

# TIMELINE & KEY TAKEAWAYS

September 3, 2019 – 5PM



WED	WED NIGHT	THU	FRI	SAT
Chance of showers late morning for coastal regions. Breezy conditions with gusts up to 20-30 mph along the SE coast Wednesday afternoon.	Rain will begin to increase from the SE through the night. Tropical storm force winds could begin in SE counties during the overnight hours.	The greatest impacts from Hurricane Dorian are expected Thursday morning into Friday. The heaviest rains are expected Thursday through early Friday. Life-threatening inundation will be possible along the coast, sounds and adjacent rivers. The center of Dorian is expected to be NE of the coast by early Friday afternoon. Conditions will improve from south to north during the day Friday.		Conditions continue to improve with mostly sunny skies. Flooding may be ongoing Heavy surf is possible.

## Hurricane Dorian

- 1) The greatest impacts are expected late Wednesday night into Friday for Coastal NC
- 2) Significant impacts are becoming more likely across portions of eastern North Carolina:
  - **Life-threatening storm surge:**  
4-7' south of Cape Lookout, 3-5' Cape Lookout to Duck (including Pamlico and Albemarle Sounds, and Neuse and Pamlico Rivers)
  - **Heavy rainfall amounts of 5-10", with locally higher amounts up to 15"**
  - **Tropical storm force winds are likely across eastern NC**
- 3) Hurricane, Tropical Storm, and Storm Surge Watches/Warnings are now in effect

# HURRICANE DORIAN

September 3, 2019 – 5PM



Significant impacts from life-threatening storm surge, heavy rain, and strong winds are becoming more likely across eastern NC late Wednesday night - Friday.

Now is the time to make final emergency preparations before the storm's onset.

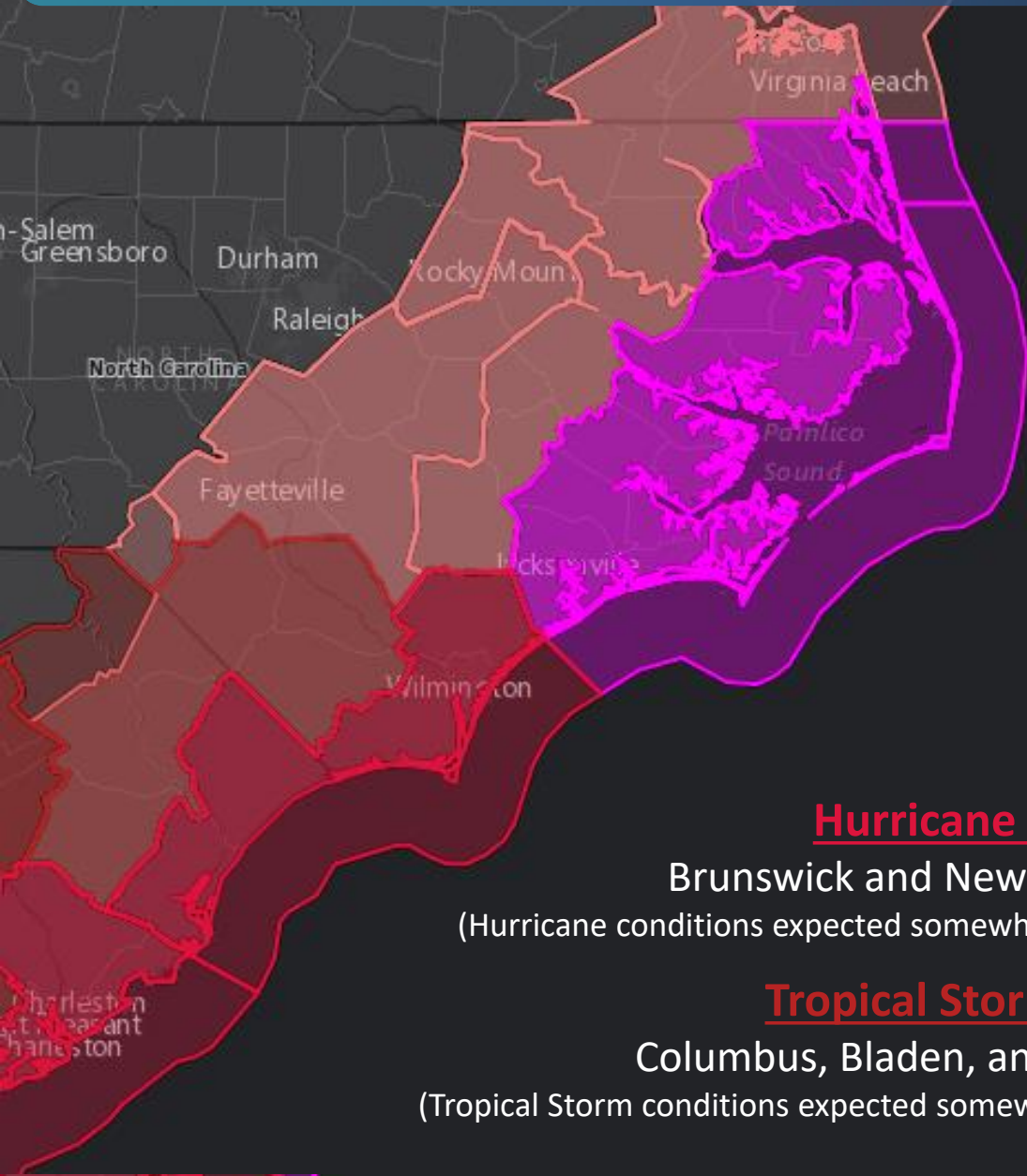
**Hurricane Dorian [5PM TUE]**  
**Location:** Approx. 125 miles ESE of Cape Canaveral, FL  
**Max Sustained Winds:** 110 MPH  
**Movement:** NW at 6 MPH  
**Min Central Pressure:** 28.32" (959 mb)

