

HURRICANE DORIAN BRIEFING

Prepared by: WFO Wilmington, NC

What has changed: LIFE THREATENING FLASH FLOODING LIKELY, rainfall amounts increased and flooding risk increased to Extreme, TORNADO WATCH now in effect

Next Briefing: Last scheduled, will provide updates as conditions warrant **Disclaimer:** The information contained within is time-sensitive. Do not use after 4:00 PM EDT Thursday.

6:30 AM EDT Thursday, September 5 2019



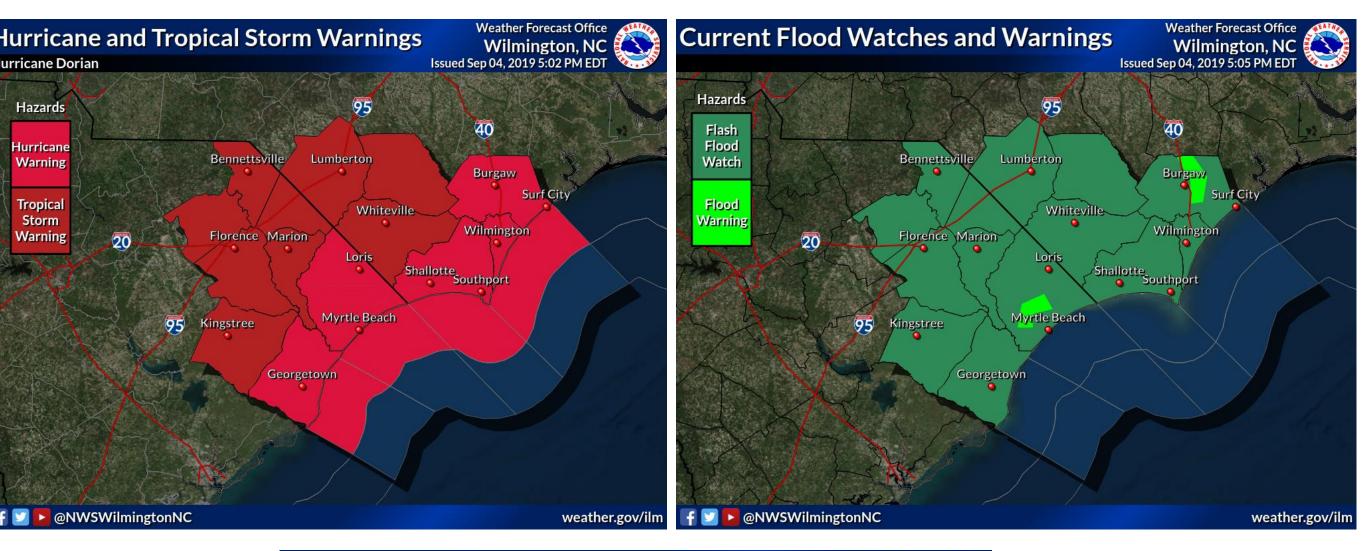


Situation Overview Hurricane Dorian

- Major impacts including coastal flooding from storm surge, power outages, some structural damage, and flash-flooding is expected, especially closer to the coast. Conditions will deteriorate from south to north today through this evening
- FLASH FLOOD WATCH, HURRICANE WARNING, and STORM SURGE WARNING are in effect for Georgetown, Horry, Brunswick, New Hanover, and Pender Counties.
- FLASH FLOOD WATCH and TROPICAL STORM WARNING are effect for Bladen, Columbus, Robeson, Dillon, Marion, Marlboro, Darlington, Florence and Williamsburg Counties



Wilmington, NC WEATHER FORECAST OFFICE









Situation Overview

Hurricane Dorian

Hazard	Impacts	Location	Timing
Wind	Tropical storm force winds developing. Hurricane force winds expected along the coast and adjacent waters. Power outages, some structural and tree damage are likely in the area with the highest winds.	Highest potential and strongest winds expected along the coast	TS Force winds develop this morning
Storm Surge/ Inundation	Impacts from Dorian's storm surge are expected. Inundation, damage to coastal structures, major beach erosion and ocean over-wash expected.	Coastal areas of southeast North Carolina and northeast South Carolina.	Surge is expected to b significant, especially wi high tide this afternoon a possibly tonight
Flooding Rain	10 to 15 inches of rain (lesser amounts farther inland) with locally higher amounts up possible along coastal areas. Flash-flooding, flooding of roads, small creeks/streams and poor drainage areas expected where the heaviest rain occurs.	The highest amounts are expected east of I-95, especially along coastal areas.	Rainfall increasing, with heaviest rainfall rates to through early Fri morni
Tornado	Isolated tornadoes are possible.	Anywhere across southeast North Carolina or northeast South Carolina, highest threat near the coast.	Today
Marine	Rip Currents and dangerous surf are likely. Large/steep seas are expected along with treacherous conditions at inlet entrances.	All beaches and coastal waters	Rip currents & rough su through Fri. More sever marine impacts develop today through tonight



