

Water-Data Report 2007

**06132000 MISSOURI RIVER BELOW FORT PECK DAM, MT**

Missouri-Poplar Basin  
Prarie Elk-Wolf Subbasin

LOCATION.--Lat 48°02'39", long 106°21'21" referenced to North American Datum of 1927, 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.--Records since Oct. 1, 1969, are furnished by 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 Several unpublished observations of water temperature and specific conductance were made during the year.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 discharge, 51,000 ft<sup>3</sup>/s including 32,000 ft<sup>3</sup>/s inflow from spillway 1 mi downstream from station, Aug. 8, 1946; maximum gage height observed, 12.30 ft, Mar. 10, 1936 (ice jam), site and elevation then in use; 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 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	5,500	5,800	9,200	10,200	10,700	8,400	5,900	5,600	6,700	5,700	7,200	6,900
2	5,800	5,900	8,600	9,700	10,600	8,700	6,100	5,800	7,200	6,000	6,900	7,000
3	5,800	5,900	8,500	9,700	10,600	8,000	4,800	6,500	7,100	6,100	6,900	7,000
4	6,400	5,700	8,800	9,400	11,100	7,400	5,100	6,800	7,300	5,900	6,900	7,000
5	5,700	5,800	8,800	10,300	11,000	5,800	5,200	6,600	6,900	5,800	6,900	7,000
6	5,500	6,000	9,300	10,200	10,400	5,500	4,200	6,800	6,800	6,700	7,300	7,000
7	5,600	5,900	9,000	10,500	10,800	5,700	4,000	6,600	7,000	6,700	6,900	6,900
8	5,600	6,700	9,300	10,100	11,300	5,800	4,100	7,000	5,800	6,800	7,100	6,700
9	5,900	7,200	8,900	9,400	10,900	6,000	4,100	6,600	5,800	6,800	6,900	6,900
10	5,800	7,340	9,200	9,500	10,300	6,100	4,200	6,200	5,800	6,800	7,000	6,900
11	5,800	6,940	9,200	10,400	10,500	5,770	4,000	6,900	6,100	6,900	6,900	5,700
12	5,700	7,030	9,600	9,100	10,300	6,000	4,000	8,200	5,900	6,900	6,800	5,100
13	5,900	7,020	10,300	9,700	11,700	7,300	4,100	7,300	4,900	6,500	6,900	4,000
14	6,100	7,000	9,700	10,100	11,800	6,100	3,900	7,000	5,600	6,900	7,000	4,100
15	5,800	7,000	10,200	9,800	11,600	5,900	4,100	7,600	5,800	6,700	7,100	4,000
16	5,500	7,400	10,200	9,500	11,600	5,800	4,000	6,900	5,800	6,900	7,000	4,000
17	5,500	7,500	10,400	9,300	11,200	6,100	4,100	6,600	5,900	7,500	7,100	4,000
18	5,600	7,700	9,800	9,400	11,200	6,100	3,900	6,300	5,800	7,000	7,000	4,000
19	6,000	7,800	8,700	9,600	10,700	6,200	3,900	6,500	5,800	7,100	7,000	4,000
20	6,100	8,300	8,500	10,000	11,400	6,200	4,000	6,500	5,800	6,800	6,900	3,800
21	5,600	8,100	8,900	9,800	11,400	6,300	4,000	6,900	5,800	6,900	6,900	4,100
22	5,500	7,800	9,900	10,700	11,700	6,100	4,000	7,000	5,800	6,800	7,100	3,900
23	6,300	7,900	10,100	10,800	11,300	5,800	4,100	6,700	5,800	7,000	6,900	4,000
24	5,800	7,600	10,000	10,700	8,800	5,800	4,000	7,200	5,700	6,900	6,800	4,100
25	5,600	7,600	9,500	11,000	9,000	5,800	3,900	6,600	5,700	6,800	6,900	3,900
26	5,900	7,800	9,900	10,800	9,000	5,900	3,900	7,100	6,000	6,900	7,100	4,000
27	6,000	7,700	10,200	10,500	8,800	5,900	4,100	6,900	5,900	7,100	7,100	4,000
28	5,300	8,300	10,100	10,700	8,600	5,900	3,900	7,200	6,200	7,000	7,000	4,000
29	5,200	7,800	9,800	10,800	---	6,200	4,000	6,700	6,200	6,900	6,800	4,100
30	5,200	8,600	10,200	10,700	---	5,700	4,900	7,000	5,800	6,900	6,900	4,000
31	5,200	---	9,600	10,600	---	6,100	---	6,800	---	7,000	7,000	---
<b>Total</b>	177,200	215,130	294,400	313,000	298,300	194,370	128,500	210,400	182,700	208,700	216,200	152,100
<b>Mean</b>	5,716	7,171	9,497	10,100	10,650	6,270	4,283	6,787	6,090	6,732	6,974	5,070
<b>Max</b>	6,400	8,600	10,400	11,000	11,800	8,700	6,100	8,200	7,300	7,500	7,300	7,000
<b>Min</b>	5,200	5,700	8,500	9,100	8,600	5,500	3,900	5,600	4,900	5,700	6,800	3,800
<b>Ac-ft</b>	351,500	426,700	583,900	620,800	591,700	385,500	254,900	417,300	362,400	414,000	428,800	301,700

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2007, BY WATER YEAR (WY) \***

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	10,820	8,821	9,097	9,727	9,659	7,293	7,143	8,416	8,569	9,782	11,580	11,150
<b>Max</b>	28,800	21,150	13,330	14,010	15,240	13,390	17,230	18,830	26,190	35,030	26,180	27,120
<b>(WY)</b>	(1956)	(1998)	(1944)	(1971)	(1979)	(1982)	(1979)	(1979)	(1975)	(1975)	(1955)	(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 2006		Water Year 2007		Water Years 1944 - 2007*	
<b>Annual total</b>	2,659,550		2,591,000			
<b>Annual mean</b>	7,286		7,099		9,339	
<b>Highest annual mean</b>					14,950	1975
<b>Lowest annual mean</b>					5,313	1963
<b>Highest daily mean</b>	10,400	Dec 17	11,800	Feb 14	35,400	Jul 7, 1975
<b>Lowest daily mean</b>	4,500	Jun 15	3,800	Sep 20	16	Apr 6, 1978
<b>Annual seven-day minimum</b>	5,120	Apr 1	3,970	Sep 16	161	Mar 26, 1944
<b>Instantaneous low flow</b>					161	Mar 26, 1944
<b>Annual runoff (ac-ft)</b>	5,275,000		5,139,000		6,766,000	
<b>10 percent exceeds</b>	8,600		10,300		14,600	
<b>50 percent exceeds</b>	7,800		6,900		8,180	
<b>90 percent exceeds</b>	5,500		4,100		4,130	

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