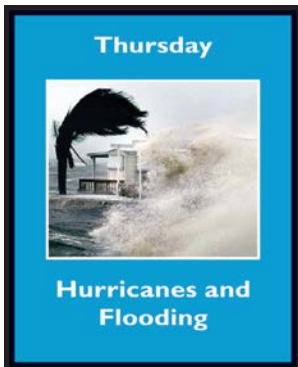




Florida's Severe Weather Awareness Week takes place from January 22-26, 2018. Severe Weather Awareness Week is an opportunity for Floridians to learn about the various weather hazards that frequently impact the state and how families and businesses can prepare for these natural events.



Each day focuses on a specific weather event. **Thursday's focus is on hurricanes and flooding.**

The most feared weather phenomenon throughout Florida during the summer and early fall is the tropical cyclone. Close to the tropics and surrounded on three sides by warm water, the unique location of Florida makes it particularly vulnerable to these systems as they develop across the Atlantic Ocean, Gulf of Mexico, and Caribbean Sea. The relatively flat terrain of Florida can also make it susceptible to flooding.

Florida has a long history of hurricanes. Records indicate that approximately 110 hurricanes and almost 200 tropical storms have impacted the state since 1851 with many more cited in history books before records were kept.

DID YOU KNOW??? No other state in the country has more hurricane landfalls per year on average than Florida does. Nearly 40% of all hurricanes that strike the United States make landfall in Florida.

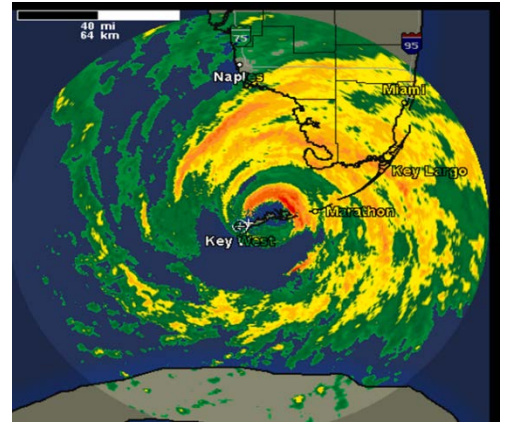
DID YOU KNOW??? In the last 150 years, all of Florida's counties have been impacted by at least one hurricane.



The North Atlantic Ocean hurricane season officially begins on June 1st and continues through November 30th. However, tropical systems can still form outside of hurricane season as early as May and as late as December. Although the number of tropical storms and hurricanes typically peaks during August and September, it is important to remember that Florida can be impacted by tropical weather systems any time during the season. Residents and visitors need to plan ahead and remain ready for possible hurricane impacts.

The 2017 hurricane season had above-average activity and many record setting storms. In total, there were 18 named storms, of which 10 were hurricanes. 6 of the 10 hurricanes (Harvey, Irma, Jose, Lee, Maria, and Ophelia) became Major Hurricanes (Category 3 or higher). The season started very early when Tropical Storm Arlene developed in April. The next tropical storm, Bret, developed in mid-June in the Main Development Region in the central, tropical Atlantic. Bret was the earliest storm to form in this region. Tropical Storm Cindy developed shortly after Bret and made landfall in Louisiana. Cindy brought locally heavy rainfall to parts of the Florida Panhandle. Activity in July was limited, with the month wrapping up with quick hitting Tropical Storm Emily. Emily formed suddenly overnight along an old frontal boundary and made landfall in Tampa hours after formation. Locally heavy rainfall fell across

parts of Central and South Florida. Gert and Franklin both reached hurricane status but did not affect the US. The hurricane season then took a turn for the worse as Category 4 Hurricane Harvey developed in the end of August. Harvey stalled out along the Texas Coast shattering rainfall records as it pummeled parts of Texas and Louisiana. Harvey produced 60.58 inches of rainfall in Nederland, Texas, the highest-ever rainfall total for any tropical cyclone in the United States. Hurricane Irma followed in the heels of Harvey reaching Category 5 status. For the entire month of September, there was at least one named storm in the Atlantic every day. Next was Jose, which was the 3rd consecutive storm to reach Category 4+ status, a new record. Much like Irma, hurricane Maria rapidly intensified and brought Category 5 destruction to parts of the Caribbean islands, including Puerto Rico. While Florida was still recovering from Irma, Hurricane Nate made landfall in Mississippi bringing heavy rainfall to the Panhandle. Tropical Storm Phillippe ended the season for Florida, bringing several tornadoes to South Florida as it crossed the Peninsula. Tropical Storm Rina formed at the start of November and was the last system of the 2017 season.