Wilmington, NC WEATHER FORECAST OFFICE

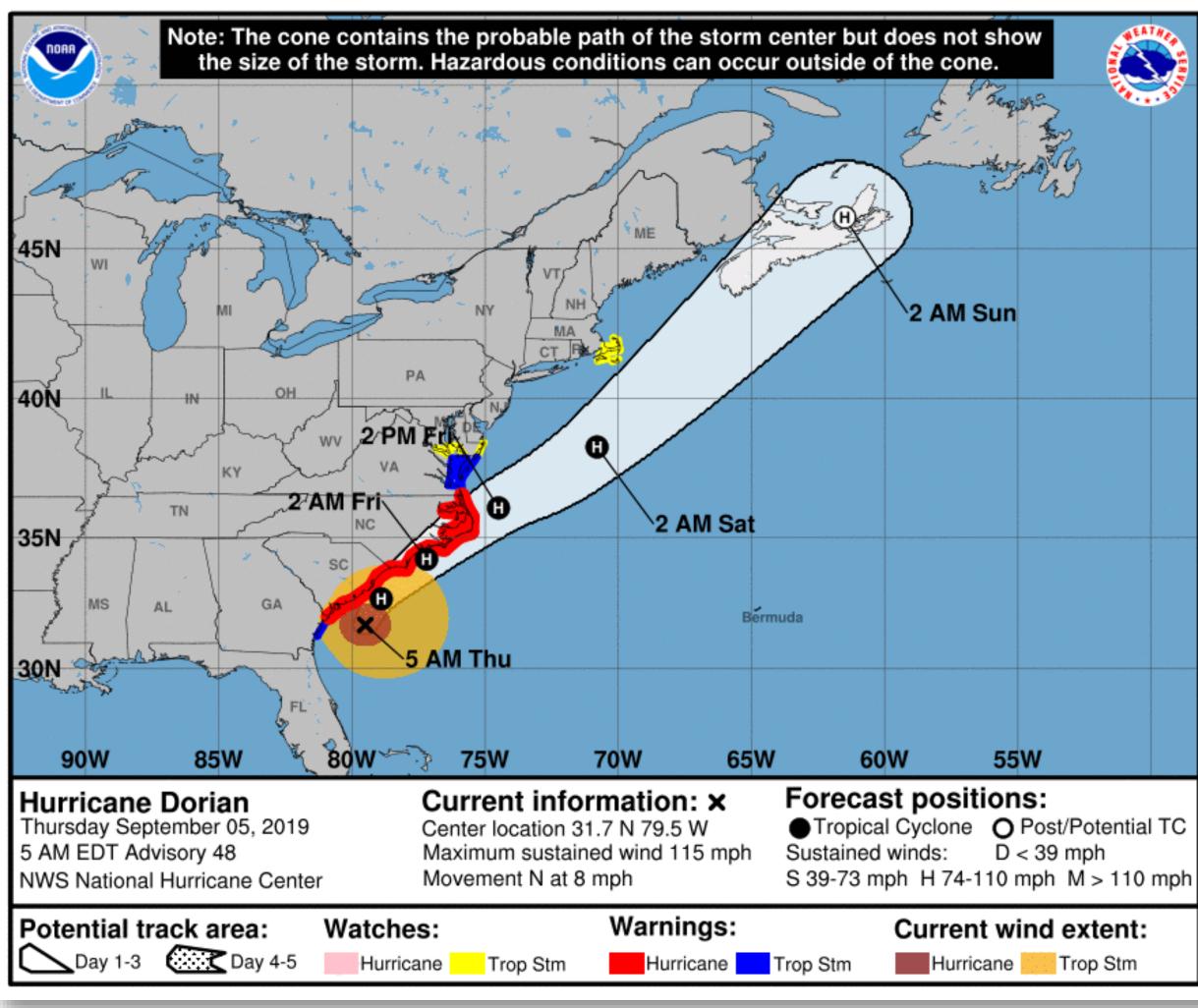




Situation Overview

Hurricane Dorian

9/5/2019 6:35 AM



NOTE: Do not focus on the exact track. Impacts can occur outside the area enclosed by the cone.

