



# HURRICANE DORIAN BRIEFING

6:15 PM EDT

Monday, September 2, 2019

Prepared by: *WFO Wilmington, NC*

**What has changed:** Included a higher resolution rainfall graphic, a Day 3 Convective Outlook for tornadoes, peak wave height, and peak wind swath graphics

**Next Briefing:** By 8:00 AM EDT Tuesday






**Disclaimer:** The information contained within is time-sensitive. Do not use after 8:00 AM EDT Tuesday.

# Situation Overview

Hurricane Dorian



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Hazard	Impacts	Location	Timing
Wind 	Tropical Storm force winds are possible. Lower chance of hurricane force winds possible too. Power outages, damage to weak structures, and tree damage are possibility.	Highest potential and strongest winds expected along the coast	For TS Force winds Wed night for northeast SC and Wed night into Thu morning for southeast NC
Storm Surge/Inundation 	Ongoing minor tidal flooding will continue independent from Dorian initially. If the storm tracks along coast, then storm surge damage is likely. Impacts could include damage to vulnerable coastal structures, major beach erosion, damage to docks and piers, and aids to navigation along the waterways may be off station or missing making navigation difficult. Lesser impacts if the storm stays farther east. <u>It remains too early to tell at this time.</u>	Coastal areas of southeast North Carolina and northeast South Carolina	Minor high tide flooding will continue through the first part of the week. Dorian inundation late Wed through Thu dependent on storm track.
Flooding Rain 	8 to 10 inches of rain (lesser amounts farther inland) with locally higher amounts up to 15 inches possible, but dependent on exact storm track. Flooding of roads, small creeks/streams and poor drainage areas is possible.	The highest amounts are expected east of I-95, especially along coastal areas	Wed through Thu night
Tornado 	Isolated tornadoes possible.	Anywhere across southeast North Carolina or northeast South Carolina	Especially Wed night into Thu morning
Marine 	Rip Currents and dangerous surf likely. Large/steep seas expected along with treacherous conditions at inlet entrances.	All beaches and coastal waters	Rip currents & rough surf through Fri. More severe marine impacts Tue night through Thu night.

