

**01029500 EAST BRANCH PENOBSCOT RIVER AT GRINDSTONE, ME**

Penobscot Basin  
East Branch Penobscot Subbasin

LOCATION.--Lat 45°43'49", long 68°35'22" referenced to North American Datum of 1983, Penobscot County, ME, Hydrologic Unit 01020002, on left bank 500 ft downstream from Bangor and Aroostook Railroad bridge, 0.5 mi south of Grindstone, and 9.5 mi upstream from confluence with West Branch Penobscot River.

DRAINAGE AREA.--837 mi<sup>2</sup>, including 249 mi<sup>2</sup> drained by Chamberlain Lake through Telos Canal.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--

DISCHARGE: October 1902 to September 1982 (monthly discharge only for some periods). October 1999 to current year.

GAGE HEIGHT: May 1998 to September 1999.

GAGE.--Water-stage recorder. Datum of gage is 294.74 ft above National Geodetic Vertical Datum of 1929. Prior to June 30, 1929, nonrecording gage on railroad bridge at same datum.

REMARKS.--Records good, except for periods of ice effect, Dec. 6-13, 20-23, Dec. 28 to Jan. 4, and Jan. 11 to Apr. 22, which are poor. Flow regulated by Chamberlain, Telos, Second, Grand Lakes, and Round Pond, combined usable capacity, about 6.835 billion ft<sup>3</sup>. Final regulation at Grand Lake Dam 35 mi upstream. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 37,000 ft<sup>3</sup>/s, Apr. 30, 1923, gage height 16.9 ft, site then in use; minimum daily discharge, 77 ft<sup>3</sup>/s, Nov. 19, 1924.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,500 ft<sup>3</sup>/s, Apr. 25, gage height, 10.71 ft; minimum daily discharge, 414 ft<sup>3</sup>/s, Sept. 27.

## 01029500 EAST BRANCH PENOBSCOT RIVER AT GRINDSTONE, ME—Continued

**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	1,150	6,150	3,490	e1,070	e945	e578	e1,030	11,200	2,470	976	640	852
2	986	4,530	3,900	e1,170	e918	e564	e1,050	11,100	2,430	935	621	708
3	1,040	3,770	3,620	e1,190	e893	e567	e1,020	10,500	2,290	917	618	618
4	1,040	3,080	3,300	e1,190	e868	e596	e971	9,940	2,190	887	731	571
5	1,010	2,480	2,010	1,250	e848	e609	e916	9,320	3,480	892	683	537
6	990	2,530	e1,310	1,730	e825	e599	e904	8,320	3,640	1,020	643	516
7	942	2,500	e1,570	2,830	e802	e556	e901	7,980	2,730	1,020	729	510
8	905	2,640	e1,520	2,580	e780	e553	e860	8,330	2,050	967	740	500
9	879	2,860	e1,340	2,590	e757	e550	e825	9,070	1,750	893	1,070	488
10	842	3,290	e1,480	2,580	e738	e550	e805	9,130	1,720	871	937	482
11	613	2,870	e1,380	e1,960	e721	e600	e799	9,000	1,620	845	1,070	489
12	976	2,570	e1,330	e1,910	e703	e599	e829	8,470	1,620	952	703	517
13	3,600	2,880	e1,090	e1,890	e690	e589	e934	7,620	1,570	1,110	662	507
14	2,500	4,980	1,600	e1,710	e679	e574	e1,180	6,690	1,490	965	634	481
15	1,720	11,500	1,540	e1,590	e719	e622	e1,210	5,630	1,420	895	610	478
16	1,360	9,740	1,490	e1,500	e688	e757	e1,500	4,970	1,310	1,020	604	484
17	1,160	9,360	1,510	e1,450	e692	e972	e1,860	5,900	1,130	1,050	594	479
18	1,240	11,300	1,450	e1,410	e702	e1,400	e2,350	6,460	1,310	922	614	467
19	1,920	9,100	1,380	e1,360	e709	e1,710	e3,000	7,260	1,260	889	592	459
20	1,790	7,510	e1,180	e1,320	e662	e1,690	e3,850	7,630	1,130	907	567	451
21	6,190	6,370	e1,250	e1,290	e637	e1,560	e4,840	8,270	1,150	990	544	446
22	7,940	5,360	e1,220	e1,250	e628	e1,500	e6,180	6,780	1,080	938	532	439
23	6,550	4,390	e1,080	e1,220	e603	e1,340	7,920	5,530	1,040	844	512	438
24	5,370	3,910	1,870	e1,180	e598	e1,270	11,500	4,550	1,050	788	506	427
25	4,640	3,660	1,900	e1,150	e603	e1,200	14,100	4,040	978	747	534	416
26	4,180	3,450	1,700	e1,120	e618	e1,150	13,100	3,430	916	712	782	418
27	3,740	3,310	1,520	e1,090	e611	e1,080	12,700	3,030	877	682	826	414
28	3,460	3,260	e1,280	e1,060	e596	e1,120	12,000	3,040	1,140	680	671	485
29	9,520	3,120	e1,170	e1,030	---	e1,140	11,400	3,140	1,290	731	591	492
30	10,400	3,030	e1,010	e1,000	---	e1,110	11,000	2,750	1,060	712	567	457
31	8,260	---	e1,110	e972	---	e1,050	---	2,620	---	676	793	---
<b>Total</b>	96,913	145,500	52,600	46,642	20,233	28,755	131,534	211,700	49,191	27,433	20,920	15,026
<b>Mean</b>	3,126	4,850	1,697	1,505	723	928	4,384	6,829	1,640	885	675	501
<b>Max</b>	10,400	11,500	3,900	2,830	945	1,710	14,100	11,200	3,640	1,110	1,070	852
<b>Min</b>	613	2,480	1,010	972	596	550	799	2,620	877	676	506	414
<b>Cfsm</b>	2.88	4.47	1.56	1.39	0.67	0.85	4.04	6.29	1.51	0.81	0.62	0.46
<b>In.</b>	3.32	4.98	1.80	1.60	0.69	0.98	4.51	7.25	1.68	0.94	0.72	0.51