Storm Track Wind/Symbol Key			
Sustained: [Blue Box]	Tropical Storm ≥ 34 kt/39mph	[Yellow Box]	Strong TS ≥ 50 kt/58mph
[Red Box]	Hurricane ≥ 64 kt/74mph	[Red Circle]	Depression
[Red Circle]	Tropical Storm	[Red Circle]	Hurricane
[Red Circle]	Post-Tropical	[Red Circle]	Potential-Tropical or Remnants

The NHC Track Forecast Cone is NOT an Impact Cone. Impacts will be felt far from the center of the storm.

# CURRENT WATCHES

September 3, 2019 – 5PM



## Hurricane Watch:

Hurricane conditions are possible within the watch area. Issued 48 hours prior to the onset of tropical storm force winds.

## Tropical Storm Watch:

Tropical storm conditions are possible within the watch area, generally within 48 hours.

## Hurricane Warning:

Brunswick and New Hanover Counties  
(Hurricane conditions expected somewhere in this area within the next 36 hrs)

## Tropical Storm Warning:

Columbus, Bladen, and Robeson Counties  
(Tropical Storm conditions expected somewhere in this areas within the next 36 hrs)



# STORM SURGE WATCH

September 3, 2019 – 5PM



**Storm Surge Warning:** Means there is a danger of life-threatening inundation from rising water moving from the coastline, during the next 36 hours in the indicated locations.

**Storm Surge Watch:** means there is a possibility of life-threatening inundation, from rising water moving inland from the coastline, in the indicated locations during the next 48 hours.

If peak surge occurs at the time of high tide, water could reach the following heights above ground:

**4-7':** South of Cape Lookout

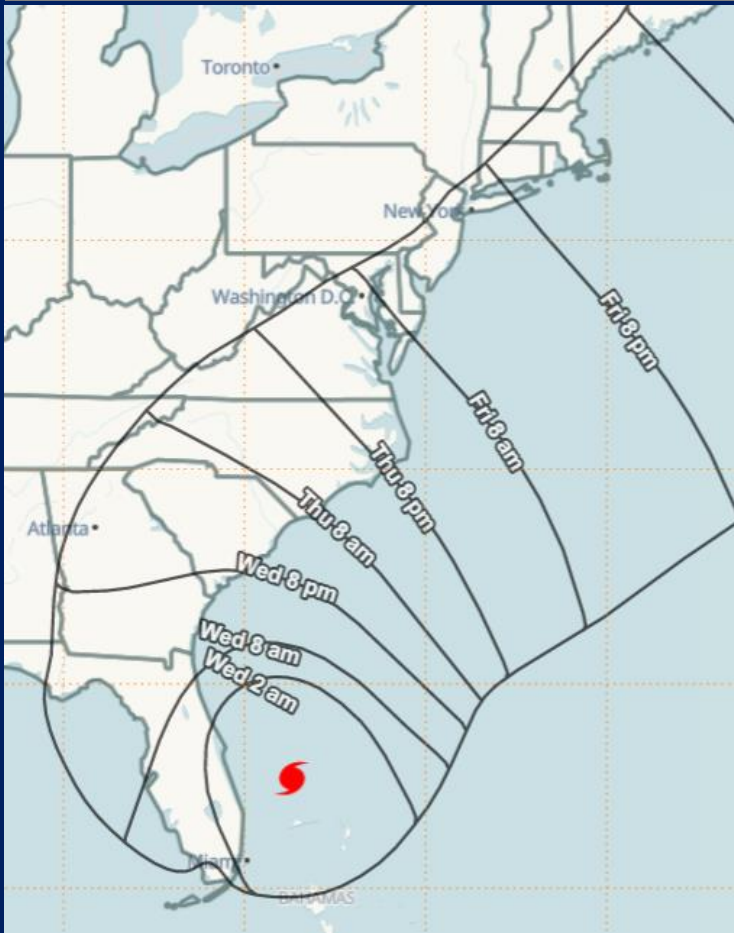
**3-5':** Cape Lookout to Duck (including Pamlico and Albemarle Sounds and the Neuse and Pamlico Rivers)

