

Town of Fenwick Island: Preparing for Sea Level Rise

In recent years many of Delaware's coastal communities have been affected by back to back major weather events, such as Hurricane Irene, Hurricane Sandy and Nor'easters. These types of storms are becoming more frequent and stronger, and communities are starting to see the impacts. It is essential that coastal communities begin to discuss sea level rise and climate change. Being proactive now and learning what the potential impacts sea level rise may bring is an important step to preserving a town.

It was the impacts from Hurricane Sandy that made sea level rise discussions a top priority for the Town of Fenwick. The Town, occupying a narrow barrier island, is in a unique situation in that both the Ocean and Bay sides will be impacted by sea level rise. Because of these issues the Town has become proactive in planning and preparing for sea level rise.



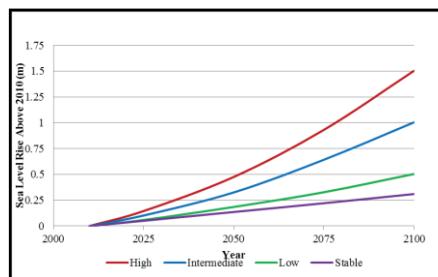
Sea Level Rise (SLR) Overview

Since 1880 the rise in sea level has been documented at 8 inches. Sea level rise has been recorded over the years using tide gauges and satellites. The global average in SLR is approximately 7 inches over 100 years. Using this rate, it is projected by 2100 sea level will rise from 1 to 5 feet.

SLR in Delaware

Compared to the global average Delaware has a greater rate in SLR. The main reason for this is the vertical movement of the Earth's crust which is causing Delaware to slowly sink. This is a similar trend seen throughout the Mid-Atlantic. Currently, beach and dune replenishment have been the main method for protecting coastal communities in Delaware.

Below is a chart of the sea level rise scenarios projected by DNREC.



Vulnerability Assessment

The Town of Fenwick Island completed a Sea Level Rise Vulnerability Study in February 2015. The project was partially funded through the DNREC Coastal Management Assistance Grant. The Study covers background information on sea level rise, SLR scenario maps and mitigation strategies and recommendations that the Town and its citizens can begin planning for. Two public meetings were held to discuss the challenges that lie ahead for Fenwick. Town officials and residents agreed proactive planning and preparation should begin.

A copy of the Vulnerability Study can be found on the Town's website at:

www.fenwickisland.org



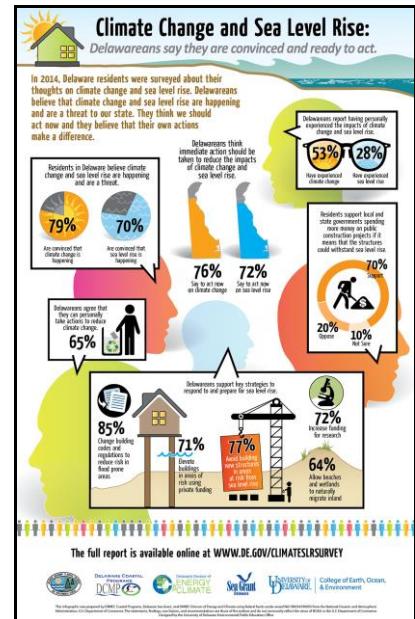
SLR Resources

For additional information on sea level rise and its potential impacts to Delaware, the Delaware Coastal Programs of DNREC prepared a document titled *Preparing for Tomorrow's High Tide: Sea Level Rise Vulnerability Assessment for the State of Delaware* (July 2012). A copy can be found at:

<http://www.dnrec.delaware.gov/coastal/Documents/SeaLevelRise/AssesmentForWeb.pdf>

To see what Delawareans think about climate change and sea level rise a survey was conducted through DNREC's Delaware Coastal Programs. A similar survey was completed in 2009. The results and a summary of the survey can be found at:

<http://www.dnrec.delaware.gov/coastal/Pages/CCSLRSurvey.aspx>



The FEMA's *Evaluation of the National Flood Insurance Program's Building Standards* (October 2006) is another source for information on sea level rise. The document can be found at:

http://www.fema.gov/media-library-data/20130726-1602-20490-5110/nfip_eval_building_standards.pdf