Texas Council Risk Management Fund

2019 Hurricane Season Recap

As an early harbinger of the approach of hurricane season, Colorado State University issues a season forecast for the number and intensity of tropical storms. Last year in early 2019 CSU forecast 13 named storms with five of them reaching hurricane status. They amended this "average" forecast later in the season when the end of El Nino indicated an "above average" season. However, the 2019 hurricane season ended as the fourth most active season on record with 18 named storms, including six hurricanes, three of which reached major hurricane status. "Major" hurricanes are defined as Category 3 or higher on the Saffir-Simpson scale of intensity.

Saffir-Simpson Hurricane Scale

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	74-95 mph 64-82 kt 119-153 km/h	**Very dangerous winds will produce some damage:** Well-constructed frame homes could have damage to roof, shingles, vinyl siding, and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph 83-95 kt 154-177 km/h	**Extremely dangerous winds will cause extensive damage:** Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3 (major)	111-129 mph 96-112 kt 178-208 km/h	**Devastating damage will occur:** Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4 (major)	130-156 mph 113-136 kt	**Catastrophic damage will occur:** Well-built framed homes can sustain severe damage with loss of most of the

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	209-251 km/h	roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5 (major)	157 mph or higher 137 kt or higher 252 km/h or higher	**Catastrophic damage will occur:** A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

NOAA, National Hurricane Center

One of the major hurricanes, Dorian struck the Bahamas as a Category 5 storm with winds of 185 miles per hour. Early estimates put damages at about $14 billion. Another notable storm was Tropical Storm Imelda that wandered into southeast Texas and dropped almost as much rain as hurricane Harvey (43.9 inches in Jefferson County). As bad as these storms were in terms of damages, they were much less than the storms of 2017 that caused over $220 billion in damages.

Effective risk management for Fund members includes awareness of hurricane season, effective preparations and response plans to keep people and property as safe as possible. The lesson from the CSU forecast is that things can change and the impact of one storm along one coastal area can make your hurricane season the worst in years. For more information go to the TCRMF website for a "Hurricane Preparedness Bulletin" on the Resources page.

Sources: National Hurricane Center, Colorado State University Hurricane Season Forecast, The Weather Channel, 11/22/19,"Eight Things we Will Remember about the 2019 Hurricane Season," website for WJNO Radio, 12/2/19 "Recap – The 2019 Atlantic Hurricane Season."