# ARRIVAL OF TSF WINDS

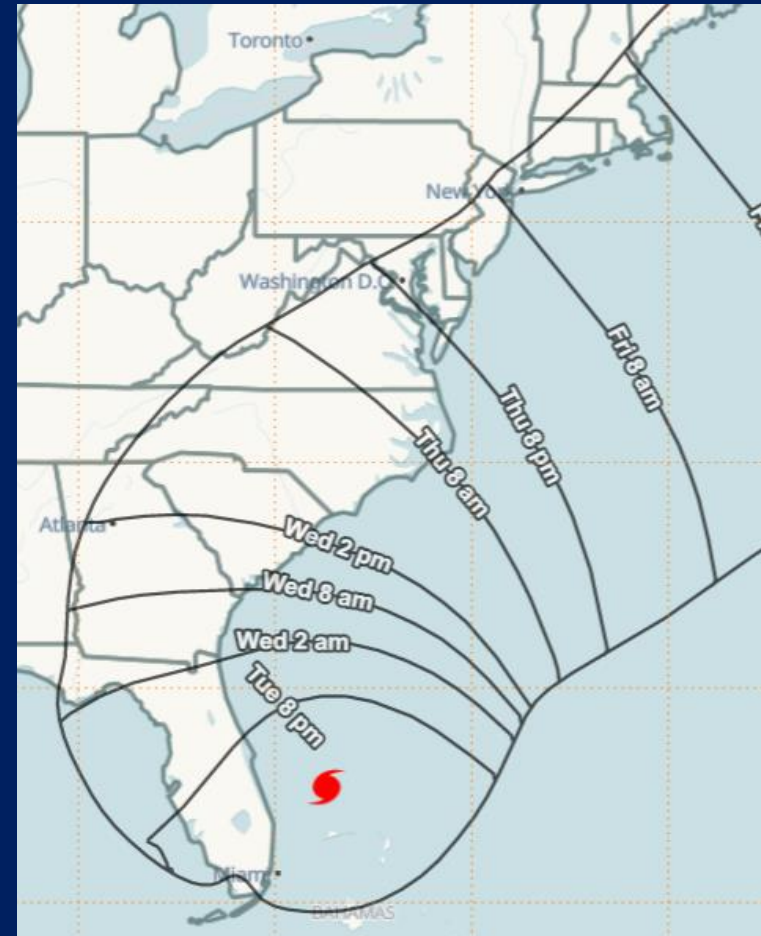
September 3, 2019 – 5PM



## Most Likely Arrival



## Earliest Reasonable Arrival



The most likely arrival time of tropical storm force winds is early Thursday morning. However, winds could arrive as early as Wednesday PM across southeastern NC.



# FORECAST WIND FIELD

## September 3, 2019 – 5PM Forecast



Tropical storm force (blue) wind speed extent at **5AM Thursday** based on the current forecast.

This graphic shows the areas potentially being affected by sustained tropical force (blue/yellow) and hurricane force (red). winds

