

Major Hurricane Florence

Decision Support Briefing # 9

As of: 7 AM Tuesday Sept 11, 2018

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What has changed?

- ✓ Hurricane Watch now in effect
- ✓ Storm Surge Watch now in effect
- ✓ Rainfall amounts increased, especially across NC
- ✓ Included Storm Surge estimates graphic

Situational Overview

- ✓ Life-threatening storm surge is likely along portions of the coast. A **Storm Surge Watch** has been issued.
- ✓ Damaging hurricane force winds are likely along portions of the coast as well. The damaging winds could also spread well inland. A **Hurricane Watch** has been issued.
- ✓ The potential for significant flooding impacts continues to increase, especially across portions of NC since Florence is expected to slow down as it approaches the coast and moves inland.
- ✓ Continue to prepare for the increasing potential of a land-falling major hurricane. Stay informed and follow any advice given by local officials.

Main Points

Hazard	Impacts	Location	Timing
Wind 	Potentially dangerous wind impacts are possible	northeast SC and southeast NC	Thursday into Friday
Storm Surge/ Inundation 	Potentially dangerous storm surge impacts are possible	All coastal areas and tidally connected creeks, rivers, bays, and waterways	Thursday into Friday
Flooding Rain 	Flooding of low-lying and poor drainage areas is possible, but the amounts and distribution of rainfall are highly track dependent	northeast SC, and especially southeast NC	Thursday into Sunday
Tornado 	A few tornadoes are possible	southeast NC	Thursday into Friday
Marine 	High likelihood of dangerous maritime and surf conditions along with rip currents, large breakers, and steep seas	Surf zone and adjacent Atlantic waters	Through Saturday

Potential Impacts



Wind: Limited Confidence – track dependent

None

Elevated

Moderate

High

Extreme



Surge/Inundation: Limited Confidence – track dependent

None

Elevated

Moderate

High

Extreme



Inland Flooding: Limited Confidence – track dependent

None

Elevated

Moderate

High

Extreme



Tornado: Limited Confidence – track dependent

None

Elevated

Moderate

High

Extreme



Marine: Confident – regardless of track

None

Elevated

Moderate

High

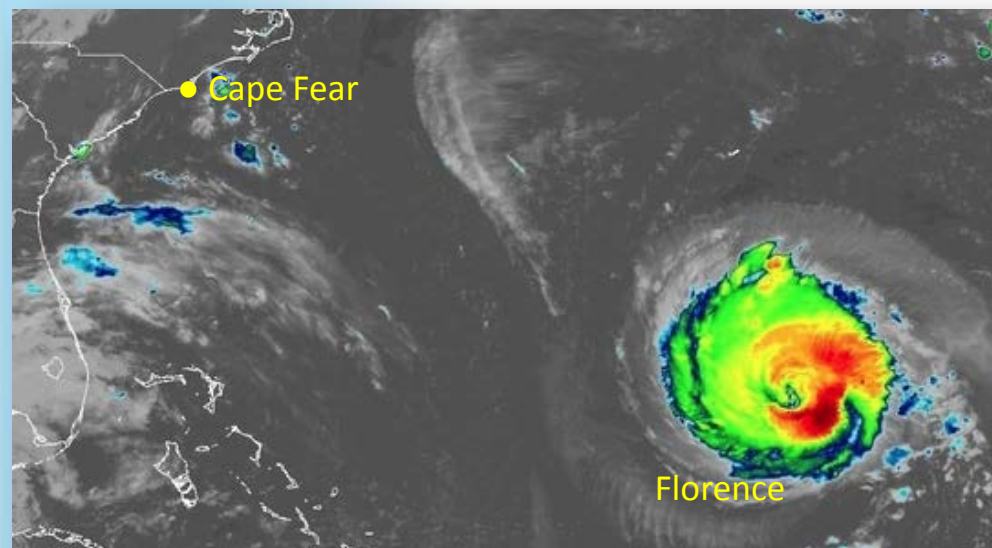
Extreme



Latest Information: Hurricane Florence

OVERVIEW:

