55.2	74.4	88.9	26.5	14.6	16.1
<b>Max</b>	23	21	26	20	23	28	99	109	254	44	19	24
<b>Min</b>	15	15	10	14	12	12	26	48	45	15	12	11
<b>Ac-ft</b>	1,160	1,110	988	1,020	863	1,030	3,290	4,570	5,290	1,630	901	960

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2006, BY WATER YEAR (WY)\***

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	30.6	28.4	23.4	20.9	23.4	30.7	52.0	108	129	56.5	29.9	28.7
<b>Max</b>	70.0	60.0	43.8	36.7	57.2	80.0	131	453	450	141	88.8	71.4
<b>(WY)</b>	(1909)	(1910)	(1981)	(1983)	(1963)	(1910)	(1930)	(1981)	(1927)	(1915)	(1993)	(1915)
<b>Min</b>	11.4	11.7	10.1	9.94	8.55	12.1	22.9	21.4	20.2	9.89	4.69	7.33
<b>(WY)</b>	(2002)	(2002)	(2002)	(1957)	(1989)	(2002)	(1931)	(2000)	(2000)	(2000)	(2000)	(2000)

\* During periods of operation (July 1908 to September 1916, July 1921 to September 1933, October 1945 to October 1953, October 1954 to September 1969, October 1978 to September 2002, October 2005 to September 2006).

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SUMMARY STATISTICS

	Water Year 2006		Water Years 1908 – 2006*	
<b>Annual total</b>	11,500			
<b>Annual mean</b>	31.5		46.8	
<b>Highest annual mean</b>			117	1981
<b>Lowest annual mean</b>			15.2	2000
<b>Highest daily mean</b>	254	Jun 10	1,930	May 22, 1981
<b>Lowest daily mean</b>	10	Dec 7	4.1	Aug 12, 1931
<b>Annual seven-day minimum</b>	11	Sep 8	4.3	Aug 24, 2000
<b>Maximum peak flow</b>	374	Jun 10	<sup>a</sup> 2,300	May 22, 1981
<b>Maximum peak stage</b>	3.27	Jun 10	8.82	May 22, 1981
<b>Instantaneous low flow</b>			<sup>b</sup> 0.50	Jan 26, 1958
<b>Annual runoff (ac-ft)</b>	22,810		33,890	
<b>10 percent exceeds</b>	70		100	
<b>50 percent exceeds</b>	19		30	
<b>90 percent exceeds</b>	13		15	

\* During periods of operation (July 1908 to September 1916, July 1921 to September 1933, October 1945 to October 1953, October 1954 to September 1969, October 1978 to September 2002, October 2005 to September 2006).

<sup>a</sup> From culvert computation of peak flow.

<sup>b</sup> Gage height, 0.40 ft, result of ice jam upstream.

