What can we do about extreme weather?

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Even without climate change, more people would be faced with the challenges of extreme weather events. That is because the human population continues to grow, our patterns of land use continue to change, and more and more of us are in the pathway of extreme weather events. A recent *New York Times* piece reported on a Gallup poll finding

that one-third of all Americans had been exposed to extreme weather events since 2020. According to *New York Times* reporter Derrick Bryson Taylor:

"Thirty-three percent of U.S. adults said they had been affected by extreme weather since 2020… according to the survey, which was based on interviews conducted last month with about 1,000 adults living in all 50 states and Washington, D.C. Hurricanes and winter weather, such as snow, ice storms and blizzards, were the most common extreme weather events cited, followed by extreme heat and floods."

While we experienced extreme weather events before climate change, climate change has made extreme weather more frequent and intense. Climate models in the late twentieth and early twenty-first century predicted impacts such as sea-level rise and extreme weather, but unlike other environmental problems such as toxic waste and air pollution, the causes were global, and the impacts were in the future. The resulting climate denial created a different type of environmental politics than the traditional politics that resulted from pollution with a visible local impact. In the 1970s, environmental policy was forged by consensus politics fueled by a threat that was obvious and undeniable. Today, it appears that there is a growing acceptance of "climate attribution science," with more and more people accepting the notion that all this wacky weather is somehow related to climate change. That connection by the public could change the politics of climate change. The Gallup poll indicates that those who experience extreme weather tend to see climate change differently than those who have not. According to Taylor:

"…researchers found that attitudes about climate change were closely associated with personal experience with an extreme weather event. Sixty-three percent of those who had been affected by extreme weather said they worried "a great deal" about global warming, compared with 33

percent who had not been affected by extreme weather. Sixty-four percent of those who had been affected by extreme weather said that climate change would pose "a serious threat" to their way of life during their lifetime, compared with 36 percent who had not been affected by extreme weather. Sixty-seven percent of people who had lived through an extreme weather event, and 48 percent of those who had not, said that the government was not doing enough to protect the environment."

The massive disruption caused by extreme weather and the climate-related explanation for these events may change the politics of climate change, and climate may start to act more like traditional environmental issues. The connection between cause and impact is being made because the impacts can now be seen and felt. However, unlike traditional environmental problems, the causes are not only local. The policy prescriptions called for are more complex than those required by traditional environmental issues. Most forms of air pollution, water pollution and toxic releases can be addressed through rules and technology that are local, state-wide, and national. They are largely within the borders of sovereign nations. Climate change crosses borders because we share a common atmosphere, and greenhouse gasses created in one place impact the entire world.

One of Gallup's most interesting findings is that the impact of experiencing extreme weather on attitudes toward climate change cuts across party lines. According to Gallup's Jeffrey M. Jones:

"…when respondents' partisanship is taken into account, victims of extreme weather are more likely than nonvictims to express concern about climate change. In most cases, there is a double-digit gap in climate-change attitudes between victims and nonvictims within each party group. For example, 79% of Democrats and Democratic-leaning independents who have personally been affected by an extreme weather event worry a great deal about global warming, compared with 60% of

Democrats who have not had such an experience. Republicans and Republican leaners are far less likely to be concerned about global warming, but there is a 15-percentage-point gap in concern between Republicans who have (28%) and have not (13%) experienced extreme weather."

Since extreme weather events are happening more frequently, we can expect the impact of these events on concern about climate change will increase over time. (Talk about learning a lesson the hard way…) While this indicates that support for climate policy will increase, what can we actually do to respond to this concern about climate and extreme weather?

The approach to climate policy cannot be limited to prevention as it might in some areas of environmental policy because no single jurisdiction can prevent the problem. Still, America's role as a global leader requires that we set an example and work to mitigate greenhouse gas pollution and develop technologies that can achieve that goal throughout the world. But in the short run, we also need to adapt to the new conditions caused by climate change. We must develop institutional mechanisms that enable communities to recover and rebuild in the aftermath of extreme weather events. We need to reconceptualize these events as routine occurrences requiring a predictable response, not as emergencies that are treated as rare and unusual.

Part of the issue of storm recovery is that our homes are more connected and more dependent on collective infrastructure than ever. While some homes might own a water well and water pump and possibly a septic tank or septic field, most Americans are connected to central water, sewage, communication, and electrical systems. Our homes, particularly due to the use of drywall are easily damaged by floods. An absence of electricity can cause many crucial home systems to fail, leaving homes uninhabitable. The creature comforts we take for granted make recovery

from extreme weather events complicated and expensive.

Due to the increasing frequency of extreme weather events, we need to develop private and publicly subsidized systems of insurance that pay the costs of reconstruction after disasters occur. Inevitably this will raise the already high cost of housing- which includes growing fees for insurance and taxes. Enacting a system of federally subsidized reconstruction insurance is politically infeasible at present but inevitable if current patterns of extreme weather persist. When such a system is finally put in place, it is critical that rates are progressive and guard against anything that increases homelessness.

In addition to private household and business reconstruction, we must also develop programs and revenue streams for infrastructure resilience and reconstruction. Schools, libraries, transportation, energy, water, communication, waste, and sewage infrastructure need to be made more weather-proof and, when damaged or destroyed, must be eligible for federal reconstruction grants. And yes, our federal tax rates must go up to pay for all of this.

Currently, weather disasters are treated as special rather than routine events. When disaster strikes, federal funding must be allocated through the theatrical spectacle of our dysfunctional Congress while victims sleep in shelters or on the couches of friends or family. The delay in funding causes pain and hardship. Children suffer as schooling is disrupted and the security of home is suddenly upended. While we have no control over nature and storms, we have a great deal of control over how we respond, recover, and rebuild.

As Mark Twain used to say (quoting someone named Charles Dudley Warner), "Everybody talks about the weather, but nobody does anything about it." Well, we still can't do anything to change weather, and hopefully, we are never arrogant enough to try that type of

geoengineering, but we do need to predict weather, prepare for it, respond to it and learn how to rebuild after its destruction passes. The experience of extreme weather affects our view of how the world works. Objective facts that we experience personally are resistant to disinformation or ideology. Air pollution policy was a response to smog, and water pollution policy was a response to rivers that smelled bad and even caught fire. Perhaps climate change policy will be a response to our growing experience with extreme weather events.

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