

STATEMENT OF JIM CANTORE

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Before the

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On

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Chairman Scott, Ranking Member Thompson, and distinguished members of the Committee. Good morning. I am Jim Cantore, and I am a meteorologist for The Weather Channel television network. I have been a weather forecaster for more nearly 35 years.

As farmers and the entire agriculture industry are aware, weather is the inescapable and ever-changing environment in which we live. As our climate changes, weather is becoming more volatile. As we witnessed last week across Texas and several other states, no person, business, community or entire state can escape its extremes. Dangerous cold, snow and ice revealed infrastructure failures, tested the human will for survival and sadly cost dozens of Americans their lives.

I am here today on behalf of The Weather Channel to testify about the increasing impacts of climate change on the agricultural and rural communities of the United States, as well as the impact on the entire U.S. population. Our job is to prepare Americans for these difficult times and help them navigate our changing Earth. Our responsibility as scientists is to follow the data. We are on the side of the American people, and it is up to us to explain the science in plain terms.

Over the past several decades, scientists from all over the world have been studying changes in earth's atmosphere and weather patterns. Recent observations are confirming what computer models and scientific theory conclude:

- Earth's climate is changing faster than at any point in the history of modern civilization, primarily as a result of human activities that emit greenhouse gases into the atmosphere.
- The impacts are already being felt in the United States and are projected to intensify in the future - Americans will be dealing with even more extreme and costly weather in every season.
- The severity of these impacts will depend largely on actions taken to reduce greenhouse gas emissions and to adapt to the changes that will occur.

Carbon dioxide in our atmosphere has been steadily increasing and in response, so have the temperatures. Since 1880 the average global temperature has been increasing at a rate of 0.14°F per decade. However, since 1981 the increase is more than twice that rate (0.32°F). These numbers

may seem small, but much like our body temperature, earth's temperature is remarkably stable... simply put, the planet has a fever and it is getting worse. The statistics are alarming:

- The last 7 years have been the warmest on record.
- Ice sheets and glaciers worldwide are melting and draining water into the ocean, raising the sea level. In New York City, the ocean is roughly a foot higher than when the Empire State Building was built in 1930.
- By the end of this century, the global mean sea level will likely be over a foot higher than today, but if we continue to emit high levels of greenhouse gases, it could rise over 3 ft by 2100. Flooding will be a frequent occurrence with each high tide along the eastern seaboard and Gulf Coast.
- Extreme temperatures and prolonged drought are increasing the risk of water shortages and wildfires over the western U.S.
- Extreme rainfall events are on the rise, increasing the chances for more serious flash flooding.
- And the strongest hurricanes are getting stronger.

I have seen these changes firsthand. Over my nearly 35-year career as a meteorologist at The Weather Channel, I have observed storms growing stronger, producing more precipitation and bringing destruction to areas that have never seen similar damage.

On October 8th, 2016, I was covering Hurricane Matthew in Lumberton, North Carolina. My team and I came upon a motel where people had evacuated from the North Carolina and South Carolina coasts, as their local officials had instructed them. They came to Lumberton, thinking that this far inland - about 80 miles - they would be safe from the storm surge they were facing on the coastline. But what they encountered in Lumberton was excessive inland rainfall, over 18 inches in the region. We had to help evacuate these people in boats to higher ground - due to this historic flood event. Again, Hurricane Matthew's inland devastation was evidence that many of these tropical systems are stronger, wetter and slower moving than we have seen in the past. This storm also left partially harvested cotton, soybean, and sweet potato farms across North Carolina submerged. Farmers who lost pigs and chickens barely recovered before Hurricane Florence hit in 2018. Devastating rainfall is a trend we are seeing with a likely climate link.

Also, in 2018, Hurricane Michael rapidly intensified to a category 5 upon landfall along the Gulf Coast. The hurricane-force winds lasted so long, and moved so far inland, the storm devastated the pecan crop in Georgia. That was the third year in a row the Georgia pecan crop had taken a hit from hurricanes - and Michael was the coup de grace. Even on the west side - the weak side - of the storm, across the Florida panhandle, there were massive timber losses - trees, snapped like twigs - where you could smell the pine in the air for miles. The crop losses in Georgia and Florida totaled more than three billion dollars. Relief to farmers was slow, and so is the regeneration of this region's crops

Our Weather Channel viewers are the very people whom climate change is affecting the most. They are our farmers, our first responders, our airline pilots, our truckers, our working-class families. While the phrase "climate change" has long been politicized in this country, these Americans are now facing today, in real time, what people thought might be a 22nd century problem. They are seeing their crops being washed away in 500-year floods; their livestock killed in monstrous wildfires; their children being diagnosed with increasing respiratory illnesses due to a more hostile atmosphere.

In 2020 there were 22 weather/climate disaster events with losses exceeding one billion dollars each to affect the United States. These events have been increasing over the last 40 years. The 1980–2020 annual average is 7 events; the annual average for the most recent 5 years (2016–2020) is 16.

One of the most memorable of these events occurred last August when we saw one of the costliest severe thunderstorms in U.S. history damage over 700 miles of the upper midwest - much of it farmland.

My colleague Dave Malkoff was on the ground in Benton County, Iowa as farmer Ben Olson was picking up the pieces of his destroyed corn crop. Early estimates from the Iowa Corn Growers Association put the loss at around 10 million acres, which is well over a billion bushels of corn. With a bushel selling for about 3 dollars and 40 cents each, that's more than a 3-billion-dollar loss. And Mr. Olson and his neighbors are left with farms of rotting corn.

And whether or not your districts are directly affected by a disaster, you and your constituents are helping foot the bill. Billion-dollar natural disasters are on the rise in many parts of the country, climate change is playing a role. As policymakers, you are well aware of not only the cost of American lives and livelihoods, but also the detrimental impact these billion-dollar disasters have on our federal and state budgets.

In Conclusion: I used to question the roots of climate change theories. I, like many, doubted that climate change has its origins in human causes. But after covering severe weather for three decades, including more than 100 tropical systems, dozens of tornado outbreaks, and more floods than I can remember, I am here to tell you that climate change is real and we are absolutely playing a role in this. Not every disaster is driven by climate change. But more and more we are seeing things we have never seen before, and a link to climate change in many of these events. And our country is suffering; just ask the folks in Texas. While these changes are alarming, there is still time. With the government's help, our farmers will be able to adapt to changing temperatures and can even mitigate future warming. But we must act now to make the tough choices that will not only improve the lives of future generations but those of all generations living today and tomorrow. And for those farmers whose life's work it is to feed this country and sustain one of the most time-honored industries of our great nation, we have a responsibility to help.