



Water-Data Report 2008

**01017550 WILLIAMS BROOK AT PHAIR, ME**

St. John Basin  
Meduxnekeag Subbasin

LOCATION.--Lat 46°37'41", long 67°57'11" referenced to North American Datum of 1983, Aroostook County, ME, Hydrologic Unit 01010005, on right bank at upstream side of Bangor and Aroostook Railroad bridge, 0.1 mi upstream from Phair, and 2.5 mi upstream from Prestile Stream.

DRAINAGE AREA.--3.82 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--

DISCHARGE: November 1999 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete weir. Elevation of gage is 580 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Records good, except for periods of ice effect, Dec. 17-18, Jan. 4-5, and Jan. 12 to Apr. 3, which are fair, and period of doubtful stage-discharge relation, Sept. 5-8, which is poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 187 ft<sup>3</sup>/s, Apr. 23, 2007, gage height, 5.31 ft; minimum discharge, 0.19 ft<sup>3</sup>/s, Aug. 16 and 25, 2001.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov 16	1615	95	3.68
Apr 21	2215	125	4.16
Apr 23	2245	130	4.26
Apr 30	0530	*163	*4.80

Minimum discharge, 0.34 ft<sup>3</sup>/s, Oct. 8, gage height, 1.40 ft.

## 01017550 WILLIAMS BROOK AT PHAIR, ME—Continued

**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	0.74	1.7	6.4	4.0	e4.2	e3.5	e2.4	34	7.5	7.1	9.9	1.8
2	0.63	1.7	6.1	4.0	e4.2	e3.5	e2.8	25	4.8	4.0	19	1.7
3	0.63	2.3	6.3	3.8	e4.2	e3.3	e3.3	21	3.9	3.2	18	1.7
4	0.66	25	6.7	e3.8	e4.0	e3.3	4.1	20	3.3	3.5	18	1.7
5	0.60	10	5.8	e3.7	e4.0	e3.3	5.6	22	2.9	2.7	7.9	e1.6
6	0.51	7.4	5.3	3.6	e4.0	e3.3	6.7	18	2.6	2.4	5.6	e1.6
7	0.58	11	5.0	3.4	e3.8	e3.1	7.1	16	2.6	2.2	4.9	e3.1
8	0.42	7.4	4.8	5.4	e3.8	e3.2	8.0	20	2.7	2.1	4.8	e2.2
9	0.54	6.1	4.4	11	e3.5	e3.2	9.7	20	2.6	3.3	13	3.7
10	0.55	5.6	4.2	14	e3.4	e3.2	13	13	4.0	6.3	8.2	5.8
11	0.48	5.1	4.0	10	e3.4	e3.2	15	11	17	3.1	5.7	2.8
12	3.0	4.5	4.3	e9.8	e3.2	e2.9	16	10	12	2.3	5.6	2.1
13	5.3	4.6	3.8	e8.9	e3.2	e2.8	18	8.6	4.9	2.2	6.2	2.1
14	2.2	5.0	3.7	e8.2	e3.2	e2.8	20	7.6	3.2	2.5	4.9	2.0
15	1.6	16	3.5	e7.7	e3.2	e2.7	21	6.9	2.8	2.2	4.1	2.0
16	1.3	74	3.4	e7.2	e3.2	e2.6	26	6.7	4.1	2.2	4.6	1.8
17	1.1	37	e3.5	e6.9	e4.0	e2.5	40	6.3	5.3	2.1	3.8	1.7
18	0.92	19	e3.4	e6.9	e5.8	e2.5	59	5.6	6.1	2.0	3.2	1.5
19	0.88	14	3.4	e6.7	e11	e2.5	70	6.7	4.1	3.1	4.1	1.4
20	1.4	12	3.4	e6.4	e8.1	e2.5	76	17	3.1	3.5	3.3	1.4
21	1.4	11	3.2	e6.0	e5.2	e2.5	103	8.3	3.2	3.8	2.7	1.4
22	1.0	13	3.1	e5.7	e5.2	e2.5	99	7.0	3.1	9.2	2.4	1.3
23	1.2	18	3.3	e5.5	e5.2	e2.4	95	7.3	2.5	6.1	2.3	1.3
24	3.3	11	9.3	e5.2	e4.7	e2.3	81	6.6	3.4	6.5	2.3	1.3
25	1.9	9.2	8.4	e5.0	e4.2	e2.3	55	5.1	2.7	7.6	2.8	1.2
26	1.4	8.8	5.3	e4.7	e3.8	e2.3	49	4.5	2.2	6.8	2.6	1.3
27	3.4	10	4.7	e4.5	e3.8	e2.3	38	4.4	2.5	6.4	2.2	4.0
28	7.0	9.0	4.4	e4.4	e3.6	e2.2	30	3.8	2.4	8.6	2.1	12
29	2.9	7.5	4.3	e4.5	e3.5	e2.2	44	3.4	17	11	2.0	11
30	2.1	7.2	4.1	e4.6	---	e2.2	91	3.0	15	11	2.1	4.7
31	1.9	---	4.0	e4.6	---	e2.2	---	4.2	---	8.3	2.0	---
<b>Total</b>	51.54	374.1	145.5	190.1	126.6	85.3	1,108.7	353.0	153.5	147.3	180.3	83.2
<b>Mean</b>	1.66	12.5	4.69	6.13	4.37	2.75	37.0	11.4	5.12	4.75	5.82	2.77
<b>Max</b>	7.0	74	9.3	14	11	3.5	103	34	17	11	19	12
<b>Min</b>	0.42	1.7	3.1	3.4	3.2	2.2	2.4	3.0	2.2	2.0	2.0	1.2
<b>Cfsm</b>	0.44	3.26	1.23	1.61	1.14	0.72	9.67	2.98	1.34	1.24	1.52	0.73
<b>In.</b>	0.50	3.64	1.42	1.85	1.23	0.83	10.80	3.44	1.49	1.43	1.76	0.81

