Poll: Majority Says Climate Change Responsible For Severity of Hurricanes

By Pam Wright Sep 29 2017 01:30 PM EDT weather.com

Story Highlights

Fifty-five percent of Americans say climate change impacted the intensity of hurricanes this season.

That's a significant departure from 2005, when only 39 percent believed there was a link.

Scientists maintain that finding a link between global warming and intense hurricanes is complicated.

A majority of Americans say they believe climate change contributed to the severity of the hurricanes that devastated Florida, Texas and parts of the Caribbean over the past six weeks, according to a new Washington Post-ABC News poll.

The results of the poll indicate that 55 percent of Americans now believe hurricanes Harvey, Irma and Maria were stronger than they would have been without carbon emissions-driven global warming, a significant departure from a similar poll taken more than a decade ago.

A month after Hurricane Katrina devastated New Orleans and the Gulf Coast, a similar 2005 Post-ABC poll found that only 39 percent of Americans believed climate change had a role in the intensity of the storm.

NOAA's GOES satellite shows Hurricane Irma (C) in the Caribbean Sea, Tropical Storm Jose (R) in the Atlantic Ocean and Tropical Storm Katia in the Gulf of Mexico in an image taken Sept. 8, 2017. (NASA/NOAA GOES Project via Getty Images)
While there is a shift in the way American's view climate change and the formation of powerful hurricanes, scientists maintain that understanding whether there is a link is complicated.

Researchers are still trying to understand the link between global warming and intense hurricanes, but the risk to low-lying areas and the deadly impacts of storm surge from hurricanes as a result of sea level rise are well-documented.

A 2013 study published in PNAS found that the risk of a Hurricane Katrina-level storm surge has risen two to seven times for every 1.8-degree Fahrenheit increase in temperature.

Climate change can also impact the amount of rainfall that drops from a hurricane because a warming planet enables the atmosphere to hold more moisture.

“We think that Harvey type of rainfalls will become noticeably more frequent as the century goes on,” Kerry Emanuel, an atmospheric scientist at MIT, told the Los Angeles Times.

Researchers have noted that the number of hurricanes may decrease in the years to come because of climate change, but stronger Category 4 or 5 storms will likely become more frequent, the National Oceanic and Atmospheric Administration has said.

"A review of existing studies lead us to conclude that it is likely that greenhouse warming will cause hurricanes in the coming century to be more intense globally and have higher rainfall rates than present-day hurricanes," NOAA says. "The hurricane model also projects that the lifetime maximum intensity of Atlantic hurricanes will increase by about 5 percent during the 21st century."

**Politics, Age Play Role in Beliefs About Climate Change**

The poll conducted Sept. 18-21 among a random national sample of 1,002 adults reached on cellular and landline phones highlights that beliefs in climate change and the impacts of global warming has become more political, rather than based on science.

The largest surge in people who say there is a link between climate change and the intensity of hurricanes came from Democrats and independents, growing from below 50 percent to 78 percent for Democrats and from 42 to 56 percent for independents, according to the poll.

In 2005, 70 percent said intense weather events came from time to time and had nothing to do with climate change. That number rose to 72 percent in this week’s poll.

Age is also a factor.

According to the poll, 67 percent of adults younger than 30 and 64 percent of adults in their 30s say climate change contributed to the intensity of Harvey, Irma and Maria. Only about half of people between the ages of 40 and 64 agree, and the results for those over 65 is even lower, the Post reports.