



Major Hurricane Maria: Worst hurricane in nearly 90 years for Puerto Rico

During a preliminary survey of areas along the path of Hurricane Maria's center it was evident that catastrophic damage had occurred. Maria's strong winds spread large amounts of debris across the entire area. All full trees were leafless, and those that were not snapped or uprooted by Maria's strong winds, lost medium to large branches. During the interview process, stories and images were particularly similar. Numerous locals reported that they felt the ground shaking as Maria crossed the island, while most were amazed by the force of the unprecedented strong winds that not only transformed their surroundings but their lives. Although most structures across the island are built using concrete as the main material, countless homes and buildings sustained some type of structural damage. Structures without a concrete roof suffered some type of roof damage or it was completely blown off. Nearly all commercial signage, fences, and canopies were destroyed, including large digital high definition billboards. The last time that Puerto Rico experienced a category 4 or higher hurricane was back on 1928 with Hurricane San Felipe II.

Floods are generally categorized based on the level of their impacts, and the extreme rainfall flooding event caused by Hurricane Maria in Puerto Rico can be considered as catastrophic due to the numerous evacuation and rescues performed, overwhelming overflowing of rivers and tributaries, medium to large scale mudslides and the extensive damage to structures, as well as roads and bridges. In fact, streamflow data from the U.S. Geological Survey showed that 53 out of 65 river gauges met or exceeded flood stage. Among these rivers, 30 exceeded major flood stage while 13 reached or exceeded all-time record level. Widespread river flooding was observed across the island, particularly along the southeastern, northern and western portions of Puerto Rico.

The situation was aggravated by flood water accumulation in low lying and poor drainage areas. Several water pumps failed, and as a result, vast areas were flooded by rain, sewage and sea water. Some areas severely affected within the Metro Area include Ocean Park, Santurce, Condado, Cataño and Loiza. Catastrophic floods created substantial monetary and human losses in the areas in which they occurred.



TJUA NEXRAD at Cayey, PR destroyed by Maria.



Major damage to the solar panel farm in Humacao, PR