

Hurricane Irene Summary

Hurricane Irene was the strongest hurricane to impact the Hampton Roads area since Hurricane Isabel in 2003. It moved across the NWS Wakefield's county warning area (CWA) and coastal waters as a minimal category 1 storm with maximum sustained winds of 80 mph. Hurricane warnings were issued all along the coastal waters of VA/NC and much of the DELMARVA. Five deaths occurred in the local area; four related to fallen trees and one due to high surf. The high winds led to widespread power outages, with some residents without power for more than a week.

Hurricane Irene made landfall near Cape Lookout, NC around 8 am Saturday, August 27th. The center of circulation moved north across the Albemarle Sound and entered the Wakefield CWA near Elizabeth City around 5 pm. The storm exited the coast just north of Duck, NC around 7 pm, and then passed just offshore of Sandbridge and Virginia Beach. Irene was offshore of Chincoteague, VA by midnight August 28th and near Ocean City, MD around 3 am.

During the storm, a total of 13 staff members were at the office working and taking shelter. The main forecast issues were the storm surge heights over the lower Bay and Eastern Shore, timing and duration of highest wind speeds/gusts, and locating the westward extent of the heavy rainfall on the back side of the storm. Two tornadoes in VA, one near Sandbridge Beach and the other in Chincoteague, led to localized property damage. As expected, the heaviest rain fell along and east of Irene's track with a swath of 6-12 inches occurring just west of track. Flood Watches were extended well inland to I-95 to account for heavy inland rains. 50-75% of normal rainfall was observed from January–July on average across the region, which allowed for less flooding from Irene's rainfall than is usually expected. The rain also fell over a long period of time and no extreme rainfall rates were observed. Although a few rivers made it to flood stage, river levels were generally low prior to Irene, meaning flooding for the storm would be mainly confined to quick-to-respond tributaries, flood prone, and low lying areas.

—Matt Scalora

Tropical Storm Irene # 35
August 28, 2011
11 PM EDT Sunday
 Current Location 45.3 N 71.3 W
 Max Sustained Wind 50 mph (Cat 0)
 Current Movement 26 mph

 Current Location
 Forecast Positions
 Potential Track Area