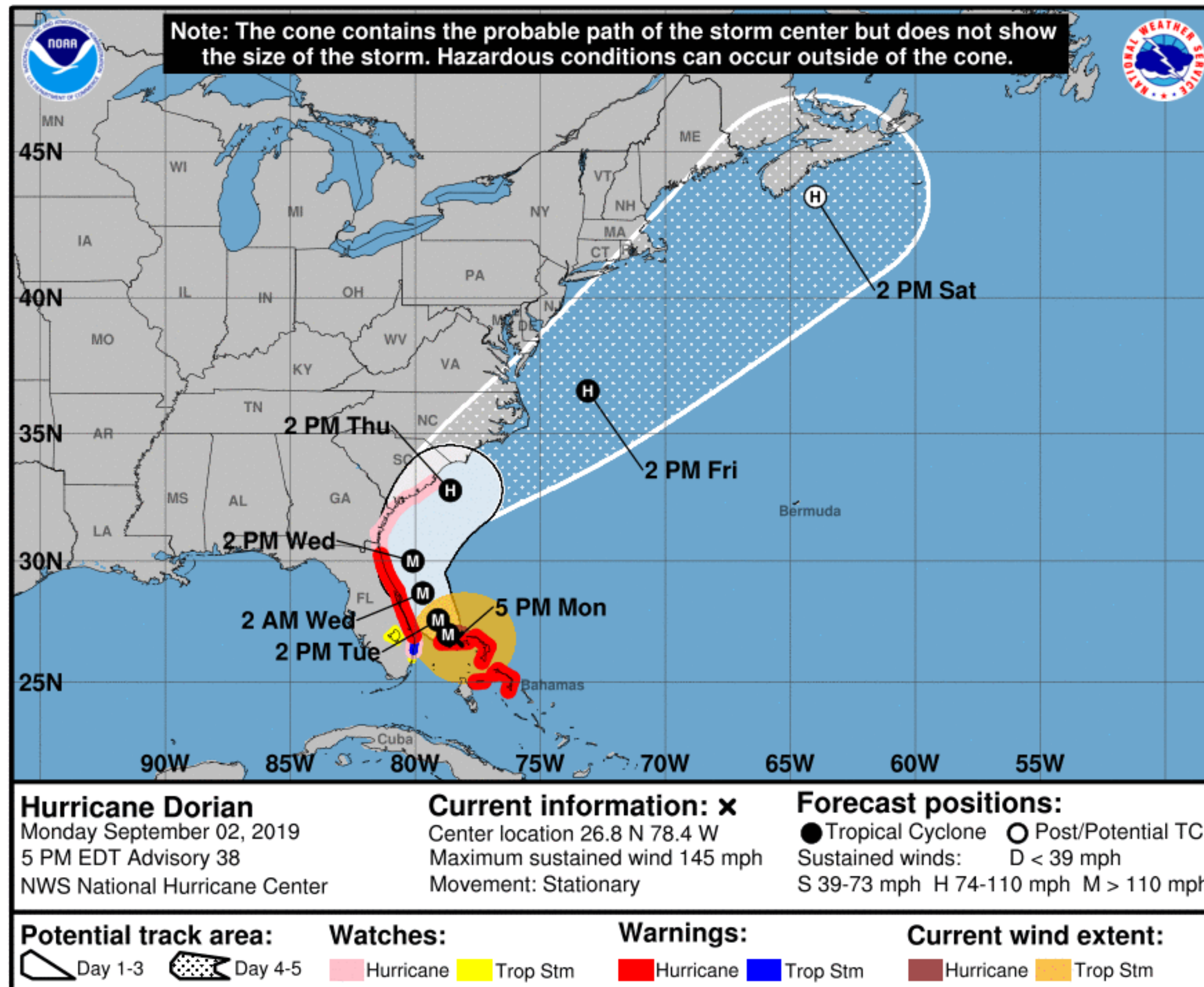


# Situation Overview

## Hurricane Dorian



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

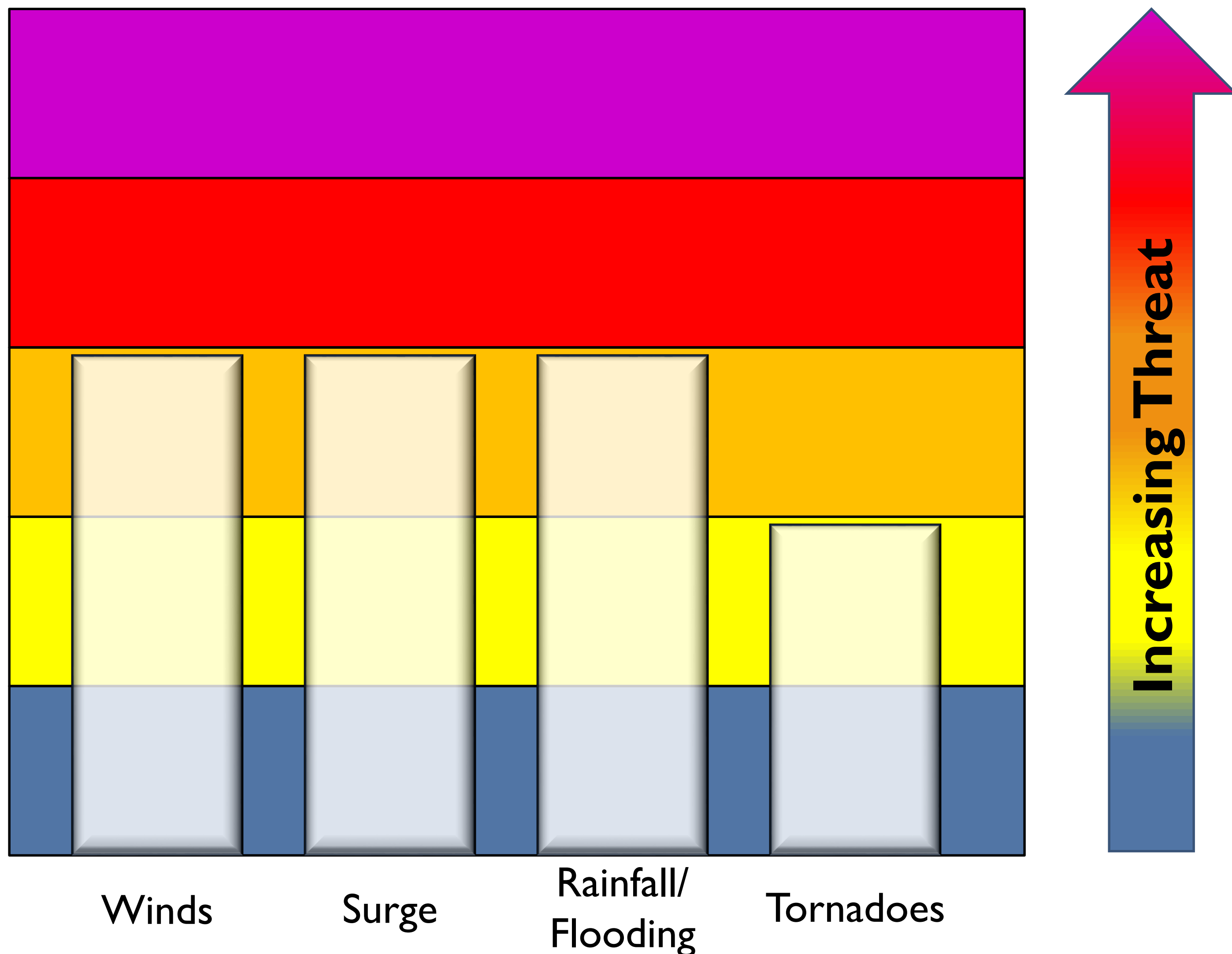
- No significant changes with the latest update. Dorian to remain a dangerous hurricane as begins to exit the Bahamas and moves parallel to the east coast of Florida tonight through Wednesday.
- Later in the track Dorian will threaten SC and NC Wednesday night, but more-so during Thursday.
- **Immediate concerns include:**
  - Ongoing minor coastal flooding with each high tide
  - Strong rip currents and worsening surf/maritime conditions tonight through the week.
- **Concerns developing this week include:**
  - Increasing potential for flooding rain, storm surge, damaging winds and possibly tornadoes, especially developing during Wed night through Thu
  - Uncertainty remains with the long term track of the storm as any minor adjustment could significantly adjust the level of impact the area experiences