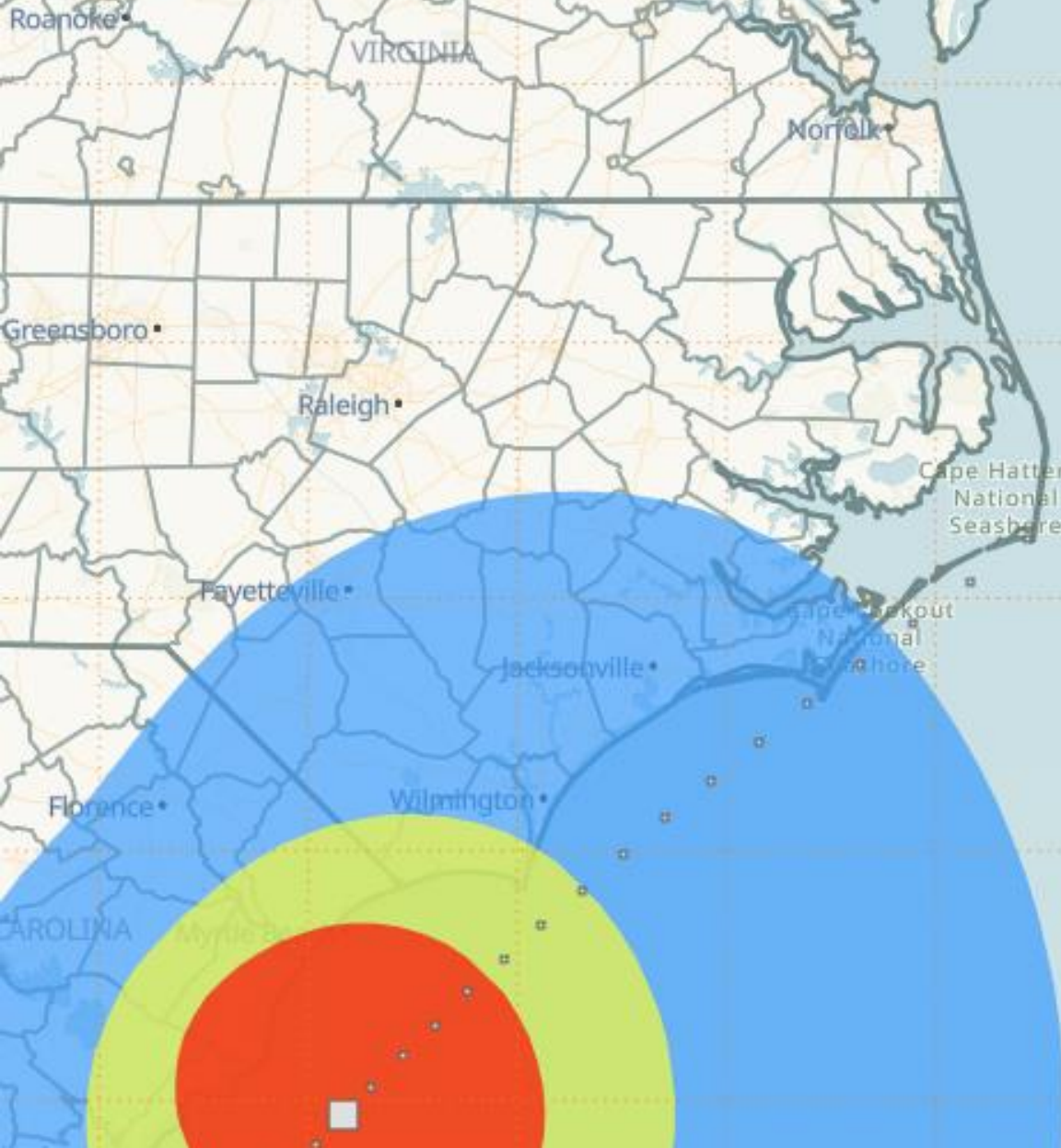
**Storm Track Wind/Symbol Key**

Sustained: ■ Tropical Storm ≥ 34 kt/39mph ■ Strong TS ≥ 50 kt/58mph ■ Hurricane ≥ 64 kt/74mph

Track Symbols: ○ Depression ● Tropical Storm ● Hurricane ⊗ Post-Tropical × Potential-Tropical or Remnants

# FORECAST WIND FIELD

## September 3, 2019 – 5PM Forecast



Tropical storm force (blue) wind speed extent at 5PM Thursday based on the current forecast.

This graphic shows the areas potentially being affected by sustained tropical force (blue/yellow) and hurricane force (red) winds.

