Water-Data Report 2012

06036650 JEFFERSON RIVER NEAR THREE FORKS, MT

Missouri Headwaters Basin
Jefferson Subbasin

LOCATION.--Lat 45°53'50", long 111°35'44" referenced to North American Datum of 1983, 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 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 Several unpublished observations of water temperature and specific conductance were made during the year.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 06036650, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/06036650.2012.pdf

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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	1,300	1,920	1,800	e1,600	e1,450	1,380	2,920	5,890	3,520	1,110	456	304
2	1,340	1,920	e1,550	e1,500	e1,450	1,410	4,260	5,060	3,300	1,110	397	309
3	1,400	1,900	e1,500	e1,550	1,470	1,400	4,730	4,460	3,360	1,160	370	341
4	1,430	1,860	e1,450	e1,550	1,440	1,440	3,630	4,010	3,670	1,160	347	346
5	1,470	1,890	e1,300	e1,500	1,410	1,440	3,170	3,600	3,750	1,200	350	337
6	1,610	1,950	e1,400	1,550	e1,400	1,470	3,100	3,330	4,110	1,170	357	320
7	1,730	1,930	e1,500	1,530	1,440	1,430	2,920	3,040	4,800	1,090	349	315
8	1,840	1,820	e1,550	1,500	1,480	1,380	2,670	2,760	4,910	1,040	314	332
9	1,910	1,800	e1,550	1,540	1,460	1,400	2,410	2,460	4,640	937	296	331
10	1,920	1,830	e1,500	1,540	1,430	1,420	2,330	2,360	4,220	827	278	333
11	1,940	1,840	e1,500	1,470	1,410	1,410	2,380	2,570	3,780	793	299	322
12	1,970	1,840	e1,550	1,380	1,400	1,420	2,590	2,800	3,500	787	321	303
13	2,020	1,890	e1,600	1,380	1,440	1,420	3,030	2,780	3,240	753	353	305
14	2,020	1,920	e1,600	1,450	1,420	1,430	3,380	2,740	3,140	706	338	323
15	2,020	1,890	e1,650	1,540	1,390	1,430	3,210	2,740	3,280	730	314	341
16	1,990	e1,750	e1,650	e1,500	1,360	1,440	3,030	2,960	3,040	841	303	362
17	2,010	1,800	e1,600	e1,400	1,380	1,500	2,840	3,420	2,830	990	314	387
18	2,050	1,790	e1,550	e1,200	1,420	1,580	2,670	4,170	2,670	1,090	324	414
19	2,090	e1,500	e1,500	e1,300	1,400	1,660	2,620	4,510	2,600	1,070	317	428
20	2,100	e1,400	e1,500	e1,350	1,360	1,610	2,630	4,290	2,490	997	320	438
21	2,090	e1,500	e1,500	e1,400	1,430	1,520	2,530	3,820	2,330	938	316	461
22	2,090	e1,650	e1,400	e1,500	1,460	1,510	2,710	3,610	2,170	850	324	463
23	2,080	1,860	e1,350	e1,500	1,470	1,610	3,010	3,850	2,030	776	330	463
24	2,060	1,920	e1,400	e1,400	1,450	1,710	3,410	4,430	1,920	711	329	468
25	2,070	1,950	e1,450	e1,500	1,440	1,770	3,930	4,360	1,810	655	321	485
26	2,070	e1,750	e1,500	e1,500	1,420	1,910	4,600	4,210	1,690	590	324	498
27	2,010	1,800	e1,500	e1,450	1,390	2,080	5,480	4,190	1,530	554	327	535
28	1,920	1,830	e1,600	e1,500	1,390	2,240	6,740	4,110	1,370	518	326	541
29	1,860	1,810	e1,650	e1,600	1,400	2,410	7,100	4,030	1,260	513	316	550
30	1,920	1,860	e1,700	e1,550	---	2,460	6,790	4,030	1,160	499	299	564
31	1,930	---	e1,650	e1,500	---	2,580	---	3,870	---	492	287	---
Total	58,260	54,370	47,500	45,730	41,260	50,870	106,820	114,460	88,120	26,657	10,216	11,919
Mean	1,879	1,812	1,532	1,475	1,423	1,641	3,561	3,692	2,937	860	330	397
Max	2,100	1,950	1,800	1,600	1,480	2,580	7,100	5,890	4,910	1,200	456	564
Min	1,300	1,400	1,300	1,200	1,360	1,380	2,330	2,360	1,160	492	278	303
Ac-ft	115,600	107,800	94,220	90,710	81,840	100,900	211,900	227,000	174,800	52,870	20,260	23,640

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,504	1,565	1,275	1,171	1,223	1,459	2,296	3,675	5,155	2,014	808	1,020
Max	3,163	2,805	1,993	1,929	1,964	2,295	4,444	7,679	11,770	5,919	3,030	3,303
(WY)	(1985)	(1984)	(1999)	(1983)	(1984)	(1996)	(1996)	(1997)	(2011)	(2011)	(1984)	(1984)
Min	698	1,039	805	553	728	824	954	990	988	309	59.1	262
(WY)	(2004)	(1989)	(1993)	(2004)	(2004)	(2002)	(2005)	(1992)	(1992)	(2007)	(1988)	(1994)

