HURRICANE PREPAREDNESS IN SOUTH CAROLINA

Before a tropical storm approaches...

- KNOW THE RISKS that exist during a tropical storm including high winds, storm surge, rainfall-induced flooding, and tornadoes. Discuss these with your family.
- DESIGNATE A SAFE PLACE within your home to gather all family members during the storm. If you are in a flood-prone area, the safest place will be inland at a shelter, family member's home, or hotel.
- MAKE A DISASTER KIT that includes items such as non-perishable food items, batteries, radio, flashlight, water, medicines, clothes, blankets, and a first aid kit. Anything you may need for a period of 3 to 5 days should be included and kept together in the safety area. If you must evacuate, take this with you.
- PLAN FOR YOUR PETS. Shelters do not accept animals but many locations have pet shelters available nearby. Know where this area is before you leave home.
- CHECK YOUR INSURANCE on your home. Flooding is not usually covered on typical homeowner's policies. Purchase a specific flood insurance policy if you live in an area subject to damage from rising waters.
- PREPARE YOUR HOME by boarding windows, removing loose items from the yard, and moving boats inland off the water. Do this well before even a voluntary evacuation is in effect.
- UPON A VOLUNTARY EVACUATION, prepare to leave immediately. It is recommended to leave before a mandatory evacuation is in place to prevent travel delays and highway congestion.
- WHEN A MANDATORY EVACUATION IS ORDERED, LEAVE IMMEDIATELY. Pack your essentials from the disaster kit and travel inland.
- KEEP A NOAA WEATHER RADIO with you. The National Weather Service will broadcast local information on the threatening storm along with watches, warnings, and advisories for winds, floods, and other severe weather that will affect you.
- REMEMBER– Although storm surge and wind are usually confined to the immediate coastal regions, inland areas also experience significant weather including rainfall-induced floods, tornadoes, and high winds. Therefore, even non-coastal residents should find safe a location to gather if threatening conditions occur.

Hurricane season begins on June 1 each year and continues through November 30. Although this period is the predominant time of year for hurricanes to occur in the Atlantic Basin, Gulf of Mexico, and Caribbean Sea, tropical storms can and have formed in every month of the calendar year.

As the summer progresses and the ocean waters warm, conditions become more favorable for tropical storm formation, with a maximum frequency of storms in the second week of September. The coastal sections of South Carolina are particularly vulnerable to storms from the Atlantic Ocean. High tourist populations during the summer months on the beautiful Grand Strand and southern pristine beaches of Hilton Head make the potential for life-threatening storms even greater. To avoid serious consequences to property and life during tropical weather events, be prepared and take specific actions in the task of hurricane preparedness.

The number-one killer in land-falling tropical systems is inland flooding. The biggest potential killer is storm surge. Tornadoes spawned by the rotating cyclone as it interacts with the land surface also pose a threat to life and property. As the winds flow from relatively smooth ocean waters onto the rough terrain of hills, trees, and buildings over land, several processes begin to work in favor of heavy rains and twisters. The convergence of air creates upward motion, clouds, and precipitation. If the storm's forward speed slows down, as often occurs, the duration of heavy rainfall over specific areas is prolonged, generating widespread flooding. In 1999, Hurricane Floyd made landfall in North Carolina, but generated 12 to 18 inch rainfall totals over northeastern sections of South Carolina. The Waccamaw River remained above flood stage for 55 days.

In addition to flooding, wind shear created as high winds flow over the reduced low-level winds generates tornadoes primarily in the northeast sector of a storm. All quadrants of storms have produced tornadic activity in the pre- and post-landfall time frames as thunderstorm bands spiral inland. Lastly, in South Carolina we

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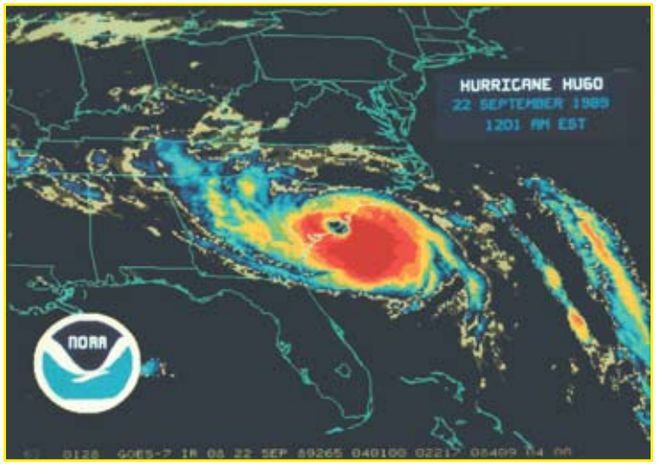

cannot forget hurricanes Hugo (1989) and Gracie (1959). The two storms occurred almost exactly 30 years apart with hurricane-force winds exhibited as far inland as Columbia, SC, and Charlotte, NC. This reminds us that all South Carolinians need to prepare for hurricanes, not just those along the coast. In a concerted effort, the citizens of the Palmetto State can prepare for, react, and respond to tropical weather systems and prevent unnecessary loss of life and property from the sandy beaches of Garden City to the green mountains of Walhalla.

Michael Foster

Saffir-Simpson Scale for Hurricane Intensity

Intensity Level	Wind Speed	Description
Tropical Depression	Less than 39 mph	Initial development stage of tropical cyclones
Tropical Storm	39-73 mph	Well-defined circulation with cloud banding features
Category 1 Hurricane	74-95 mph	No real damage to buildings. Damage to mobile homes, signs. Some coastal flooding and minor pier damage.
Category 2 Hurricane	96-110 mph	Damage to building roofs, doors, windows. Floods damage piers, boats. Trees blown down.
Category 3 Hurricane	111-130 mph	Structural damage to homes, buildings. Large trees down. Terrain flooded well-inland.Flooding damages larger structures and destroys smaller buildings.
Category 4 Hurricane	131-155 mph	Wall failure and roof failure on small homes. Major erosion of beaches. Terrain flooded inland.
Category 5 Hurricane	Over 155 mph	Complete destruction of homes and industrial buildings. Major damage from flooding to all structures at shoreline. Massive evacuation required.