- ✓ Florence is a dangerous Category 4 hurricane
- ✓ The storm will continue on a WNW track today, then a NW track toward the coast tonight through Friday
- ✓ The storm's forward speed may slow down considerably Friday through Sunday

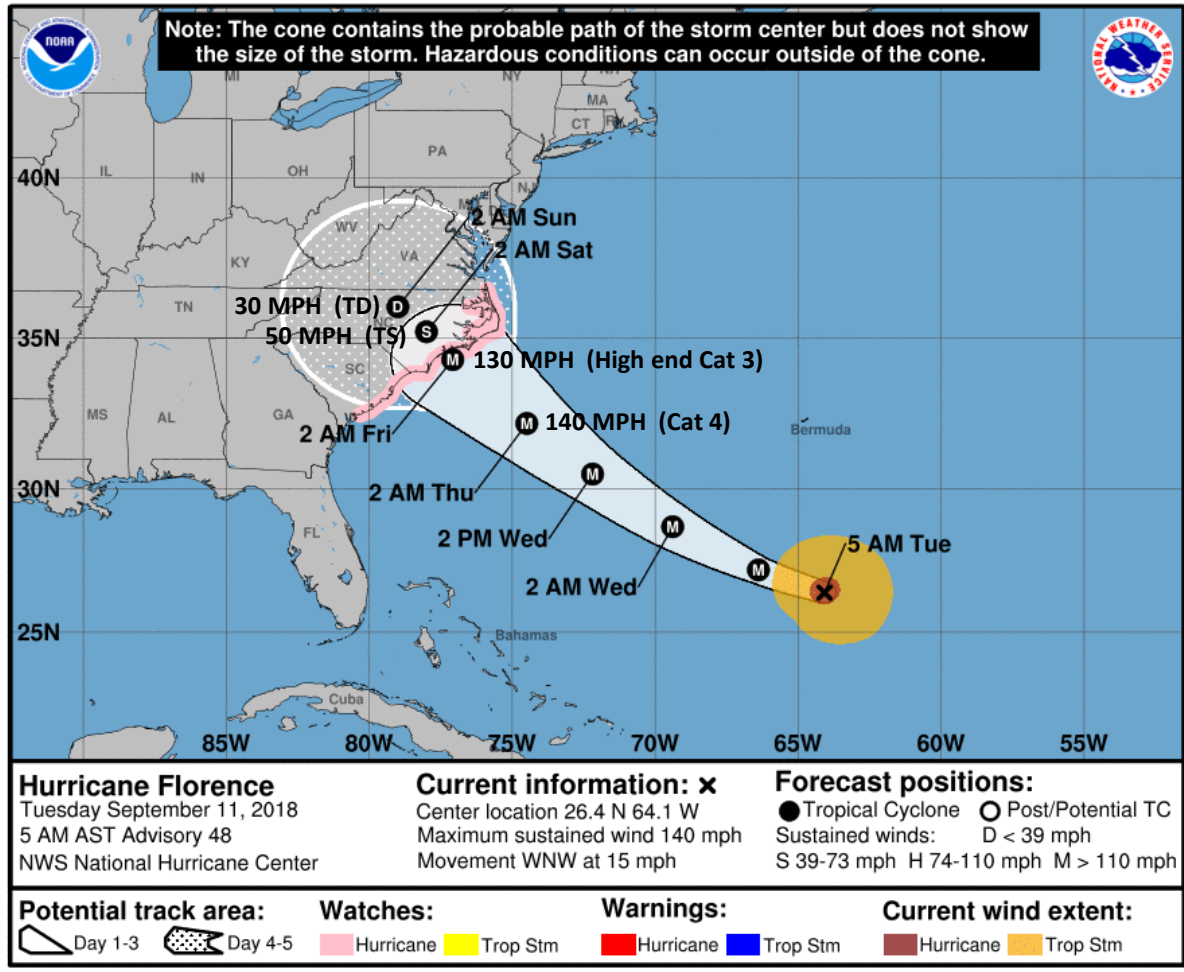


