



Water-Data Report 2008

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 and crest-stage gage. Datum of gage is 530.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, including period of no gage-height record, Sept. 14-16, except for period of ice effect, Nov. 25 to Apr. 21, and period of no gage-height record, Jan. 30 to Feb. 1, which are 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, 29,500 ft³/s, May 1, 2008, gage height, 18.33 ft; minimum discharge, 41 ft³/s, Sept. 26-27, 1968, gage height, 1.89 ft.

REVISIONS.--The maximum discharges for water years 1973 and 1983 have been revised, as shown in the following table. These values supersede those published in the report of those years.

Water Year	Date	Discharge (ft³/s)	Gage height (ft)
1973	Apr 30, 1973	23,100	16.95
1983	Apr 19, 1983	26,500	17.70

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,500 ft³/s, May 1, gage height, 18.33 ft; minimum discharge, 127 ft³/s, Oct. 11-12, gage height, 2.69 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	251	1,330	e1,880	e1,020	e797	e899	e648	28,600	1,190	3,060	1,340	388
2	222	1,180	e1,750	e961	e860	e860	e688	23,100	1,350	2,670	2,750	360
3	201	1,060	e1,650	e912	e860	e826	e739	16,400	1,220	2,080	3,620	336
4	183	3,120	e1,630	e876	e833	e796	e767	12,100	1,070	1,640	4,990	312
5	171	5,850	e1,510	e848	e792	e775	e840	10,300	936	1,340	5,330	294
6	161	5,340	e1,410	e827	e758	e763	e974	9,560	828	1,120	4,200	278
7	149	4,860	e1,340	e811	e730	e759	e1,180	8,530	742	951	3,190	274
8	141	4,500	e1,330	e827	e710	e765	e1,470	7,640	692	821	2,650	289
9	137	3,860	e1,270	e971	e698	e774	e1,950	7,720	671	742	2,520	332
10	132	3,170	e1,180	e1,400	e690	e783	e2,620	7,130	659	1,070	2,670	565
11	130	2,610	e1,140	e1,770	e685	e803	e3,440	6,070	882	1,200	2,550	724
12	162	2,160	e1,130	e1,940	e675	e817	e4,170	5,110	1,320	965	2,420	623
13	875	1,890	e1,070	e2,000	e666	e812	e4,630	4,380	1,240	791	2,440	547
14	1,670	1,690	e1,020	e1,870	e656	e809	e5,020	3,840	986	703	2,270	e495
15	1,610	1,850	e989	e1,690	e651	e798	e5,290	3,390	792	695	2,060	e449
16	1,320	5,940	e963	e1,540	e643	e780	e5,580	3,020	690	654	1,840	e411
17	1,050	11,300	e939	e1,420	e639	e765	e5,980	2,710	694	611	1,610	381
18	852	10,100	e914	e1,310	e668	e749	e6,890	2,400	941	586	1,430	344
19	717	6,990	e895	e1,210	e794	e737	e8,510	2,200	1,060	602	1,320	306
20	678	4,980	e878	e1,140	e917	e730	e10,300	2,740	1,040	845	1,210	276
21	798	3,850	e866	e1,070	e998	e732	e12,600	2,710	987	994	1,090	237
22	836	3,210	e853	e1,010	e1,020	e728	14,800	2,350	874	1,170	985	215
23	768	3,170	e846	e967	e1,040	e717	15,500	2,020	765	1,400	857	198
24	862	2,930	e983	e923	e1,120	e701	16,900	1,780	753	1,180	681	185
25	1,020	e2,520	e1,250	e883	e1,150	e684	17,000	1,570	823	1,170	632	175
26	964	e2,350	e1,450	e849	e1,100	e667	15,700	1,380	740	1,280	619	169
27	895	e2,210	e1,500	e820	e1,040	e678	14,100	1,250	814	1,120	567	213
28	1,440	e2,350	e1,410	e793	e989	e674	12,200	1,130	1,140	968	514	574
29	2,030	e2,020	e1,280	e772	e942	e670	11,400	1,020	1,490	1,070	469	1,550
30	1,840	e2,120	e1,180	e762	---	e654	21,700	912	2,720	1,320	433	1,830
31	1,550	---	e1,090	e772	---	e646	---	855	---	1,220	410	---
Total	23,815	110,510	37,596	34,964	24,121	23,351	223,586	183,917	30,109	36,038	59,667	13,330
Mean	768	3,684	1,213	1,128	832	753	7,453	5,933	1,004	1,163	1,925	444
Max	2,030	11,300	1,880	2,000	1,150	899	21,700	28,600	2,720	3,060	5,330	1,830
Min	130	1,060	846	762	639	646	648	855	659	586	410	169
Cfsm	0.86	4.13	1.36	1.26	0.93	0.84	8.36	6.65	1.13	1.30	2.16	0.50
In.	0.99	4.61	1.57	1.46	1.01	0.97	9.32	7.67	1.26	1.50	2.49	0.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,104	1,546	1,121	672	605	796	4,686	4,299	1,281	704	608	642
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 2007		Water Year 2008		Water Years 1957 - 2008	
Annual total	572,255		801,004			
Annual mean	1,568		2,189		1,506	
Highest annual mean					2,316	2006
Lowest annual mean					818	1985
Highest daily mean	15,900	Apr 26	28,600	May 1	28,600	May 1, 2008
Lowest daily mean	130	Oct 11	130	Oct 11	42	Sep 27, 1968
Annual seven-day minimum	145	Oct 6	145	Oct 6	44	Sep 26, 1968
Maximum peak flow			29,500	May 1	29,500	May 1, 2008
Maximum peak stage			18.33	May 1	18.33	May 1, 2008
Instantaneous low flow			127	Oct 11	41	Sep 26, 1968
Annual runoff (cfs)	1.76		2.45		1.69	
Annual runoff (inches)	23.87		33.41		22.94	
10 percent exceeds	4,020		5,000		3,750	
50 percent exceeds	777		1,020		675	
90 percent exceeds	225		463		220	

