

## NOAA Flood Model

According to [WaPo](#),

*Sea levels could rise faster along the U.S. East Coast than in any other densely populated part of the world, new research shows, as changes in ice caps and ocean currents push water toward a shoreline inlaid with cities, resort boardwalks and gem-rare habitats. Three studies this year, including one out last week, have made newly worrisome forecasts about life along the Atlantic over the next century. While the rest of the world might see seven to 23 inches of sea-level rise by 2100, the studies show this region might get that and more — 17 to 25 inches more — for a total increase that would submerge a beach chair.*

The mechanism is really interesting, having to do with ocean currents:

*Warm water from the south Atlantic flows north along the coast, cools off and sinks. That sinking happens on such a vast scale that the Atlantic's surface is lower here, a depression in the ocean 28 inches deep. But two new studies have shown that climate change could make northern waters warmer and could dump a disruptive flood of freshwater from melting glaciers in Greenland.*

Freshwater is lighter and doesn't sink, jamming up the current and increasing sea level in the sinking zone.

Most East Coast cities are well above the water, but storm surges are a major concern, as well as damage to lower-lying wetlands and barrier islands.