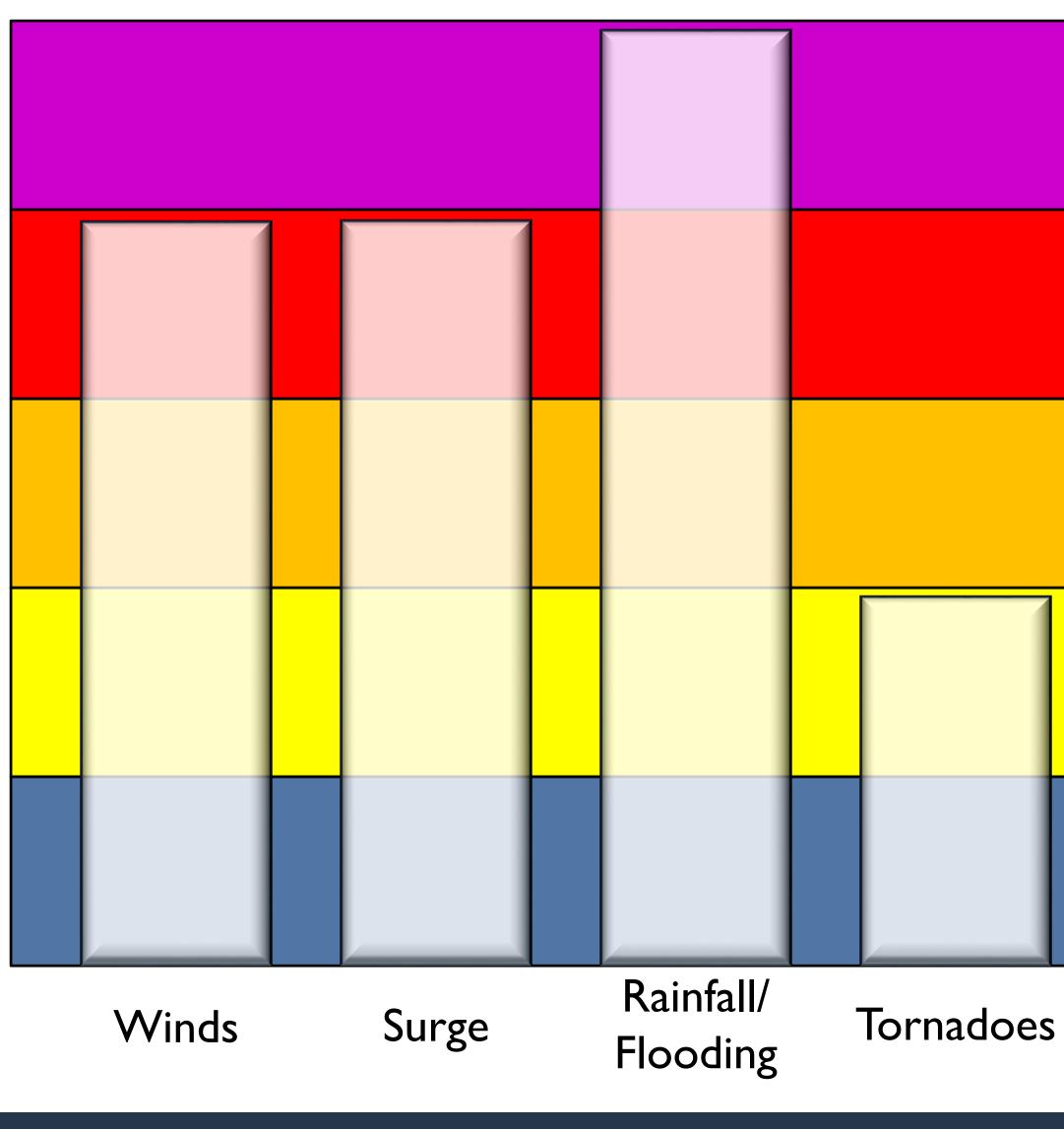


- Dorian is approaching from the south and will move close to the upper SC coast this afternoon and evening, and track very close to the southeast NC coast tonight.
- The hurricane is forecast to begin accelerating away from the Cape Fear area late tonight into early Friday morning.
- Please note that given the sharp angle of incidence as the storm moves up the coast that any subtle change to the storm's track can still significantly alter the impacts received across the area.
- Reminder: Impacts can occur well outside the area enclosed by the cone.



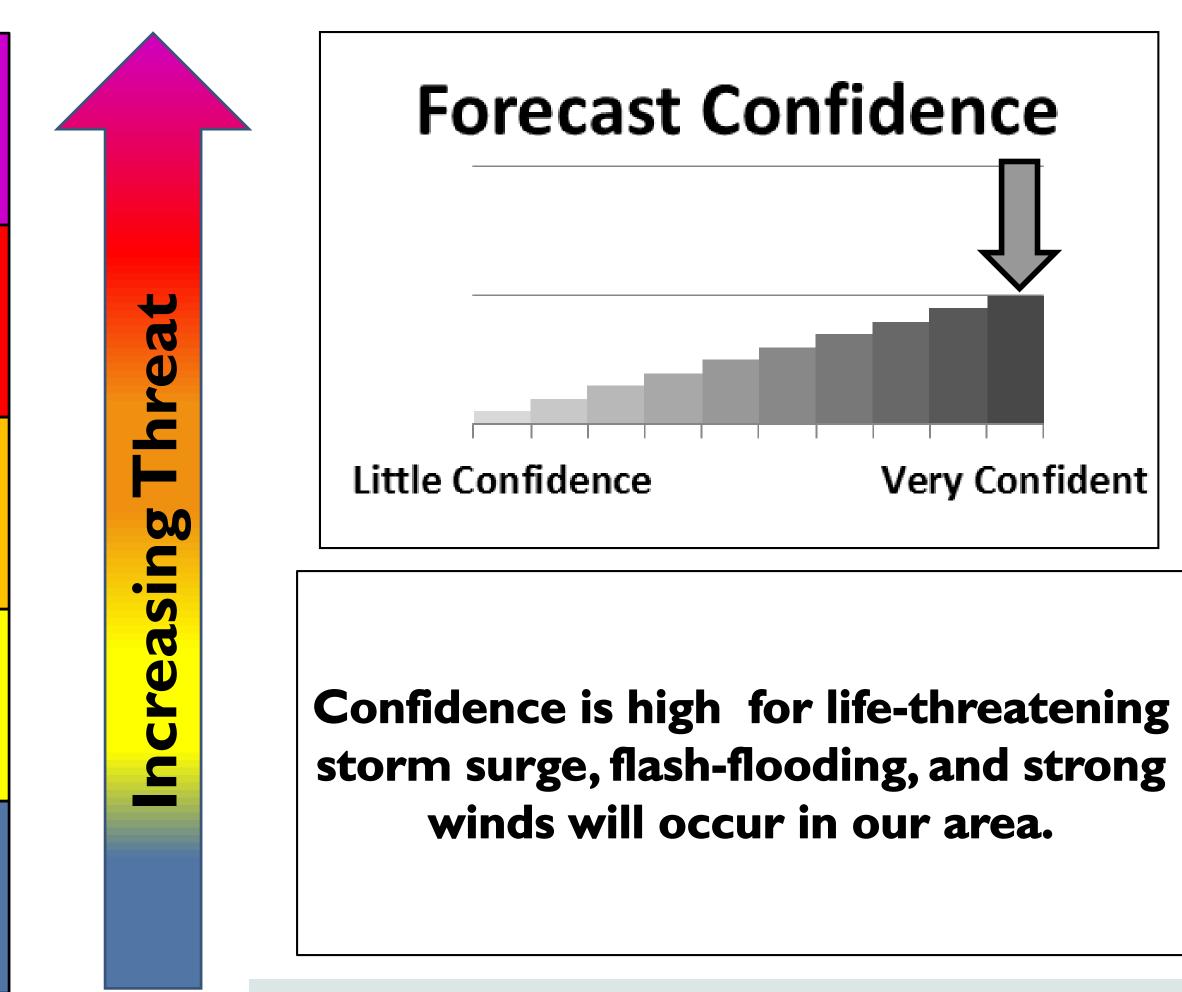
Threat Levels

Hurricane Dorian



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For information on specific hazards in this area, please go to https://www.weather.gov/ilm/tropical



