Water-Data Report 2012

12358500 MIDDLE FORK FLATHEAD RIVER NEAR WEST GLACIER, MT

Pend Oreille Basin
Middle Fork Flathead Subbasin

LOCATION.--Lat 48°29'44", long 114°00'37" referenced to North American Datum of 1983, in S ½ SW ¼ NE ¼ sec.34, T.32 N., R.19 W., Flathead County, MT, Hydrologic Unit 17010207, on left bank 0.8 mi downstream from McDonald Creek, 1.3 mi west of West Glacier, and at river mile 3.8.

DRAINAGE AREA.--1,128 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1939 to current year. Prior to October 1947, published as "near Belton."

REVISED RECORDS.--Water Supply Paper 1216: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 3,128.72 ft, referenced to the National Geodetic Vertical Datum of 1929. Prior to Nov. 22, 1950, non-recording gage at present site and elevation.

REMARKS.--Records are good except for estimated daily discharges, which are fair. Bureau of Reclamation satellite telemeter is located at the station.

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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	738	1,210	733	599	576	425	3,440	10,200	6,480	10,600	2,070	732
2	727	1,180	699	564	562	446	3,490	9,180	8,710	10,400	1,990	705
3	709	1,110	679	589	545	439	3,190	8,000	12,700	9,920	2,030	683
4	702	1,060	673	583	489	452	3,010	7,190	12,400	9,090	1,910	661
5	695	1,010	665	581	452	492	2,880	6,870	14,300	7,980	1,780	641
6	742	959	638	585	446	535	2,740	6,420	18,200	7,410	1,700	659
7	779	905	623	568	e440	503	2,600	5,880	15,900	7,160	1,690	653
8	905	873	611	563	e445	480	2,420	5,850	12,800	7,110	1,670	630
9	877	846	575	555	463	472	2,300	7,080	11,500	7,060	1,620	609
10	826	809	534	571	479	509	2,320	9,430	10,600	6,860	1,550	607
11	858	778	504	520	460	578	2,620	8,790	9,680	6,640	1,480	600
12	1,090	772	532	425	455	629	3,700	7,700	9,540	6,190	1,430	581
13	1,140	770	553	428	451	698	4,620	7,490	11,000	5,870	1,380	564
14	1,090	748	553	461	452	743	4,640	8,510	13,800	5,770	1,330	548
15	1,030	714	553	513	428	746	4,540	10,600	13,200	5,540	1,330	530
16	981	665	553	477	423	1,170	4,220	13,200	12,200	5,330	1,300	515
17	932	656	553	439	422	1,480	4,130	15,500	13,300	4,880	1,210	505
18	881	662	553	427	421	1,420	4,090	14,000	17,300	4,740	1,140	502
19	840	645	541	418	416	1,340	3,990	11,800	17,000	4,520	1,090	503
20	808	619	511	421	416	1,290	4,120	10,000	16,100	4,200	1,060	502
21	782	616	501	469	415	1,250	6,100	9,580	14,100	3,940	1,060	495
22	782	633	481	519	465	1,210	6,660	12,900	13,300	3,640	1,050	497
23	985	731	414	514	500	1,160	8,420	14,300	13,900	3,330	1,010	515
24	1,240	776	441	478	462	1,110	13,000	12,000	15,500	3,120	958	518
25	1,240	793	487	506	460	1,070	17,200	10,100	15,800	2,860	925	511
26	1,160	761	481	525	462	1,090	17,900	8,540	15,900	2,650	880	503
27	1,090	723	468	508	449	1,150	21,100	7,460	15,100	2,540	839	494
28	1,020	764	514	478	403	1,260	16,900	6,830	12,200	2,470	818	485
29	972	763	661	489	381	1,390	12,600	6,340	10,700	2,400	803	477
30	938	753	687	606	---	1,730	10,500	6,220	10,100	2,280	790	468
31	1,030	---	652	614	---	2,700	---	6,130	---	2,160	767	---
Total	28,589	24,304	17,623	15,993	13,238	29,967	199,440	284,090	393,310	168,660	40,660	16,893
Mean	922	810	568	516	456	967	6,648	9,164	13,110	5,441	1,312	563
Max	1,240	1,210	733	614	576	2,700	21,100	15,500	18,200	10,600	2,070	732
Min	695	616	414	418	381	425	2,300	5,850	6,480	2,160	767	468
Med	905	767	553	514	452	1,070	4,130	8,540	13,200	5,330	1,300	524
Ac-ft	56,710	48,210	34,960	31,720	26,260	59,440	395,600	563,500	780,100	334,500	80,650	33,510
Cfsm	0.82	0.72	0.50	0.46	0.40	0.86	5.89	8.12	11.6	4.82	1.16	0.50
In.	0.94	0.80	0.58	0.53	0.44	0.99	6.58	9.37	12.97	5.56	1.34	0.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,030	1,185	901	724	702	887	3,241	9,469	10,070	3,982	1,349	933
Max	3,004	5,598	3,750	2,420	2,686	3,272	7,093	14,670	19,870	10,190	2,540	2,510
(WY)	(1960)	(1990)	(1996)	(1974)	(1971)	(2007)	(1943)	(1957)	(1964)	(2011)	(2011)	(1968)
Min	367	279	262	282	244	307	664	5,259	3,576	1,249	576	420
(WY)	(1940)	(1953)	(1953)	(2001)	(2001)	(1944)	(1975)	(1941)	(1941)	(1944)	(1941)	(1988)

