



USGS Water-Year Summary 2017

## 01092000 MERRIMACK RIVER NEAR GOFFS FALLS, BELOW MANCHESTER, NH

LOCATION - Lat 42°56'53", long 71°27'50" referenced to North American Datum of 1927, Hillsborough County, NH, Hydrologic Unit 01070002, on right bank, 600 ft upstream from bridge on Interstate Highway 293, 0.8 mi downstream from Bowman Brook, 1.3 mi north of Goffs Falls, 2.2 mi downstream from Piscataquog River, and 3.0 mi south of Manchester City Hall on Elm Street.

DRAINAGE AREA - 3,092 mi<sup>2</sup>.

[REVISIONS HISTORY](#) - WSP 1231: 1937. WSP 1271: 1937(M, m).

### SURFACE-WATER RECORDS

PERIOD OF RECORD - Discharge records: October 1936 to current year. October 1936 monthly discharge only, published in WSP 1301.

GAGE - Water-stage recorder. Datum of gage is 109.27 ft above National Geodetic Vertical Datum of 1929.

REMARKS - WATER YEARS 2014-17: Records good except those for estimated discharges, which are poor. Flow regulated by power plants, by Franklin Falls Reservoir since 1942, and by Squam, Newfound, Winnepesaukee, Winnisquam, and other lakes and reservoirs upstream.

EXTREMES OUTSIDE PERIOD OF RECORD - Maximum discharge since at least 1722, 150,000 ft<sup>3</sup>/s, March 20, 1936, gage height, 35.19 ft, from floodmarks, from rating curve extended above 48,000 ft<sup>3</sup>/s on basis of computation of flow over dam at gage heights 25.87 ft and 35.19 ft.

EXTREMES FOR PERIOD OF RECORD - Maximum discharge, 102,000 ft<sup>3</sup>/s, Sep. 23, 1938, gage height 25.87 ft, from rating curve extended above 48,000 ft<sup>3</sup>/s on basis of computation of flow over dam at gage heights 25.87 ft and 35.19 ft.

**U.S. Department of the Interior**  
**U.S. Geological Survey**

Suggested citation: U.S. Geological Survey, 2019, National Water Information System data available on the World Wide Web (USGS Water Data for the Nation), accessed [April 3, 2019], [https://nwis.waterdata.usgs.gov/nwis/wys\\_rpt?dv\\_ts\\_ids=&64051&adr\\_begin\\_date=2016-10-01&adr\\_end\\_date=2017-09-30&site\\_no=01092000&agency\\_cd=USGS](https://nwis.waterdata.usgs.gov/nwis/wys_rpt?dv_ts_ids=&64051&adr_begin_date=2016-10-01&adr_end_date=2017-09-30&site_no=01092000&agency_cd=USGS)

Water-Data Report 2017  
01092000 MERRIMACK RIVER NEAR GOFFS FALLS, BELOW MANCHESTER, NH -- Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**YEAR 2016-10-01 to 2017-09-30**  
**DAILY MEAN VALUES**

