

STORY & WEBSITE EMBARGOED Until 10:30AM ET, March 14 Contacts: Ben Strauss, 609-613-0832 bstrauss@climatecentral.org Richard Wiles, 609-986-1980 rwiles@climatecentral.org

REPORT: GLOBAL WARMING DOUBLES EXTREME COASTAL FLOOD RISK NATIONWIDE

Rising Sea Levels Threaten Millions by Boosting Storm Surges

(March 14 – Princeton) Sea level rise due to global warming has already doubled the annual risk of coastal flooding of historic proportions across widespread areas of the United States, according to a new report from <u>Climate Central</u>, and backed by <u>two peer-reviewed papers</u>. By 2030, many locations are likely to see storm surges combining with sea level rise to raise waters at least 4 feet above the local high-tide line. Nearly 5 million U.S. residents live in 2.6 million homes on land below this level. More than 6 million people live on land below 5 feet; by 2050, the study projects that widespread areas will experience coastal floods exceeding this higher level.

Titled <u>"Surging Seas</u>", the report is the first to analyze how sea level rise caused by global warming is compounding the risk from storm surges throughout the coastal contiguous U.S. It is also the first to generate local and national estimates of the land, housing and population in vulnerable low-lying areas, and associate this information with flood risk timelines. Under embargo until March 14, the Surging Seas <u>website</u> includes a searchable, interactive <u>online map</u> that zooms down to neighborhood level, and shows risk zones and statistics for 3,000 coastal towns, cities, counties and states affected up to 10 feet above the high-tide line.

TO ACCESS WEBSITE, user ID = "surgingseas" and password = "tidesofmarch"

Study author Dr. Ben Strauss will give a press conference and showcase the tool this WEDNESDAY, MARCH 14 at 12:30 p.m., ET. <u>Click here to register.</u> The password is "climate"

In 285 municipalities, more than half the population lives below the 4-foot mark. One hundred and six of these places are in Florida, 65 are in Louisiana, and 10 or more are in New York (13), New Jersey (22), Maryland (14), Virginia (10) and North Carolina (22). In 676 towns and cities spread across every coastal state in the lower 48 except Maine and Pennsylvania, more than 10% of the population lives below the 4-foot mark.

Water level station records show that the sea has already risen 8 inches globally during the last century, and projections point to a steep acceleration. "Sea level rise is not some distant problem that we can just let our children deal with. The risks are imminent and serious," said report lead author Dr. Ben Strauss of Climate Central. "Just a small amount of sea level rise, including what we may well see within the next 20 years, can turn yesterday's manageable flood into tomorrow's potential disaster. Global warming is already making coastal floods more common and damaging."

In addition to the Surging Seas report and website, Climate Central is releasing <u>fact sheets</u> laying out the risks for each coastal state. Staff scientists (Ben Strauss, Claudia Tebaldi, Remik Ziemlinski) have also authored two peer-reviewed studies being published March 15th in the scientific journal <u>Environmental Research Letters</u>, with co-authors at the University of Arizona (Jeremy Weiss, Jonathan Overpeck) and the National Oceanic and Atmospheric Administration (Chris Zervas). In addition to hosting the <u>map tool</u>, <u>the national report</u>, <u>state fact sheets</u>, and the <u>peer-reviewed papers</u>, the website, <u>SurgingSeas.org</u>, includes <u>downloadable data</u> for all the cities, counties and states studied; <u>embeddable widgets</u>; <u>republishable graphics</u>; and <u>links</u> to dozens of

local, state and national planning documents for coping with rising seas.

The website also shows how the threat from climate change-driven sea level rise and storm surge is expected to increase over time at 55 water level stations around the U.S. and near most major coastal cities. At the majority of these stations, floods high enough to formerly be called worse than once-a-century events have more than doubled in likelihood.

Land, housing and population vulnerability estimates are based on 2010 Census data and on land elevations relative to potential water levels, and do not take into account potential protections. However, properties behind walls or levees may suffer enhanced damage when defenses are overtopped, or during rainstorms, because the same structures that normally keep waters out can keep floodwaters in once they arrive.

"Escalating floods from sea level rise will affect millions of people, and threaten countless billions of dollars of damage to buildings and infrastructure," Strauss said. "To preserve our coastal towns, cities and treasures, the nation needs to confront greenhouse gas pollution today, while also preparing to address sea level rise that can no longer be avoided."

Use this link Dr. Strauss for a press conference this Wed., March 14 at 12:30 p.m., ET.

Suggested Twitter hashtags: #SurgingSeas #TidesOfMarch

Key URLs: ClimateCentral.org - SurgingSeas.org

National graphics for print or broadcast use: Changes in Flood Risk; City Populations Below 4 Feet

Headquartered in Princeton, New Jersey, Climate Central (<u>climatecentral.org</u>) is a non-profit research and journalism organization providing authoritative and up-to-date information to help the public and policymakers make sound decisions about climate and energy.

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