



Water-Data Report 2007

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 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--

DISCHARGE: November 1999 to current year.

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

REMARKS.--Records good, except for period of ice effect, Dec. 26 to Apr. 1, which is fair, and period of doubtful stage-discharge relation, Aug. 30 to Sept. 7, which is poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 187 ft³/s, Apr. 23, 2007, gage height, 5.31 ft; minimum discharge, 0.19 ft³/s, Aug. 16 and 25, 2001.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s and (or) maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov 14	2045	122	4.06
Apr 23	2200	*187	*5.31

Minimum discharge, 0.40 ft³/s, Sept. 25.

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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	1.8	8.7	10	e3.0	e2.4	e1.7	e9.6	24	4.1	1.4	0.77	e1.6
2	2.7	8.0	8.9	e3.5	e2.5	e1.7	12	19	3.7	1.6	1.2	e1.1
3	2.6	7.4	7.3	e3.1	e2.4	e1.8	9.3	16	3.3	1.8	2.0	e0.88
4	2.1	6.9	6.6	e2.9	e2.2	e1.7	8.0	13	3.2	1.5	2.4	e0.71
5	4.0	6.5	5.9	e3.9	e2.1	e1.7	7.9	13	7.1	2.2	1.7	e0.63
6	2.3	6.4	5.3	e17	e2.0	e1.6	7.2	12	5.3	2.1	1.1	e0.79
7	1.8	6.6	5.7	e19	e2.0	e1.6	6.1	11	3.7	1.9	0.89	e0.70
8	1.6	7.7	5.7	e9.0	e1.9	e1.6	5.6	12	2.9	1.5	2.4	0.68
9	1.5	11	4.8	e7.2	e1.9	e1.5	5.2	11	2.7	1.3	3.1	0.65
10	1.4	10	4.8	e6.1	e1.8	e1.5	4.9	9.7	2.6	1.3	1.3	0.58
11	1.3	7.9	4.8	e5.7	e1.8	e1.8	5.0	9.5	2.4	1.6	0.97	0.74
12	4.3	18	4.4	e5.4	e1.8	e1.8	5.4	11	2.2	2.0	1.0	0.78
13	6.3	16	4.1	e5.0	e1.7	e1.7	6.2	7.7	2.1	1.7	0.91	0.66
14	3.4	59	4.9	e4.5	e1.7	e2.2	6.5	6.5	2.0	1.8	0.77	0.60
15	2.5	56	6.0	e3.9	e2.1	e5.7	7.2	6.4	1.9	3.2	0.78	0.85
16	2.1	27	7.2	e4.0	e2.0	e9.3	7.0	6.0	1.8	8.7	0.74	1.0
17	1.9	34	6.3	e3.4	e1.9	e11	7.4	6.6	2.0	3.4	0.66	0.81
18	3.7	30	5.5	e3.1	e1.9	e19	9.6	7.0	2.4	2.8	0.89	0.77
19	3.7	18	4.7	e3.4	e1.9	e23	19	19	1.9	1.9	0.77	0.60
20	9.0	16	3.8	e3.5	e1.8	e22	34	14	1.8	3.2	0.68	0.62
21	25	13	3.6	e3.2	e1.8	e16	51	12	2.1	3.8	0.59	0.56
22	10	12	3.3	e3.0	e1.8	e11	66	8.1	2.0	2.2	0.47	0.56
23	6.6	11	5.1	e2.9	e1.8	e10	110	6.7	1.9	1.6	0.53	0.60
24	6.2	10	14	e2.9	e1.8	e12	109	6.2	1.8	1.3	1.8	0.61
25	6.1	9.3	8.4	e2.8	e1.7	e10	51	5.8	1.5	1.1	2.4	0.46
26	5.6	8.9	e6.1	e2.7	e1.7	e9.0	33	5.1	1.5	1.0	3.0	0.55
27	5.0	8.7	e5.1	e2.6	e1.7	e9.2	28	4.5	1.5	0.92	1.4	0.66
28	5.4	8.1	e4.5	e2.5	e1.7	e15	26	8.4	3.9	0.90	0.94	1.2
29	29	7.6	e3.4	e2.4	---	e15	23	6.6	2.3	0.93	0.85	1.1
30	13	9.0	e3.3	e2.4	---	e11	21	5.1	1.7	0.90	e2.1	0.85
31	8.9	---	e3.2	e2.4	---	e9.8	---	4.6	---	1.1	e2.3	---
Total	180.8	458.7	176.7	146.4	53.8	241.9	701.1	307.5	79.3	62.65	41.41	22.90
Mean	5.83	15.3	5.70	4.72	1.92	7.80	23.4	9.92	2.64	2.02	1.34	0.76
Max	29	59	14	19	2.5	23	110	24	7.1	8.7	3.1	1.6
Min	1.3	6.4	3.2	2.4	1.7	1.5	4.9	4.5	1.5	0.90	0.47	0.46
Cfsm	1.53	4.00	1.49	1.24	0.50	2.04	6.12	2.60	0.69	0.53	0.35	0.20
In.	1.76	4.47	1.72	1.43	0.52	2.36	6.83	2.99	0.77	0.61	0.40	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4.64	7.67	6.64	3.99	1.89	6.33	22.3	8.69	3.97	2.95	1.66	1.55
Max	16.5	18.0	11.9	12.5	6.10	16.2	32.0	12.4	6.58	5.98	2.90	3.85
(WY)	(2006)	(2006)	(2004)	(2006)	(2006)	(2000)	(2005)	(2000)	(2006)	(2006)	(2003)	(2005)
Min	1.08	0.96	1.26	0.41	0.39	0.75	11.3	5.74	2.60	1.46	0.40	0.63
(WY)	(2001)	(2002)	(2002)	(2002)	(2002)	(2001)	(2006)	(2001)	(2002)	(2001)	(2001)	(2000)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 2000 - 2007	
Annual total	2,810.9		2,473.16			
Annual mean	7.70		6.78		5.83	
Highest annual mean					9.34	2006
Lowest annual mean					3.53	2001
Highest daily mean	59	Nov 14	110	Apr 23	117	Apr 23, 2001
Lowest daily mean	1.0	Sep 19	0.46	Sep 25	0.24	Aug 25, 2001
Annual seven-day minimum	1.1	Sep 13	0.57	Sep 20	0.27	Sep 14, 2001
Maximum peak flow			187		187	
Maximum peak stage			5.31		5.31	
Instantaneous low flow			0.40		0.19	
Annual runoff (cfsm)	2.02		1.77		1.53	
Annual runoff (inches)	27.37		24.08		20.74	
10 percent exceeds	16		14		13	
50 percent exceeds	5.4		3.2		2.4	
90 percent exceeds	1.6		0.89		0.77	