Hurricane Florence – GOES East Band 13 530 AM Tuesday Sept 11, 2018

NHC Advisory #48: 5 AM Tuesday Sept 11, 2018

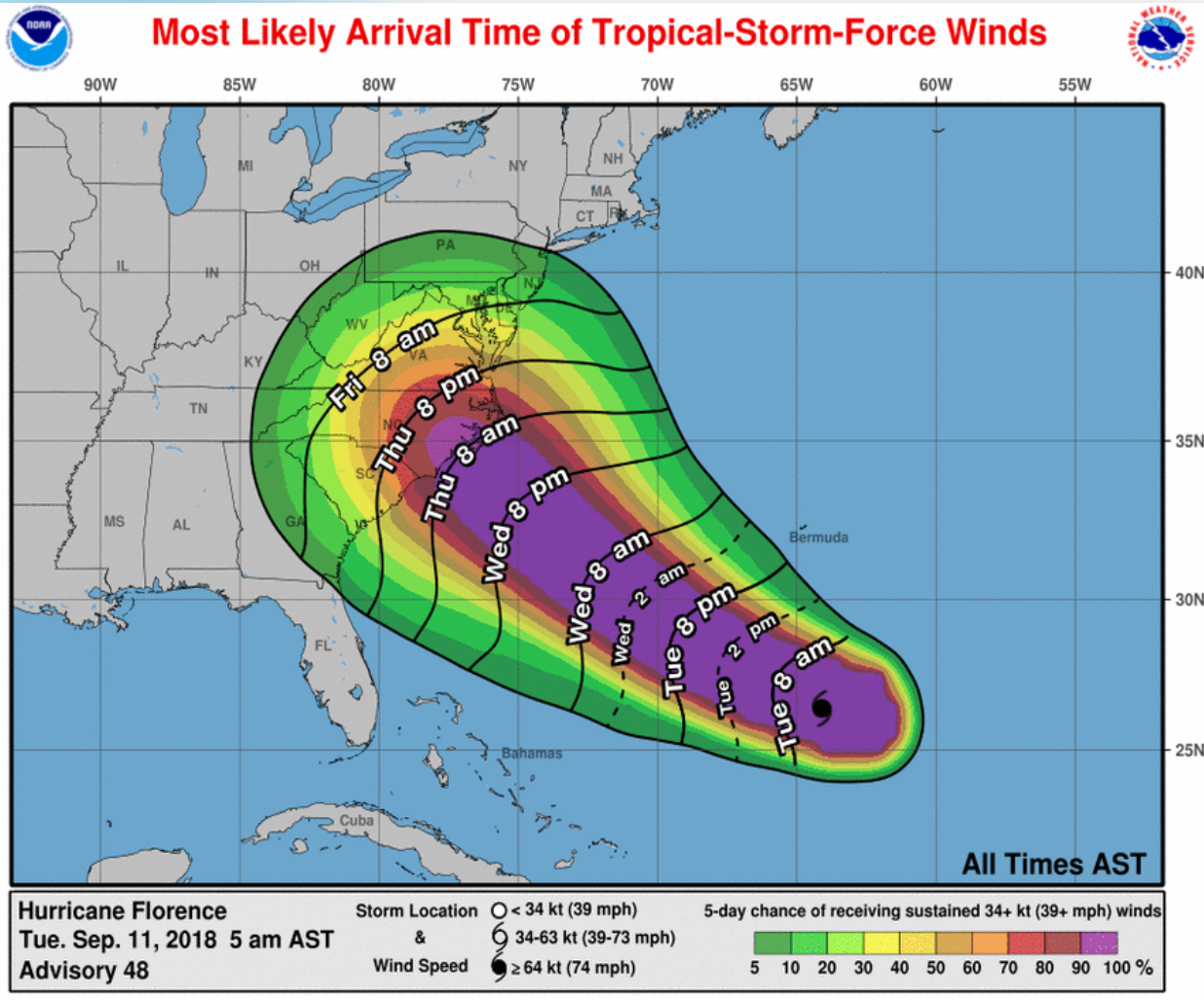
Max Winds:	140 MPH (Cat. 4)
Location:	975 mi. ESE of Cape Fear
Movement:	West-Northwest at 15 MPH
Pressure:	944 MB (27.88 inches)

