

Managing Risk Through Catastrophe: Lessons from Hurricane Florence



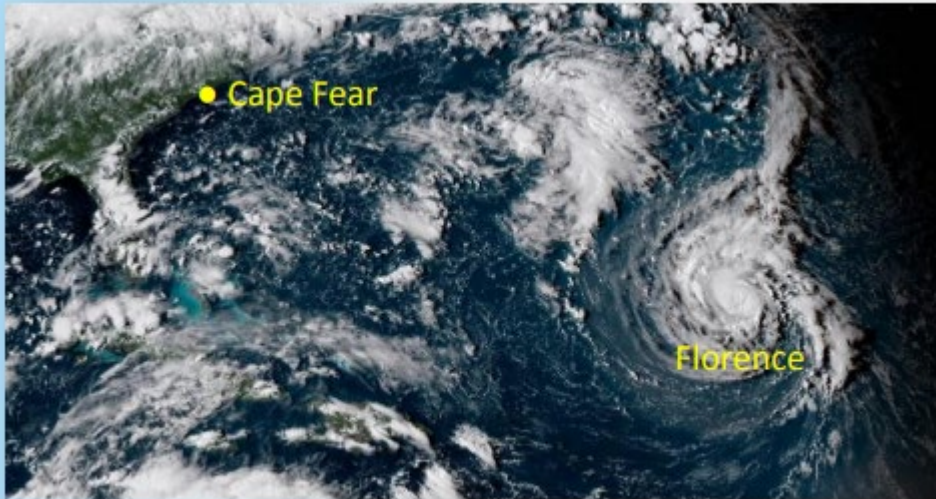
UNIVERSITY of NORTH CAROLINA WILMINGTON

2018 Campus Snapshot

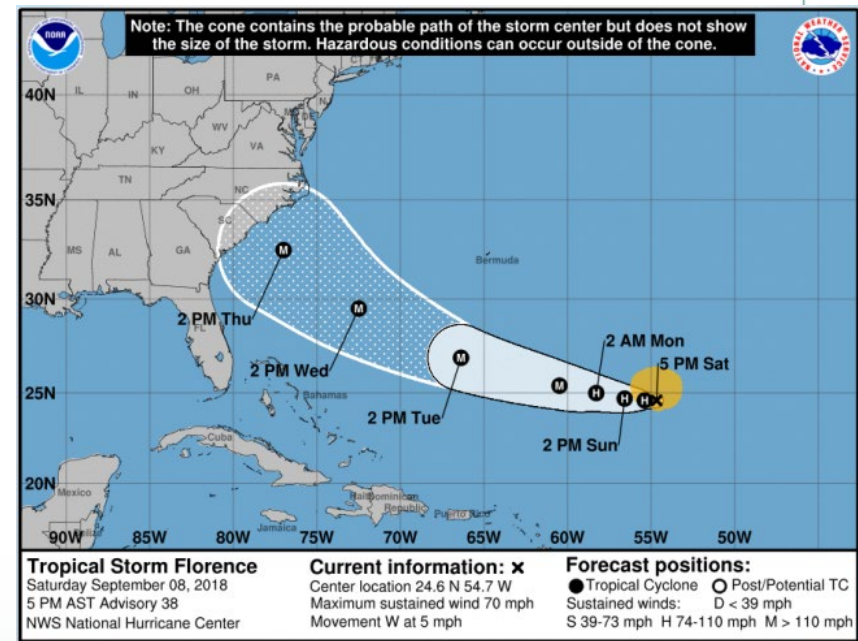
Total Enrollment	16,747
Undergraduate	14,452
Graduate	2,295
On-campus housing	4,145
Employees	2,394
Main Campus Acreage	647
Buildings	138



Meanwhile, in the Atlantic



Tropical Storm Florence – Visible Satellite 430 PM Saturday Sept 8, 2018



Preparations – long before an event

- Continuity of Operations Planning
- Disaster Recovery Planning
- Exercise your Plans
- Insurance
- Know your Players

Hurricane Florence



- Grew to Category 4 September 10
- Category 1 at landfall – Wrightsville Beach
- Wind Gusts of 100+ mph
- Stalled over Wilmington
- 35" Rain
- Severe flooding
- Power outages: 90% in New Hanover County
- 2,200 primary roads closed in NC

