

Water-Data Report 2013

## 06132000 MISSOURI RIVER BELOW FORT PECK DAM, MT

Missouri-Poplar Basin  
Prairie Elk-Wolf Subbasin

LOCATION.--Lat 48°02'40", long 106°21'23" referenced to North American Datum of 1983, in NW ¼ sec.6, T.26 N., R.42 E., McCone County, MT, Hydrologic Unit 10060001, on right bank 2 mi upstream from Milk River, 6 mi south of Nashua, 8 mi downstream from Fort Peck Dam, and at river mile 1,763.5.

DRAINAGE AREA.--57,556 mi<sup>2</sup>.

### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--March 1934 to current year.

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

GAGE.--Water-stage recorder. Elevation of gage is 2,018 ft, referenced to the National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers bench mark). Prior to Apr. 14, 1938, at site 0.7 mi upstream at different elevation; Apr. 14, 1938, to Sept. 30, 1963, at present site at elevation 2.00 ft higher, all water-stage recorders. Since Oct. 1, 1969, published discharge is determined by flow meters and spillway discharge at Fort Peck Dam.

COOPERATION.--Beginning Oct. 1, 1969, records have been furnished by the U.S. Army Corps of Engineers; 2 to 4 discharge measurements are made each year and the records are reviewed by the U.S. Geological Survey. Records for March 1934 to September 1969 collected and computed by the U.S. Geological Survey.

REMARKS.--Flow is completely regulated by Fort Peck Dam. Diversions for irrigation of about 880,400 acres occur upstream from station. Operational level in Fort Peck Lake was reached beginning 1944 water year. Several unpublished observations of water temperature and specific conductance were made during the year.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 65,900 ft<sup>3</sup>/s, June 15, 2011, furnished by U.S. Army Corps of Engineers; maximum gage height, 15.53 ft, June 13, 2011, at U.S.G.S. gaging station; maximum daily reverse flow, 400 ft<sup>3</sup>/s, Mar. 29, 1943, backwater from Milk River.