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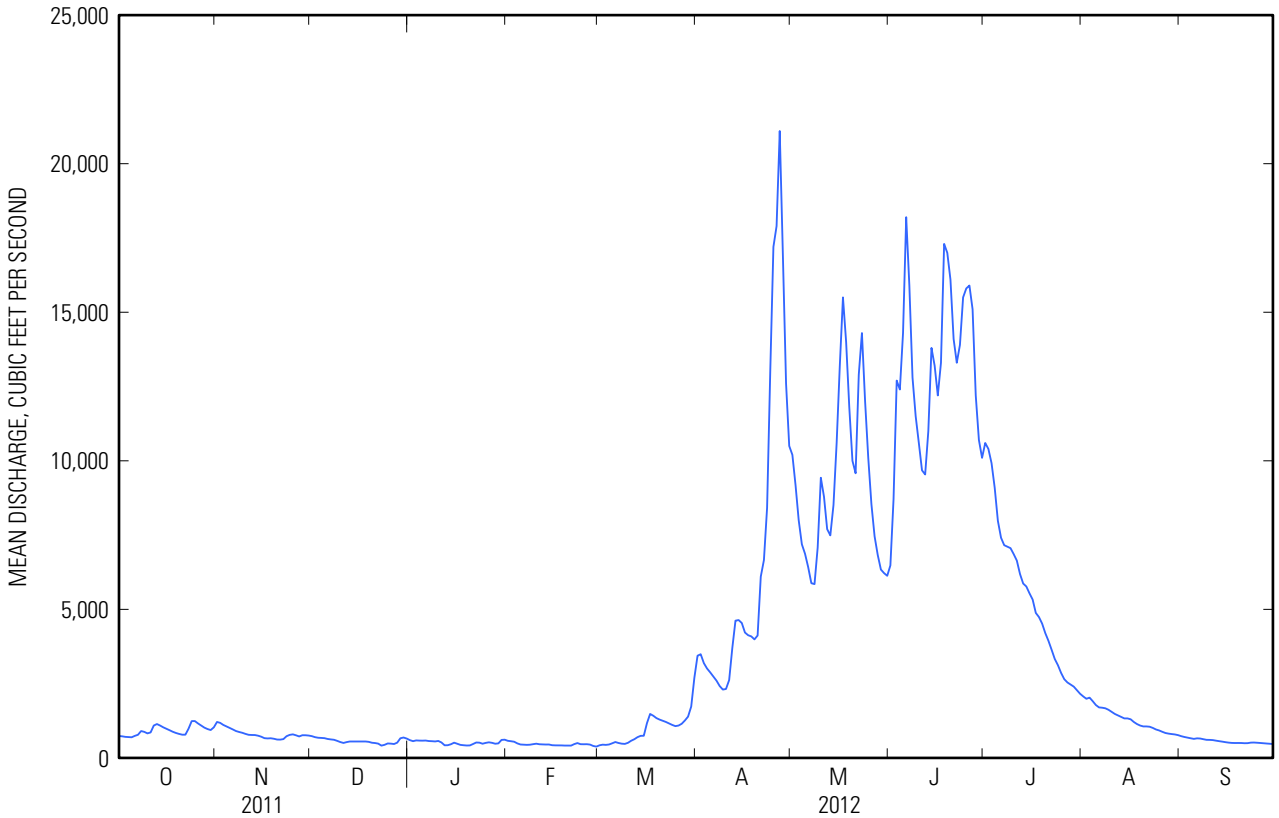
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1940 - 2012	
Annual total	1,457,096		1,232,767			
Annual mean	3,992		3,368		2,878	
Highest annual mean					4,076	2011
Lowest annual mean					1,437	1941
Highest daily mean	24,100	Jun 8	21,100	Apr 27	92,700	Jun 9, 1964
Lowest daily mean	414	Dec 23	381	Feb 29	189	Nov 27, 1952
Annual seven-day minimum	468	Dec 21	420	Feb 15	205	Nov 26, 1952
Maximum peak flow			22,600	Apr 27	[b]140,000	Jun 9, 1964
Maximum peak stage			9.12	Apr 27	36.46	Jun 9, 1964
Instantaneous low flow			[a]366	Feb 29	[c,d]173	Nov 27, 1952
Annual runoff (ac-ft)	2,890,000		2,445,000		2,085,000	
Annual runoff (cfsm)	3.54		2.99		2.55	
Annual runoff (inches)	48.05		40.66		34.67	
10 percent exceeds	14,500		10,800		8,430	
50 percent exceeds	1,090		928		1,100	
90 percent exceeds	643		467		440	

[a]Gage height, 1.52 ft.
[b]About 140,000 ft³/s, from rating extended above 31,000 ft³/s, on basis of a contracted opening measurement at gage height 19.42 ft, and flood volume-hydrographic comparison.
[c]Gage height, 1.42 ft.
[d]Stage below intakes.