

Why is this missing? @realDonaldTrump #prepare Get prepared! The worst is yet to come!

Gary Yohe

Posted: 5 October 2017

Gary Yohe is Huffington Foundation Professor of Economics and Environmental Studies at Wesleyan University. He is the author of more than 150 scholarly articles, several books, and many contributions to media coverage of climate issues. gyohe@wesleyan.edu.

We now have three points of data as we continue to think about living in the United States on a planet where Mother Nature is in charge of a dynamic and changing climate – three enormous storms that made landfall as Category 4 or Category 5 hurricanes.

One data point is a city with no prior development restrictions. As Houston grew over the past few decades, developers and city officials ignored a long history of hurricane vulnerability and extreme precipitation events. The had experienced two 500-year flooding events over the previous two years, and Hurricane Harvey delivered a third such event with 50 inches of rain falling in some locations over the few days when the storm just wandered randomly overhead (<https://www.cbsnews.com/amp/news/what-does-500-year-flood-really-mean/>). The chances that this three-year experience was born of the historical climate is negligible ($\{(1/500)^3 \times 100\} = 0.000001\%$); the experience is, instead, evidence that the climate around eastern Texas has changed – dramatically and for the worse. Their request for federal recovery aid has been estimated in the tens of billions of dollars (current estimates of economic damage and the cost of recovery are as high as \$150 billion). Nobody objects to their receiving aid to underwrite their work to recover (<http://abcnews.go.com/US/hurricanes-harvey-irma-cost-us-economy-290-billion/story?id=49761970>), but they cannot simply put everything back the way it was in the places where it was. Leading up to landfall, the mayor of Houston, with support of the Texas governor and its congressional delegation, did not mandate evacuation of the population at risk, and so the number of people who lost their lives, including first responders, exceeded 70 (<http://www.msn.com/en-us/news/us/deaths-related-to-harvey-rise-to-at-least-70/ar-AArhuzq>).

The data point is a collection of population and economically important locations scattered across Florida – a state that had, in the mid 1990's, imposed strict and stronger building requirements on housing and commercial property in anticipation of another very strong hurricane event – a decision that was based both on their experiences with Hurricane Andrew in 1992 *and* the potential that climate change would increase the intensity of the next event. Leaders from both parties agreed to the new post-Andrew building codes. Both parties agreed with the decision to evacuate millions of people well before landfall when the prospect of Hurricane Irma hitting the entire state loomed. Many of their constituents were inconvenienced,

and, of course, Irma took a favorable track inside the west coast of the peninsula. But nobody really complained that damage was smaller than it could have been. Across the state, fewer than 25 people lost their lives, but economic damages were still high; they are currently estimated to be slightly less than \$100 billion (<https://www.yahoo.com/gma/irma-weakens-category-1-batters-orlando-moves-florida-071803473--abc-news-topstories.html>). Why? Because Floridians were prepared, and because they believed their elected political leadership – not just when they told them to evacuate, but also when they told them to prepare (years in advance) for the worst.

The first two of these events happened within three weeks of each other in a developed country with well-established government structures. They were followed by the third event – a catastrophe in Puerto Rico and the Virgin Islands – our third data point. The president had to promise prompt recovery aid. That effort had been well received in Texas and Florida, but it was spotty at best in the days immediately after Maria passed over the islands. Nine days after Hurricane Maria took dead aim at those islands, for example, the electricity grid was working for only 50% of the island and many American citizens were still running out of food and water; some were dying in the head, and many did not have access to necessary medicines (<https://www.cbsnews.com/videos/did-trumps-time-at-golf-club-affect-hurricane-maria-response/>).

The need for federal help was and still is overwhelming in all three cases, but disaster relief is an incomplete response. This simple and “real” fact leads to an obvious meta-question with more long term ramifications for the entire country. Why has the president not emphasized a climate-related message – “get prepared, and anticipate more of the same (or probably worse) as the future unfolds”?

To do so would be to admit that we live in a dynamic climate whose observed and attributed changes are driven by human activity (the burning of fossil fuels). To do so would fly in the face of energy company interests that protect the sources of their enormous underground wealth at any cost. To do so would dismiss the claims of strong and rich supporters and fly in the face of earlier statements and tweets. To do so would be to resist the assertion of EPA Administrator Pruitt that speaking about climate change in the wake of these natural disasters was “insensitive (<http://www.cnn.com/2017/09/07/politics/scott-pruitt-hurricanes-climate-change-interview/index.html>).

BUT, to do otherwise would not only be fiscal folly. It would be immoral. To ignore the growing risk of dramatic coastal storms driven in their intensity by climate change would persistently put hundreds of American lives and billions of American dollars at risk unnecessarily in a future that will be marked with increasingly frequent and increasingly intense extreme weather events. “People will die, unnecessarily, if we do not prepare” is not political hyperbole; it is an “actual fact” (<http://science.sciencemag.org/content/356/6345/1362>). Compare 70 deaths to 25 to the growing number of deaths across Puerto Rico – compare the experiences of the ill-prepared to the prepared.

To be sure, nobody is claiming that climate change caused those three hurricanes. But it is not hard to link their enormous and historic intensities, one right after another, to the incredibly warm water in the South Atlantic Ocean and the Gulf of Mexico. Temperatures at the surface of

these bodies of water are extraordinarily high this year (for example, they are 3 degrees F warmer right now than this time last year (<https://www.nodc.noaa.gov/dsdt/cwtg/egof.html>); and deeper ocean water is also much warmer than usual. Upwelling that accompanies hurricanes is therefore not bringing moderating cool water to the surface. It is, instead, replacing warm water with warm water. As a result, storms that followed Harvey, the first Category 5 hurricane to make landfall, also achieved the same Category 5 status as they grew over the ocean. Attributing the warm water to climate change is not a stretch of anyone's imagination.

So what we need is an extended tweet from the president that goes something like this:

[@realDonaldTrump](#) #prepare Get prepared for the next one! I was wrong to ignore climate change. As you look forward, take account of your worst experience and make plans for when it happens again...

[@realDonaldTrump](#) #prepare ...not just in response to another horrific experience, but in anticipation of exaggerated versions of the same story that you just lived. Just think Maria...

[@realDonaldTrump](#) #prepare ...Be prepared for the worst. Take action early to make the worst a lot less damaging. Your lives and the lives of your and neighbors depend on us all, and that includes YOU.

What does a string of tweets like this directed at the American population mean to the international community? Particularly with respect to international governance agreements like the Paris Climate Agreement and the United Nations Framework Convention on Climate Change (UNFCCC)? Would it mean that the United States was planning to resume its leadership role in framing the global response to climate risk?

The world certainly understands that the president's tweets represent policy statements, and so people around the globe would recognize a positive change in the US perspective on climate change as a potential sea change – a step that would give countries around the world some cover as they continue to participate. More specifically, this would give support and promote momentum for their efforts to ameliorate climate risk through adaptation and mitigation initiatives under, for example, the Paris Climate Agreement: “Parties recognize the importance of averting, minimizing and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage” (Article 8 in http://unfccc.int/files/meetings/paris_nov_2015/application/pdf/paris_agreement_english.pdf). It might also give hope that the US would at least live up to its obligations under Article 4 of the UNFCCC (to which the US is still a signatory): “The developed country Parties and other developed Parties included in Annex II shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations ...” (<https://unfccc.int/resource/docs/convkp/conveng.pdf>). Whether the US will indeed would in fact live up to these obligations through January of 2021 is anybody's guess, but a string of tweets like the one suggested above would be a step in the right direction.

