

Water-Data Report 2012

06177000 MISSOURI RIVER NEAR WOLF POINT, MT

Missouri-Poplar Basin
Prarie Elk-Wolf Subbasin

LOCATION.--Lat 48°04'02", long 105°31'59" referenced to North American Datum of 1983, in SW ¼ NW ¼ sec.28, T.27 N., R.48 E., McCone County, MT, Hydrologic Unit 10060001, on right bank 500 ft downstream from bridge on State Highway 13, 5 mi southeast of Wolf Point, 7.8 mi downstream from Wolf Creek, and at river mile 1,701.4.

DRAINAGE AREA.--82,290 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1928 to current year.

REVISED RECORDS.--Water Supply Paper (WSP) 1146: 1931. WSP 1729: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 1,958.57 ft, referenced to the National Geodetic Vertical Datum of 1929. Prior to Apr. 13, 1930, nonrecording gages at Wolf Point ferry landing 5.5 mi upstream at different elevation.

REMARKS.--Records are good except for estimated daily discharges, which are poor. Flow is partly regulated by Fort Peck Lake and many other reservoirs upstream from station. Diversion for irrigation of about 1,010,400 acres occurs upstream from station. U.S. Army Corps of Engineers satellite telemeter is located at the station. Several unpublished observations of water temperature and specific conductance were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 14, 1908, reached a stage of about 20 ft (site and elevation then in use).

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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	11,300	9,650	10,600	10,900	e12,100	e9,150	7,170	7,880	11,900	11,600	11,300	10,200
2	10,100	9,380	10,600	11,100	e12,200	e8,670	7,460	7,840	12,400	11,700	11,300	10,200
3	9,910	9,450	10,400	11,300	e12,100	e8,530	7,300	8,530	12,100	11,500	11,200	10,200
4	9,680	10,300	11,000	11,200	e12,200	e7,500	7,090	9,320	11,700	11,400	11,300	10,200
5	9,670	10,700	11,600	11,100	e12,100	e7,600	7,350	9,140	10,900	11,700	11,100	11,000
6	9,650	10,800	11,600	11,800	e12,300	e7,800	7,260	9,050	10,400	11,400	11,200	11,300
7	10,000	10,600	11,500	12,200	e12,200	e8,000	7,200	9,020	10,100	11,300	11,300	12,100
8	10,300	10,600	11,400	12,200	e12,100	7,590	7,170	9,610	9,930	11,200	11,500	13,900
9	10,000	10,700	11,500	12,000	e12,200	7,550	7,310	9,550	10,700	10,900	11,200	14,700
10	10,100	10,600	11,300	12,200	e12,100	7,660	7,100	9,700	11,200	10,800	11,100	9,880
11	10,100	10,700	11,400	12,100	e12,000	7,930	6,900	9,750	10,500	10,800	11,300	10,600
12	9,770	10,600	11,400	12,200	e12,100	8,310	6,900	9,850	10,600	10,900	11,200	10,300
13	9,050	10,700	11,500	e12,000	e12,300	8,480	7,200	10,000	11,000	10,900	11,100	10,300
14	9,060	10,700	11,400	e12,000	e11,100	8,510	7,150	9,900	11,100	10,700	11,200	10,300
15	9,640	10,700	11,300	e12,000	e11,300	8,350	6,910	10,100	10,900	10,900	11,100	10,200
16	9,950	10,500	11,300	e12,000	e11,100	8,160	6,800	10,100	10,700	11,100	11,100	10,200
17	9,970	10,600	11,200	e12,000	e11,300	8,000	6,870	10,300	10,400	10,900	11,200	10,400
18	9,810	10,600	11,100	e12,200	e11,200	7,930	6,780	9,440	10,400	11,200	11,200	10,200
19	9,760	10,500	11,200	e12,200	e10,200	7,700	7,080	9,400	11,300	11,200	11,200	10,300
20	9,730	10,500	11,200	e12,100	e10,200	7,540	7,060	9,510	11,800	10,800	11,200	10,100
21	9,740	10,700	11,100	e12,000	e10,200	7,650	7,260	9,460	11,700	11,000	11,300	10,300
22	9,620	10,500	11,200	e12,100	e10,200	7,460	7,430	9,350	11,600	11,200	11,200	10,200
23	9,720	10,300	11,300	e12,100	e10,200	7,490	7,540	9,260	11,700	10,900	11,300	10,100
24	9,520	10,700	11,100	e12,100	e9,410	7,570	7,460	9,570	11,600	11,200	11,200	10,400
25	9,710	10,500	11,100	e12,100	e9,460	7,230	7,570	9,120	11,700	11,200	10,500	10,400
26	9,420	10,600	11,100	e12,200	e9,440	7,150	7,400	8,900	12,300	11,200	10,200	10,300
27	9,600	10,600	11,100	e12,300	e9,370	7,000	7,790	9,380	12,900	11,200	10,100	10,500
28	9,720	10,400	11,000	e12,000	e9,180	6,910	8,260	9,620	13,100	11,300	10,300	10,300
29	9,580	10,500	11,000	e12,000	e9,280	7,260	8,090	9,420	13,000	11,400	10,400	10,200
30	9,710	10,500	11,100	e12,000	---	7,270	7,810	9,450	12,400	11,400	10,400	10,300
31	9,600	---	11,100	e12,200	---	7,160	---	10,300	---	11,100	10,000	---
Total	303,490	314,180	346,700	369,900	321,140	241,110	218,670	291,820	342,030	346,000	341,200	319,580
Mean	9,790	10,470	11,180	11,930	11,070	7,778	7,289	9,414	11,400	11,160	11,010	10,650
Max	11,300	10,800	11,600	12,300	12,300	9,150	8,260	10,300	13,100	11,700	11,500	14,700
Min	9,050	9,380	10,400	10,900	9,180	6,910	6,780	7,840	9,930	10,700	10,000	9,880
Ac-ft	602,000	623,200	687,700	733,700	637,000	478,200	433,700	578,800	678,400	686,300	676,800	633,900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2012, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	10,650	8,717	8,804	9,488	9,661	8,616	9,295	9,323	10,150	10,460	11,720	11,370
Max	29,130	22,210	13,420	14,270	15,820	16,750	27,180	23,680	70,500	44,850	27,670	27,150
(WY)	(1956)	(1998)	(1944)	(1971)	(1976)	(1976)	(1952)	(2011)	(2011)	(2011)	(2011)	(1955)
Min	3,151	2,328	1,338	995	1,195	2,301	1,470	1,182	1,268	1,171	3,515	3,274
(WY)	(1993)	(1947)	(1943)	(1943)	(1943)	(1945)	(1945)	(1945)	(1945)	(1945)	(1963)	(1992)