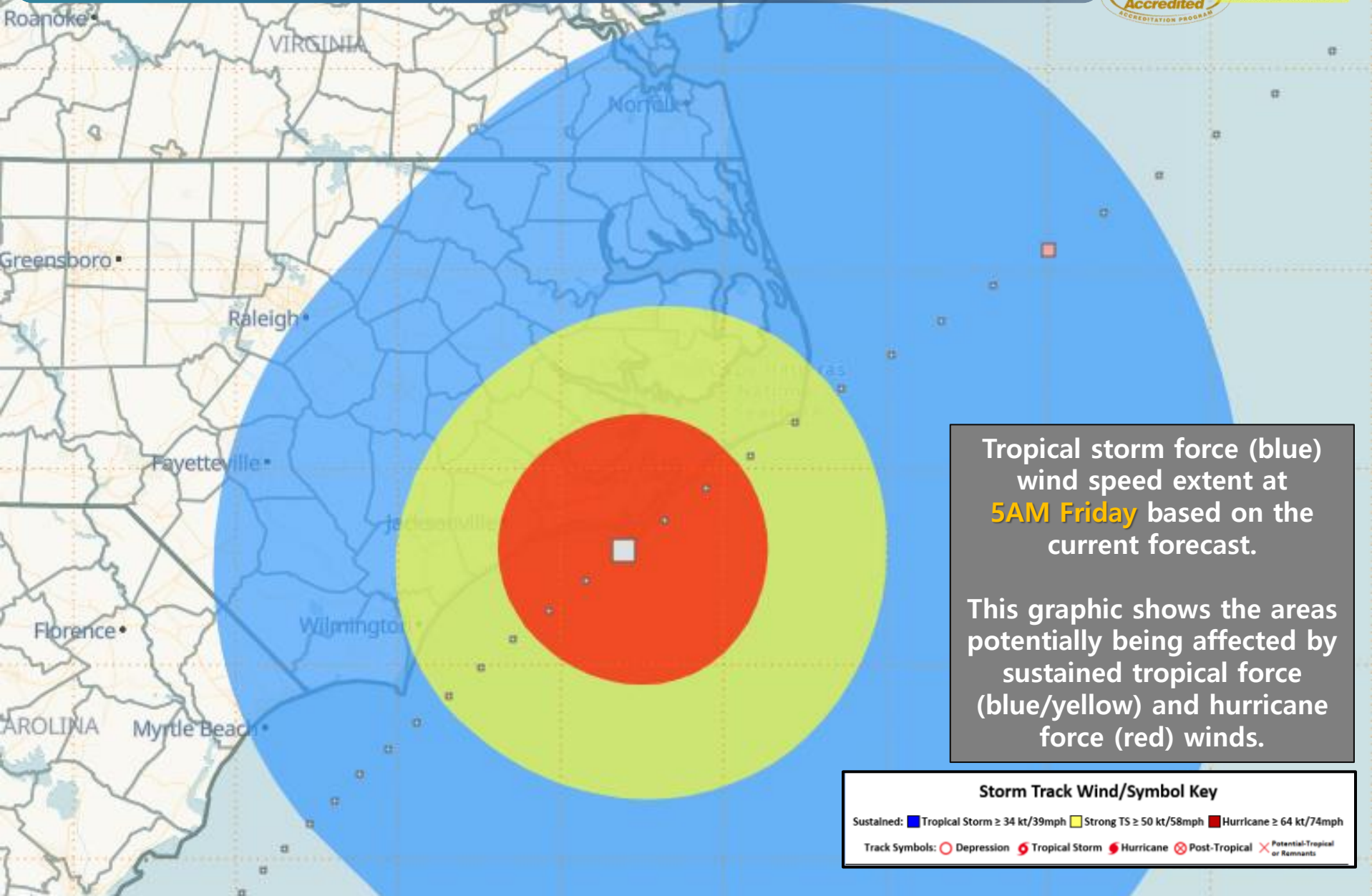
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Track Symbols:	Depression	Tropical Storm	Hurricane	Post-Tropical	Potential-Tropical or Remnants



# FORECAST WIND FIELD

## September 3, 2019 – 5PM Forecast



Tropical storm force (blue) wind speed extent at **5AM Friday** based on the current forecast.

This graphic shows the areas potentially being affected by sustained tropical force (blue/yellow) and hurricane force (red) winds.