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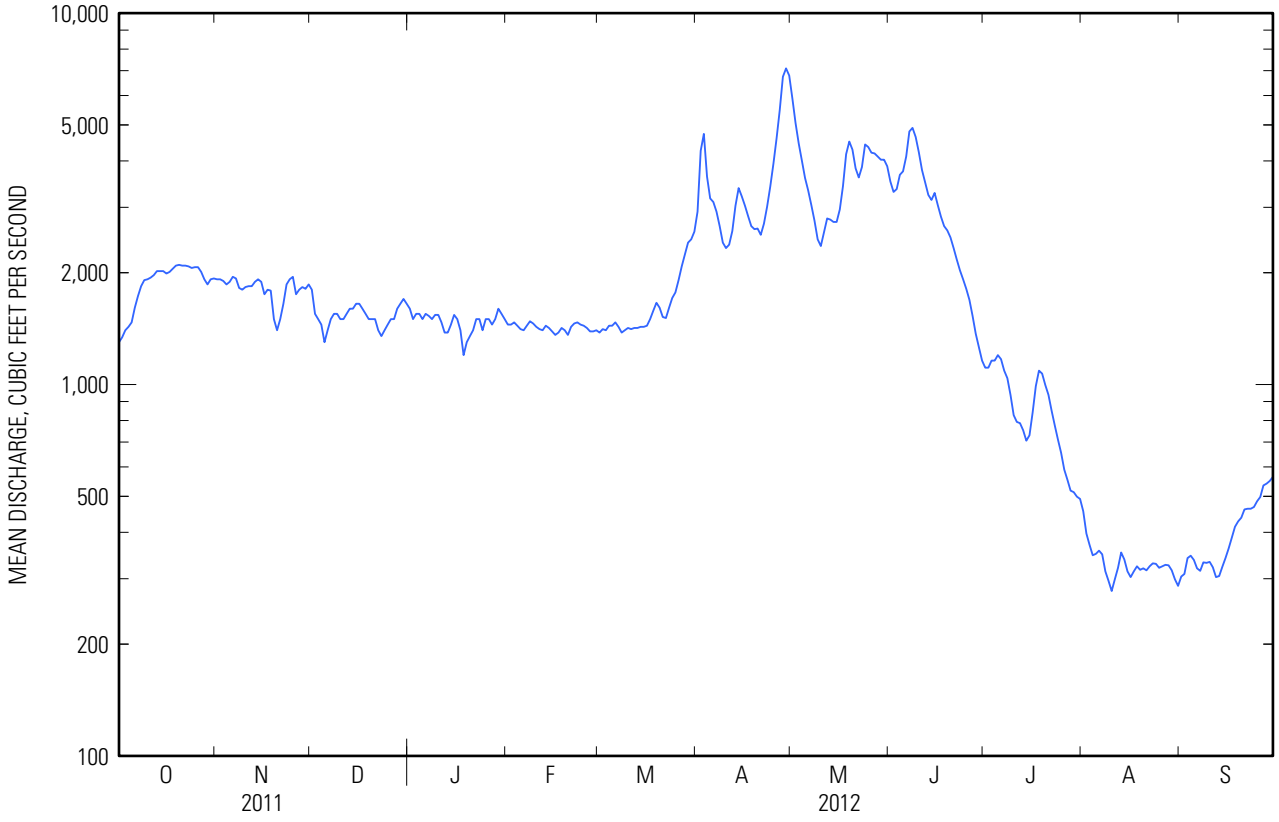
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1978 - 2012	
Annual total	1,135,115		656,182			
Annual mean	3,110		1,793		1,929	
Highest annual mean					3,650	1984
Lowest annual mean					936	2004
Highest daily mean	17,200	Jun 12	7,100	Apr 29	17,200	Jun 12, 2011
Lowest daily mean	750	Feb 25	278	Aug 10	44	Aug 19, 1988
Annual seven-day minimum	979	Feb 23	310	Aug 27	48	Aug 19, 1988
Maximum peak flow			[a]7,220	Apr 29	[d]17,400	Jun 12, 2011
Maximum peak stage			[b]8.33	Dec 15	[b]9.88	Jan 3, 1997
Instantaneous low flow			[c]265	Aug 10	[e]43	Aug 19, 1988
Annual runoff (ac-ft)	2,252,000		1,302,000		1,398,000	
10 percent exceeds	8,200		3,540		3,780	
50 percent exceeds	1,800		1,500		1,390	
90 percent exceeds	1,190		341		578	

[a]Gage height, 6.64 ft.
[b]Backwater from ice.
[c]Gage height, 2.28 ft.
[d]Gage height, 9.38 ft.
[e]Gage height, 1.31 ft.