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	4.27	8.20	6.42	4.23	2.17	5.93	23.9	8.99	4.10	3.15	2.12	1.69
<b>Max</b>	16.5	18.0	11.9	12.5	6.10	16.2	37.0	12.4	6.58	5.98	5.82	3.85
<b>(WY)</b>	(2006)	(2006)	(2004)	(2006)	(2006)	(2000)	(2008)	(2000)	(2006)	(2006)	(2008)	(2005)
<b>Min</b>	1.08	0.96	1.26	0.41	0.39	0.75	11.3	5.74	2.60	1.46	0.40	0.63
<b>(WY)</b>	(2001)	(2002)	(2002)	(2002)	(2002)	(2001)	(2006)	(2001)	(2002)	(2001)	(2001)	(2000)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 2000 - 2008	
<b>Annual total</b>	2,228.10		2,999.14			
<b>Annual mean</b>	6.10		8.19		6.13	
<b>Highest annual mean</b>					9.34	2006
<b>Lowest annual mean</b>					3.53	2001
<b>Highest daily mean</b>	110	Apr 23	103	Apr 21	117	Apr 23, 2001
<b>Lowest daily mean</b>	0.42	Oct 8	0.42	Oct 8	0.24	Aug 25, 2001
<b>Annual seven-day minimum</b>	0.53	Oct 5	0.53	Oct 5	0.27	Sep 14, 2001
<b>Maximum peak flow</b>			163	Apr 30	187	Apr 23, 2007
<b>Maximum peak stage</b>			4.80	Apr 30	5.31	Apr 23, 2007
<b>Instantaneous low flow</b>			0.34	Oct 8	0.19	Aug 16, 2001
<b>Annual runoff (cfsm)</b>	1.60		2.15		1.60	
<b>Annual runoff (inches)</b>	21.70		29.21		21.80	
<b>10 percent exceeds</b>	12		17		13	
<b>50 percent exceeds</b>	2.8		4.0		2.7	
<b>90 percent exceeds</b>	0.77		1.7		0.80	

