

# **SUSSEX COUNTY**

## ***REFERENCE TIDE GAUGE - LEWES (BREAKWATER HARBOR)***

The Lewes tide gauge is located on the bay side of Cape Henlopen in Breakwater Harbor.

### ***Delaware Bay***

For the Delaware Bay shoreline in Sussex County, high tides occur about 25 minutes later at the Mispillion River (the north end of the county) than at the Lewes gauge. Low tides occur around 50 minutes later.

### ***Oceanfront***

The high and low tides on the oceanfront occur up to around 1 hour earlier than the high and low tides at the Lewes gauge.

### ***Back bays***

The back bays of Sussex County are Rehoboth Bay and Indian River Bay (both of which drain through the narrow Indian River Inlet), and Little Bay and Little Assawoman Bay (both of which drain into Maryland's Assawoman Bay to the south).

High tides on the back bays of Sussex County occur up to about 2½ hours later than the high tides at the Lewes gauge. Low tides occur up to about 3 hours later.

The back bays present a problem during prolonged periods of onshore flow. For each successive tide cycle that the back bays are not allowed to drain, the water levels increase.

### ***Data Acquisition***

In order to access data from the Lewes gauge, use the National Ocean Service web site at <http://storms.nos.noaa.gov/>.

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The tide heights from actual events referenced in the following table are those that were verified by the National Ocean Service. They may vary slightly from figures found in National Weather Service publications.

In the table, an asterisk (\*) indicates that location experiences back bay type flooding. Being that the reference gauge is on Delaware Bay, the tide level associated with that particular location may vary somewhat from event to event based on the number of tide cycles during which there is an onshore flow.

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

- 9.2 FT — March 6, 1962.
- 8.8 FT — January 4, 1992.
- 8.6 FT — January 28, 1998.
- 8.5 FT — February 5, 1998.
- 8.0 FT — SEVERE TIDAL FLOODING BEGINS.**  
September 27, 1985 (Hurricane Gloria) and March 3, 1994.
- 7.9 FT — October 25, 1980 and March 29, 1984.
- 7.8 FT — December 12, 1992 and January 7, 1996.
- 7.7 FT — May 12, 2008.
- 7.6 FT — October 14, 1977 and February 17, 2003.
- 7.5 FT — October 31, 1991.
- 7.4 FT — December 22, 1972; January 2, 1987; November 14, 1997; January 25, 2000 and October 7, 2006.
- 7.3 FT — December 9, 1973 and October 8, 1996.
- 7.2 FT — September 25, 1992 and May 25, 2005.
- 7.1 FT — January 31, 2006.
- 7.0 FT — MODERATE TIDAL FLOODING BEGINS.**  
February 26, 1979; November 15, 1981; December 2, 1986; October 19, 1989 and January 3, 2003.
- 6.9 FT — Flooding occurs in Milford along the Mispillion River.  
Flooding begins in Primehook Beach.  
Flooding begins in Broadkill Beach, including DE Route 16.  
Flooding occurs in Rehoboth Beach along Surf Avenue and along the Boardwalk.  
Flooding begins in Oak Orchard, including Sussex County Route 312\*.  
Flooding occurs in Millsboro.
- 6.7 FT — Flooding occurs along Sussex County Route 360 and Salt Pond Road\* (both are just north of Bethany Beach).
- 6.5 FT — Flooding begins around the Mispillion Light.  
Flooding begins in Slaughter Beach.  
Flooding occurs along Cedar Street in Lewes.  
Flooding occurs along US Route 9 in Lewes in the vicinity of the Lewes and Rehoboth Canal.  
Flooding begins in Long Neck, including DE Route 23\*.
- 6.3 FT — Flooding occurs at Old Landing on Rehoboth Bay\*.  
Flooding occurs along sections of DE Route 1 between Dewey Beach and Bethany Beach, including the Delaware Seashore State Park\*.  
Flooding begins in Dewey Beach\*, Bethany Beach and South Bethany\*.  
Flooding begins in Fenwick Island\*, including DE Route 54.
- 6.0 FT — MINOR TIDAL FLOODING BEGINS.**
- 1.8 FT — BLOWOUT TIDE.**
- 4.2 FT — January 10, 1978.

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