

**ISLE OF PALMS AND SULLIVAN'S ISLAND  
DISASTER EXPO  
ANSWER KEY**

**Question 1:** What category was Hurricane Hugo when it struck land in 1989?

**Answer 1:** Hugo was category 4 when it struck just north of Charleston.

**Source 1:** According to the National Oceanic and Atmospheric Administration (NOAA), storm surge from Hugo inundated the SC Coast from Charleston to Myrtle Beach, with maximum storm tides of 20 feet observed in the Cape Romain-Bulls Bay area. Charlotte, North Carolina reported 69 mph sustained winds and gusts to 99 mph. Twenty-one deaths and \$7 billion in damages were reported on the mainland United States.

**Question 2:** Prior to the threat of Hurricane Floyd, how long did it take to evacuate Charleston County?

**Answer 2:** Almost 9 hours

**Source 2:** According to NOAA, "Floyd triggered the second largest evacuation in US history. Evacuees in Charleston had the longest average travel times, almost nine hours." Fifty-seven deaths were directly attributable to Floyd, most due to drowning.

**Question 3:** How much of Sullivan's Island and the Isle of Palms would be under water if a category 3 hurricane struck land south of the islands on a high tide?

**Answer 3:** 100%. Both islands would be 9-12 feet underwater if a category 3 hurricane struck.

**Source 3:** City of Isle of Palms Disaster Preparedness Plan and Storm Surge model for Charleston County. It is imperative that you follow evacuation instructions. Residents are usually given 48-72 hours notice in advance of a hurricane.

**Question 4:** Following Hurricane Hugo, how long before residents and property owners were able to get back on the islands?

**Answer 4:** Four days for the Isle of Palms and approximately five days for Sullivan's Island

**Source 4:** Isle of Palms Police Chief Thomas Buckhannon and Sullivan's Island Fire Chief Anthony Stith. At 8:00 am on September 25<sup>th</sup>, the harbor tour boat took Isle of Palms residents from Patriot's Point and arrived at the Wild Dunes Marina at approximately 9:00 am. On-island transportation was not available, so residents had to walk from the Marina to their properties, and residents were required to return to the Marina for departure at noon sharp. Sullivan's Island residents were ferried from Shem Creek.

**Question 5:** The State of South Carolina is considered to have what level of risk for earthquakes?

**Answer 5:** Moderate to High

**Source 5:** South Carolina Emergency Management Division

**Question 6:** If an earthquake of the magnitude of the 1886 Charleston earthquake (7.3 on Richter scale) struck today, what damage would be caused?

**Answer 6:** 900 fatalities; 45,000 casualties; 70,000 displaced households; 80% of households without water for weeks and/or months; 800 bridges damaged beyond use; 300,000 households without power; 36 million tons of debris; 250 burning fires with compromised firefighting equipment; \$10.9 billion in economic losses in tri-county area of Charleston, Berkeley, Dorchester

**Source 6:** South Carolina Emergency Management Division

**Question 7:** What percentage of homeowners, even in earthquake-prone areas, have earthquake insurance?

**Answer 7:** 25-28%

**Source 7:** Western Insurance Information Institute

**Question 8:** When was the last earthquake that could be felt on the Isle of Palms and what was its magnitude?

**Answer 8:** On December 18, 2008, an earthquake of 3.6 magnitude, with an epicenter four miles south-southwest of Summerville, could be felt throughout the tri-county area.

**Source 8:** South Carolina Department of Natural Resources

**Question 9:** What is the percentage chance that an earthquake will occur in the world on any given day?

**Answer 9:** 100%

**Source 9:** United States Geological Survey

**Question 10:** Name 10 items that should be in your disaster kit.

**Answer 10:** At least 1 gallon of bottled water per person each day; a first aid kit; medicines; bug repellent; enough can foods and non-perishables for the entire family for at least 3-7 days; a manual can opener; a portable, self-generating radio and extra batteries; flashlights; candles and matches; games or cards; a lock box with personal documents and computer back-up files; an ice chest; rain gear; trash bags; a small gas camp stove with fuel; a whistle; pet supplies and pet food; recent photograph of your family and pets; blankets; pillows; toiletries; keys; cash

**Source 10:** NOAA and Charleston County Hurricane Preparedness Guide

**Question 11:** How many days' worth of medicine should you have with you in the event of an evacuation?

**Answer 11:** At least 2 weeks supply.

**Source 11:** City of Isle of Palms Disaster Preparedness Plan

**Question 12:** Where are hurricane shelters located East of the Cooper?

**Answer 12:** There are none. All shelters are located in North Charleston and Ladson

**Source 12:** Charleston County Hurricane Preparedness

**Question 13:** If your vacation or secondary home is damaged, are you eligible for FEMA assistance?

**Answer 13:** Damages to a secondary or vacation home are not eligible under FEMA's disaster assistance program. However, if you own a secondary home that is rented or occupied by a family member, you may be eligible for assistance from the Small Business Administration.

**Source 13:** FEMA

**Question 14:** If you lose your job due to a disaster, will FEMA make mortgage or rent payments until you return to work? Is any other assistance available?

**Answer 14:** No. FEMA is not authorized to make such payments. If you lost work due to the disaster, you may qualify for Disaster Unemployment Assistance (DUA). You would have to contact the State Employment Commission for information about DUA. The DUA program covers most people affected by a disaster, including many who do not normally qualify for regular unemployment

**Source 14:** FEMA

**Question 15:** How many days in advance of a named storm must you have flood insurance in place?

**Answer 15:** There is typically a 30 day waiting period from date of purchase before a new flood policy goes into effect.

