

One year after Hurricane Maria:

What happened, and what it means for climate action, clean energy, and environmental justice

On September 20, 2017 Maria made landfall in Puerto Rico as a Category 4 Hurricane. We now know that the storm was the deadliest hurricane to hit the United States in the past 100 years. The storm was a disaster, a tragedy, and a potent reminder of the need to address climate change, especially because it so disproportionately affects our already-vulnerable communities.

Hurricane Maria and climate change

Maria is a stark example that human-driven climate change is making hurricanes more intense and destructive by fueling several factors that contribute to monster storms.

In Puerto Rico we've seen:

- Increased **rainfall in very heavy events** by nearly 30 percent from 1958-2016.
- Higher **sea levels** by about four inches since 1960, which is projected to rise 22 inches by 2060. This translates into stronger **storm surges** moving further inland, leading to more destroyed property and health risks.
- **Warmer oceans** by more than 1.5 degrees Fahrenheit since 1900. This means more powerful storms because of increased evaporation of ocean waters.

Maria's devastation by the numbers:

2,975 people died as a result of Hurricane Maria and its aftermath, according to the official count based on a George Washington University study.

Hurricane Maria was the largest blackout in U.S. history. Almost all the island residents lost power, for an average of 84 days, and some for up to 300 days. Impacts from [this included](#):

- 70% of hospitals without power
- 14% of households reporting an inability to access medications
- 9.5% of residents saying they lacked of electricity needed for respiratory equipment
- Others reporting closed medical facilities, absent doctors
- It took over a month for cellular telephone coverage to return to the island

- Puerto Rico residents spent an **average of 68 days without clean water** after the storm.
- The Puerto Rican government [estimates](#) it will cost \$139 billion to recover from Hurricane Maria-related devastation.
- A recent [poll found 83%](#) of Puerto Ricans reported serious effects from the storm such as major damage to their homes, losing power for more than three months, employment setbacks or worsening health problems.
- [Almost 800,000](#) Puerto Ricans (12 percent of the population) left the island in the months after Hurricane Maria, over half of whom have not returned.
- Poverty levels rose [as high as 52%](#) of the population in the wake of Hurricane Maria.



Our fellow Americans deserve better

Analyses show a slow and insufficient response from the federal government exacerbated Hurricane Maria's destruction. Problems included:

- [54%](#) of federal emergency personnel lacked the necessary qualifications for an event like this.
- Many didn't have the necessary Spanish language skills
- Investigations from Politico and others found a "persistent double standard" in the federal response relief efforts in Hurricane Maria compared to Hurricane Harvey

Then-FEMA director Byrne did not go to Puerto Rico until [three weeks](#) after the storm. And when President Trump visited he severely downplayed the inadequate federal government response.

Where Puerto Rico and all of us go from here

A stark reminder of the need to mitigate climate change

A year after Hurricane Maria, Congress has still not acted to address cutting climate pollution that contributed to the intensity and destructiveness of this hurricane.

While there are climate champions in Congress, far too many are ignoring or denying the problem. Some lawmakers want it both ways –recognizing the threat on the one hand, but opposing all actions to reduce climate pollution on the other.

It is time to ask our representatives: **What's your plan to tackle the climate crisis?**

Learn more at edfaction.org/climate

Puerto Rico needs a more resilient electricity system

We need to not simply rebuild Puerto Rico's electricity grid, but ensure it is cleaner, more affordable, and resilient.

Prior to the storm, Puerto Rico's grid already needed a billions of dollars in upgrades, and relied overwhelmingly on fossil fuel resources, including petroleum, natural gas, and coal. Renewables also made up less than 3% of the energy mix.

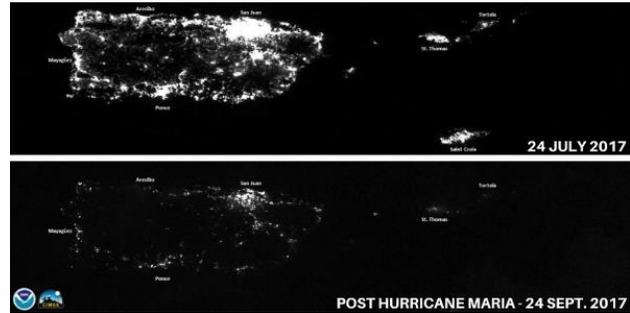
EDF and others are helping to design a cleaner and more agile grid in Puerto Rico that is less polluting, takes advantage of Puerto Rico's abundant solar energy resources, and can better withstand future extreme weather and climate impacts. This includes building microgrids that can ensure critical facilities, such as hospitals and water treatment plants, stay online through the next large disruption.

Vote to #ProtectMadreTierra

The Trump Administration is not acting to protect our most vulnerable communities. We need our elected officials at all levels to fight for climate action, clean air and equitable treatment of all people living in America, regardless of or where they live.

That means asking questions about these issues on the campaign trail, and supporting and voting for candidates that exhibit these values.

Register to vote today at edf.org/vote and tweet using #ProtectMadreTierra about why you plan to vote for a healthier environment.



Top: Puerto Rico at night before the storm
Bottom: Puerto Rico at night 4 days after the storm hit



Destroyed homes in Puerto Rico seen from a flyover three days after Maria made landfall