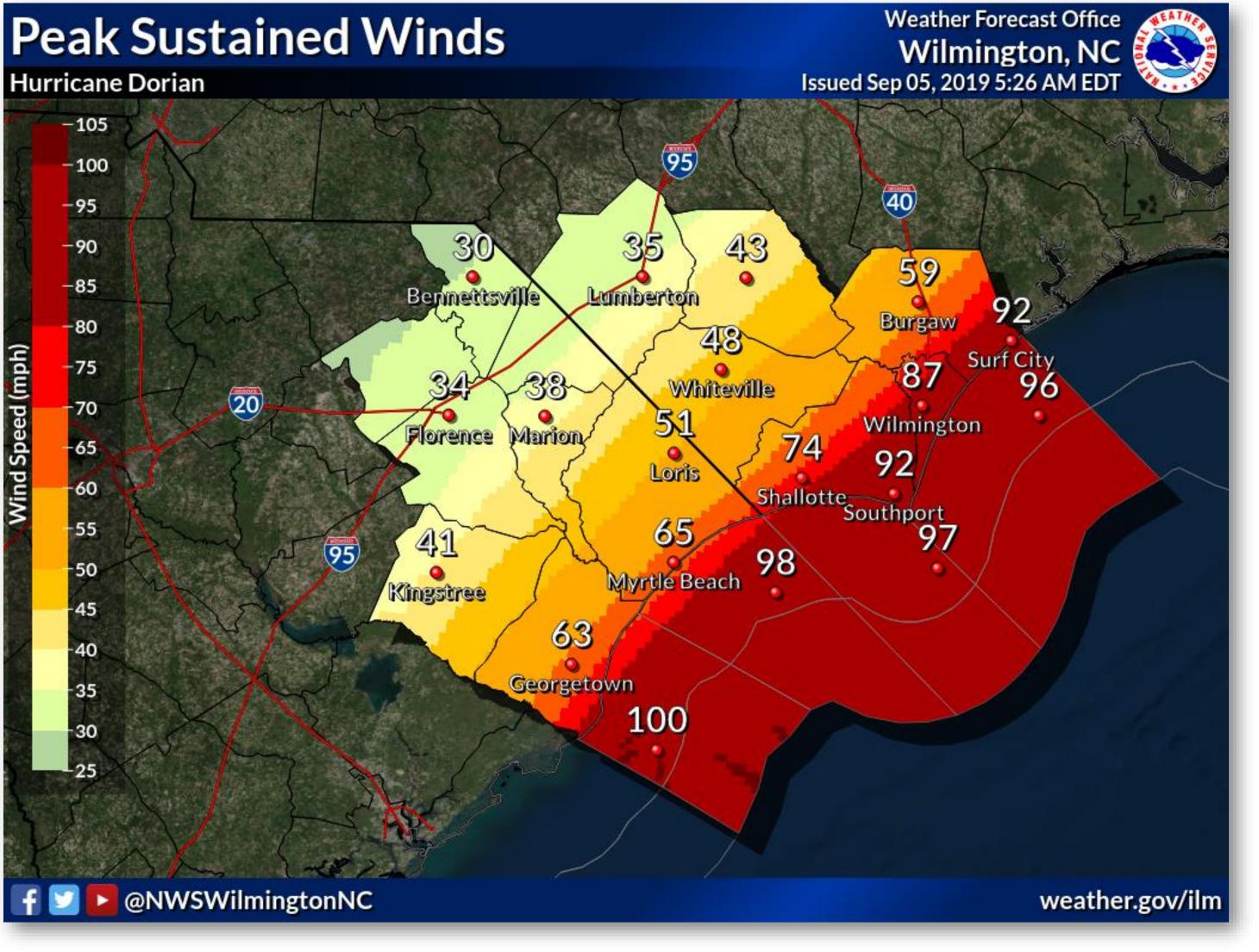




Peak Wind Swath (MPH)

Hurricane Dorian





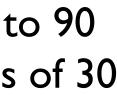
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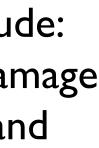


Wilmington, NC WEATHER FORECAST OFFICE

- Hurricane force winds are possible for the coastal northeast SC this afternoon into the early evening for parts of Horry County. Hurricane force winds are likely for coastal southeast NC this evening into the overnight hours early Friday morning.
- Based on the latest track sustained winds of 65 to 90 mph are expected along the coastal areas. Winds of 30 to 55 mph are expected farther inland.
- Impacts in the areas with the highest winds include: downed trees & power lines, some structural damage - especially to weak structures & roofs, fences and signs blown down.
- Winds improving by late evening for northeast SC, and mid-morning Friday for southeast NC areas.
- Note: these winds speeds are highly dependent on the \bullet storm's track. Any subtle change and these conditions will change.