Official NHC Track Information and Hurricane Watch



- ✓ Life threatening surge, wind, and rain impacts are becoming likely
- ✓ Florence will have far reaching impacts, regardless of where the storm comes ashore
- ✓ Based on the latest track the bulk of wind and surge impacts are expected to develop Thursday and persist into Friday.
- ✓ A slower track Friday into Sunday will enhance the flooding rain threat across a large area
- ✓ The new Hurricane Watch is highlighted in pink along the Carolina coast

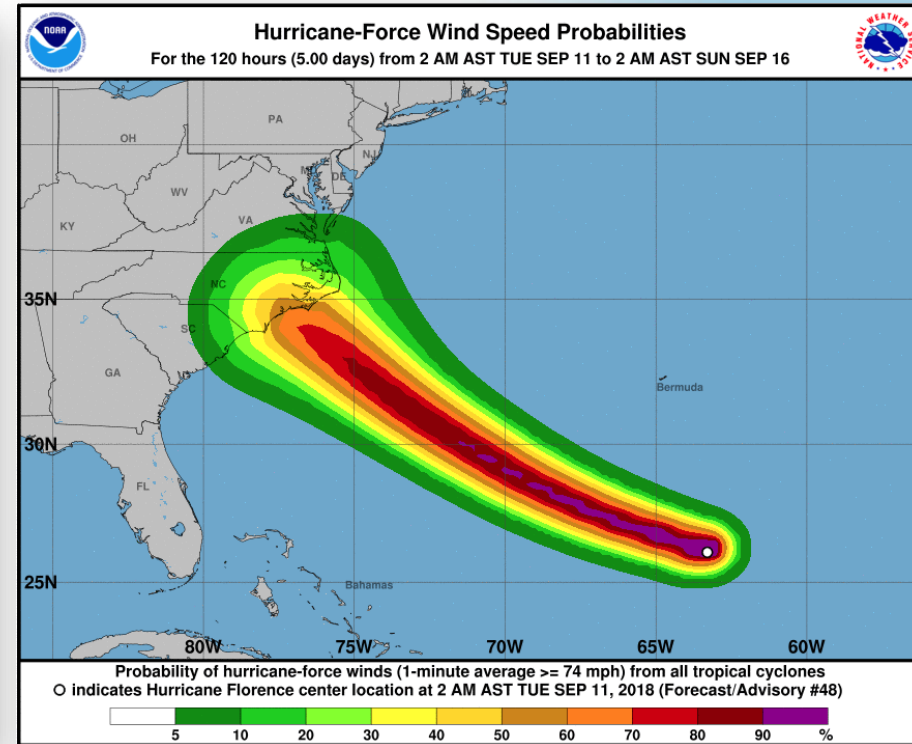
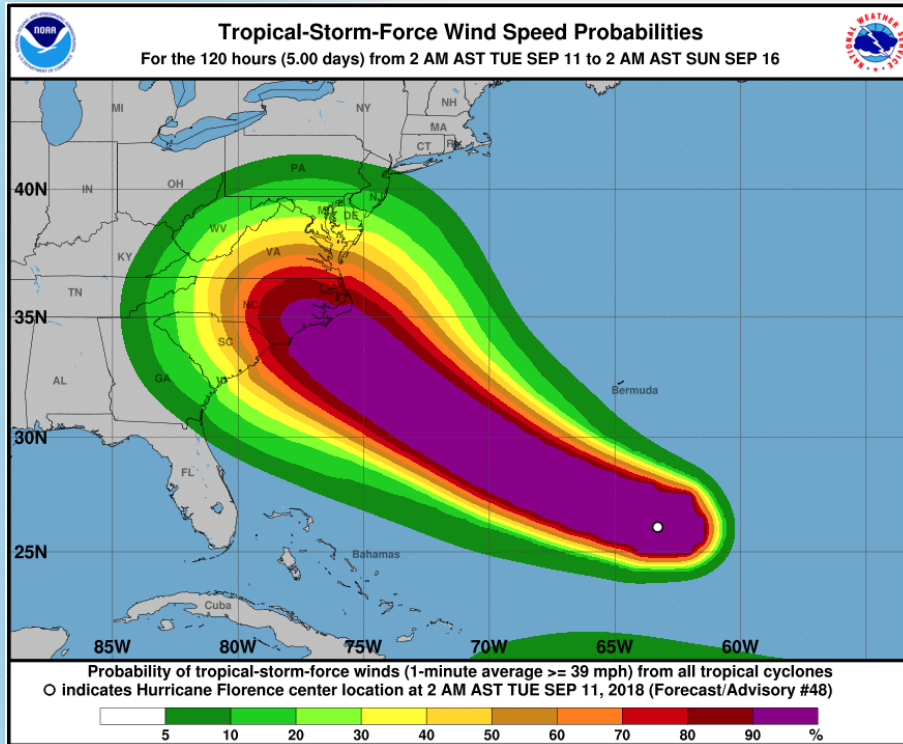
Most Likely Arrival Time of Tropical Storm Force Winds