### Storm Track Wind/Symbol Key

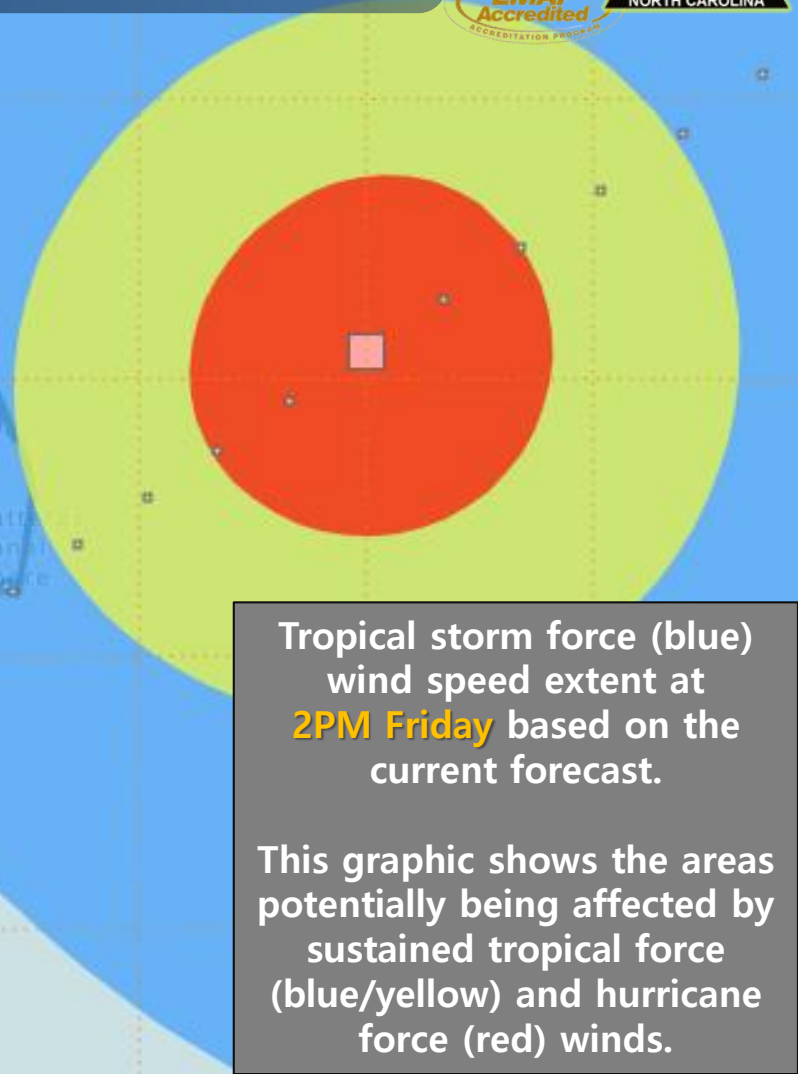
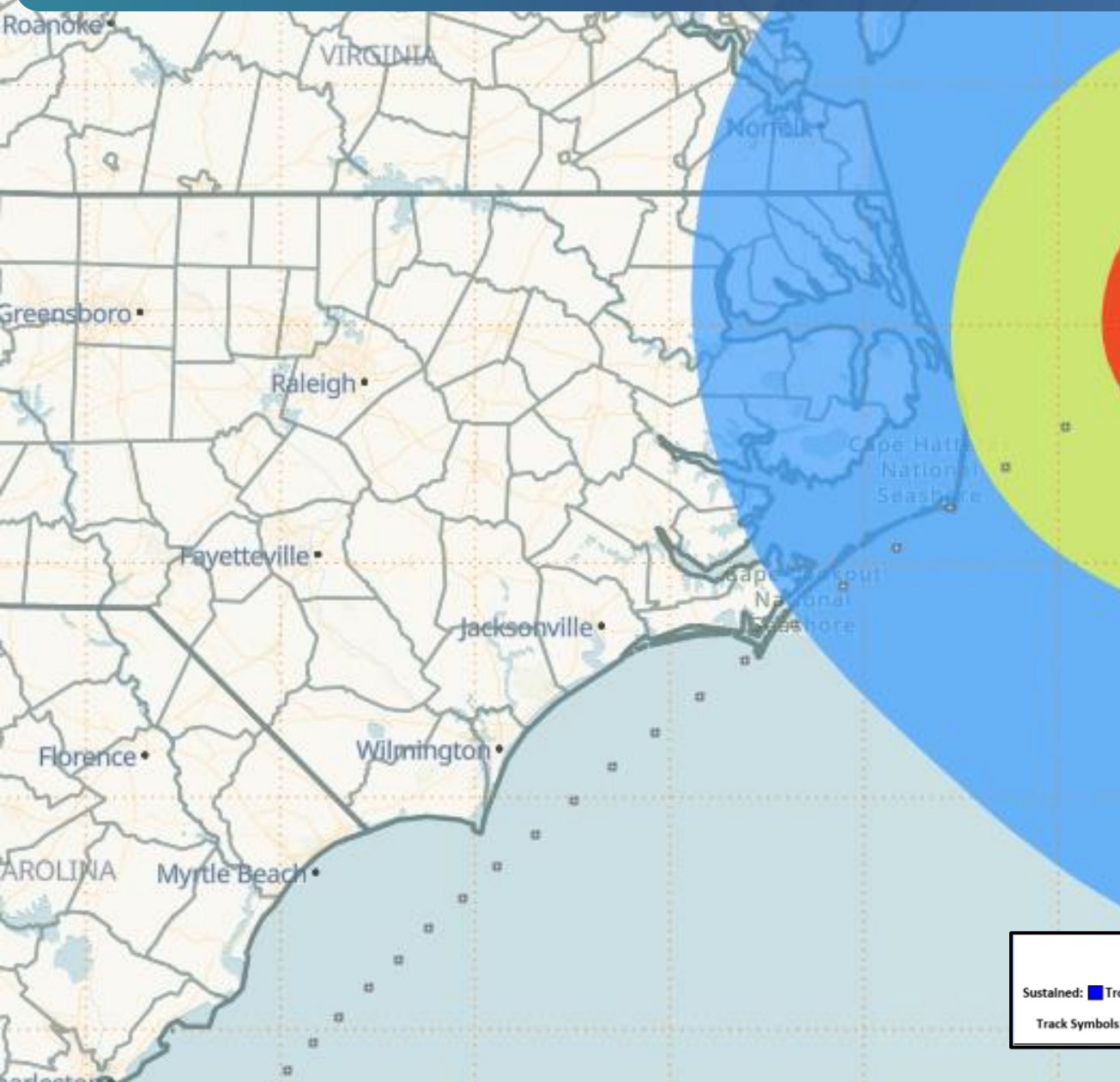
Sustained: ■ Tropical Storm  $\geq 34$  kt/39mph ■ Strong TS  $\geq 50$  kt/58mph ■ Hurricane  $\geq 64$  kt/74mph

