

HURRICANE IRENE

AUGUST 27TH, 2011

OVERVIEW

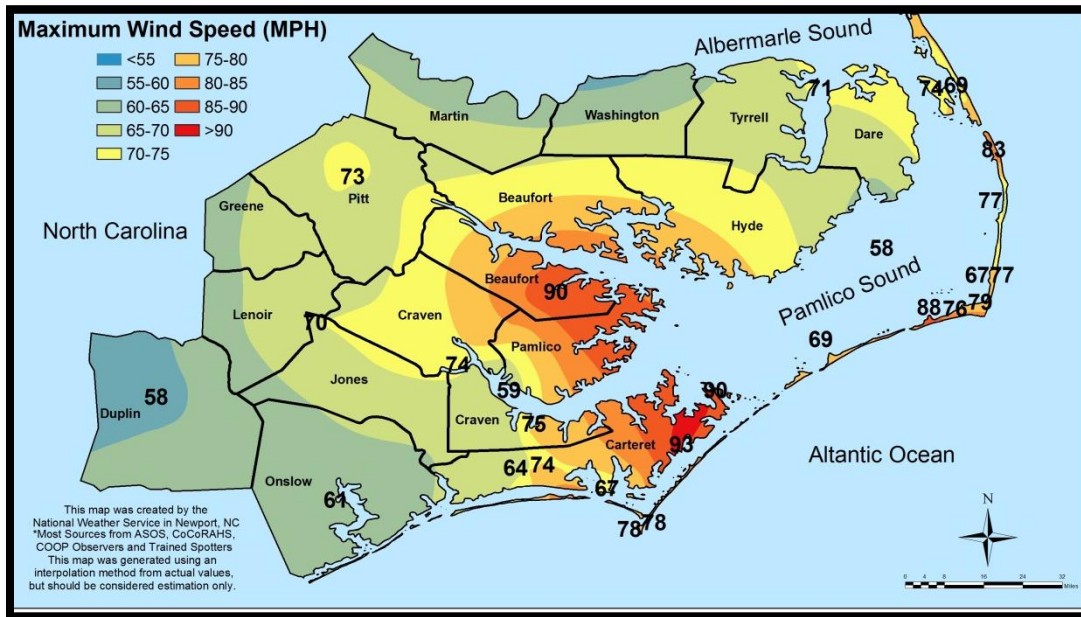
Today marks the one year anniversary of Hurricane Irene which made landfall on August 27th, 2011. Hurricane Irene was a large and powerful Atlantic hurricane that left extensive flooding, surge and wind damage along its path through the Caribbean, the United States East Coast and as far north as Canada. Irene made landfall near Cape Lookout, North Carolina at around 7:30 AM EDT on August 27, 2011 as a strong category 1 storm. Irene caused 5 deaths in North Carolina. On the evening of August 26, as the outer bands were affecting the coast, Hurricane Irene also spawned several tornadoes. One EF-2 tornado near Columbia in Tyrrell County demolished at least 4 homes and overturned cars.

Precipitation totals associated with Irene were particularly high with totals ranging from around 5 inches over the Northern Outer Banks, to around 15 inches in Beaufort County. Bunyan in Beaufort County reported 15.66 inches. Doppler Radar estimated totals of over 17 inches in portions of Beaufort, Craven and Pamlico Counties. Extensive storm surge and wind damage also occurred with Irene. The peak wind gust recorded was 93 mph near Harkers Island in Carteret County as the eye was moving ashore. Trees were down throughout eastern North Carolina and thousands were left without electricity. Ocean and Sound overwash created numerous breaches of Highway 12 along the Outer Banks.

One of the biggest impacts associated with Irene was the destructive storm surge. Although, Hurricane Irene was a Category 1 storm, the extreme surge that affected coastal counties will serve as a reminder that even weaker Tropical Cyclones can cause major surge hazards. Those locations hardest hit were coastal locations along the Pamlico River, Neuse River and on the sound side of the Outer Banks. Several homes right along the coast were swept off their foundations from strong surge and wave action while some homes further inland sustained flooding as water quickly rose from area inlets and rivers.