**Source 15:** Floodsmart.gov

**Question 16:** What natural or other disasters are covered by homeowners' insurance?

**Answer 16:** It varies. Policy holders should carefully read and understand their coverage. Floods are not covered under regular homeowners' insurance.

**Source 16:** Just good advice.

**Question 17:** If a structure, such as a 1,200 square foot "J.C. Long" house, was appraised at \$100,000 (regardless of the purchase price or land value) and sustained damaged in a disaster that required \$50,000 in repairs, would it be required to be elevated during reconstruction?

**Answer 17:** Yes

**Source 17:** City of Isle of Palms Code of Ordinances Section 5-4-169(a) states "New construction, substantial improvement or the repair of substantial damage of any residential structure shall have the lowest floor, including basement, elevated to no lower than the base flood elevation." Substantial damage and substantial improvement are defined in Section 5-4-155. The City of Isle of Palms Code of Ordinances is available online at [www.iop.net](http://www.iop.net)

**Question 18:** If a damaged structure was required to be elevated, would a typical flood insurance policy cover the cost of elevation?

**Answer 18:** No. An additional increased cost of compliance (ICC) coverage must be added to cover this expense.

**Source 18:** FEMA National Flood Insurance Program

**Question 19:** Could a damaged house be required to be reconstructed farther away from the Atlantic Ocean?

**Answer 19:** Yes. If the house was constructed seaward of the OCRM setback line and the property had an area landward of the line that could accommodate a house, the Beach Management Act requires that it be built landward of the line.

**Source 19:** South Carolina Coastal Zone Management Act

**Question 20:** After Tropical Storm Charlie and Hurricane Gaston in 2004, how many days was the cleanup effort to remove all the debris on the Isle of Palms?

**Answer 20:** The City of Isle of Palms, Charleston County and the contractor Phillips and Jordan worked for thirty-one consecutive days to clear the island of debris.

**Source 20:** Public Works Departmental Report

**Question 21:** How do you find pet friendly hotels in the South Carolina, North Carolina and Georgia?

**Answer 21:** Many of the pets left behind during Hurricane Hugo were rescued, but hundreds were not. Over forty-two hotels in the Columbia and Florence area will accept pets with some restrictions.

**Source 21:** Charleston County Website at [www.charlestoncounty.org](http://www.charlestoncounty.org)

**Question 22:** What part of Hurricane Hugo caused the most damage: the wind or the storm surge?

**Answer 22:** Probably about equal. The winds were strong and the storm surge piled boats on top of each other. A twenty-foot storm surge came ashore in Awendaw, Bull's Bay and Cape Romain. The trees at Francis Marion Forest were uprooted. Residents who evacuated to Lincoln High School in McClellanville had to help one another in pitch darkness reach the space in the ceiling above the rooms in order to survive the storm surge. Inland, Hugo destroyed homes, timber and the area's cotton crop. Schools and businesses as far north as Greenville and Rock Hill were closed through the days following Hugo due to fallen trees and power lines.

**Source 22:** NOAA

**Question 23:** Will taping the windows help when a hurricane threatens?

**Answer 23:** No. Tape offers little strength to glass and NO protection against flying debris. Once a hurricane warning has been issued, put shutters or boards over doors and windows.

**Source 23:** NOAA

**Question 24:** If you feel the earth or your house shake, what should you do?

**Answer 24:** Stay indoors and get under a desk or table and hang on to it, move into a hallway, or get against an inside wall. Stay clear of windows, fireplaces and heavy furniture or appliances. Get out of the kitchen.

**Source 24:** United States Geological Survey

**Question 25:** Where can island residents receive information and updates before, during and following a disaster?

**Answer 25:** Keep your battery operated radio and television tuned into the local radio station and television stations. If internet is available, go to the Isle of Palms website ([www.iop.net](http://www.iop.net)) or the Sullivan's Island website ([www.sullivanisland-sc.com](http://www.sullivanisland-sc.com)). If you are in a shelter, local authorities will offer information as they receive it.

**Source 25:** Fire Chief Ann Marie Graham and the City of Isle of Palms Hurricane Preparedness Plan

**Question 26:** Following the devastation of Hurricane Hugo, how long before power was restored and available on the islands?

**Answer 26:** South Carolina Electric & Gas (SCE&G) restored the Intracoastal Waterway crossing along the Ben Sawyer Causeway on October 3, 1989. This restoration energized distribution circuits on Isle of Palms and Sullivan's Island, so October 3 was the first day that power was available to both islands. The date all customers who could accept power were restored to power was 18 days after Hugo on October 9, 1989.

**Source 26:** Westy Westmorland, South Carolina Electric & Gas

**Question 27:** Where can you learn more about natural disasters before they occur?

**Answer 27:** Informational websites:

Isle of Palms [www.iop.net](http://www.iop.net)

Sullivan's Island [www.sullivanisland-sc.com](http://www.sullivanisland-sc.com)

Charleston County [www.charlestoncounty.org](http://www.charlestoncounty.org)

FEMA [www.fema.gov](http://www.fema.gov)

Red Cross [www.redcross.org](http://www.redcross.org)

National Flood Insurance Program [www.fema.gov/nfp](http://www.fema.gov/nfp)

**Source 27:** Fire Chief Ann Marie Graham