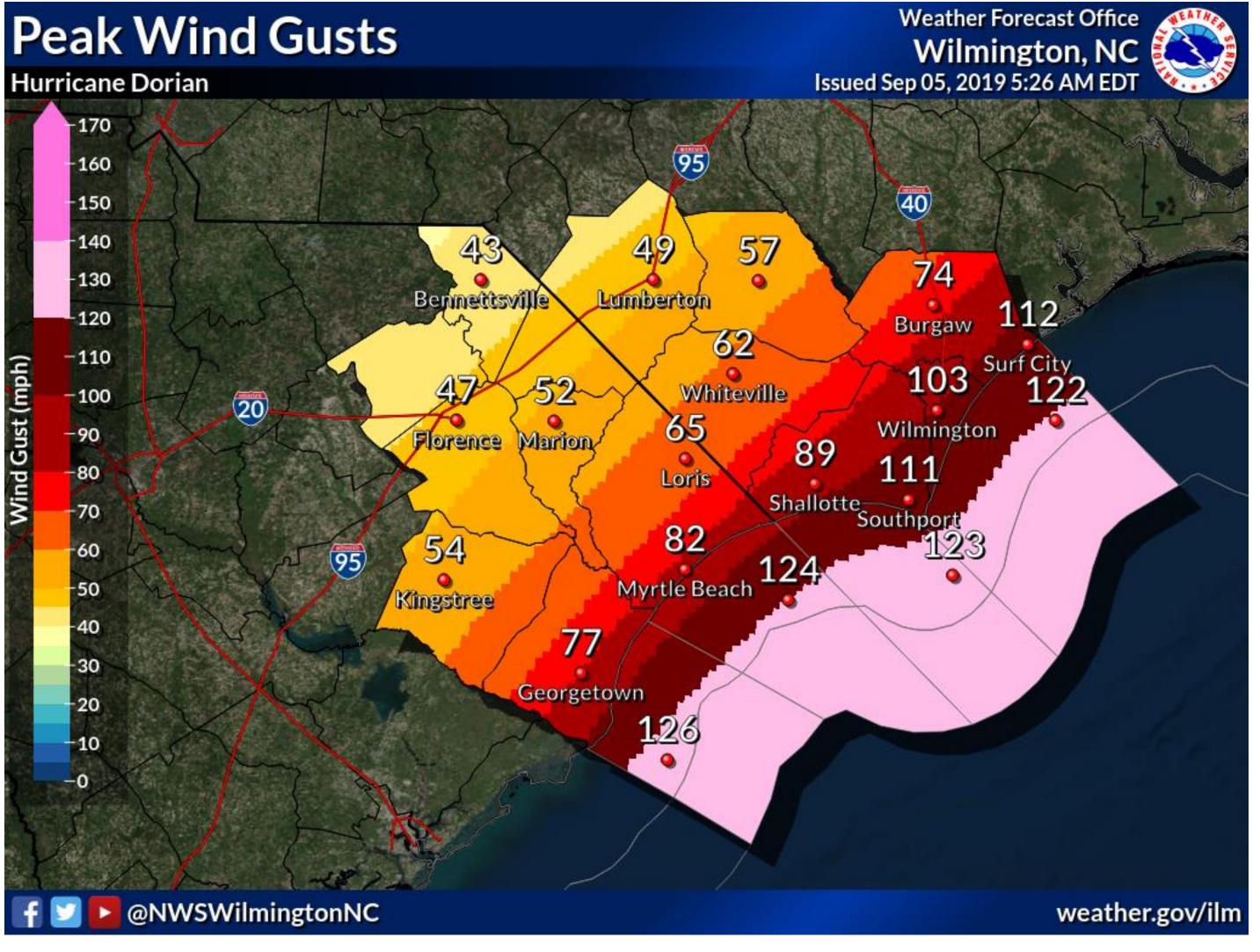






Peak Wind Gusts (MPH)

Hurricane Dorian



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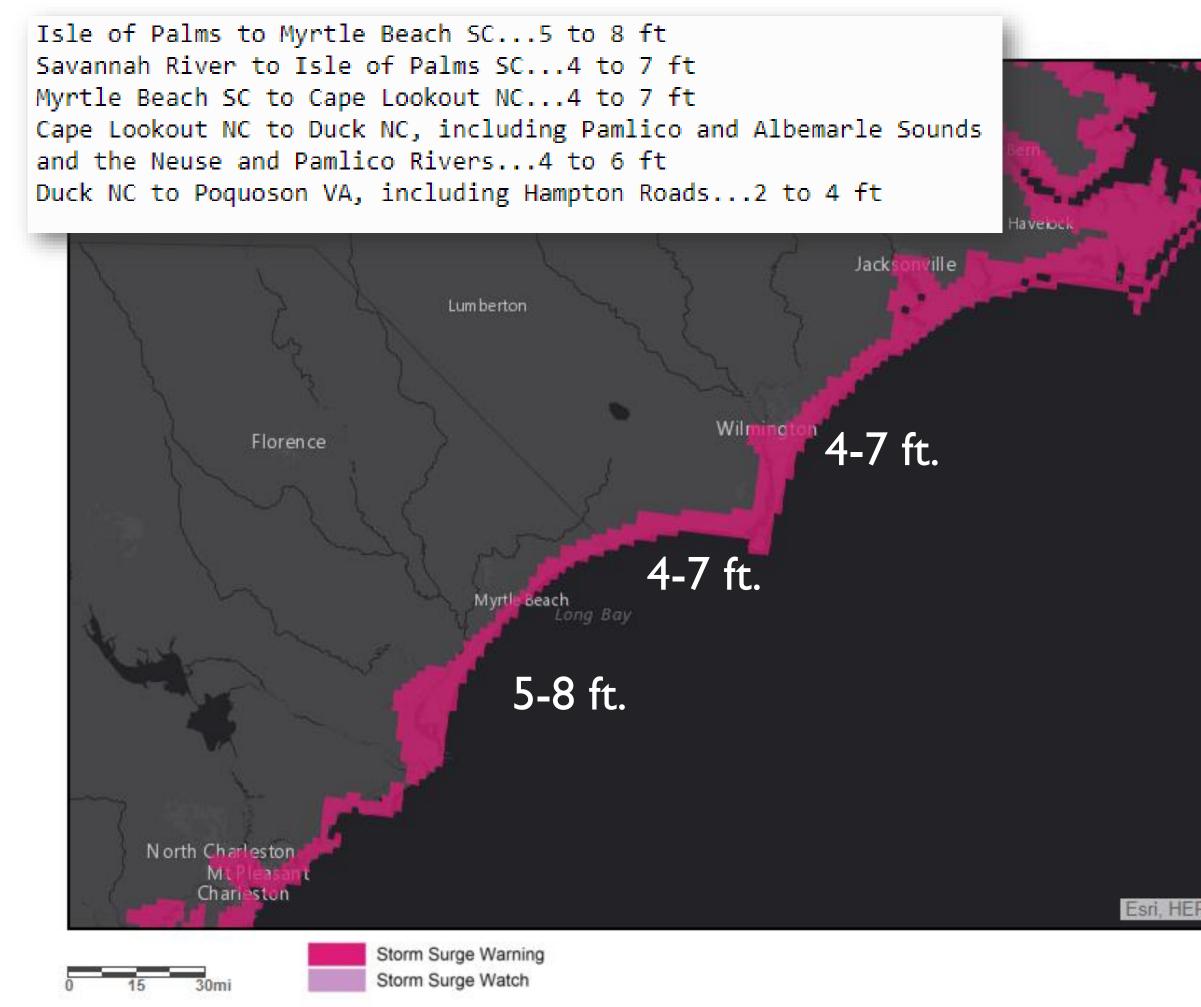
- Note: these wind gusts are highly dependent on the storm's track. Any subtle change and these conditions will change.
- Based on the latest track wind gusts of 70 to 100+ mph are possible along coastal areas (highest in the vicinity of Cape Fear through Surf City). Gusts of 45 to 65 mph are expected farther inland.