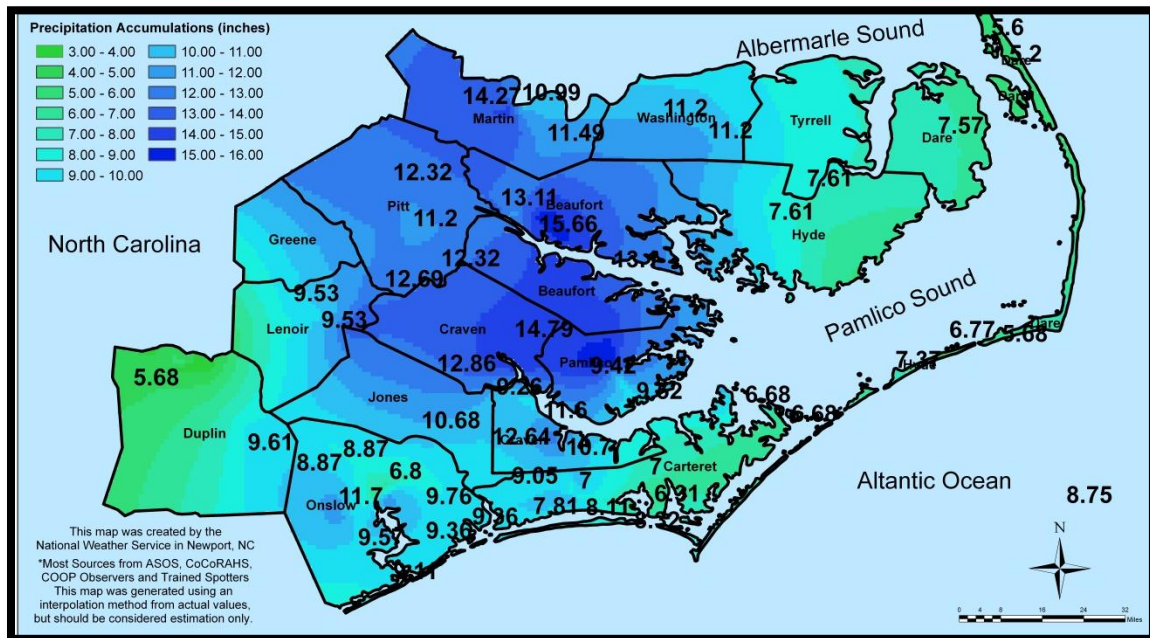
WIND

Below is a map of the maximum wind speeds (MPH) observed during Hurricane Irene.



PRECIPITATION

Below is a map of the storm total precipitation (inches) from Hurricane Irene.



SURGE

Below are several maps depicting storm surge values across the County Warning Area. These values are separated into feet above mean sea level and feet above ground level.