# Threat Levels

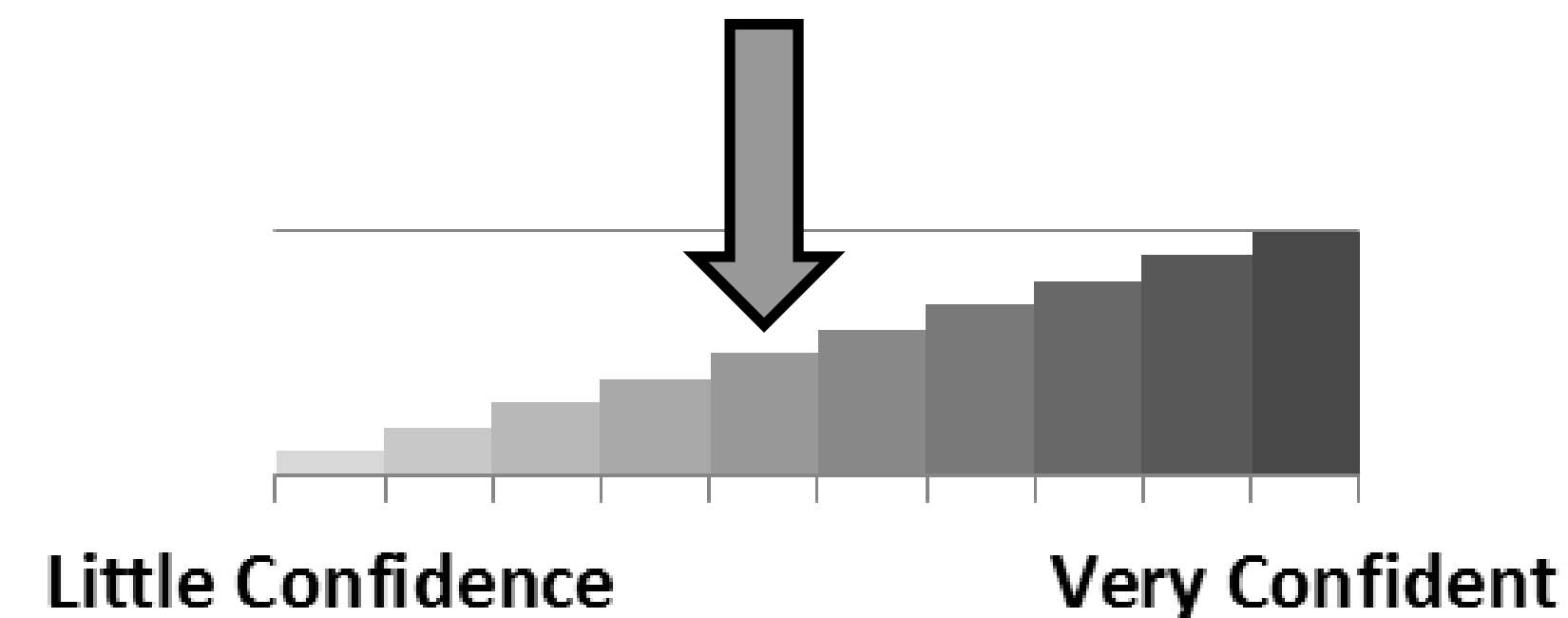
Hurricane Dorian



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## Forecast Confidence



**Overall Confidence Moderate** with the track. High confidence for continued minor tidal flooding, strong rip currents and increasingly hazardous maritime conditions.