✓ Based on the latest track the tropical storm force winds are most likely to arrive at the SE NC coast by early Thu morning, during Thursday late morning for the NE SC coast.

✓ Tropical storm force winds would spread farther inland during the day Thursday and Thursday night

Tropical Storm and Hurricane Force Probabilities



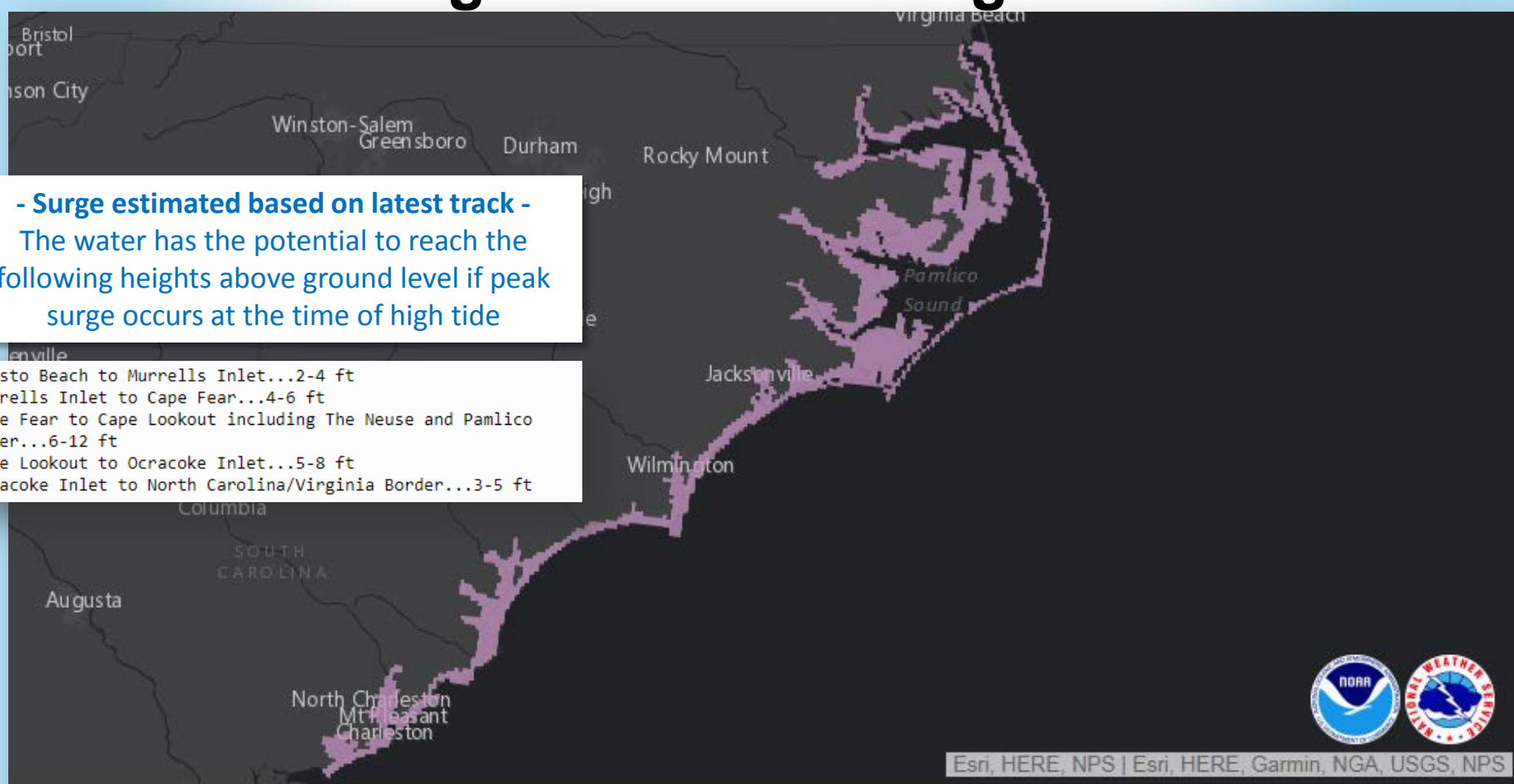
TS Force Wind Speed Probabilities remain high across a large portion of northeast SC and the eastern half of NC. Hurricane Force Wind Speed Probabilities continue to show a risk of hurricane force winds from the central SC coast and northeast SC into southeast VA, with the highest values currently focused across southeast NC. Note that the probabilities extend farther inland as well, suggesting that wind impacts will not just be confined to coastal areas.


Storm Surge Watch and Surge Estimates

- Surge estimated based on latest track -

The water has the potential to reach the following heights above ground level if peak surge occurs at the time of high tide