[e, Value has been estimated.]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	2016	2016	2016	2017	2017	2017	2017	2017	2017	2017	2017	2017
1	729	3,530	4,830	3,120	2,980	16,600	7,510	11,200	10,800	4,720	1,240	1,190
2	716	2,510	7,660	e3,020	e2,830	14,500	7,230	11,400	11,600	6,890	1,090	966
3	724	2,200	7,640	2,870	e2,700	15,100	7,460	13,000	10,300	14,200	1,850	1,210
4	755	2,470	6,070	3,540	e2,490	13,800	9,340	13,300	8,720	13,600	1,660	1,780
5	730	3,860	4,780	e4,130	e2,440	10,700	13,800	12,300	8,050	9,020	1,630	2,120
6	738	3,180	3,850	e4,330	2,460	8,050	15,500	13,500	9,710	6,030	1,640	2,780
7	726	2,480	3,550	e3,910	2,390	7,240	19,400	15,900	17,600	4,690	1,780	4,010
8	686	2,170	3,210	e3,180	2,330	6,790	21,700	16,900	20,900	4,130	1,920	4,520
9	814	1,730	3,140	e3,010	e2,540	6,420	21,100	16,300	18,900	3,600	2,190	3,880
10	795	1,370	2,690	e2,470	e2,230	6,710	19,200	14,100	15,100	3,200	1,640	3,170
11	789	1,680	e2,160	2,860	e2,340	6,000	19,200	11,400	11,400	3,280	1,560	2,760
12	1,200	1,370	2,090	3,200	e2,350	4,570	22,100	9,020	9,110	3,230	1,420	2,440
13	1,310	1,450	2,430	4,270	2,450	4,750	25,000	8,040	7,270	3,130	1,530	2,130
14	1,160	1,270	2,350	e4,530	e2,650	4,130	25,700	9,710	6,270	3,700	1,450	1,830
15	1,000	1,490	2,240	e4,820	2,640	3,710	23,000	17,600	5,270	4,300	1,280	1,580
16	928	3,200	e1,660	e4,460	2,600	4,630	18,800	21,200	4,410	4,120	1,340	1,560
17	821	2,830	e1,830	e3,970	2,570	4,550	17,200	20,500	4,670	3,580	1,210	1,480
18	750	2,800	1,990	3,790	2,480	4,220	17,800	17,500	4,890	3,320	1,550	1,300
19	751	2,360	2,200	3,600	2,520	4,020	16,400	14,400	4,890	3,620	2,240	1,270
20	776	2,300	2,850	3,440	2,730	3,900	13,600	11,500	5,740	3,590	3,280	1,330
21	1,130	2,300	3,100	3,440	2,820	3,940	11,900	9,430	6,970	3,210	2,870	1,450
22	1,870	2,470	2,900	3,520	3,210	4,130	12,200	7,850	6,530	2,880	2,180	1,490
23	1,270	2,120	2,840	3,570	3,450	3,800	13,000	7,340	5,470	2,730	2,180	1,410
24	1,850	2,030	2,690	3,730	4,360	3,740	12,000	7,560	4,730	2,750	1,960	1,270
25	1,280	1,900	e2,560	3,790	7,000	3,750	10,800	7,110	4,160	2,580	2,160	1,210
26	1,170	1,930	e2,470	3,810	14,900	3,740	11,000	9,610	3,950	2,560	1,910	945
27	1,080	1,950	2,490	4,030	19,800	4,260	13,600	15,000	3,800	2,360	1,630	1,520
28	2,030	1,940	2,730	3,860	19,700	5,620	14,800	15,500	4,270	1,950	1,510	1,110
29	3,180	2,140	3,210	3,710		6,880	13,900	13,200	3,790	1,980	1,370	1,190
30	3,700	2,590	3,390	e3,370		7,680	12,600	10,600	3,180	1,920	1,300	1,160
31	3,900		e3,240	e3,080		7,740		9,310		1,420	1,030	
<b>Total</b>	39,360	67,620	100,800	112,400	126,000	205,700	466,800	391,300	242,400	132,300	53,600	56,060
<b>Mean</b>	1,270	2,254	3,253	3,627	4,499	6,635	15,559	12,620	8,082	4,267	1,729	1,869
<b>Max</b>	3900	3860	7660	4820	19800	16600	25700	21200	20900	14200	3280	4520
<b>Min</b>	686	1270	1660	2470	2230	3710	7230	7110	3180	1420	1030	945
<b>Ac-ft</b>	78,060	134,100	200,000	223,000	249,800	407,900	926,000	776,100	480,900	262,400	106,300	111,200

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 2017, BY WATER YEAR  
(WY)**

	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sep</b>
<b>Mean</b>	3,453	4,962	5,656	4,755	4,714	7,961	13,910	8,600	4,746	2,744	2,181	2,219
<b>Max</b>	19,820	13,569	13,690	12,550	11,370	18,240	25,660	20,380	16,480	11,470	8,576	14,499
<b>(WY)</b>	(2006)	(2006)	(1984)	(2006)	(1970)	(1953)	(1969)	(2006)	(1984)	(1973)	(1990)	(1938)
<b>Min</b>	771	1,320	1,458	1,265	1,354	2,141	4,175	3,059	1,354	809	781	742
<b>(WY)</b>	(1965)	(2002)	(1979)	(2002)	(1980)	(1940)	(2012)	(1957)	(1964)	(1991)	(2002)	(2016)

Water-Data Report 2017  
 01092000 MERRIMACK RIVER NEAR GOFFS FALLS, BELOW MANCHESTER, NH -- Continued

**SUMMARY STATISTICS**

	<b>Water Year 2017</b>		<b>Water Years 1937 - 2017</b>	
<b>Annual total</b>	1,994,000			
<b>Annual mean</b>	5,464		5,471	
<b>Highest annual mean</b>			10,330	2006
<b>Lowest annual mean</b>			2,248	1965
<b>Highest daily mean</b>	25,700	Apr 14	94,800	Sep 23, 1938
<b>Lowest daily mean</b>	686.0	Oct 08	98.0	Oct 11, 1964
<b>Annual 7-day minimum</b>	725.0	Oct 02	394.4	Sep 25, 1964
<b>Maximum peak flow</b>	25,900 <sup>a</sup>	Apr 14	102,500 <sup>a</sup>	Sep 23, 1938
<b>Maximum peak stage</b>	9.83	Apr 14	25.87	Sep 23, 1938
<b>Annual runoff (cfsm)</b>	1.77		1.78	
<b>Annual runoff (inches)</b>	24.0		24.1	
<b>10 percent exceeds</b>	14,140		12,500	
<b>50 percent exceeds</b>	3,240		3,590	
<b>90 percent exceeds</b>	1,270		1,230	

<sup>a</sup> Discharge affected by Regulation or Diversion