*After Fort Peck Lake reached operational level (1943 to current year).

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1943 – 2012*	
Annual total	8,292,170		3,755,820			
Annual mean	22,720		10,260		9,855	
Highest annual mean					21,940	2011
Lowest annual mean					5,548	2005
Highest daily mean	90,600	Jun 14	14,700	Sep 9	90,600	Jun 14, 2011
Lowest daily mean	8,080	Jan 1	6,780	Apr 18	680	Dec 5, 1942
Annual seven-day minimum	8,110	Jan 1	6,940	Apr 12	906	Jan 12, 1943
Maximum peak flow			17,500	Sep 9	^b 93,200 Jun 14, 2011	
Maximum peak stage			^a 14.77 Sep 9		^c 15.64 Mar 27, 1960	
Instantaneous low flow					^d 320 Dec 10, 1941	
Annual runoff (ac-ft)	16,450,000		7,450,000		7,140,000	
10 percent exceeds	48,100		12,100		15,400	
50 percent exceeds	12,800		10,500		8,540	
90 percent exceeds	9,370		7,550		4,530	
Water Years 1929 – 1939**						
Annual mean					7,183	
Highest annual mean					10,300	1939
Lowest annual mean					4,891	1937
Highest daily mean					56,700	May 25, 1939
Lowest daily mean					840	Nov 29, 1937
Annual seven-day minimum					910	Feb 10, 1938
Maximum peak flow					^e 66,800 Mar 25, 1939	
Maximum peak stage					^b 14.40 Mar 25, 1939	
Annual runoff (ac-ft)					5,204,000	
10 percent exceeds					14,800	
50 percent exceeds					5,060	
90 percent exceeds					2,600	

*After Fort Peck Lake reached operational level (1943 to current year).

**Prior to Fort Peck Lake reaching operational level (1929-1939).

^aWith a 10.00 ft gage height datum correction added effective Mar. 8, 2012.

^bGage height 14.77 ft.

^cBackwater from ice.

^dOccurred outside period of record, during filling of Fort Peck Lake.

^eFrom rating curve extended above 39,000 ft³/s.

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