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

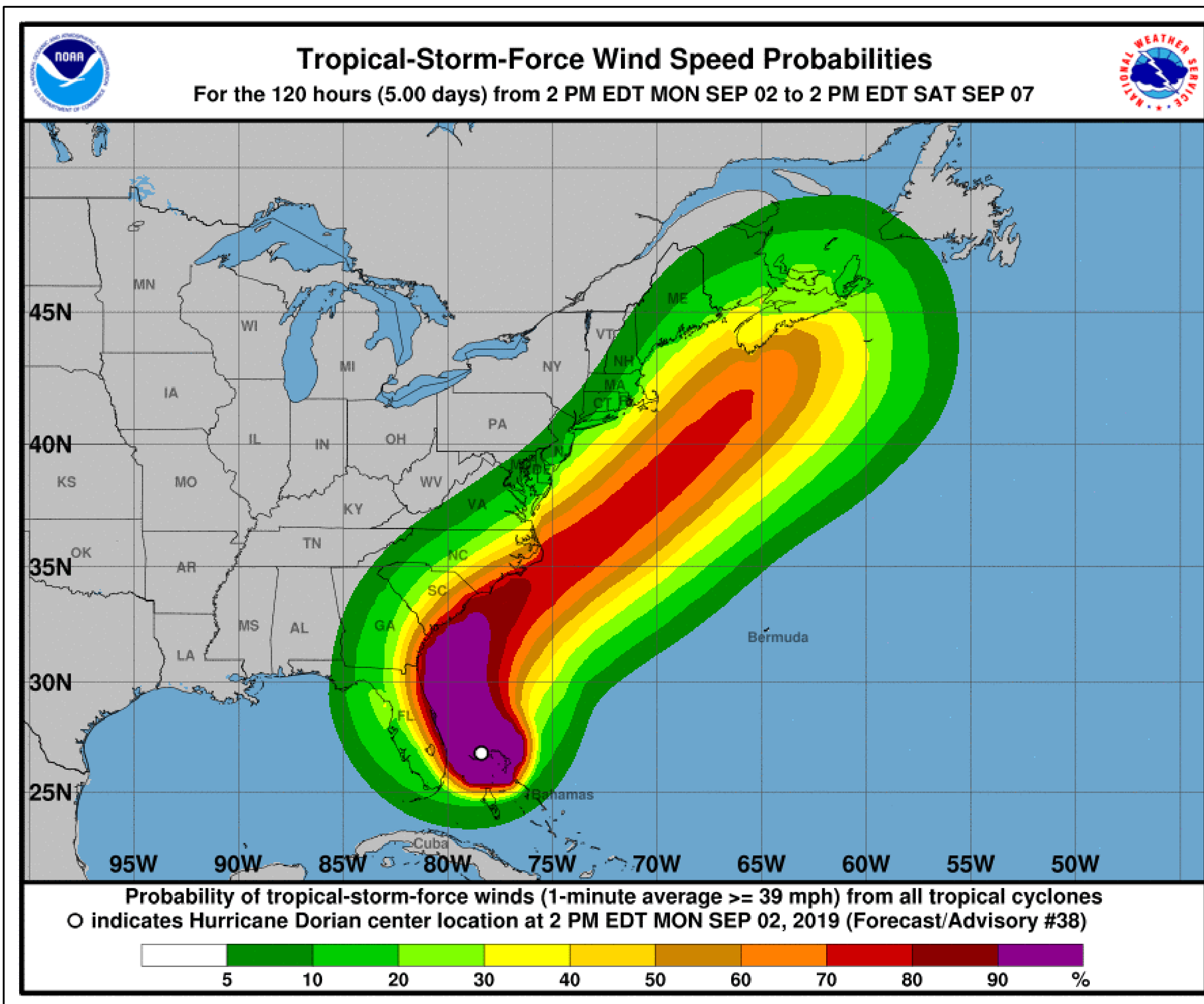


# TS Wind Speed Probabilities

Hurricane Dorian



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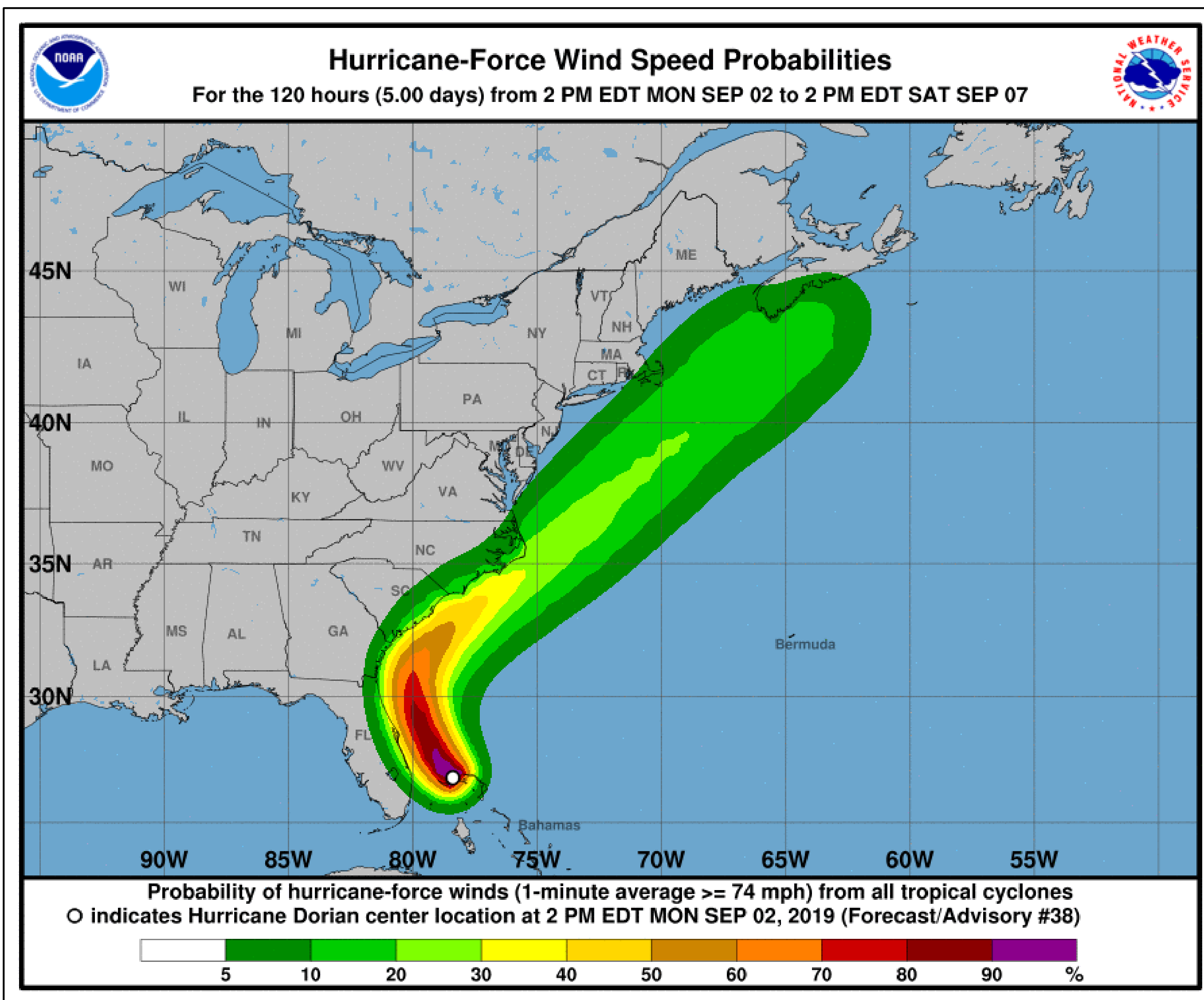
- Potential for tropical storm force winds is 70 to 80 percent along the coast.
- The axis of highest probabilities remains just off the coast.

