Water-Data Report 2012

06178000 POPLAR RIVER AT INTERNATIONAL BOUNDARY

Missouri-Poplar Basin
Poplar Subbasin

LOCATION.--Lat 48°59'25", long 105°41'49" referenced to North American Datum of 1983, in NE ¼ NE ¼ SE ¼ sec.6, T.37 N., R.46 E., Daniels County, MT, Hydrologic Unit 10060003, on left bank 0.7 mi south of international boundary, 1.5 miles upstream from Coal Creek, 18.5 miles northwest of Scobey, and at river mile 135.7.

DRAINAGE AREA.--358 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1931 to current season (seasonal records only for most years). Published as Middle Fork Poplar River at International Boundary, March 1931 to November 1975.

REVISED RECORDS.--Water Supply Paper (WSP) 1389: 1931; 1935-37, maximum discharge (M); 1939-40; 1942 (M); 1943; 1948 (M); 1950 (M). WSP 1729: Drainage area. Water Data Report 1984: Drainage area.

GAGE.--Water-stage recorder and concrete control since September 1977. Elevation of gage is 2,460 ft., referenced to the National Geodetic Vertical Datum of 1929.

COOPERATION.--This is one of a number of stations that are maintained jointly by the United States and Canada.

REMARKS.--Records are good except for estimated daily discharges, which are poor. A few small diversions for irrigation occur upstream from station. U.S. Geological Survey satellite telemeter is located at the station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12,700 ft^3/s, Apr. 6, 1954, gage height, 10.25 ft, from floodmark, from rating curve extended above 2,500 ft^3/s, on basis of slope-area measurement of peak flow; no flow at times.

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 06178000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/06178000.2012.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	3.3					e3.5	18	29	106	8.0	0.69	0.46
2	3.4					e3.5	17	26	75	7.3	1.0	0.51
3	3.4					e3.0	16	25	60	6.2	1.4	0.48
4	3.5					e3.5	16	25	51	5.5	1.8	0.51
5	3.6					e3.5	15	34	42	4.8	1.8	0.52
6	3.8					e3.5	16	100	34	4.5	1.6	0.54
7	9.8					e3.5	19	122	27	4.1	1.4	0.52
8	12					e4.0	20	103	23	3.8	1.2	0.50
9	8.6					e20	19	88	24	3.5	1.0	0.51
10	7.2					e80	18	69	31	3.3	0.93	0.52
11	6.5					e220	16	57	30	2.9	0.91	0.48
12	6.1					e200	16	49	27	2.6	1.1	0.49
13	5.8					e300	16	40	23	2.2	1.1	0.47
14	5.7					e250	15	32	26	2.0	1.2	0.52
15	5.7					149	15	28	26	2.4	1.0	0.49
16	5.7					108	14	25	23	2.3	1.0	0.49
17	5.7					93	15	23	21	2.2	0.87	0.53
18	5.7					68	15	22	18	2.3	0.79	0.75
19	5.7					58	16	22	24	2.2	0.76	0.72
20	5.9					49	18	20	43	1.9	0.71	0.71
21	5.9					41	18	18	47	1.8	0.67	0.67
22	6.2					33	18	18	57	1.7	0.55	0.69
23	6.6					27	17	20	41	1.4	0.48	0.71
24	6.6					24	16	21	31	1.5	0.43	0.71
25	6.8					23	15	25	25	1.5	0.37	0.76
26	7.0					23	14	25	21	1.2	0.33	1.1
27	7.0					22	14	53	17	1.2	0.39	1.3
28	6.7					19	21	170	13	1.1	0.38	1.6
29	7.0					19	28	328	11	0.95	0.40	1.7
30	6.6					18	35	245	9.4	0.76	0.44	1.7
31	6.7					18	---	166	---	0.69	0.48	---
Total	190.2					1,890.0	526	2,028	1,006.4	87.80	27.18	21.66
Mean	6.14					61.0	17.5	65.4	33.5	2.83	0.88	0.72
Max	12					300	35	328	106	8.0	1.8	1.7
Min	3.3					3.0	14	18	9.4	0.69	0.33	0.46
Med	6.1					23	16	29	26	2.2	0.87	0.53
Ac-ft	377					3,750	1,040	4,020	2,000	174	54	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2012, BY WATER YEAR (WY)*

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2.79	4.90	0.00	0.00	20.2	65.2	79.5	19.6	17.6	8.31	1.59	1.47
Max	11.8	9.35	0.00	0.00	61.3	418	699	106	226	120	19.4	15.3
(WY)	(1955)	(1955)	(1936)	(1936)	(1981)	(1999)	(1952)	(2011)	(2011)	(1993)	(1940)	(1954)
Min	0.04	0.12	0.00	0.00	0.00	0.00	5.52	3.05	0.16	0.04	0.00	0.01
(WY)	(1989)	(1937)	(1936)	(1936)	(1936)	(1950)	(1988)	(1992)	(1988)	(1988)	(1967)	(1988)

*Seasonal records most years.

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SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1931 – 2012*	
Highest daily mean	1,320	Apr 12	328	May 29	5,000	Apr 6, 1954
Lowest daily mean	1.6	Sep 13	0.33	Aug 26	0.00	Jun 30, 1932
Maximum peak flow			[a]363	May 29	[d]12,700	Apr 6, 1954
Maximum peak stage			[b]5.11	Mar 10	10.25	Apr 6, 1954
Instantaneous low flow			[c]0.31	Aug 25		

*Seasonal records most years.
[a]Gage height, 4.53 ft.
[b]Backwater from ice.
[c]Gage height, 2.26 ft.
[d]From rating curve extended above 2,500 ft³/s on basis of slope-area measurement of peak flow.