

All the values in this figure are referenced to the elevation benchmark North American Vertical Datum of 1988 (NAVD88) now commonly used for FEMA (Federal Emergency Management Agency) Flood Insurance Rate Maps, FEMA Elevation Certificates, and many local land surveys. We use this datum because official tide datums are based on water level observations between 1982 and 2001, and those values no longer represent the reality of water levels in the region. The current tidal datums are subject to revision at some point in the future.

The Sewell's Point water level observations are available from NOAA Tides and Currents [here](#).

The forecast of mean sea level for the next 40 years is based on analysis of the water observations over the past 40 years using an exponential trend analysis.

The range of model projections for future sea level through 2100 is based on the analysis reported in National Oceanic and Atmospheric Administration (NOAA) Technical Report NOS CO-OPS 083 titled "Global and regional sea level rise scenarios for the United States" published in January 2017. Available [here](#).

Global Mean Sea Level (GMSL) rise scenarios (in meters) based on the most recent analyses found in the scientific literature are found in Table 5 (pg23) of the report. These are the values used in this analysis.

After conversion to feet, the GMSL values were adjusted for subsidence using the 3.1mm/yr average regional value computed by the National Geodetic Survey (2013) and reported in USGS Circular 1392 available at:

<https://pubs.usgs.gov/circ/1392/>

There are 6 different sea level rise scenarios developed in the NOAA report. We show only the range between the "low" and the "extreme" scenarios on this figure. Decadal values for all six scenarios (adjusted for subsidence and converted to feet and the NAVD88 datum) are reported in the table below.