Track Symbols: ○ Depression ● Tropical Storm ● Hurricane ⊗ Post-Tropical × Potential-Tropical or Remnants



# FORECAST WIND FIELD

## September 3, 2019 – 5PM Forecast



Tropical storm force (blue) wind speed extent at **2PM Friday** based on the current forecast.

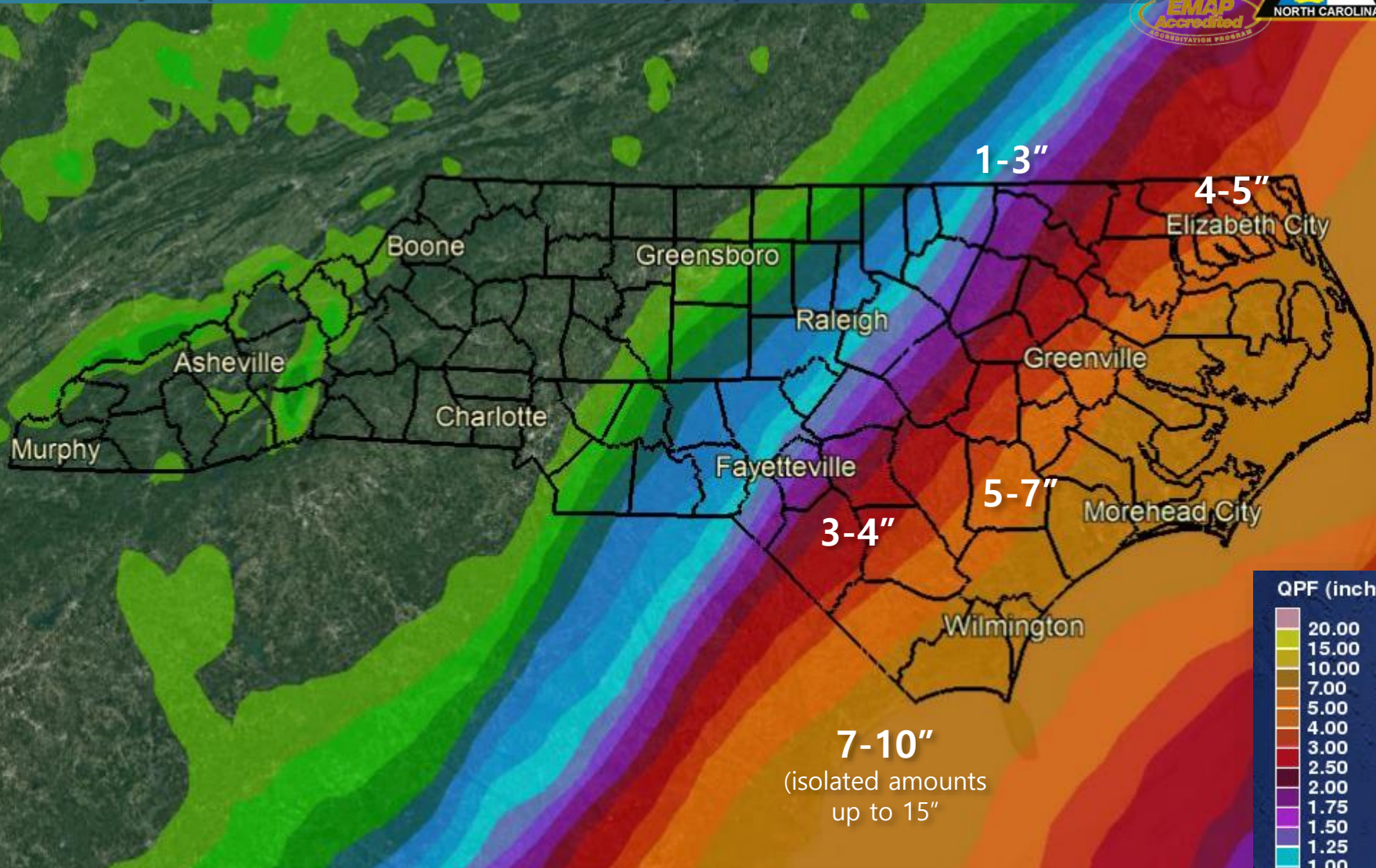
This graphic shows the areas potentially being affected by sustained tropical force (blue/yellow) and hurricane force (red) winds.

