

Water-Data Report 2009

**01021500 MACHIAS RIVER AT WHITNEYVILLE, ME**

Maine Coastal Basin  
Maine Coastal Subbasin

LOCATION.--Lat 44°43'23", long 67°31'14" referenced to North American Datum of 1983, Washington County, ME, Hydrologic Unit 01050002, on right bank 800 ft downstream from U.S. Route 1A highway bridge at Whitneyville.

DRAINAGE AREA.--458 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--

DISCHARGE: October 1905 to September 1921, September 1929 to September 1977. May 2001 to March 2009 (discontinued). Monthly discharge only for some periods published in WSP 1301. Records for October 1903 to September 1905, published in WSP 97, 124, 165, and 241, are unreliable and should not be used.

REVISED RECORDS.--WSP 971: Drainage area. WSP 1231: 1907-15, 1916-21(M). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 37.22 ft above National Geodetic Vertical Datum of 1929. October 1, 1905, to Sept. 30, 1921, nonrecording gage on highway bridge at different datum.

REMARKS.--Records good, except for period of doubtful stage-discharge relation, Mar. 28-31, which is fair, periods of ice effect, Nov. 24, Dec. 7-9, Dec. 18 to Mar. 27, and period of no gage-height record, Jan. 22-24, Feb. 4-12, and 20-24, which are poor. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft<sup>3</sup>/s, May 29, 1961, gage height, 16.92 ft; minimum daily discharge, 3.5 ft<sup>3</sup>/s, Oct. 12, 1939, when flow was held back by cofferdam during reconstruction of highway bridge upstream.

## 01021500 MACHIAS RIVER AT WHITNEYVILLE, ME—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,170	1,120	3,140	e1,960	e492	e1,240	---	---	---	---	---	---
2	2,110	955	3,260	e1,480	e483	e1,400	---	---	---	---	---	---
3	3,510	842	2,920	e1,270	e480	e1,350	---	---	---	---	---	---
4	3,110	766	2,490	e1,100	e463	e1,220	---	---	---	---	---	---
5	2,340	714	2,190	e1,000	e449	e1,080	---	---	---	---	---	---
6	1,860	678	1,960	e947	e441	e986	---	---	---	---	---	---
7	1,590	906	e1,740	e876	e432	e983	---	---	---	---	---	---
8	1,410	1,350	e1,630	e820	e473	e1,030	---	---	---	---	---	---
9	1,290	1,400	e1,430	e777	e514	e1,140	---	---	---	---	---	---
10	1,210	1,530	2,300	e746	e494	e1,110	---	---	---	---	---	---
11	1,120	1,370	3,660	e714	e463	e1,040	---	---	---	---	---	---
12	1,030	1,190	4,240	e687	e604	e1,220	---	---	---	---	---	---
13	947	1,050	6,490	e670	e905	e1,220	---	---	---	---	---	---
14	884	971	6,080	e657	e983	e1,120	---	---	---	---	---	---
15	826	1,010	4,370	e639	e880	e1,010	---	---	---	---	---	---
16	784	1,920	3,210	e618	e765	e941	---	---	---	---	---	---
17	795	4,010	2,660	e603	e667	e908	---	---	---	---	---	---
18	776	3,500	e2,150	e592	e606	e887	---	---	---	---	---	---
19	704	2,460	e1,830	e639	e586	e938	---	---	---	---	---	---
20	641	1,900	e1,580	e669	e599	e1,200	---	---	---	---	---	---
21	598	1,590	e1,400	e650	e584	e1,140	---	---	---	---	---	---
22	572	1,410	e1,280	e612	e570	e1,040	---	---	---	---	---	---
23	547	1,280	e1,200	e582	e580	e950	---	---	---	---	---	---
24	517	e1,120	e1,180	e558	e623	e884	---	---	---	---	---	---
25	487	1,150	e1,550	e536	e599	e856	---	---	---	---	---	---
26	604	2,730	e2,040	e519	e580	e870	---	---	---	---	---	---
27	1,610	4,930	e1,920	e508	e560	e929	---	---	---	---	---	---
28	1,710	4,610	e2,470	e506	e1,000	1,090	---	---	---	---	---	---
29	1,890	3,990	e2,930	e508	---	1,390	---	---	---	---	---	---
30	1,660	3,540	e2,700	e508	---	2,900	---	---	---	---	---	---
31	1,340	---	e2,350	e495	---	4,600	---	---	---	---	---	---
<b>Total</b>	40,642	55,992	80,350	23,446	16,875	38,672	---	---	---	---	---	---
<b>Mean</b>	1,311	1,866	2,592	756	603	1,247	---	---	---	---	---	---
<b>Max</b>	3,510	4,930	6,490	1,960	1,000	4,600	---	---	---	---	---	---
<b>Min</b>	487	678	1,180	495	432	856	---	---	---	---	---	---
<b>Cfsm</b>	2.86	4.08	5.66	1.65	1.32	2.72	---	---	---	---	---	---
<b>In.</b>	3.30	4.55	6.53	1.90	1.37	3.14	---	---	---	---	---	---

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1906 - 2009, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	565	966	1,060	817	720	1,223	2,394	1,697	863	449	312	333
<b>Max</b>	2,486	2,460	2,972	2,116	2,799	3,633	5,836	3,163	3,206	1,189	993	1,624
<b>(WY)</b>	(2006)	(2007)	(1951)	(2006)	(1976)	(1936)	(1920)	(1963)	(1917)	(1947)	(1943)	(1954)
<b>Min</b>	62.1	76.4	144	146	195	242	813	549	228	127	50.0	50.5
<b>(WY)</b>	(2002)	(2002)	(1956)	(1948)	(1940)	(1967)	(2006)	(1966)	(1941)	(1949)	(2001)	(2001)

01021500 MACHIAS RIVER AT WHITNEYVILLE, ME—Continued

SUMMARY STATISTICS

	Calendar Year 2008		Water Years 1906 - 2009	
<b>Annual total</b>	530,969			
<b>Annual mean</b>	1,451		945	
<b>Highest annual mean</b>			1,498	1973
<b>Lowest annual mean</b>			542	1966
<b>Highest daily mean</b>	6,490	Dec 13	13,900	May 29, 1961
<b>Lowest daily mean</b>	127	Jul 18	3.5	Oct 12, 1939
<b>Annual seven-day minimum</b>	135	Jul 14	27	Sep 15, 2001
<b>Maximum peak flow</b>			14,800	May 29, 1961
<b>Maximum peak stage</b>			16.92	May 29, 1961
<b>Annual runoff (cfsm)</b>	3.17		2.06	
<b>Annual runoff (inches)</b>	43.13		28.03	
<b>10 percent exceeds</b>	3,100		2,260	
<b>50 percent exceeds</b>	1,140		565	
<b>90 percent exceeds</b>	254		172	

