06036650 JEFFERSON RIVER NEAR THREE FORKS, MT

Missouri Headwaters Basin
Jefferson Subbasin

LOCATION.--Lat 45°53′52″, long 111°35′45″ referenced to North American Datum of 1927, in SW ¼ SW ¼ NW ¼ sec.27, T.2 N., R.1 E., Broadwater County, MT, Hydrologic Unit 10020005, on left bank 50 ft downstream from bridge on U.S. Highway 10, 2.5 mi northwest of Three Forks, and at river mile 2,329.3.

DRAINAGE AREA.--9,532 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,076.76 ft, referenced to the National Geodetic Vertical Datum of 1929.

REMARKS.--Records are good except those for estimated daily discharges, which are poor. Some regulation occurs by Ruby River Reservoir (station number 06020500) and Clark Canyon Reservoir (station number 06015300). Diversions for irrigation of about 390,000 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 Several unpublished observations of water temperature and conductance were made during the year.

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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	817	1,190	1,020	e1,500	1,000	e1,100	1,170	3,200	4,100	1,250	186	208
2	874	1,190	917	e1,400	993	1,120	1,200	3,670	3,460	1,460	170	213
3	948	1,240	900	e1,400	969	1,120	1,230	3,910	3,050	1,500	173	216
4	1,070	1,310	901	e1,400	999	1,040	1,230	3,740	3,010	1,450	174	231
5	1,140	1,300	e900	e1,300	992	1,020	1,320	3,420	3,440	1,360	165	229
6	1,150	1,300	e850	e1,300	970	1,010	1,780	3,150	3,550	1,350	160	214
7	1,150	1,300	e500	e1,200	957	1,030	2,490	2,970	3,500	1,240	163	210
8	1,180	1,330	e600	e1,100	994	1,030	2,600	2,990	3,620	1,180	169	214
9	1,240	1,340	e750	e1,100	996	1,020	2,700	3,000	4,720	1,130	168	214
10	1,300	1,330	e850	e1,200	e900	978	2,910	2,880	6,540	1,050	165	222
11	1,300	1,280	e900	e1,300	e900	976	3,120	2,630	7,810	977	157	243
12	1,320	1,220	e900	e1,200	930	943	3,210	2,410	8,370	926	166	242
13	1,300	1,240	e900	e1,200	974	940	3,380	2,280	7,790	948	165	244
14	1,290	1,320	e900	1,320	1,010	966	3,440	2,370	6,290	936	157	241
15	1,300	1,270	e850	1,130	e900	952	3,940	2,580	5,530	854	156	262
16	1,280	1,300	e850	e1,000	e650	956	4,630	2,810	4,930	776	167	344
17	1,250	1,240	e800	e1,000	e600	937	5,140	3,300	4,360	699	177	444
18	1,230	1,250	e700	e1,050	e550	953	4,730	3,990	3,820	607	196	496
19	1,220	1,310	e600	e1,000	e500	969	3,750	4,730	3,360	520	207	511
20	1,180	1,300	e700	e950	e600	936	2,950	5,770	2,990	445	198	539
21	1,160	1,260	e800	e1,000	e700	934	2,600	6,600	2,660	405	190	564
22	1,180	1,230	e1,000	e900	e800	948	2,630	7,100	2,330	374	180	610
23	1,190	1,210	e1,300	e950	e850	958	2,980	7,140	1,970	344	177	669
24	1,190	1,170	e1,700	e1,100	e850	947	3,510	6,770	1,720	339	177	718
25	1,180	1,160	e1,600	e1,050	e800	954	3,340	6,260	1,470	323	176	729
26	1,180	1,170	e1,600	1,040	e800	1,020	3,020	5,720	1,350	301	199	745
27	1,170	1,190	e1,500	1,020	e900	1,070	2,740	5,680	1,220	262	197	758
28	1,150	1,140	e1,500	1,040	e1,000	1,060	2,640	5,730	1,140	239	201	748
29	1,160	1,070	e1,500	1,050	---	1,040	2,620	5,550	1,120	228	200	770
30	1,190	1,030	e1,400	1,060	---	1,110	2,800	5,420	1,160	206	198	752
31	1,200	---	e1,500	1,060	---	1,140	---	4,880	---	197	206	---
Total	36,489	37,190	31,688	35,320	24,084	31,177	85,800	132,650	110,380	23,876	5,540	12,800
Mean	1,177	1,240	1,022	1,139	860	1,006	2,860	4,279	3,679	770	179	427
Max	1,320	1,340	1,700	1,500	1,010	1,140	5,140	7,140	8,370	1,500	207	770
Min	817	1,030	500	900	500	934	1,170	2,280	1,120	197	156	208
Ac-ft	72,380	73,770	62,850	70,060	47,770	61,840	170,200	263,100	218,900	47,360	10,990	25,390

