

Water-Data Report 2012

06061500 PRICKLY PEAR CREEK NEAR CLANCY, MT

Upper Missouri Basin
Upper Missouri Subbasin

LOCATION.--Lat 46°31'09", long 111°56'49" referenced to North American Datum of 1983, 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 mi².

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 current year. Seasonal records, Water Years 2011 and 2012. 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. 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 Several unpublished observations of specific conductance and water temperature were made during the year.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	41						84	80	85	31	16	12
2	41						62	74	89	46	16	13
3	41						52	72	95	35	16	13
4	40						52	71	83	30	16	12
5	49						52	74	81	31	15	12
6	49						49	67	98	31	14	12
7	55						46	64	83	32	15	13
8	55						46	62	75	33	15	13
9	52						49	64	78	28	15	12
10	49						49	70	72	27	16	12
11	48						53	65	70	26	17	11
12	48						71	62	65	26	15	12
13	47						67	60	76	25	14	12
14	46						58	61	70	26	13	12
15	48						54	61	61	41	14	12
16	49						52	64	57	39	18	12
17	51						52	68	54	54	16	12
18	48						49	70	51	36	15	12
19	47						49	66	49	29	14	12
20	46						47	62	48	26	14	11
21	46						57	62	44	25	14	11
22	46						63	77	40	23	15	12
23	45						71	74	41	22	15	12
24	46						88	65	37	20	14	12
25	47						100	64	34	19	14	12
26	46						106	66	34	19	13	12
27	46						116	77	32	20	13	13
28	45						97	83	31	23	13	13
29	46						87	92	30	21	12	13
30	46						81	96	30	19	12	13
31	45						---	81	---	17	12	---
Total	1,454						1,959	2,174	1,793	880	451	365
Mean	46.9						65.3	70.1	59.8	28.4	14.5	12.2
Max	55						116	96	98	54	18	13
Min	40						46	60	30	17	12	11
Ac-ft	2,880						3,890	4,310	3,560	1,750	895	724

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1908 - 2012, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	30.7	28.2	23.1	20.7	23.1	30.4	51.4	108	132	57.0	30.2	28.6
Max	70.0	60.0	43.8	36.7	57.2	80.0	131	453	450	141	88.8	71.4
(WY)	(1909)	(1910)	(1981)	(1983)	(1963)	(1910)	(1930)	(1981)	(1927)	(1915)	(1993)	(1915)
Min	11.4	11.7	10.1	9.94	8.55	12.1	22.9	21.4	20.2	9.89	4.69	7.33
(WY)	(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 current year). Seasonal record, 2011 and 2012

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1908 – 2012*	
Annual mean					46.5	
Highest annual mean					117	1981
Lowest annual mean					15.2	2000
Highest daily mean	785	Jun 8	116	Apr 27	1,930	May 22, 1981
Lowest daily mean	39	Apr 8	11	Sep 11	4.1	Aug 12, 1931
Annual seven-day minimum					4.3	Aug 24, 2000
Maximum peak flow					123	Apr 27
Maximum peak stage					1.82	Apr 27
Instantaneous low flow					^b 0.50	Jan 26, 1958
Annual runoff (ac-ft)					33,680	
10 percent exceeds					99	
50 percent exceeds					29	
90 percent exceeds					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 current year). Seasonal record, 2011 and 2012.

^aFrom culvert computation of peak flow.

^bGage height, 0.40 ft, result of ice jam upstream.