Storm Surge Warning in Effect Hurricane Dorian







- NE SC will see the worst with high tide early this afternoon
- Coastal SE NC will see the worst conditions during this high tide this afternoon and late tonight/early Friday morning.
- Potential for 5 to 8 ft inundation from Myrtle Beach south, and 4 to 7 ft inundation north of Myrtle Beach. Surge impacts also likely along vulnerable locations around Winyah Bay including the city of Georgetown, SC.
- Wave activity combined with the surge will also lead to severe erosion and ocean overwash, with most severe impacts for our east facing beaches. Piers, and structures in areas with a weakened shoreline infrastructure are at risk for damage.

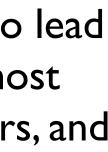








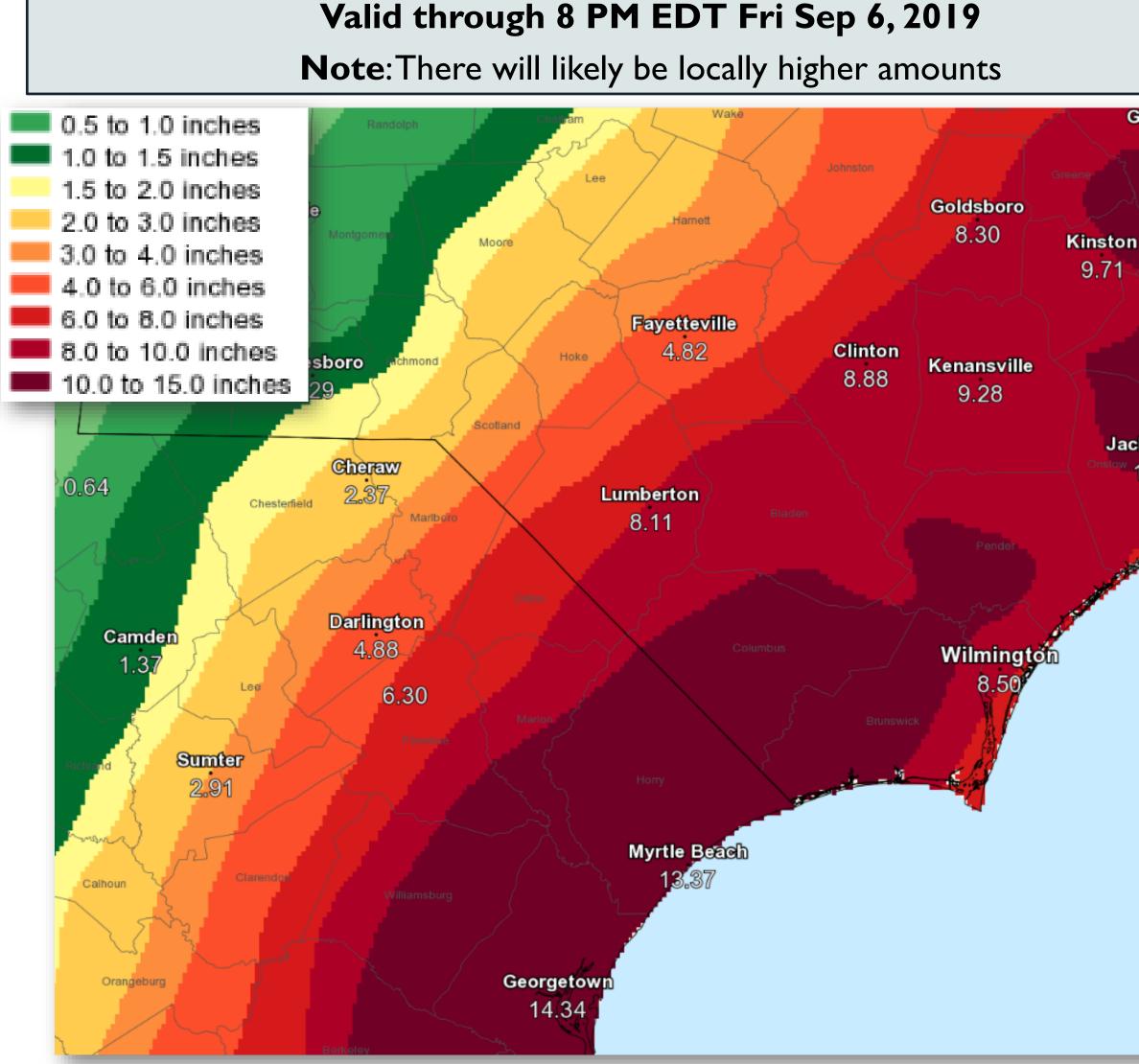






Expected Storm Total Rainfall

Hurricane Dorian



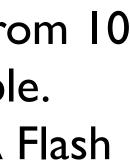
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*****Life threatening Flash Flooding Likely*****

- Greenville 9.49 acksonville
- STORM TOTAL RAINFALL amounts will range from 10 to 15 inches with isolated higher amounts possible. Rainfall totals will be lower farther northwest. A Flash Flood Watch is in effect.
- FLOODING IMPACTS include: the potential for road failures/scours, rapid rises in small streams and creeks that may over-top their banks, flooding across vulnerable low-lying and prone locations. Driving will become very hazardous with some road closures possible.
 - **DO NOT DRIVE THROUGH FLOODED ROADWAYS**
- TIMING The heaviest rainfall will occur today through tonight, improving earlier across northeast SC and into Friday morning for southeast NC.