This map displays the predicted wind speed zones for a tropical system in South Carolina. The zones are categorized by Enhanced Fujita (EF) scale ratings and corresponding wind speeds in miles per hour (mph). Key features include:

- EF-0 (75 mph) zones:** Shaded in a darker red, these zones are located in the western and central parts of the state, including areas near Florence, Conway, and Myrtle Beach.
- EF-1 (95 mph) zones:** Shaded in a lighter red, these zones are primarily located along the coastal region, particularly around Myrtle Beach and North Myrtle Beach.
- Geographic Labels:** Major cities and towns such as Florence, Conway, Myrtle Beach, and North Myrtle Beach are labeled. The Atlantic Ocean is visible to the east.
- Infrastructure:** Major highways, including I-95 and I-26, are shown as yellow lines with their respective shields.
- Map Source:** The map is credited to Google Earth, with data from the National Oceanic and Atmospheric Administration (NOAA) and the United States Navy.

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National

Florence has made Wilmington, N.C., an island cut off from the rest of the world

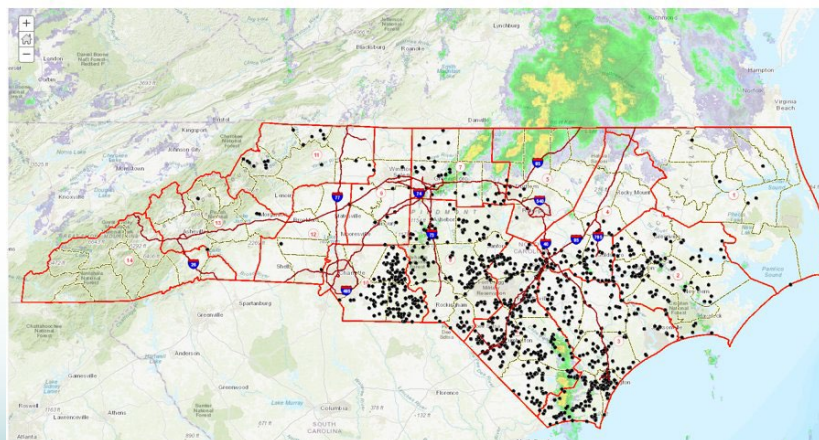
By [Patricia Sullivan](#) and [Katie Zezima](#)

September 16, 2018

WILMINGTON, N.C. — This city has always embraced the water, with a lively riverfront on one side and the ocean on the other. But in the wake of Hurricane Florence, water has rendered Wilmington an island, shut off from the rest of the world.

It is impossible to get in and out of the city now. Flooding closed interstates and secondary roads, choking it off by land. The airport has been shuttered since Wednesday. It is not accessible by sea, with the Port of Wilmington on Cape Fear River closed.

Hurricane Florence 9:30 AM 9/17





Interstate 40



Highway 421



Interstate 95

Our Situation

- More than 400 trees down
- Traffic interrupted
- No power, air conditioning, IT
- Three academic buildings severely affected: Dobo Hall, Leutze Hall, Cameron Hall
- Four residence halls severely affected: Galloway Hall, Cornerstone Hall, Belk Hall, University Apartments
- City/County isolated from the country – no airport, no access roads
- Students and employees evacuated
- Employees' homes affected