# Hurricane Wind Speed Probabilities

Hurricane Dorian



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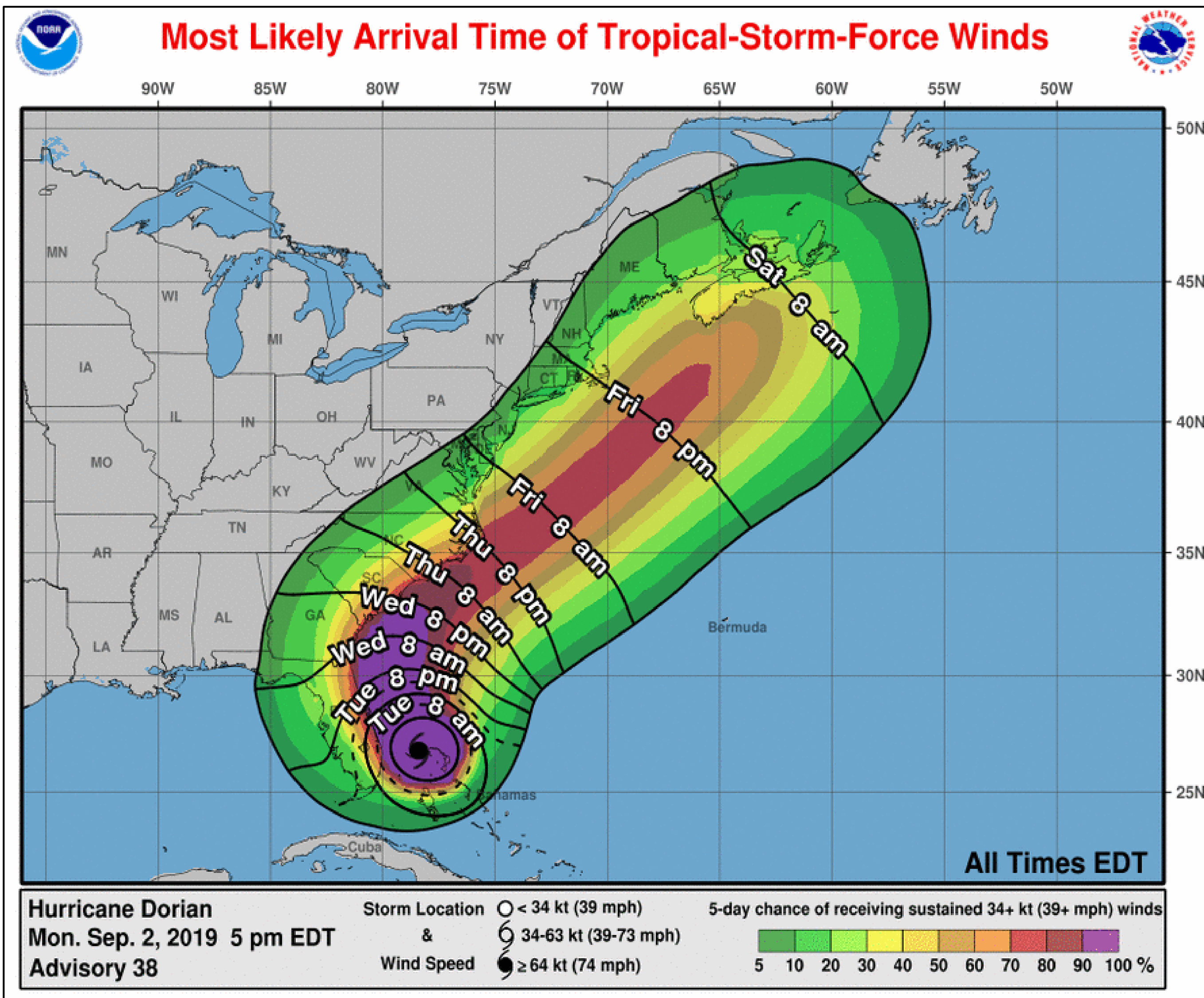
- Potential for hurricane force winds is 20 to 30 percent along the coastal areas.
- The axis of highest hurricane probabilities exists just off the coast.

# Mostly Likely Time of Arrival

Hurricane Dorian



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- Tropical Storm force winds are expected to arrive Wednesday night for northeast SC and late Wednesday night into Thursday morning for southeast NC.
- If the hurricane tracks over the area or closer to the coast then hurricane force winds could arrive during Thursday.



