

Water-Data Report 2007

01015800 AROOSTOOK RIVER NEAR MASARDIS, ME

St. John Basin
Aroostook Subbasin

LOCATION.--Lat 46°31'23", long 68°22'18" referenced to North American Datum of 1983, Aroostook County, ME, Hydrologic Unit 01010004, on left bank, 180 ft upstream from Garfield Road bridge, and 1.8 mi downstream from St. Croix Stream and Masardis.

DRAINAGE AREA.--892 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--

DISCHARGE: September 1957 to current year.

REVISED RECORDS.--WDR ME-82-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 530.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, including period of no gage-height record, Aug. 30 to Sept. 4, except for period of ice effect, Dec. 3 to Apr. 24, which is poor. Slight regulation by Millinocket Lake, capacity 1.11 billion ft³, used for power. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,100 ft³/s, Apr. 19, 1983, gage height, 17.70 ft; maximum gage height, 18.00 ft, Apr. 18, 1994 (backwater from ice); minimum discharge, 41 ft³/s, Sept. 26-27, 1968, gage height, 1.89 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,500 ft³/s, Apr. 26, gage height, 15.29 ft; minimum discharge, 135 ft³/s, Sept. 26-27, gage height, 2.72 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	439	4,010	1,680	e1,040	e539	e332	e879	9,640	1,450	466	251	e489
2	428	3,280	1,990	e1,090	e513	e327	e868	9,840	1,310	434	238	e485
3	422	2,740	e1,850	e1,060	e490	e334	e843	9,460	1,180	433	242	e410
4	404	2,340	e1,650	e997	e469	e324	e818	8,650	1,050	417	379	e343
5	423	2,030	e1,420	e971	e451	e352	e795	7,870	1,110	397	582	290
6	494	1,810	e1,280	e1,130	e437	e355	e777	7,280	1,400	438	492	250
7	480	1,660	e1,330	e1,780	e421	e347	e795	6,790	1,360	507	439	222
8	426	1,570	e1,320	e2,160	e410	e332	e778	6,580	1,160	514	452	209
9	375	1,680	e1,200	e2,190	e392	e326	e755	6,810	986	453	692	199
10	331	1,990	e1,190	e2,040	e388	e317	e733	6,500	1,050	412	858	193
11	292	2,020	e1,210	e1,760	e380	e312	e719	5,690	1,210	395	730	186
12	356	2,230	e1,140	e1,550	e372	e315	e717	5,630	1,070	480	600	196
13	1,190	3,050	e1,060	e1,530	e366	e317	e723	5,100	888	626	508	196
14	1,660	4,410	e1,150	e1,400	e361	e326	e766	4,180	748	576	445	195
15	1,450	8,220	e1,120	e1,280	e384	e350	e871	3,450	654	521	391	181
16	1,170	8,710	e1,090	e1,170	e374	e396	e1,010	3,040	585	747	348	185
17	938	7,490	e1,070	e1,090	e377	e456	e1,260	3,010	551	867	321	188
18	856	7,570	e1,050	e1,020	e382	e537	e1,590	3,170	612	717	308	181
19	1,070	6,920	e1,020	e967	e380	e637	e2,090	3,650	624	591	289	174
20	1,440	5,640	e1,010	e930	e374	e748	e2,940	4,240	565	552	267	166
21	4,470	4,570	e1,000	e898	e366	e835	e4,060	4,750	543	645	244	162
22	7,720	3,780	e979	e878	e361	e882	e5,760	4,680	549	670	225	155
23	6,510	3,110	e967	e855	e352	e915	e7,840	4,000	554	588	211	149
24	5,060	2,550	e1,410	e839	e347	e937	e10,500	3,420	524	516	218	144
25	4,160	2,240	e1,730	e809	e342	e955	14,400	3,000	478	461	239	141
26	3,470	2,010	e1,760	e761	e339	e952	15,900	2,580	428	410	270	138
27	2,900	1,840	e1,630	e721	e334	e931	14,100	2,210	392	361	302	141
28	2,470	1,720	e1,270	e678	e332	e925	11,600	2,060	444	324	314	170
29	3,540	1,590	e1,080	e637	---	e921	10,400	2,070	548	301	282	225
30	5,290	1,520	e977	e601	---	e916	9,750	1,820	531	288	e258	270
31	4,930	---	e1,030	e568	---	e891	---	1,590	---	269	e346	---
Total	65,164	104,300	39,663	35,400	11,033	17,800	125,037	152,760	24,554	15,376	11,741	6,633
Mean	2,102	3,477	1,279	1,142	394	574	4,168	4,928	818	496	379	221
Max	7,720	8,710	1,990	2,190	539	955	15,900	9,840	1,450	867	858	489
Min	292	1,520	967	568	332	312	717	1,590	392	269	211	138
Cfsm	2.36	3.90	1.43	1.28	0.44	0.64	4.67	5.52	0.92	0.56	0.42	0.25
In.	2.72	4.35	1.65	1.48	0.46	0.74	5.21	6.37	1.02	0.64	0.49	0.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,111	1,503	1,120	663	601	797	4,631	4,266	1,287	694	581	646
Max	5,092	5,212	2,823	2,183	2,085	3,749	10,380	11,250	3,591	2,089	2,380	2,939
(WY)	(2006)	(1964)	(1958)	(2006)	(1996)	(1979)	(1976)	(1961)	(1984)	(1962)	(1981)	(1999)
Min	201	292	242	257	181	198	1,055	1,061	301	77.5	79.5	61.5
(WY)	(1969)	(2002)	(1998)	(1982)	(2002)	(1993)	(1967)	(1987)	(1988)	(1991)	(1968)	(1995)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1957 - 2007	
Annual total	690,914		609,461			
Annual mean	1,893		1,670		1,493	
Highest annual mean					2,316	2006
Lowest annual mean					818	1985
Highest daily mean	8,710	Nov 16	15,900	Apr 26	22,100	Apr 19, 1983
Lowest daily mean	155	Sep 19	138	Sep 26	42	Sep 27, 1968
Annual seven-day minimum	169	Sep 14	147	Sep 21	44	Sep 26, 1968
Maximum peak flow			16,500	Apr 26	23,100	Apr 19, 1983
Maximum peak stage			15.29	Apr 26	18.00	Apr 18, 1994
Instantaneous low flow			135	Sep 26	41	Sep 26, 1968
Annual runoff (cfsm)	2.12		1.87		1.67	
Annual runoff (inches)	28.81		25.42		22.74	
10 percent exceeds	4,620		4,510		3,720	
50 percent exceeds	1,280		795		662	
90 percent exceeds	203		270		220	

