

DELAWARE RIVER

TRENTON TO MARCUS HOOK

REFERENCE TIDE GAUGE - PHILADELPHIA

The Philadelphia tide gauge is located on the Delaware River near the east end of Washington Avenue.

High tide at Trenton, New Jersey occurs about 1¼ hours later than the high tide at Philadelphia. Low tide is around 1¾ hours later.

High tide at Marcus Hook, Pennsylvania occurs about 1½ hours earlier than the high tide at Philadelphia. Low tide is around 1¼ hours earlier.

Mercer County

In the minor range, there are no known tidal flooding problem areas in Mercer County. However, tidal effects may worsen river and creek flooding caused by heavy rainfall or snowmelt.

Bucks County

In the upper part of the minor range:

Flooding begins around Radcliffe Street and Mill Street in Bristol.

Flooding begins in Bristol Township near the mouth of the Neshaminy Creek.

Burlington County

Note: For eastern Burlington County refer to Ocean County.

In the minor range:

Flooding begins along the riverfront in Burlington City.

In Burlington Township, flooding begins along Tanner's Run near the intersection of US Route 130, Beverly Road and Devlin Avenue.

In Delanco, flooding begins along Delaware Avenue and on the access road to the Riverside Bridge (Burlington Avenue).

Flooding begins around the Centerton Road bridge (Burlington County Route 635) over the Rancocas Creek. The bridge connects Willingboro and Westampton Township with Mount Laurel Township.

Flooding begins in Riverside and Delran.

In Moorestown, flooding begins along the North Branch of the Pennsauken Creek below the Strawbridge Lake Dam.

*Prolonged periods of westerly winds tend to prevent the Rancocas Creek from draining into the Delaware River. This may result in flooding in Moorestown along Kendles Run (especially at Creek Road) and along Parkers Creek.

Flooding begins around Kern Street, Zeisner Avenue and River Road in Cinnaminson.

Flooding begins along the Pompeston Creek in Cinnaminson and Riverton.

Philadelphia County

In the lower part of the minor range:

Flooding begins at the east end of Linden Avenue in the Northeast. There is a large parking lot at that location.

Flooding begins at the former Navy Shipyard from both the Delaware River and the Schuylkill River.

In the upper part of the minor range:

Flooding begins along Columbus Boulevard from Spring Garden Street to Washington Avenue. Generally, it is not a case of the river spilling over onto the roadway. The flooding problems tend to occur when the river is high and water begins to backup into the storm drains.

Camden County

In the minor range:

Flooding begins on North Park Drive in Pennsauken.

In Camden, flooding begins along Admiral Wilson Boulevard (US Route 30) and Baird Avenue as the Cooper River overflows.

Water backs up into Cooper River Lake.

Flooding begins on South Park Drive in Collingswood and Haddon Township.

Flooding begins along the Little Timber Creek between Gloucester City and Brooklawn.

Flooding begins in Brooklawn around the Brooklawn Circle.

Gloucester County

In the minor range:

In Westville, flooding begins along Timber Avenue, Edgewater Avenue and NJ Route 47 as the Big Timber Creek overflows its banks.

Flooding begins along Woodbury Creek and Hessian Run in West Deptford Township.

Flooding begins along Woodbury Creek in Woodbury.

Flooding begins along Mantua Creek.

Flooding begins along the Nehonsey Brook in Greenwich Township (Gibbstown) at South Poplar Street and Democrat Road.

The Repaupo Creek overflows onto Flood Gates Road in Greenwich Township and Logan Township. There is a floodgate at the mouth of Repaupo Creek, where it empties into the Delaware River.

Flooding begins along High Hill Road and Center Square Road in Logan Township.

Flooding begins along US Route 130 at Oldmans Creek.

Flooding begins along Pedricktown Road (Gloucester County Route 601) in Logan Township near Oldmans Creek.

Delaware County

In the upper part of the minor range:

Flooding begins in Tinicum Township between Philadelphia International Airport and Essington.