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	1,321	1,826	1,584	1,116	1,026	1,520	4,837	4,841	2,261	1,316	896	969
<b>Max</b>	6,395	6,564	6,015	3,657	3,680	7,851	9,941	10,890	6,292	4,697	2,807	4,200
<b>(WY)</b>	(2006)	(1964)	(1951)	(2006)	(1970)	(1936)	(2000)	(1961)	(1917)	(1918)	(1976)	(1954)
<b>Min</b>	210	327	203	255	216	222	1,268	1,545	796	357	250	264
<b>(WY)</b>	(1911)	(1956)	(1909)	(1948)	(1948)	(1923)	(1926)	(2004)	(1921)	(1955)	(1941)	(1910)

01029500 EAST BRANCH PENOBSCOT RIVER AT GRINDSTONE, ME—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1903 - 2007	
<b>Annual total</b>	990,167		846,447			
<b>Annual mean</b>	2,713		2,319		1,961	
<b>Highest annual mean</b>					3,233	2006
<b>Lowest annual mean</b>					1,028	1911
<b>Highest daily mean</b>	11,500	Nov 15	14,100	Apr 25	33,700	Apr 30, 1923
<b>Lowest daily mean</b>	512	Sep 3	414	Sep 27	77	Nov 19, 1924
<b>Annual seven-day minimum</b>	550	Aug 29	428	Sep 21	117	Dec 25, 1914
<b>Maximum peak flow</b>			14,500	Apr 25	37,000	Apr 30, 1923
<b>Maximum peak stage</b>			10.71	Apr 25	16.90	Apr 30, 1923
<b>Annual runoff (cfsm)</b>	2.50		2.14		1.81	
<b>Annual runoff (inches)</b>	33.92		28.99		24.54	
<b>10 percent exceeds</b>	6,250		6,610		4,650	
<b>50 percent exceeds</b>	1,950		1,120		1,130	
<b>90 percent exceeds</b>	681		566		430	

