

Climate change makes living at the coast riskier, but more people keep coming

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Among the counties that trace the coastline of the contiguous United States, two very different pictures emerged from the latest census.



One shows how residents fled after devastating hurricanes, fueled by warmer-than-normal water in the Gulf of Mexico, slammed into their communities.

The other shows how coastal counties attracted millions of people to shiny new subdivisions, drawn by idyllic dreams of life near the beach.

The contrasting scenarios illustrate a growing disconnect, experts say. Even as insurance rates and flood claims escalate and federal scientists warn of the dangers of rising seas, extreme rainfall and rapidly intensifying storms, Americans still flock to the coast.

It's a <u>collision course</u>, and people overlook the risks at their own peril, said Michael Mann, director of the Penn Center for Science, Sustainability, and the Media at the University of Pennsylvania.

People in areas that haven't yet been pummeled by hurricanes may not be keenly aware of the struggling recoveries in places like Cameron Parish, Louisiana, and Gulf County, Florida, but the experts say coastal communities are increasingly at risk.

A drive through Cameron Parish reveals bare concrete slabs standing as ghostly remnants of homes and businesses where residents once worked, worshiped and played.

Seven hurricanes and tropical storms over 15 years wrecked the tiny parish on the state's southwest coast, including major hurricanes like Rita in 2005 and Laura in 2020.

Overwhelmed, many families moved away. The most recent census estimates show about half the residents who lived there in 2000 remain. Over 20 years, the parish saw the greatest population loss of any coastal county in the lower 48 states.



Fewer students meant the loss of the high school football team and a community tradition of gathering on Friday nights for games, said Susan Racca, a parish resident and the clerk of court. And that's just one of many effects still rippling through the community. "It's very distressing," Racca said.

A similar exodus took place in Gulf County, Florida, after Hurricane Michael ripped through with winds in excess of 150 mph in October 2018, laying waste to a swath of homes and timberland miles inland.

Meanwhile, nearly 90% of the 225 coastal counties in the nation continued to grow between 2010 and 2020, a USA TODAY analysis found.

"There's a certain amount of hazard risk people are willing to put up with that's probably higher than we think it is, judging by the fact that people keep moving to these areas," said Mathew Hauer, an assistant professor of sociology at Florida State University.

Coastal counties swelled by more than 7 million people, a higher growth rate than over the previous decade.

Bryan County, Georgia, was the sixth fastest-growing in the nation overall, and the fastest-growing coastal county. It saw a 50% increase over 10 years, which brought the population to 45,000. It recently reeled in the largest economic development project in state history, a new Hyundai electric vehicle and battery manufacturing plant that will employ 8,500.

"We've got a great county," said County Commission Chairman Carter Infinger. It benefits from its proximity to historic Savannah, beaches and waterways. Prospective residents also find <u>affordable housing</u>, good schools, lower tax rates and other benefits, said Infinger, who expects the



growth to continue.

He is not particularly worried about sea level rise.

The county hasn't seen much flooding, and it is buffered by barrier islands to the east rather than beaches, he said. "We have our set backs and building codes. We make them build on raised slabs."

Sea level rise "is not at the top of our list," he said. "It's just kind of on the back burner. We keep an eye on it."

He's not alone. To the south, eight of Florida's hurricane-prone counties are among the nation's 20 fastest-growing coastal counties.

Historic St. Augustine and wide, white sandy beaches draw people to St. Johns County in northeast Florida. The county's population growth was second to Bryan between 2010 and 2020, with a 43.7% increase. Sustained growth makes it the fastest-growing county over 20 years, with an additional 150,000 residents, a 122% increase.

New subdivisions with matching homes, community pools and clubhouses mushroomed. At Beachwalk, a community still under construction, a members-only club grants access to a crystal-blue artificial lagoon and waterpark.

The county experienced its own streak of passing hurricanes and nor'easters that eroded beaches and flooded homes. But partnering with state and <u>federal officials</u>, they're spending millions to replenish the sand and dunes.

Worrying about rising sea levels just isn't the focus right now, said St. Johns County Commission Chairman Henry Dean.



"I'm one who sort of wants to peel one potato at a time," Dean said. For him, that means focusing on "what's best for the current residents of St. Johns County."

Catastrophic consequences

Recent studies show damage from rising sea levels may not be as far away as some perceive and will increasingly threaten communities over the next 30 years.

In Cameron Parish and other locations along the Louisiana coast where the ground is sinking as water levels rise, National Oceanic and Atmospheric Administration projections show that compound effect could put water levels in the Gulf of Mexico 12 to 22 inches higher by 2050. That means a storm surge similar to Rita or Laura's would move higher and farther inland.

High tide flooding associated with the moon cycles also will increase, according to William Sweet, an oceanographer with NOAA's National Ocean Service. The number of high tide flood days at Sabine Pass on the Louisiana/Texas border just west of Cameron Parish could grow from nine or 10 days a year to 80 to 125 days a year by 2050.

Along the Georgia coast, high tide flood days could occur anywhere from six to nine times more often by 2050, flooding 49 to 71 days a year. NOAA forecasts similar increases for Nantucket, Massachusetts, and for St. Johns and Flagler counties in Florida.

In September, the nonprofit Climate Central released a study estimating \$34 billion worth of real estate could be underwater at high tide within just 30 years. The national research concluded that as many as 64,000 buildings and 637,000 properties could be at least partially below the tidal boundary level.



That includes 600 buildings in Cameron Parish, roughly 27% of the parish.

Shrinking towns a taboo topic

People don't like to talk about towns losing population, but that's unrealistic, said A.R. Siders, an assistant professor in the disaster research center at the University of Delaware. "We're not very good in the United States about dealing with shrinking towns, whether they're shrinking because of sea level rise and climate change issues, or they're shrinking because an economy has collapsed."

Urban planners in some areas are "forbidden from using population shrinkage as a planning model," Siders said. "They are only allowed to plan for the idea of maintaining or growing population."

That may change as tax values plummet with properties increasingly underwater, she said. Cities and towns might need to look at mergers or other creative solutions rather than banking on perpetually increasing values. The federal government, she added, also could be doing more to provide incentives to overhaul long-term planning.

Though some communities are elevating homes and building seawalls, Siders said, that's "fiddling around the margins" rather than addressing adaptation at the kind of scale that will soon be required.

Laura Lightbody, who directs the flood-prepared communities initiative for The Pew Charitable Trusts, said growing a community for economic reasons is often at odds with growing a community that will be more resilient to climate-related disasters.

"It's very rare that you find a policymaker or elected official who's willing to put future risk in front of economic growth," Lightbody said.



"It's kind of a unicorn."

'Things seem different'

In Cameron Parish, residents try to stitch the fabric of their lives back together after each storm, but too many threads are missing.

Several churches closed after Laura and never reopened, said state Sen. Mark Abraham. "You have a sense of community wrapped around a church that isn't there anymore."

It's not all bad news, Abraham said. The parish is home to two large liquid natural gas facilities, and others are planned. Taxes on the facilities will help the community rebuild and prepare.

A Republican and real estate broker, Abraham said he didn't know about any consequences of <u>sea level rise</u> but he does see the effects of repetitive intense hurricanes.

Parish residents are "a different kind of people, very resilient and rugged. They've always built back after hurricanes." But, he said, "things seem different this time."

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