## = Effects of Hurricane Charley in North Carolina =

The effects of Hurricane Charley in North Carolina were minor to moderate and included \$ 25 million ( 2004 USD ) in damage . Hurricane Charley lasted from August 9 to August 15 , 2004 , and at peak intensity it attained 150 miles per hour ( 240 km / h ) winds , making it a strong Category 4 hurricane on the Saffir @-@ Simpson Hurricane Scale . The storm made landfall in southwestern Florida at maximum strength , and moved northward , parallel to the U.S. East Coast before moving ashore on northeastern South Carolina .

The storm caused flooding in seven counties within the state as a result of 5 @.@ 05 inches ( 128 mm ) of rainfall . Winds peaked at 85 miles per hour ( 137 km / h ) which downed trees and power lines , and left 65 @,@ 000 homes without power . A storm surge of 2 feet ( 0 @.@ 61 m ) to 3 feet ( 0 @.@ 91 m ) was reported , along with moderate waves that caused minor beach erosion . No deaths are attributed to the storm .

## = = Preparations = =

On August 13, 2004, a tropical storm watch was issued for Cape Fear, southward to South Carolina. The watch was extended northward to Oregon Inlet later that day; the watch further extended to Chincoteague, Virginia. The tropical storm watch from Cape Lookout to Oregon Inlet was changed to a hurricane warning. A hurricane watch was subsequently put into effect for coastal areas from Oregon Inlet to the North Carolina / Virginia border, although by August 15 all advisories were discontinued. Flood watches were also placed into effect for portions of the state.

Governor Mike Easley declared a state of emergency in advance of the storm , and 200 National Guard troops were dispatched to Charlotte , Raleigh , Kinston and Lumerton , while 800 more were on standby . On Ocracoke Island , authorities ordered mandatory evacuations , while on Bogue Banks voluntary evacuations were in place . Officials in Wrightsville Beach drove along the streets with loudspeakers mounted on trucks , warning tourists that a storm was approaching . The storm forced the University of North Carolina at Wilmington to suspend a planned opening for students moving in to residence halls . Campgrounds at the Cape Hatteras National Seashore were closed by the National Park Service and three boat ramps were closed . Duke Power Co. prepared for Charley by lowering the level of hydroelectric lakes to make room for excessive rainfall . The state Department of Environment and Natural Resources advised hog farmers to pump out their waste lagoon . About 60 Red Cross shelters were opened during the storm and during the peak of Charley , and roughly 1 @,@ 600 people sought protection .

## = = Impact = =

Hurricane Charley produced moderate to heavy rainfall over the state , peaking at 5 @.@ 05 inches ( 128 mm ) near Greenville ; other rainfall amounts ranged from less than 1 inch ( 25 mm ) ? more than 4 inches ( 100 mm ) . The outer rainbands began affecting the region in the early hours of August 14 . Due to widespread debris , storm drains became clogged which left flooding in some areas . Freshwater flooding was reported in seven counties along the coastal plain . State highways 42 and 581 , as well as numerous county and local roads , were covered with at least 1 foot ( 0 @.@ 30 m ) of water . Wilmington and surrounding towns were forced to close a total of 20 streets . The heavy precipitation also caused the Neuse River to swell to flood stage . A few businesses throughout the region were damaged ; two in downtown Greenville and five others were flooded .

The storm produced estimated storm surge of 2 feet ( 0 @.@ 61 m ) to 3 feet ( 0 @.@ 91 m ) , along with waves of up to 8 feet ( 2 @.@ 4 m ) in height . However , there were isolated reports of 8 feet ( 2 @.@ 4 m ) surge , particularly along the beaches of Brunswick County . This produced minor beach erosion along the coastline . Winds gusted from 60 ? 70 miles per hour ( 95 ? 110 km / h ) , causing minor wind damage . The hurricane spawned five weak tornadoes across the state , including an F1 in Nags Head that damaged twenty structures . Charley destroyed 40 houses and damaged 2 @,@ 231 , 231 severely , including 221 damaged beach homes in Sunset Beach .

Damage was the greatest in Brunswick County , where wind gusts peaked at 85 miles per hour (  $137\ km\ /\ h$  ) . The winds blew down chimneys and damaged a roof on one building , and ripped the siding off another . Crop damage was also heavy in Brunswick County , with 50 % of the tobacco crop lost and 30 % of the corn and vegetable fields destroyed . Strong winds downed trees and power lines , leaving 65 @,@ 000 homes without power . Damage in North Carolina totaled to \$ 25 million ( 2004 USD ) .