

EXCERPT FROM...

Climate Change: Global Sea Level

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WHY SEA LEVEL MATTERS

In the United States, <u>almost 40 percent</u> of the population lives in relatively high population-density coastal areas, where sea level plays a role in flooding, shoreline erosion, and hazards from storms. Globally, 8 of the world's 10 largest cities are near a coast, according to the U.N. Atlas of the Oceans.

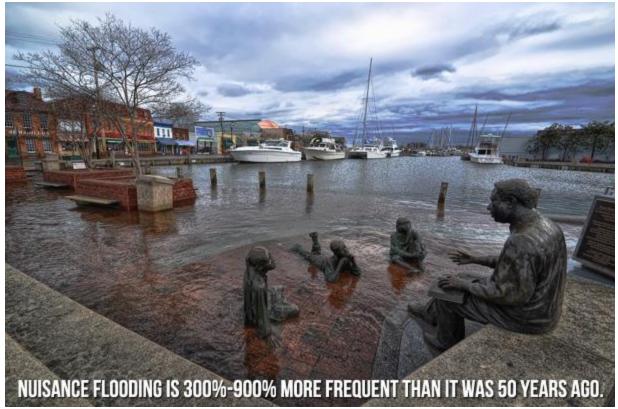


South Beach, Miami on May 3, 2007. Photo by Flickr user <u>James WIlliamor</u>, via a Creative Commons license.

In urban settings along coastlines around the world, rising seas threaten infrastructure necessary for local jobs and regional industries. Roads, bridges, subways, water supplies, oil and gas wells, power plants, sewage treatment plants, landfills—the list is practically endless—are all at risk from sea level rise.

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Higher background water levels mean that deadly and destructive storm surges, such as those associated with Hurricane Katrina, "Superstorm" Sandy, and Hurricane Michael—push farther inland than they once did. Higher sea level also means more frequent high-tide flooding, sometimes called "nuisance flooding" because it isn't generally deadly or dangerous, but it can be disruptive and expensive. (Explore past and future frequency of high-tide flooding at U.S. locations with the Climate Explorer, part of the U.S. Climate Resilience Toolkit.)



Nuisance flooding in Annapolis in 2012. Around the U.S., nuisance flooding has increased dramatically in the past 50 years. Photo by Amy McGovern.

In the natural world, rising sea level <u>creates stress</u> on coastal ecosystems that provide recreation, protection from storms, and habitat for fish and wildlife, including commercially valuable fisheries. As seas rise, saltwater is also <u>contaminating freshwater aquifers</u>, many of which sustain municipal and agricultural water supplies and natural ecosystems.

Read the entire article at:

https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level

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