# Peak Wind Swath

Hurricane Dorian

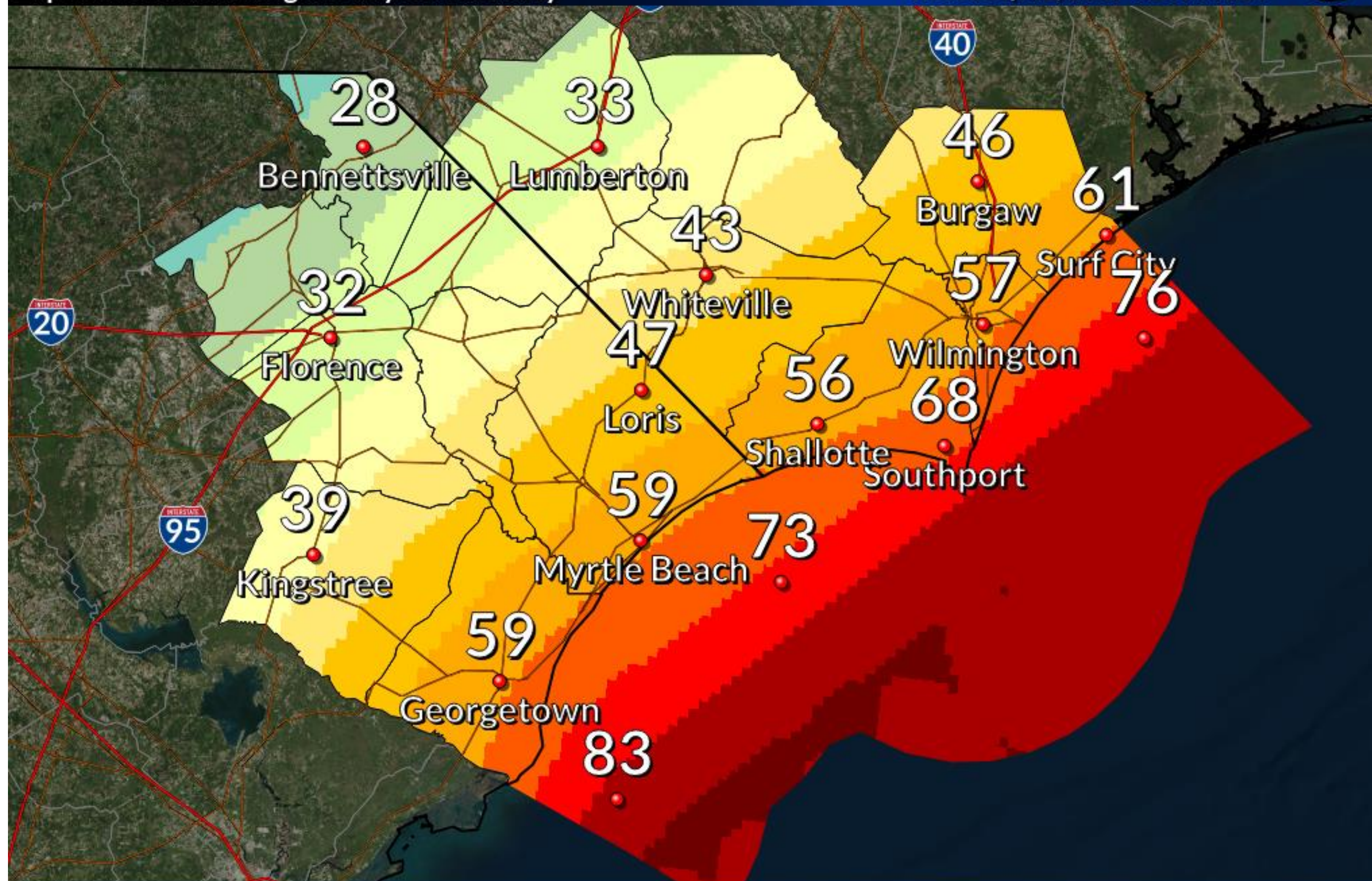


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## Peak Sustained Wind Speeds

Expect to occur during the day on Thursday

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- Note: these winds speeds are highly dependent on the storm's track. Any subtle change and these conditions will change.
- Based on the latest track sustained winds of 45 to 65 mph are possible along the coastal locations (potentially higher near Cape Fear). Winds of 25 to 45 mph are expected farther inland.
- Potential impacts in the areas with the highest winds include: downed trees, downed power lines, some damage – especially to weak structures, fences and signs blown down.



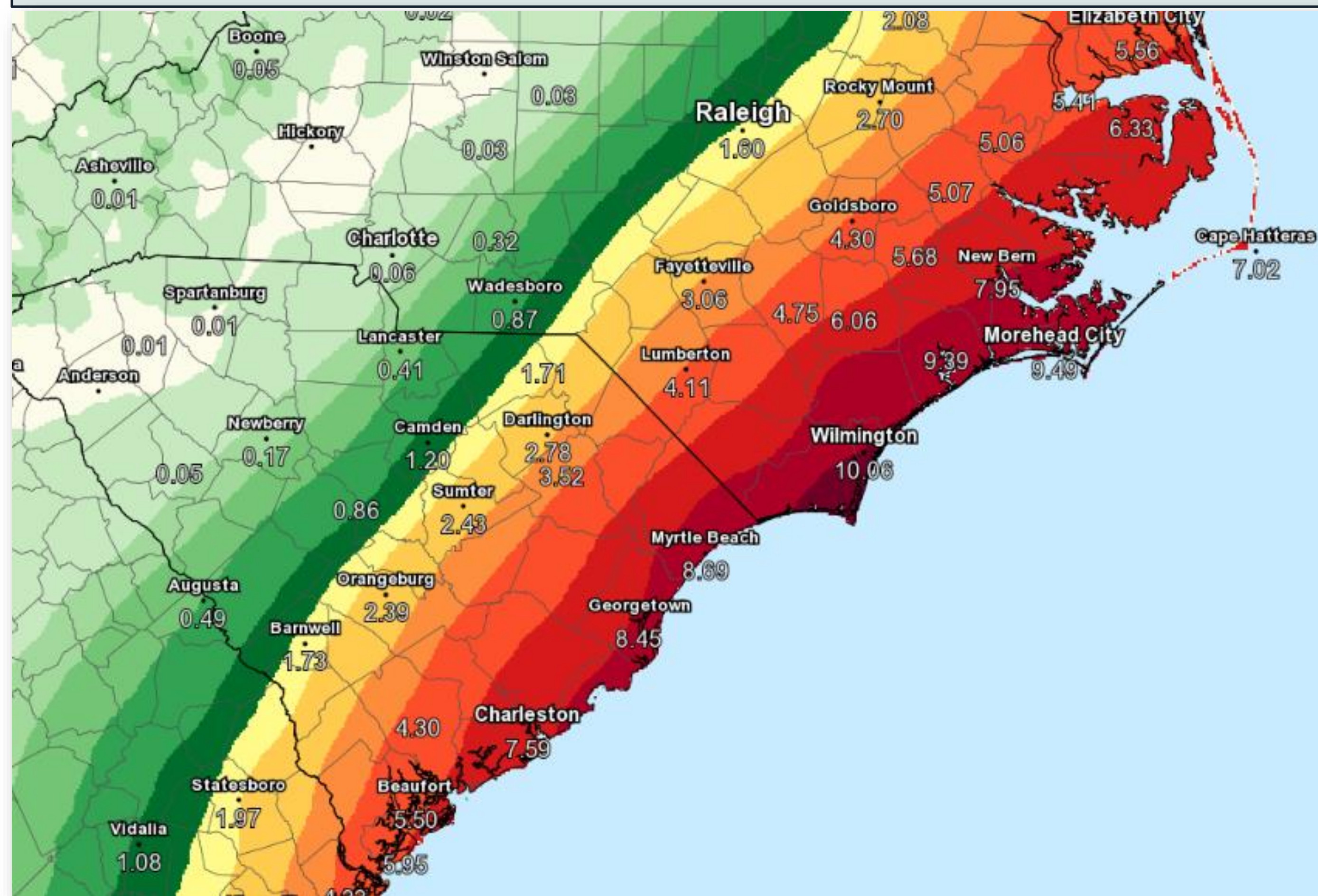
# Expected Storm Total Rainfall

Hurricane Dorian



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**Note:** There will likely be locally higher amounts