## 06132000 MISSOURI RIVER BELOW FORT PECK DAM, MT—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	10,100	9,700	10,400	11,400	12,400	12,500	5,900	5,700	9,000	8,100	7,800	7,900
2	10,200	9,400	10,600	11,200	12,400	10,000	6,000	8,200	8,900	8,300	7,800	7,700
3	10,100	9,500	10,600	11,200	12,700	10,000	7,400	8,000	9,000	8,300	7,700	7,700
4	10,300	9,610	11,100	11,300	12,400	7,800	6,800	8,000	8,300	8,400	7,800	7,600
5	10,100	10,400	11,000	12,200	12,400	8,000	5,900	7,900	8,200	8,100	7,800	7,700
6	10,200	10,500	11,200	12,800	12,400	6,100	6,000	7,700	8,400	8,300	7,800	7,600
7	10,100	10,500	11,000	12,600	12,500	6,000	5,500	8,200	8,400	8,000	7,900	7,800
8	10,100	10,400	11,000	12,200	12,500	6,100	5,700	7,800	9,600	8,100	7,900	7,700
9	10,100	10,400	11,000	12,500	12,500	6,000	6,100	8,000	9,000	8,300	8,000	7,400
10	10,000	10,300	11,000	12,500	12,500	6,300	6,000	8,200	9,400	8,500	7,900	7,600
11	9,900	10,300	11,100	12,500	12,600	6,100	6,000	8,100	9,000	8,100	7,900	7,700
12	9,700	10,300	10,900	12,600	12,500	6,100	6,100	8,000	9,900	8,400	7,900	7,400
13	9,800	10,400	11,200	12,400	12,500	6,000	6,100	7,900	10,000	7,900	7,900	7,550
14	9,800	10,300	11,000	12,400	12,400	6,000	6,100	8,200	9,900	8,200	7,800	7,700
15	9,800	10,400	11,200	12,000	12,500	6,100	6,100	8,200	9,900	8,300	7,900	7,300
16	10,000	10,400	11,100	12,400	12,600	6,100	6,000	8,300	9,600	8,100	7,900	5,900
17	9,800	10,500	11,100	12,400	12,500	6,100	6,000	8,500	9,700	8,000	7,900	4,700
18	9,900	10,400	11,000	12,400	12,600	6,000	6,000	8,400	11,200	7,700	7,800	4,900
19	9,800	10,500	11,200	12,400	12,600	6,100	5,900	8,500	11,100	8,000	8,100	4,700
20	9,900	10,800	11,100	12,400	12,500	6,000	5,800	8,200	11,000	8,000	7,900	4,700
21	9,900	10,600	11,000	12,400	12,400	6,100	5,700	8,200	11,000	7,800	7,900	4,900
22	10,000	10,600	10,900	12,300	12,500	6,100	5,600	8,100	11,100	8,200	8,400	5,000
23	10,000	10,600	11,000	12,500	12,400	6,000	5,700	8,300	11,000	8,200	8,300	4,700
24	10,000	10,600	11,100	12,200	12,500	5,900	5,900	8,000	11,100	7,800	7,700	4,700
25	10,100	10,600	11,700	12,300	12,400	6,100	5,900	8,000	11,100	7,800	8,000	4,900
26	10,400	10,700	11,200	12,300	12,500	6,000	5,800	8,200	11,000	7,900	7,900	4,900
27	10,500	10,600	11,300	12,500	12,500	6,100	5,900	8,000	11,200	7,700	8,700	5,100
28	10,400	10,400	11,200	12,300	12,500	5,900	5,900	8,100	10,900	7,700	8,700	5,400
29	10,300	10,500	11,200	12,600	---	6,100	5,900	7,800	10,900	7,700	8,300	5,400
30	10,400	10,600	11,200	12,600	---	6,000	5,900	8,000	10,800	7,900	8,400	6,200
31	10,600	---	11,200	12,600	---	6,000	---	8,100	---	7,700	8,100	---
<b>Total</b>	312,300	310,810	342,800	380,400	349,700	205,700	179,600	248,800	299,600	249,500	247,800	190,450
<b>Mean</b>	10,070	10,360	11,060	12,270	12,490	6,635	5,987	8,026	9,987	8,048	7,994	6,348
<b>Max</b>	10,600	10,800	11,700	12,800	12,700	12,500	7,400	8,500	11,200	8,500	8,700	7,900
<b>Min</b>	9,700	9,400	10,400	11,200	12,400	5,900	5,500	5,700	8,200	7,700	7,700	4,700
<b>Ac-ft</b>	619,400	616,500	679,900	754,500	693,600	408,000	356,200	493,500	594,300	494,900	491,500	377,800

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2013, BY WATER YEAR (WY)\***

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	10,420	8,619	8,963	9,594	9,526	7,159	7,027	8,428	9,137	10,090	11,520	11,010
<b>Max</b>	28,800	21,150	13,330	14,010	15,240	13,390	17,230	18,830	52,670	41,510	26,640	27,120
<b>(WY)</b>	(1956)	(1998)	(1944)	(1971)	(1979)	(1982)	(1979)	(1979)	(2011)	(2011)	(2011)	(1948)
<b>Min</b>	3,016	2,085	1,490	1,390	1,180	1,050	856	950	832	1,163	3,449	2,997
<b>(WY)</b>	(1994)	(1947)	(1946)	(1946)	(1945)	(1944)	(1945)	(1944)	(1944)	(1945)	(1963)	(1992)

\*Period of record after operational level in Fort Peck Lake was reached.

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SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1944 – 2013*	
<b>Annual total</b>	3,641,560		3,317,460			
<b>Annual mean</b>	9,950		9,089		9,293	
<b>Highest annual mean</b>					17,670	2011
<b>Lowest annual mean</b>					5,004	2010
<b>Highest daily mean</b>	15,500	Sep 8	12,800	Jan 6	65,900	Jun 15, 2011
<b>Lowest daily mean</b>	6,300	Mar 4	4,700	Sep 17	16	Apr 6, 1978
<b>Annual seven-day minimum</b>	6,490	Apr 10	4,800	Sep 17	161	Mar 26, 1944
<b>Annual runoff (ac-ft)</b>	7,223,000		6,580,000		6,732,000	
<b>10 percent exceeds</b>	11,900		12,400		14,600	
<b>50 percent exceeds</b>	10,300		8,500		8,000	
<b>90 percent exceeds</b>	6,700		6,000		4,200	

\*Period of record after operational level in Fort Peck Lake was reached.