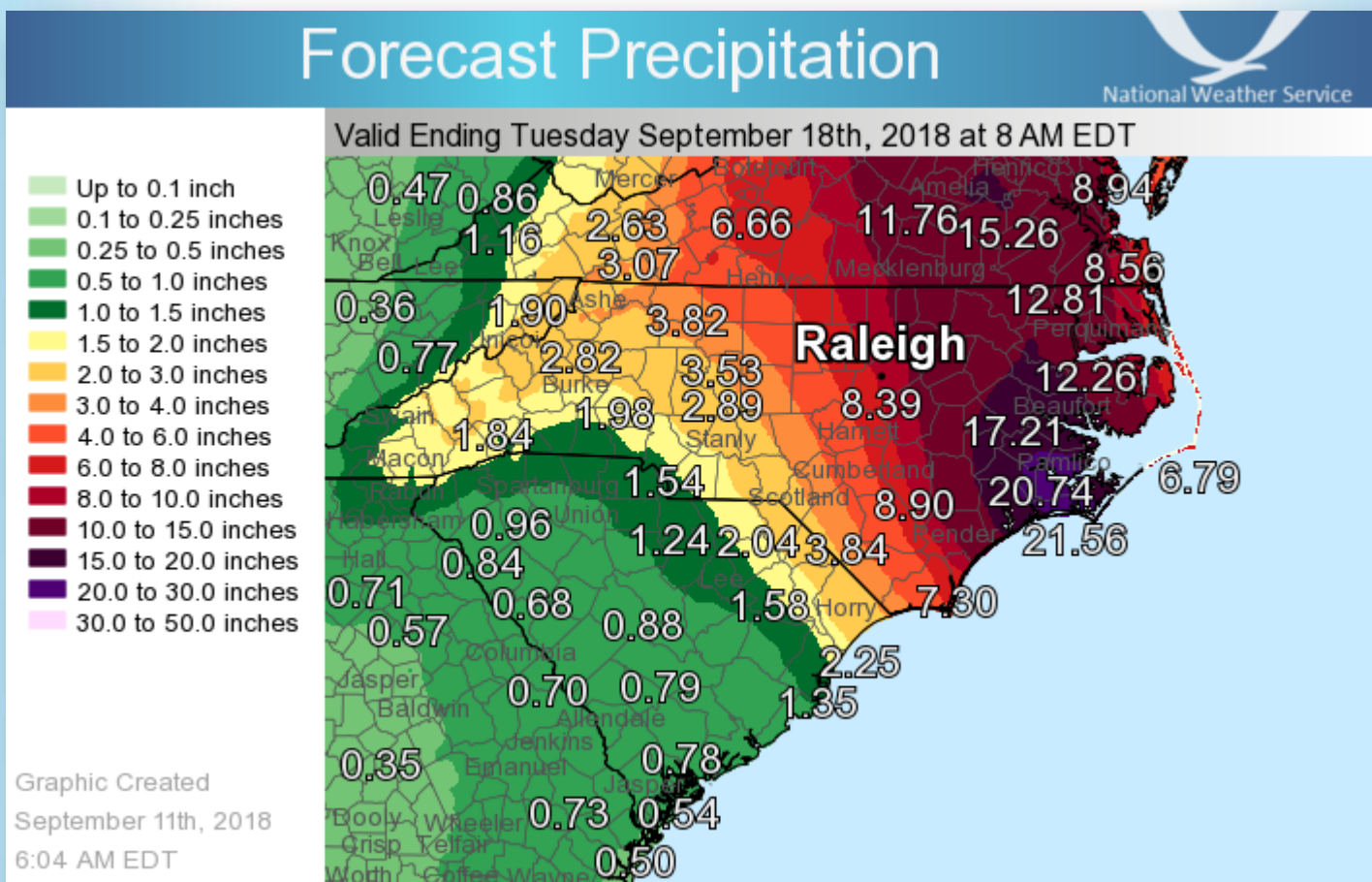
Edisto Beach to Murrells Inlet...2-4 ft
Murrells Inlet to Cape Fear...4-6 ft
Cape Fear to Cape Lookout including The Neuse and Pamlico River...6-12 ft
Cape Lookout to Ocracoke Inlet...5-8 ft
Ocracoke Inlet to North Carolina/Virginia Border...3-5 ft



 **A Storm Surge Watch** has been posted to highlight the possibility of life-threatening rising water within 48 hours. could occur. Storm surge is not just an ocean front phenomenon. Surge impacts can occur away from the coast, especially along/near any tidally connected streams, creeks, rivers, waterways, and bays.