- Storm Total rainfall amounts will generally range from 8 to 10 inches along the coast with isolated amounts to 15 inches possible. Rainfall totals will be lower farther west. A Flash Flood Watch will likely be required for part of the area.
- 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 hazardous with some road closures possible.
- Rainfall will develop on Wednesday then peak late Wednesday night through Thursday before improving Thursday night into Friday.

Storm Total Rainfall valid through 8 PM EDT Saturday

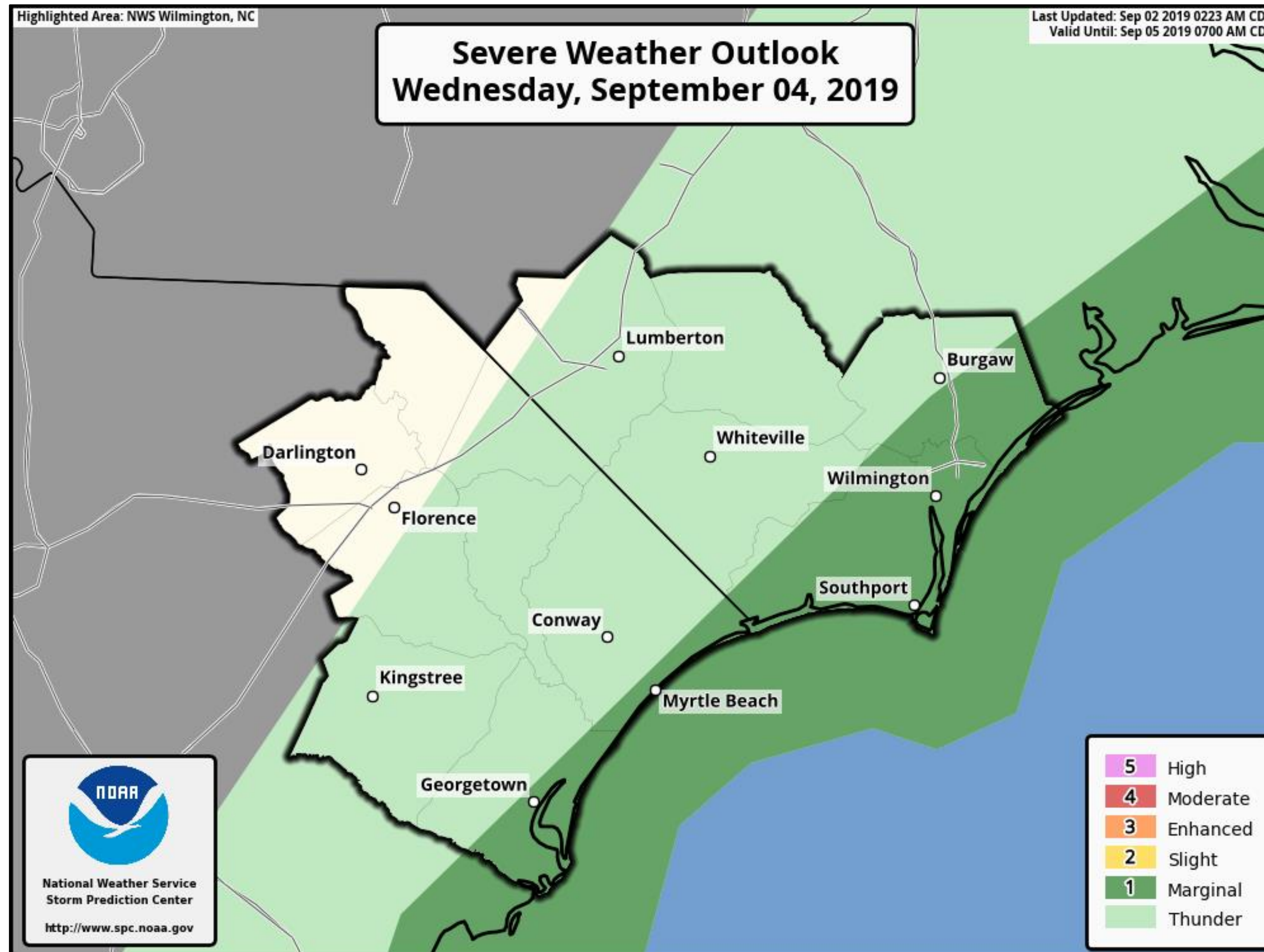


# Tornado Potential

Hurricane Dorian



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- There is a risk for isolated tornadoes as Hurricane Dorian approaches from the south.
- The risk will be greatest along coastal areas, especially from Wednesday night into Thursday morning.



