"Climate Havens Don't Exist"

The worst damage from Hurricane Helene came in areas that were expected to be relatively immune to the effects of climate change.



Floodwaters hadn't fully receded in the River Arts District in Asheville, N.C., on Oct. 1, 2024

Hurricane Helene has torn through cities across the Southeast, killing <u>at least 120</u> <u>people</u> in six states since it made landfall on Thursday. The death toll is still expected to rise. Some of the worst damage has happened inland in North Carolina, and <u>almost a third</u>of those killed were in Buncombe County, which surrounds Asheville, N.C.

The storm, fueled by very warm ocean temperatures, grew from a Category 1 to a Category 4 hurricane in less than a day, making it harder for communities to prepare.

We knew that many of the places that were pummeled by Helene were very vulnerable to extreme weather events. Helene was the <u>third hurricane</u> to hit Florida's Big Bend region in 13 months.

But the tragedy in Asheville, the artsy city that has grown rapidly in recent years, was surprising for many.

Asheville has long been described by some news outlets as a "climate haven," or a place that's safer from climate change. It doesn't experience the wildfires that are common in parts of California or the storm surges that frequently upend life in coastal cities.

"I had always felt like we were safe from climate change in this region; we talked about that a lot in town," Erica Scott, a wedding photographer, told The Times's Eduardo Medina and Richard Fausset.

To understand whether Asheville was really supposed to be climate-proof, I called Jesse Keenan, an associate professor of sustainable real estate and urban planning at Tulane University who studies climate adaptation, and whose work has been mentioned in stories about so-called climate havens.

Keenan pushed back against the idea of climate havens. He told me that it's true that Asheville is less vulnerable to some extreme weather events fueled by global warming than many other places. That appeal, plus the cheaper housing and insurance costs, has made many people move from the coast of North Carolina to Asheville in the past decade. That makes it a "receiving zone" of climate migration, he told me. But it's an exaggeration to say that makes the city immune from climate change, he added, because it touches every corner of the planet, and nowhere is truly safe.

"You can't hide from climate change," he said.

Asheville has a history of flooding, and, like anywhere in the world, it will need to adapt to a changing climate that makes catastrophes more likely. But the cost of adaptation there will be lower than in, say, <u>cities that are sinking like Miami</u>.

Despite those risks, Keenan said, people will continue to move to Asheville, maybe even more so now that parts of the city will need to be rebuilt and may see gentrification, he said.

But, he added, in the short term Helene is "going to be a wake-up call to people that climate havens don't exist."



Damage to Swannanoa, in western North Carolina, on Saturday.Credit...Mike Belleme for The New York Times

The fingerprints of climate change

The false perception of being climate-proof may have caught parts of North Carolina off guard, <u>as The Washington Post reported</u>. The state was hit hard: At least <u>49 people died</u>, and hundreds remain unaccounted for.

Many of the places where people died were far away from the coast, like Asheville. Typically, by the time storms get there, they are a lot weaker because they no longer have access to the warm ocean waters that power them, as Raymond Zhong reported. But Helene may have gotten an extra boost from the damp grounds left by rains that swept through the region before it hit Asheville, experts told Zhong. Scientists call this phenomenon the brown-ocean effect, because it causes waterlogged soil to influence a storm in the same way the sea surface does.

"If you have wet and hot soil, then we are really priming the land" to juice up a storm, Dev Niyogi, an earth and planetary sciences professor at the University of Texas at Austin, told Zhong.

It's too early to say exactly what role climate change had in this disaster. But as my colleague Judson Jones, who covers weather for The Times, explained to me, we know that in general, a warmer atmosphere can hold more water vapor and produce more rainfall, exacerbating flood events like those seen from Atlanta to Asheville.

"We also know that the Atlantic Ocean and, in this case, the Gulf of Mexico have been abundantly warm this season," he said. "And that warm water, near the ideal temperature for a bath, helped provide the energy Helene needed to rapidly intensify on Thursday."

Moving to vulnerable areas

For the last two decades, Americans have been flocking to relocate to the South and West. That has left "more people exposed to the risk of natural hazards and dangerous heat at a time when climate change is amplifying many weather extremes," as Mira Rojanasakul and Nadja Popovich showed in an article published this week.

Data and research they analyzed shows that U.S. counties that regularly get hit by hurricanes, face major wildfires and floods and swelter under punishing heat have also been some of the most popular places to move. (It's also where a lot of new development has been concentrated.)

That's because people tend to weigh economic concerns and lifestyle preferences more than potential for catastrophe. But that equation may be starting to change.

"When you go to buy a house and can't get a mortgage because of lack of insurance," Emily Schlickman, an assistant professor at the University of California, Davis, who studies wildfire risk to homes and landscapes, told The Times, disaster risk "goes from a No. 10 issue on your list to much higher."

Here's how you can help the victims of Hurricane Helene.