Potential Rainfall Totals

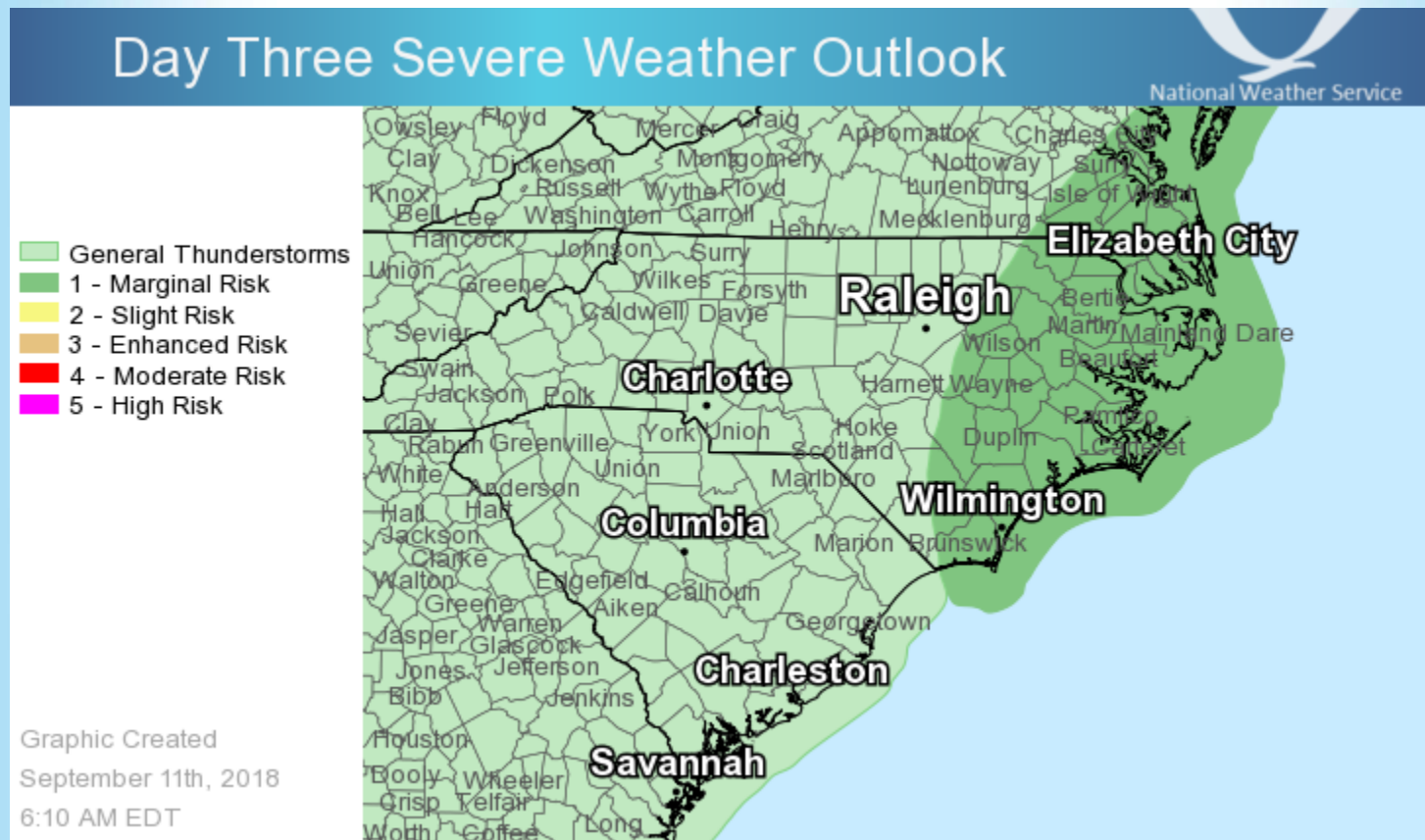
Forecast Precipitation



The distribution and total amount of rainfall for the event will be highly track dependent with the highest amounts focused along and especially north of the storm's track. The rainfall values have increased significantly since the storm's forward motion is expected to slow down later this week. As a result, the risk for flooding continues to increase, especially across eastern NC based on the latest track.




Thursday Severe Weather Outlook (Tornadoes)





There is a marginal risk for tornadoes, especially from southeast NC to southeast VA Thursday through Friday morning.



Key Points

-  Florence could make landfall as a dangerous major hurricane.

-  This is a potentially dangerous situation with life-threatening storm surge and wind impacts. The risk for flooding has also increased, especially across NC.

-  Continue to prepare for a potential land-falling major hurricane.
Stay informed and listen for instructions from local officials.
Please visit the following websites for information about protective actions:
<https://www.weather.gov/safety/hurricane-plan> or
<https://www.ready.gov/hurricanes>

Contact and Next Briefing Information



Next Briefing

When: *By Noon on Tue Sept. 11, 2018*

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