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,516	1,578	1,301	1,180	1,245	1,482	2,310	3,650	4,885	1,916	823	1,061
Max	3,163	2,805	1,993	1,929	1,964	2,295	4,444	7,679	11,420	5,505	3,030	3,303
(WY)	(1985)	(1984)	(1999)	(1983)	(1984)	(1996)	(1996)	(1997)	(1997)	(1995)	(1984)	(1984)
Min	698	1,039	805	553	728	824	954	990	988	352	59.1	262
(WY)	(2004)	(1989)	(1993)	(2004)	(2004)	(2002)	(2005)	(1992)	(1992)	(1988)	(1988)	(1994)

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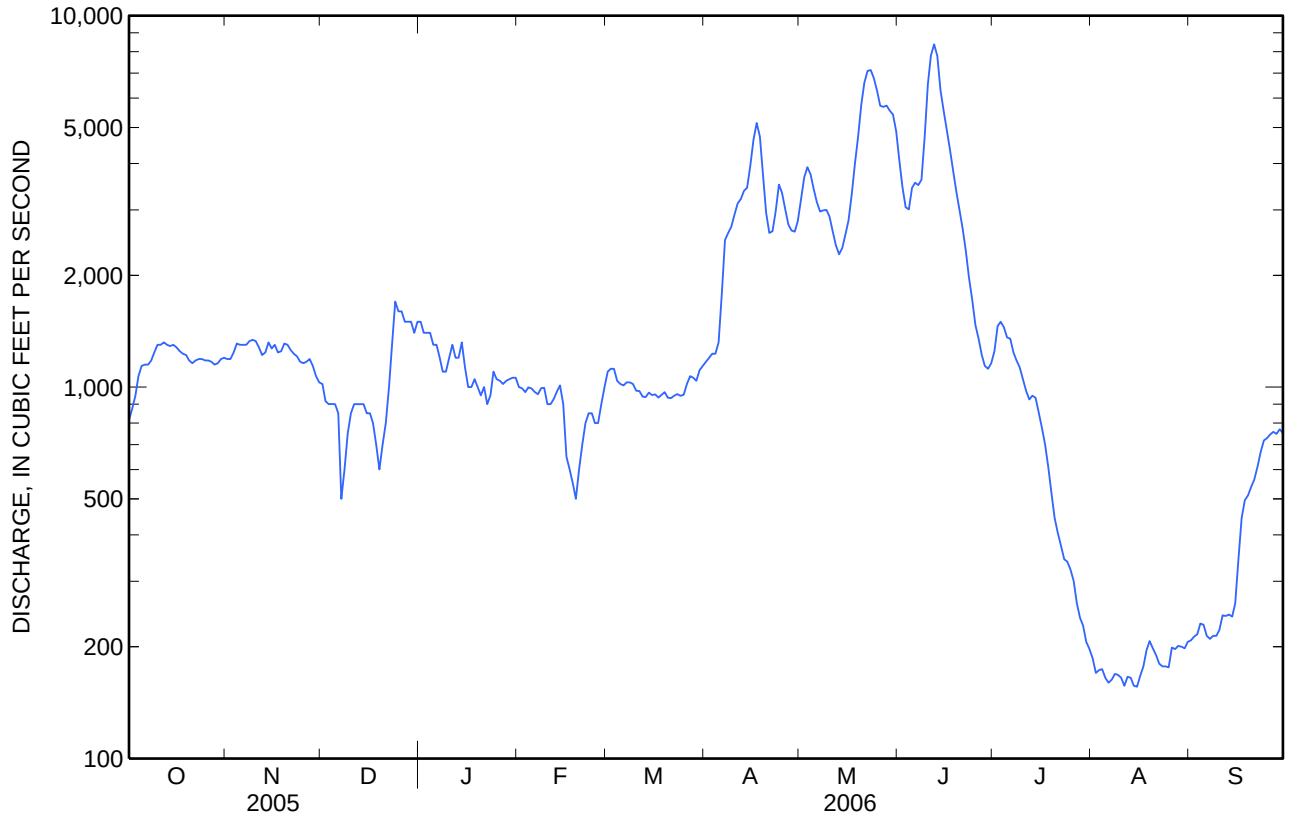
SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1978 - 2006	
Annual total	466,672		566,994			
Annual mean	1,279		1,553		1,911	
Highest annual mean					3,650	1984
Lowest annual mean					936	2004
Highest daily mean	4,890	May 22	8,370	Jun 12	16,800	Jun 9, 1995
Lowest daily mean	238	Aug 27	156	Aug 15	44	Aug 19, 1988
Annual seven-day minimum	246	Aug 24	162	Aug 10	48	Aug 19, 1988
Maximum peak flow			8,480	Jun 12	[b]17,000	Jun 9, 1995
Maximum peak stage			6.97	Jun 12	[c] 9.88	Jan 3, 1997
Instantaneous low flow			[a]148	Aug 14	[d]43	Aug 19, 1988
Annual runoff (ac-ft)	925,600		1,125,000		1,385,000	
10 percent exceeds	3,430		3,500		3,700	
50 percent exceeds	901		1,100		1,400	
90 percent exceeds	322		214		559	

[a] Gage height, 1.77 ft.
[b] Gage height, 9.00 ft.
[c] Backwater from ice.
[d] Gage height, 1.31 ft.