The last major hurricane to make U.S. landfall was Wilma (2005), until Harvey. Wilma was also the last major hurricane to make landfall in Florida, and Irma broke that streak as well. Irma was a record setting storm, making a sharp northerly turn up the Florida Peninsula after traversing the southwestern Atlantic. This brought tropical storm and hurricane conditions to all but the far western Panhandle.

To summarize, Florida received direct impacts from six tropical systems (Cindy, Emily, Harvey, Irma, Nate, and Philippe). Florida saw five landfalls from four tropical systems: Tropical Storm Emily in Tampa, Category 4 Hurricane Irma in Cudjoe Key, Category 3 Irma in Marco Island, and Tropical Storm Philippe in the Everglades. The East Coast of Florida saw high surf and coastal erosion from three other tropical cyclones that passed well offshore: Gert, Jose, and Maria. This means half of the tropical cyclones last season (9/18) impacted Florida in some way.

When a tropical system approaches the state, The National Hurricane Center will issue watches and warnings. **Do you know the difference between a watch and warning?** Watches are issued 48 hours in advance of the time dangerous winds are *possible* within the specified area. Warnings are issued 36 hours prior to the time when damaging winds are *expected*. A watch should trigger your family's disaster plan, and protective measures should be initiated. Once a warning has been issued, your family should be in the process of completing protective actions and deciding the safest location to be during the storm.

Your main protection against hurricanes is to be prepared and have a plan. Hurricane force winds can easily destroy poorly constructed buildings and mobile homes. A hurricane plan doesn't have to be anything extremely complicated, but should at least consist of the following two things. First, determine whether you live in an evacuation zone. This information can be obtained from your local emergency management office. If you live in an evacuation zone, know when and where you will be going to pass the storm. Second, have a disaster supply kit ready with non-perishable food, batteries for electronic devices such as your NOAA Weather Radio, and enough supplies to last 3 to 5 days. Assess your property to ensure that landscaping and trees do not become a wind hazard.

Know Your Zone



While hurricanes are known and feared for their ferocious winds, historically it is the water that causes most of the deaths in hurricanes. About 90% of all hurricane fatalities occur from drowning in either storm surge or freshwater flooding. The widespread flooding caused by Tropical Storm Fay in 2008 serves as a reminder that tropical storms can cause as much or greater devastation than hurricanes with freshwater flooding.

Even outside of tropical systems, flooding is a serious concern in Florida since it can happen anywhere and at any time. Effects from flooding can be localized, impacting just a few streets in a neighborhood or community, or very large, affecting multiple cities, counties and even whole states. Flooding is caused by the amount of rainfall and what happens to the rain after it hits the ground.

As our state's population increases, buildings and pavement replace the natural land. This creates more water runoff and can increase flood problems. Most deaths due to flooding in the United States are from people driving their cars into flooded areas. Once a vehicle begins to float, the situation becomes dangerous and often deadly.



Residents should be aware of their location with respect to flood-prone areas and know evacuation routes. People are also urged to be extremely cautious when driving in heavy rains, especially when water covers the road. Because it is difficult to determine the depth of water or the condition of the road under the water, if you come to a flooded road, remember the phrase "Turn Around, Don't Drown".



Meteorologists at the Southeast River Forecast Center and local National Weather Service offices all watch the weather to try to warn people well in advance of the flooding so they can save lives and property. Flood Watches and Warnings, along with Flash Flood Watches and Warnings, are issued for a specific area when flooding conditions are likely or are already occurring.

The National Hurricane Center will also issue [Storm Surge Watches and Warnings](#) for areas of the U.S. that have the potential for damaging storm surge from a tropical cyclone.

National Flood Safety Awareness is March 1, 2018. National Hurricane Preparedness Week is May 7-13, 2018. More information about hurricanes and flooding and what you can do to protect yourself and others can be found at www.nhc.noaa.gov/prepare, <http://www.nhc.noaa.gov/surge/resources.php>, www.floodsafety.noaa.gov or www.FloridaDisaster.org.

Friday's tropic will be on temperature extremes and wildfires.