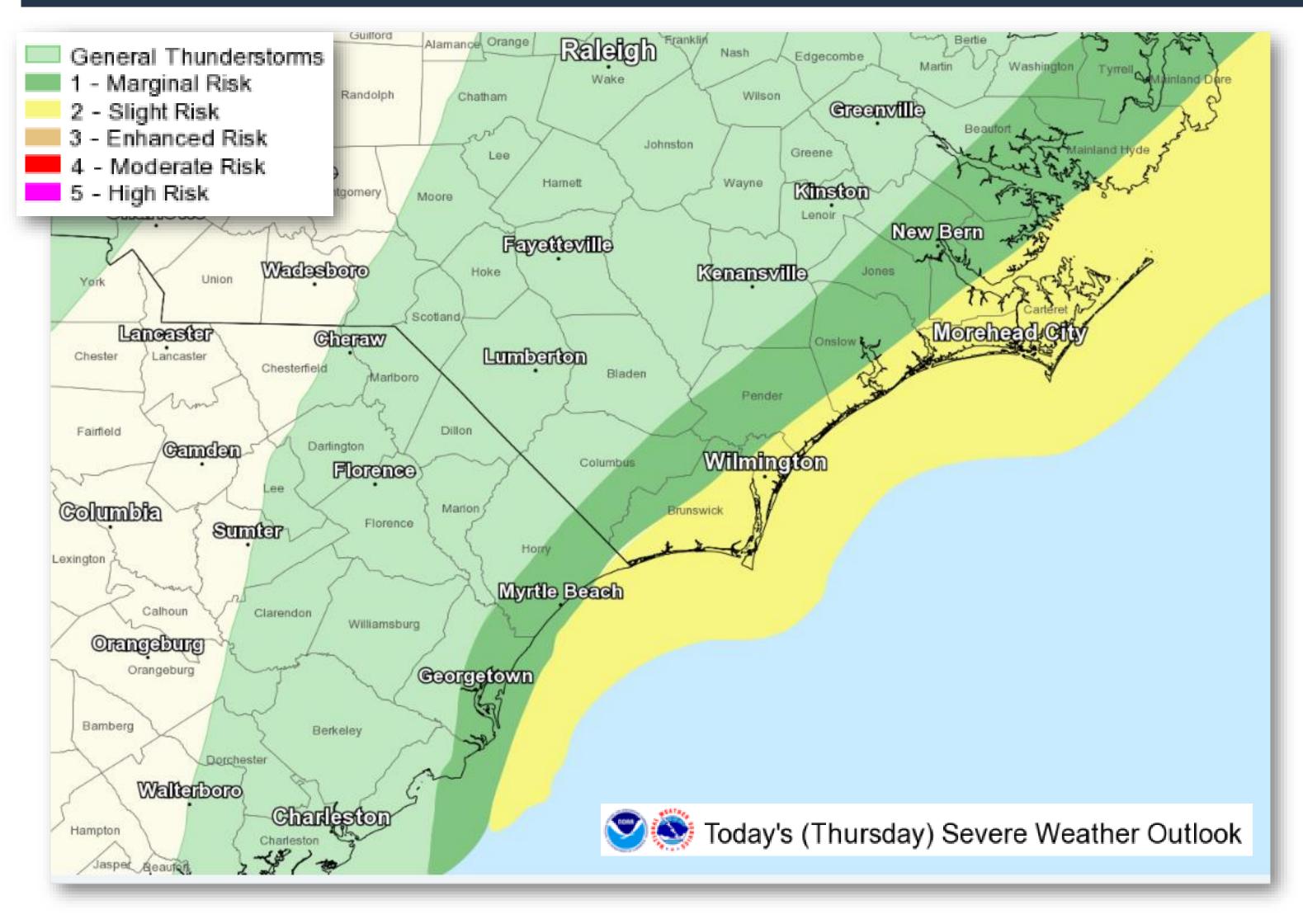






Tornado Potential

Hurricane Dorian



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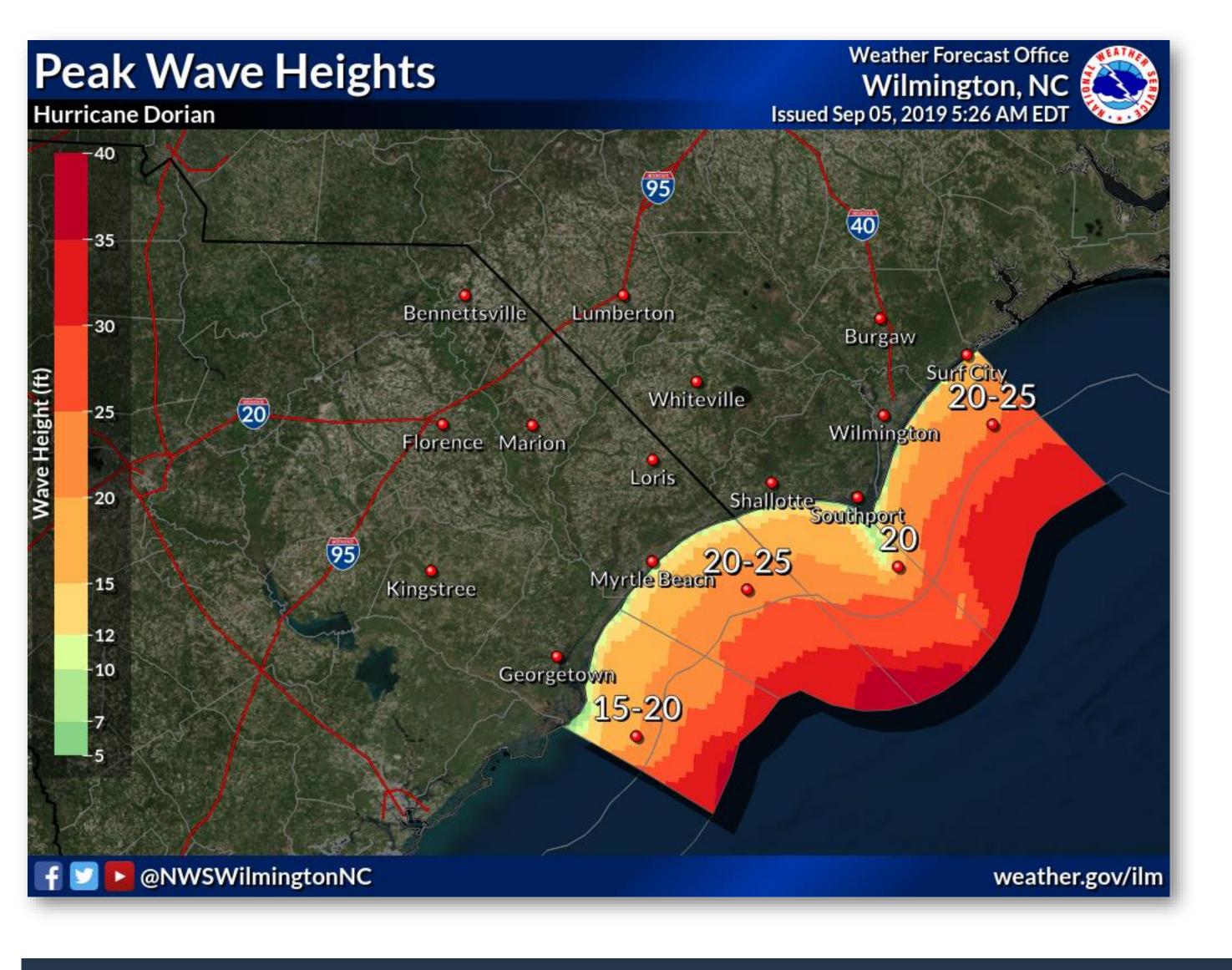


- Tornado Watch in effect. Isolated tornadoes are possible.
- Risk highest through the early afternoon for coastal northeast SC, and through the afternoon for southeast North Carolina.



Peak Wave Heights

Hurricane Dorian



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- As Dorian makes its closest ulletapproach later this afternoon and tonight wave heights across the adjacent coastal waters will range from 15-25 feet.
- Seas farther offshore could exceed 25 to 30 feet.
- Conditions will gradually improve during Friday, but more-so Friday night.





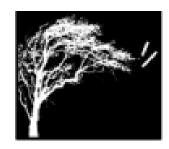






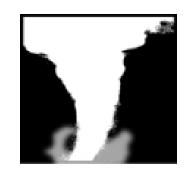


Key Take Away Messages Hurricane Dorian











- \bullet the coast.
- \bullet of inundation is highly dependent on the tide cycle and the storm's track.
- \bullet may be road failures or roads covered with deep water.
- Isolated tornadoes possible today.