Data Acquisition

In order to access data from the Philadelphia 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 - PHILADELPHIA

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 PHILADELPHIA GAUGE BEGINS IN JULY 1900. PLEASE NOTE THAT THERE ARE GAPS WITHIN THE PERIOD OF RECORD DUE TO EQUIPMENT OUTAGES AND/OR DATA AVAILABILITY.

READINGS FROM JULY 1900 THROUGH DECEMBER 1989 ARE FROM THE OLD GAUGE AT PIER 11. READINGS FROM JANUARY 1990 TO THE PRESENT ARE FROM THE GAUGE AT THE COAST GUARD STATION. A CORRECTION OF -0.09 FEET WAS APPLIED TO THE PIER 11 DATA TO MAKE IT CONSISTENT WITH THE COAST GUARD STATION DATA.

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

10.6 FT — October 30, 2012 (Post Tropical Cyclone Sandy)

10.5 FT — November 25, 1950
April 17, 2011

10.4 FT — December 21, 2012

10.2 FT — MAJOR TIDAL FLOODING BEGINS.

At this level, widespread roadway flooding begins near the river and its tidal tributaries. Vulnerable homes and businesses may be damaged 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.

October 25, 1980

10.1 FT — August 23, 1933 (Hurricane)

9.9 FT — August 20, 1955 (Hurricane Diane)
February 26, 1979

August 28, 2011 (Hurricane Irene)

May 1, 2014

9.8 FT — April 2, 2005

9.7 FT — December 11, 1992

- 9.6 FT — June 30, 1973
September 29, 2011
- 9.5 FT — November 28, 1993
September 19, 2003 (Hurricane Isabel)
April 19, 2007
- 9.4 FT — October 15, 1954 (Hurricane Hazel)
March 7, 1962
June 29, 2006
- 9.3 FT — October 17, 1955
- 9.2 FT — MODERATE TIDAL FLOODING BEGINS.**
At this level, additional roadways near the river and its tidal tributaries begin to flood. Lives may be at risk when people put themselves in harm's way. Some damage to vulnerable structures may begin to occur.
January 25, 1979
January 19, 1996
December 14, 2003
March 29, 2010
- 8.5 FT — COASTAL FLOOD ADVISORY THRESHOLD.**
- 8.2 FT — MINOR TIDAL FLOODING BEGINS.**
- 2.0 FT — LOW WATER STATEMENT THRESHOLD.**
- 3.0 FT — April 6, 1943
December 22, 1976
November 14, 2003
January 3, 2010
- 3.1 FT — January 26, 1928
February 1, 1932
March 28, 1955
February 6, 1979
January 17, 2000
- 3.2 FT — January 6, 1927
January 30, 1934
February 14, 1942
February 8, 1943
February 15, 1946
February 10, 1947
March 3, 1950
February 10, 1958
February 5, 1995
January 15, 2006

- 3.3 FT — December 8, 1939
February 24, 1963
February 25, 1967
February 25, 1990
March 6, 2007
- 3.4 FT — February 15, 1923
January 21, 1929
November 30, 1958
December 18, 1964
January 15, 1979
March 15, 1993
February 15, 2015
- 3.5 FT — October 30, 1925
December 8, 1931
December 11, 1943
December 18, 1972
December 7, 1983
- 3.6 FT — December 28, 1925
February 5, 1972
- 3.7 FT — March 19, 1941
April 4, 1975
February 8, 1985
- 3.8 FT — January 27, 1971
December 4, 1980
April 7, 1982
- 3.9 FT — March 11, 1929
February 15, 1938
February 4, 1969
- 4.1 FT — January 6, 1959
March 8, 1986
- 4.2 FT — March 8, 1932
- 4.4 FT — November 21, 1989
- 4.5 FT — January 25, 1939
- 4.8 FT — December 23, 1946
- 5.2 FT — January 25, 1945
- 6.8 FT — December 31, 1962