

# **MIDDLESEX COUNTY**

## ***REFERENCE TIDE GAUGE - SANDY HOOK***

The Sandy Hook tide gauge is located on the bay side of Sandy Hook in Monmouth County.

### ***Raritan Bay***

The Sandy Hook gauge is fairly representative of the tides along the Raritan Bay shoreline in Middlesex County. The high and low tides occur within about 15 minutes of those at Sandy Hook.

### ***Raritan River***

The Raritan River is tidal below New Brunswick. The high tides at New Brunswick occur about ½ hour later than those at Sandy Hook. Low tides are about 45 minutes later.

### ***Arthur Kill***

The high and low tides along the Arthur Kill in Middlesex County are up to about ½ hour later than those at Sandy Hook.

### ***Middlesex County***

#### **In the upper part of the minor range:**

Flooding begins along Woodbridge Creek in Woodbridge Township.

Flooding begins in Perth Amboy.

Flooding begins along the South River and in Old Bridge Township.

Flooding begins around Victory Plaza in Sayreville (US Route 9 and NJ Route 35).

Flooding begins along North Rosewell Avenue in South Amboy.

Flooding begins around Waterfront Park in South Amboy.

Flooding begins along NJ Route 35 in Laurence Harbor.

### ***Data Acquisition***

In order to access data from the Sandy Hook gauge, use the National Ocean Service web site at <http://tidesonline.nos.noaa.gov/> or the Advanced Hydrologic Prediction Service site at <http://water.weather.gov/ahps2/index.php?wfo=phi>.

## ***REFERENCE TIDE GAUGE - SANDY HOOK***

The tide heights from actual events referenced in the following table are those that were verified by the National Ocean Service.

THE PERIOD OF RECORD FOR THE SANDY HOOK GAUGE BEGINS IN JANUARY 1910. PLEASE NOTE THAT THERE ARE GAPS WITHIN THE PERIOD OF RECORD DUE TO EQUIPMENT OUTAGES AND/OR DATA AVAILABILITY.

ALL HEIGHTS ARE IN MEAN LOWER LOW WATER (**MLLW**).

14.4 FT — October 29, 2012 (Post Tropical Cyclone Sandy). This is an estimated value. The tide gauge failed about an hour before the actual high water level occurred.

10.1 FT — September 12, 1960 (Hurricane Donna)  
December 11, 1992

9.8 FT — August 28, 2011 (Hurricane Irene)

9.7 FT — November 7, 1953

9.4 FT — September 14, 1944 (Hurricane)  
March 6, 1962

9.0 FT — November 25, 1950  
March 13, 2010

8.9 FT — January 23, 1966

8.8 FT — November 12, 1968

**8.7 FT — MAJOR TIDAL FLOODING BEGINS.**

At this level, flooding starts to become severe enough to begin causing structural damage along with widespread flooding of roadways. Vulnerable homes and businesses may be severely damaged or destroyed as water levels rise further above this threshold. Numerous roads become impassable and some neighborhoods may be isolated. The flood waters become a danger to anyone who attempts to cross on foot or in a vehicle.

March 29, 1984

March 13, 1993

8.6 FT — September 27, 1985 (Hurricane Gloria)

January 2, 1987

October 31, 1991

8.5 FT — April 13, 1961

8.3 FT — February 19, 1972

March 19, 1996

8.2 FT — October 18, 2009

February 8, 2016

8.1 FT — January 31, 2006

April 16, 2007

8.0 FT — October 14, 1955

December 26, 1969

December 2, 1974

April 16, 2011

June 4, 2012

January 10, 2016

7.9 FT — August 31, 1954 (Hurricane Carol)  
December 22, 1972  
October 25, 1980  
February 24, 1998  
December 25, 2002  
November 14, 2009  
January 23, 2016

7.8 FT — October 14, 1977  
November 8, 1977  
March 3, 1994  
December 20, 1995  
January 29, 1998  
March 30, 2010

**7.7 FT — MODERATE TIDAL FLOODING BEGINS.**

At this level, widespread flooding of roadways begins due to high water and/or wave action with many roads becoming impassable. Lives may be at risk when people put themselves in harm's way. Some damage to vulnerable structures may begin to occur.

March 20, 1958  
October 22, 1961  
November 10, 1962  
December 25, 1978  
December 3, 1986  
January 4, 1994  
December 13, 1996  
November 14, 1997  
January 3, 2003  
January 3, 2006  
February 12, 2006  
October 7, 2006  
May 12, 2008  
December 12, 2008  
May 17, 2011  
December 27, 2012  
January 3, 2014  
April 29, 2014

**7.0 FT — COASTAL FLOOD ADVISORY THRESHOLD.**

**6.7 FT — MINOR TIDAL FLOODING BEGINS.**

**-2.0 FT — LOW WATER ADVISORY THRESHOLD.**

- 3.0 FT — March 7, 1939  
February 26, 1956  
January 28, 1963  
January 27, 1971  
December 17, 1972  
March 4, 1996
- 3.1 FT — February 10, 1933  
December 20, 1934  
January 25, 1939  
March 3, 1950
- 3.2 FT — December 26, 1966  
March 9, 2005
- 3.3 FT — February 14, 1942  
December 3, 1942  
January 24, 1945  
February 15, 1946  
November 30, 1955  
February 25, 1967  
March 17, 1976  
March 16, 1980
- 3.4 FT — January 31, 1966  
January 2, 1969  
December 22, 1976  
December 10, 1977
- 3.5 FT — December 8, 1939  
March 19, 1941  
February 8, 1951  
March 28, 1955
- 3.6 FT — March 24, 1940  
December 11, 1943  
December 1, 1944
- 3.7 FT — February 10, 1947
- 3.8 FT — March 11, 1933
- 4.1 FT — January 6, 1959
- 4.2 FT — January 24, 1936
- 4.3 FT — December 31, 1962
- 4.4 FT — January 10, 1978
- 4.7 FT — February 2, 1976