# Peak Wave Heights

Hurricane Dorian



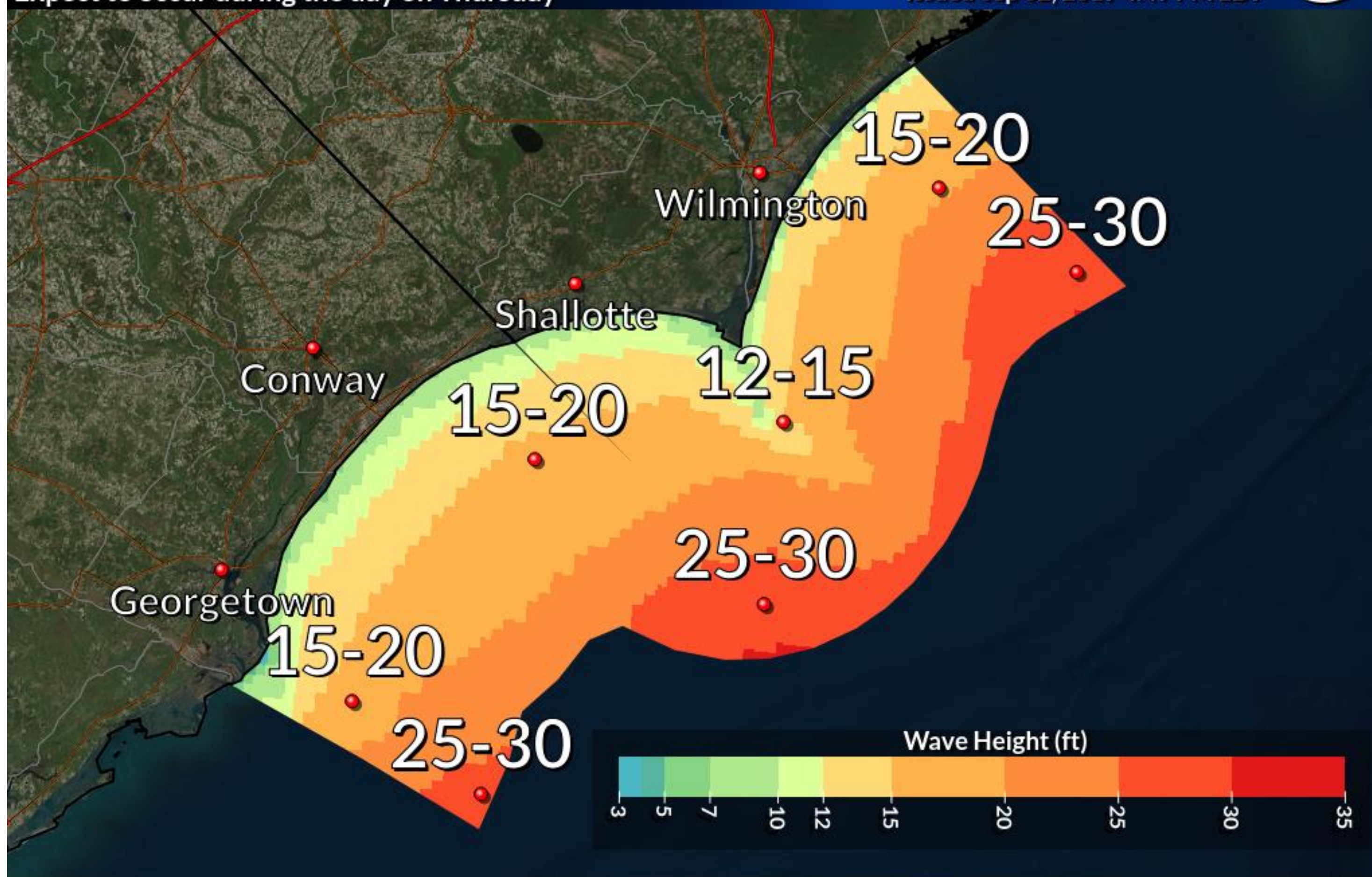
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## Peak Wave Height

Expect to occur during the day on Thursday

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- As Dorian makes its closest approach during Thursday wave heights across the adjacent coastal waters will range from 15-20 feet.
- Seas farther offshore will easily exceed 25 feet.
- Conditions will continue to worsen across the adjacent waters through Wednesday, peak Thursday, then gradually improve during Friday.



# Key Take Away Messages

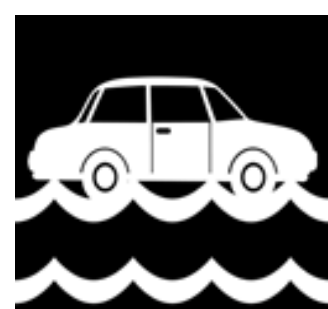
Hurricane Dorian



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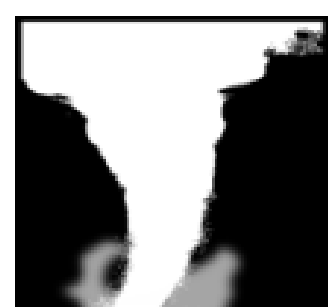
- The risk for tropical storm force winds continues to increase across northeast SC & southeast NC. The storm's closest approach will be Thu bringing a variety of potential impacts that will be greater if the storm tracks closer to the coast versus lesser if the storm tracks farther away from the coast.



- Some risk for storm surge, but highly dependent on storm track especially with high tide Thu, otherwise minor coastal flooding will persist with each high tide through the middle of the week.



- Increasing threat for flooding rainfall, especially Wed night and Thu with 8 to 10 inches possible and locally higher amounts up to 15 inches (less amounts farther inland). Could see minor to moderate river flooding, especially the Cape Fear, Northeast Cape Fear, Black River (in NC), and the Waccamaw.



- Low risk for isolated tornadoes, mainly Wed night through Thu morning.



- Building swells will continue to support strong rip currents and rough surf. More severe marine conditions are possible, especially Wed and Thu.





## Contact and Next Briefing Information

Next Briefing:  
When: By 8:00 AM EDT Tuesday  
Method: E-mail



**Web:** <http://weather.gov/ilm>



**Phone:** (910) 762-4289



**E-mail:** [nws.ilm.operations@noaa.gov](mailto:nws.ilm.operations@noaa.gov)



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