KENT COUNTY, DELAWARE

REFERENCE TIDE GAUGE - LEWES

There is no National Ocean Service tide gauge in Kent County. As a result, the Lewes tide gauge is being used as the reference for the county. The gauge is located on the bay side of Cape Henlopen in Breakwater Harbor.

High tides along Kent County's bay shore occur later than the high tides at Lewes. The time differences range from about 25 minutes in the southern part of the county to around $1\frac{1}{2}$ hours in the northern part of the county. Low tides range from about 50 minutes later in the south to around $2\frac{1}{4}$ hours later in the north.

The marshes in Kent County act like back bays during prolonged periods of onshore flow. If the water is not allowed to drain out of the marshes, any tidal flooding will either persist or worsen.

Data Acquisition

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

REFERENCE TIDE GAUGE - LEWES

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 LEWES GAUGE BEGINS IN JANUARY 1919. 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**).

- 9.3 FT January 23, 2016
- 9.2 FT March 6, 1962
- 8.8 FT January 4, 1992
- 8.7 FT October 29, 2012 (Post Tropical Cyclone Sandy)
- 8.6 FT January 28, 1998
- 8.5 FT February 5, 1998

8.0 FT — MAJOR TIDAL FLOODING BEGINS.

Flooding becomes 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. September 27, 1985 (Hurricane Gloria)

March 3, 1994

August 27, 2011 (Hurricane Irene)

- 7.9 FT October 25, 1980 March 29, 1984
- 7.8 FT December 12, 1992 January 7, 1996 November 13, 2009
- 7.7 FT May 12, 2008 October 29, 2011
- 7.6 FT October 22, 1961 October 14, 1977 February 17, 2003
- 7.5 FT October 31, 1991 October 2, 2015
- 7.4 FT September 18, 1936 (Hurricane) November 3, 1962 December 22, 1972 January 2, 1987 November 14, 1997 January 25, 2000 October 7, 2006
- 7.3 FT December 9, 1973 October 8, 1996 October 17, 2009 June 4, 2012 March 6, 2013
- 7.2 FT January 13, 1964 September 25, 1992 (Tropical Storm Danielle) May 25, 2005 February 9, 2016
- 7.1 FT November 10, 1969 January 31, 2006 December 19, 2009 December 9, 2014

7.0 FT — MODERATE TIDAL FLOODING BEGINS.

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.

November 1, 1947 February 26, 1979 November 15, 1981 December 2, 1986 October 19, 1989 January 3, 2003

6.8 FT — DE Route 9 in Leipsic begins to flood in the vicinity of the Leipsic River.

Flooding begins in Milford along the Mispillion River.

6.6 FT — DE Route 9 (Main Street) in Little Creek begins to flood.

6.3 FT — COASTAL FLOOD ADVISORY THRESHOLD.

6.2 FT — DE Route 6 into Woodland Beach begins to flood. Kent County Route 89 into Port Mahon begins to flood. Kent County Route 349 into Pickering Beach begins to flood. Kent County Route 68 into Kitts Hummock begins to flood. Kent County Route 107 near Barkers Landing begins to flood. Kent County Route 18 into Bowers Beach begins to flood. Kent County Route 121 into Webb Landing and South Bowers begins to flood.

Kent County Route 124 into Big Stone Beach begins to flood.

6.0 FT — MINOR TIDAL FLOODING BEGINS.

-2.0 FT — LOW WATER ADVISORY THRESHOLD.

- -3.0 FT December 8, 1939 March 5, 1954 December 31, 1962 December 22, 1976 January 11, 1977 December 10, 1977
- -3.1 FT January 25, 1939 November 30, 1958 January 28, 1963
- -3.2 FT January 6, 1959 March 16, 1980
- -3.4 FT January 28, 1971
- -4.2 FT January 10, 1978

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