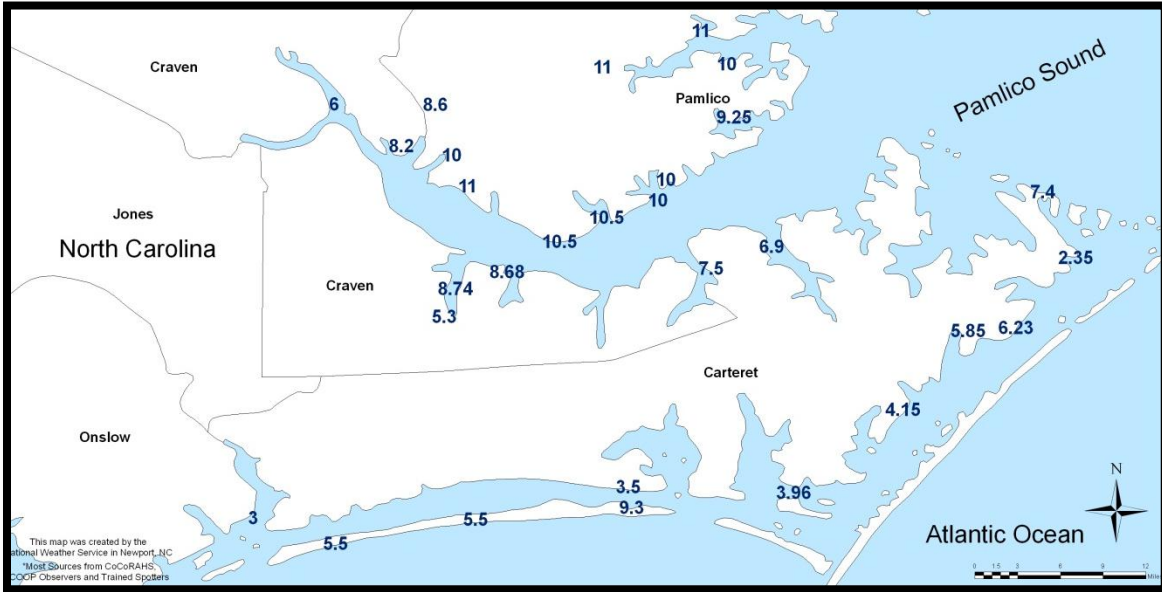


Figure. Surge values (ft) above mean sea level along the Crystal Coast

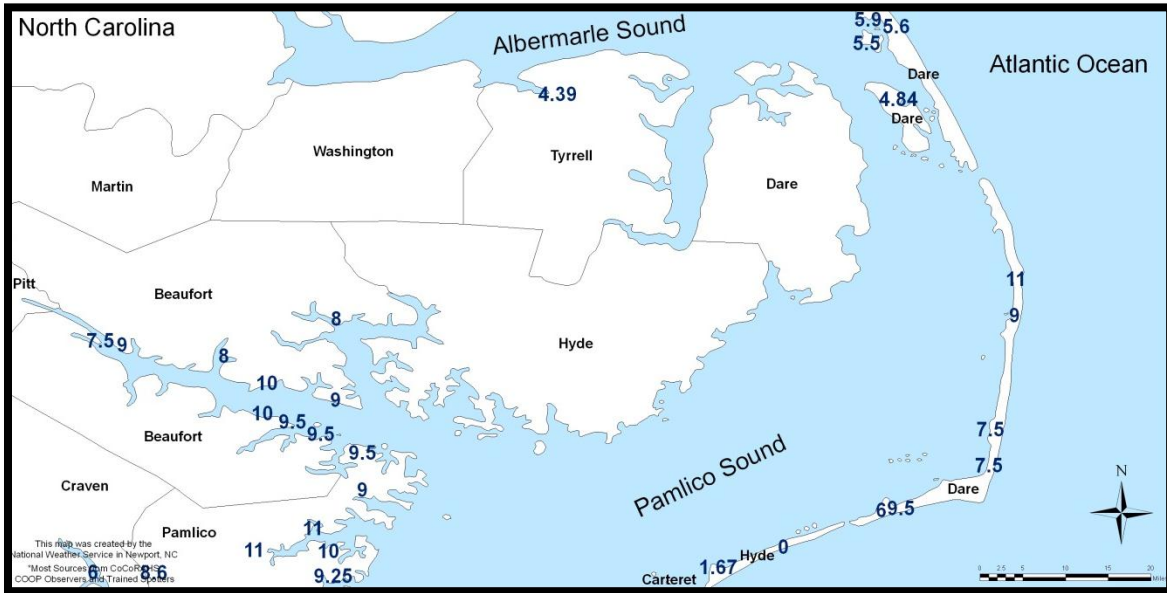


Figure. Surge values (ft) above mean sea level along the Outer Banks and Sounds

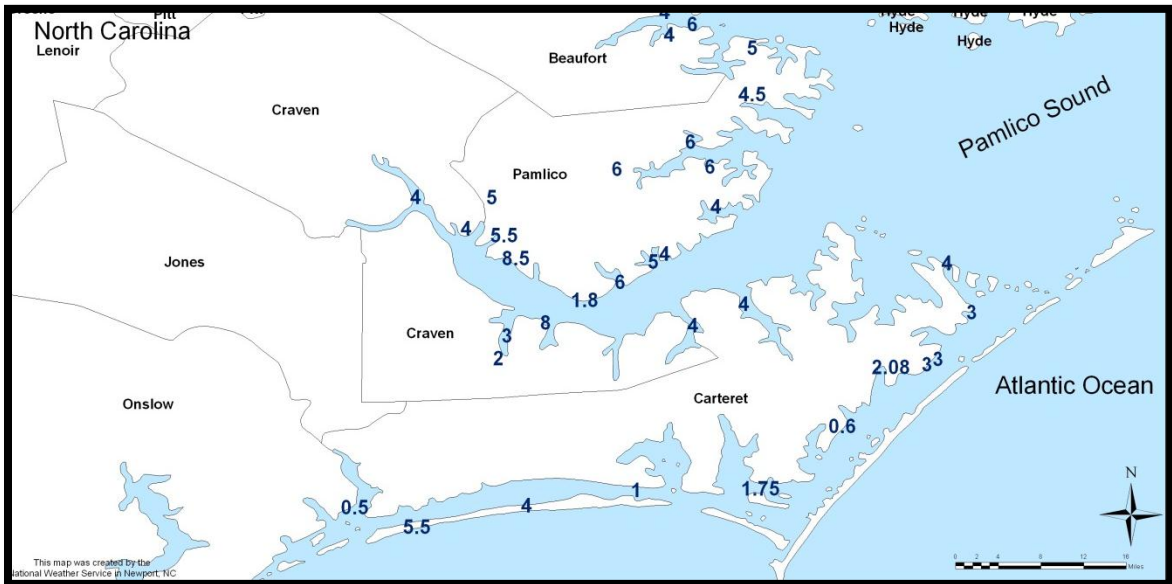


Figure. Surge values (ft) above ground level along the Crystal Coast

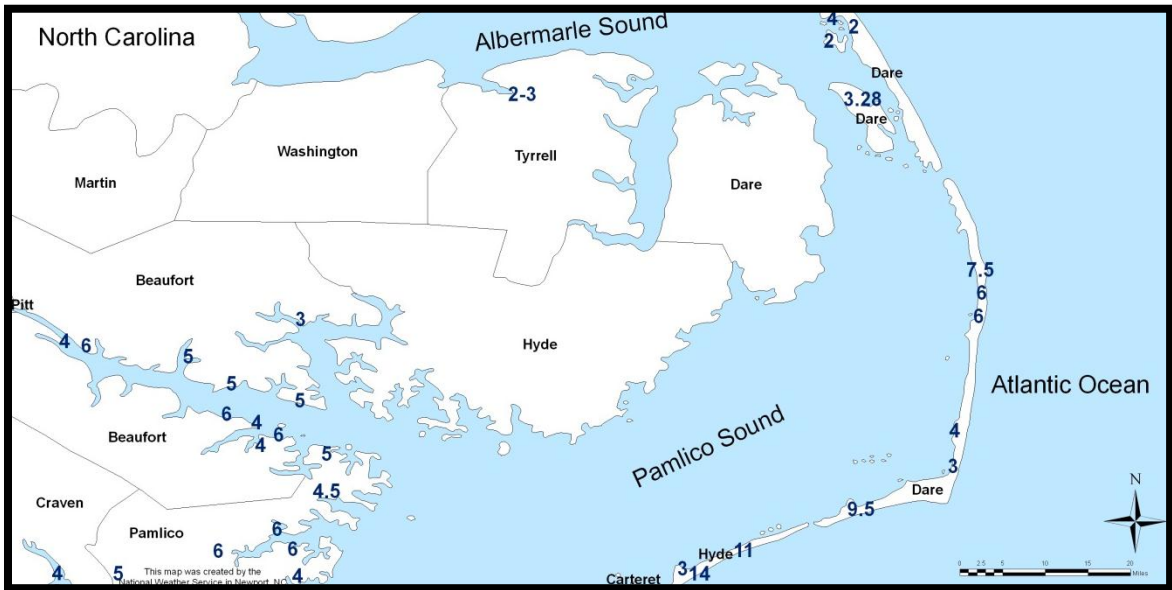


Figure. Surge values (ft) above ground level along the Outer Banks and Sounds

Safety

The anniversary of Hurricane Irene serves as a reminder to be prepared well before a Tropical Cyclone impacts your area. The track of Hurricane Irene was well forecasted and publicized (with a mention in our Area Forecast Discussion several days prior to the event). This meant that individuals had ample time to prepare before the system reached the area.

Here are a few tips on what YOU can do before the Hurricane Season arrives:

- Stock up on supplies, including boards for windows, a generator, and supplies for your hurricane kit. Don't wait until the last minute when a storm is bearing down on the area.
- Review your insurance policy. Understand your biggest threats from hurricanes, and make sure you are covered before hurricane season. Many insurance companies will not allow last minute adjustments to policies.

If in a Hurricane Watch:

- Listen frequently to NOAA Weather Radio, TV, or radio for bulletins of a storm's progress and potential path.
- Fuel and service your vehicles.
- Have plenty of cash on hand.
- Store lawn furniture and other loose, light weight objects that could become projectiles in strong winds.
- Board up windows, and/or secure mobile home tie-downs.
- Secure boats, or move them to a safe location to ride out the storm.
- If planning to stay, have a 3-5 day supply of non-perishable food, water, and medicine on hand.

If in a Hurricane Warning:

- Follow instructions issued by local officials. Leave immediately if ordered!
- If in a vulnerable area or structure, stay with friends or relatives at a low-rise inland motel, outside the flood zone, or at a designated public shelter.

For more information regarding Tropical Cyclones and safety please refer to these brochures/links:

- [Hurricane Survival Guide](#)
- [Hurricane Preparedness](#)
- [Hurricane Irene Event Review](#)

Hurricane Irene Damage Photos



Figure. Highway 12 in Rodanthe



Figure. A home in Rodanthe on the ocean side



Figure. A boat knocked off the lift with debris from surge in Oriental



Figure. Dock side of Channel Marker in Atlantic Beach (along the causeway)



Figure. A home (right) swept off its foundation with another home (left) destroyed in Jarvis Landing



Figure. Home destroyed near Jarvis Landing