

Sinking U.S. Cities Face Increasing Flood Risk

[A new study](#) published in the journal Nature exposes rising flood risks for coastal cities. By 2050, U.S. coastal sea levels are anticipated to rise approximately 1 foot, according to the study. Paired with subsidence—land sinking—the impact of rising tides could be even greater in these areas.

Over 30% of the U.S. population lives in a coastal city. The study estimates that by 2050 upwards of 500,000 people, 288,000 properties and \$109 billion in home value would be exposed without putting flood defenses in place.

“The maximum population and property exposure by 2050 represents approximately 1 in 50 people and 1 in 35 properties from 32 coastal cities.”

- *Projected risks without flood defenses*

Cities Evaluated in the Study

The study looked at 32 U.S. coastal cities grouped by region.

Atlantic coast

Boston, New York City, Jersey City, Atlantic City, Virginia Beach, Wilmington, Myrtle Beach, Charleston, Savannah, Jacksonville, Miami

Gulf Coast

Naples, Mobile, Biloxi, New Orleans, Slidell, Lake Charles, Port Arthur, Texas City, Galveston, Freeport, Corpus Christi

U.S. Pacific coast

Richmond, Oakland, San Francisco, South San Francisco, Foster City, Santa Cruz, Long Beach, Huntington Beach, Newport Beach, San Diego

Key Study Takeaways

The evaluated cities have an estimated total population of 25 million people, with “10 million properties valued at \$12 trillion,” according to the study. While all U.S. coasts are subject to rising tides, the Atlantic and Gulf areas have greater risks compared to the Pacific, according to the study—possibly due to soil geology and elevation variance.

Each year, climate change is expected to exacerbate coastal conditions, including through more storm surges, saltwater intrusion, flooding and erosion. As such risks increase alongside rising sea levels, U.S. coastal communities face serious exposures.

Additionally, the study points out that some flooding projections relied on by cities do not account for certain characteristics. It highlights subsidence as being a critical factor in future flood planning.

In fact, in some parts of the Gulf Coast, land subsidence currently outpaces the rate of sea level rise, according to the study. Not factoring in sinking areas could mean inaccurate flood planning for these communities.

Finally, it’s important to emphasize that the study “does not consider the presence of flood-control structures and future adaptation” in its initial assessment.

The study later projects how flood-defense systems could help reduce coastal risk exposures; however, it notes that a combination of methods may be most worthwhile, as structures like levees and flood walls aren’t a perfect solution.

It goes on to say that some cities have a lot of work to do, both in terms of updating flood defenses and implementing adequate controls in the first place.

At the end of the day, property owners may need to proactively take matters into their own hands to best protect themselves against increasing flood risks. This includes immediately addressing subsidence and retaining adequate flood insurance.

Contact us to discuss any flooding-related property concerns and potential risk-mitigation strategies.