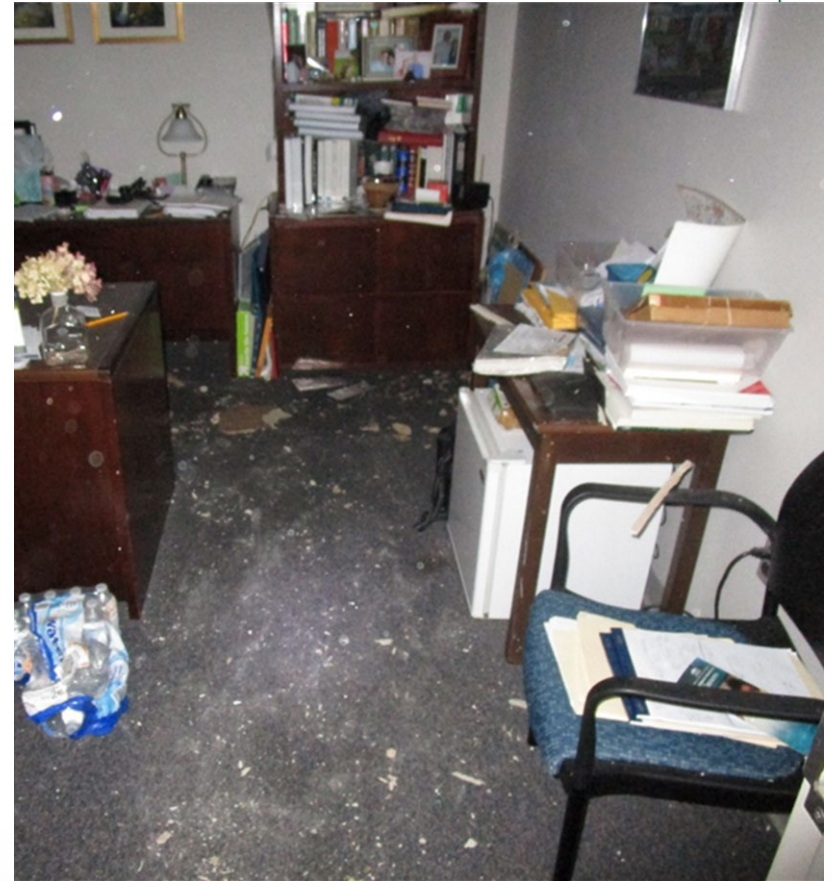














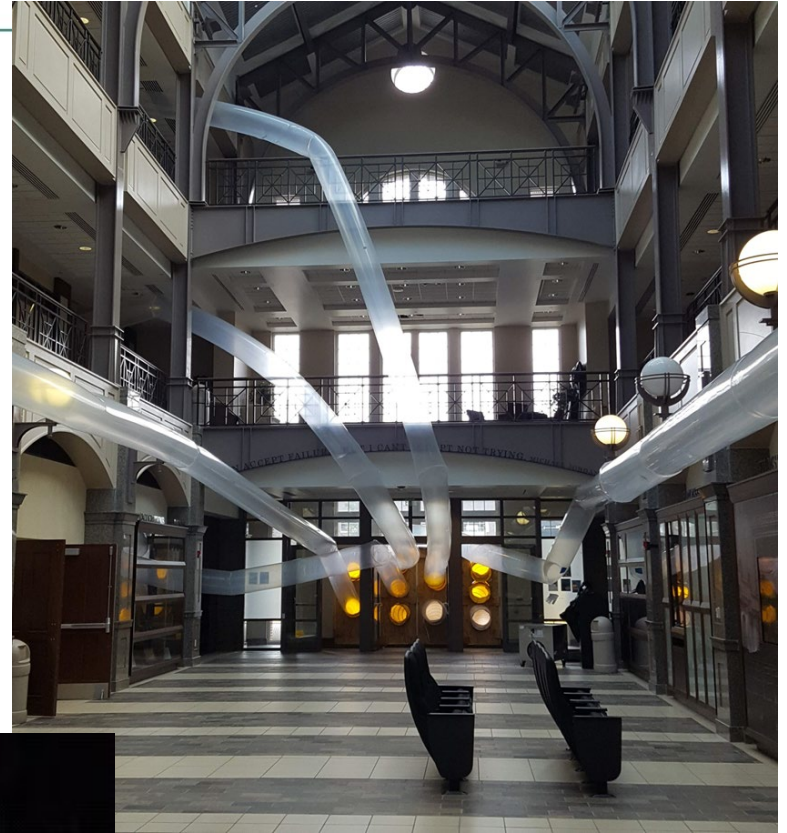




Cleanup begins







Challenges

- How to restore operations without staff
- Decision making
- Functions must continue without infrastructure support
- Deadline of resuming classes
- Funding



Key Takeaways

- Preparedness must begin long before a disaster
- Storm impacts can far exceed initial forecasts
- Cascading infrastructure failures amplify risk
- Human impacts extend beyond campus boundaries
- Decision-making must continue despite limited information
- Flexibility is essential for operational continuity
- Documentation and external coordination are critical for recovery
- Recovery begins while response is still ongoing