Tropical Storm force winds are likely, with hurricane force winds expected along the coast. The storm's closest approach will be later this afternoon through tonight & Dorian will bring a variety of impacts to the area. Power outages, downed trees, and some structural damage becoming more likely, especially closer to

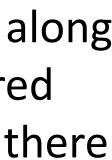
The risk for storm surge is increasing with the greatest risk with through tonight. However, the amount

Life threatening flash flooding is likely, especially today through tonight, with 10 to 15 inches expected along coastal areas. Isolated higher amounts are also possible. People that live along rivers should be prepared for minor to moderate flooding, especially rivers closer to the coast. Driving will become dangerous as there

Severe surf and marine conditions expected today through tonight into Friday morning.





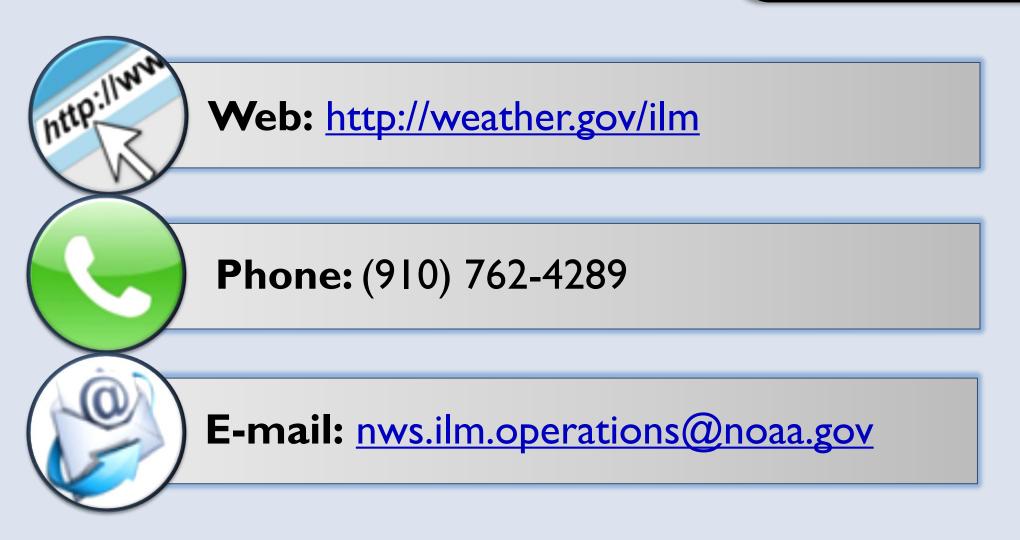






Contact and Next Briefing Information

Next Briefing: When: As needed today **Method: E-mail**



ILM Tropical Briefing Webpage: <u>https://www.weather.gov/ilm/tropical</u>