Storm Track Wind/Symbol Key					
Sustained:	Tropical Storm $\geq 34$ kt/39mph	Strong TS $\geq 50$ kt/58mph	Hurricane $\geq 64$ kt/74mph		
Track Symbols:	Depression	Tropical Storm	Hurricane	Post-Tropical	Potential-Tropical or Remnants



# 5-DAY RAINFALL FORECAST

8PM Tuesday, September 3, 2019 – 8PM Sunday, September 8, 2019

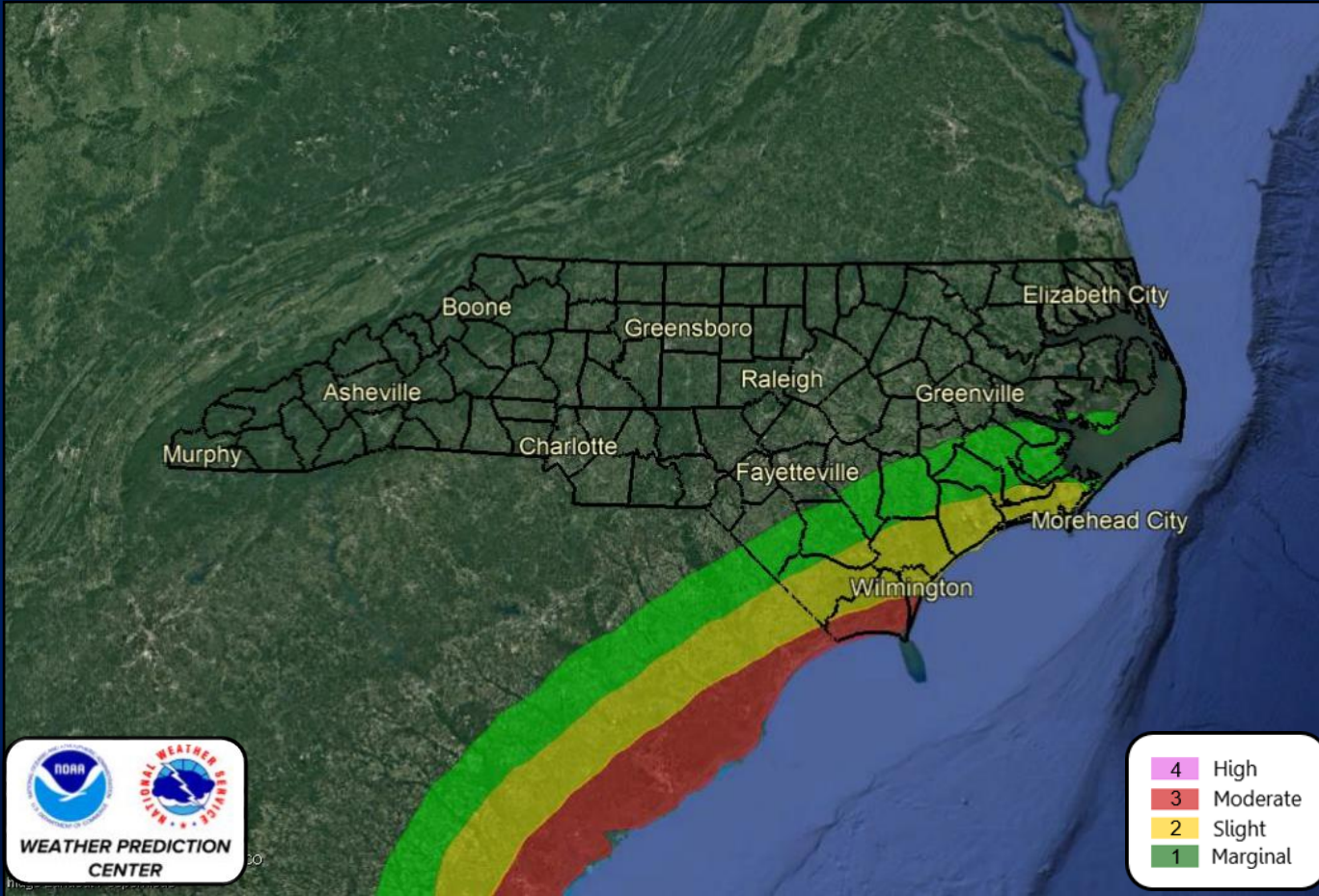


**Rainfall amounts shown are averages. Locally higher amounts are possible. Higher rainfall amounts will likely result in flash flooding and possible river flooding. The heaviest rain is expected late Wednesday night – early Friday.**



# WEDNESDAY'S FLASH FLOODING THREAT

WEATHER PREDICTION CENTER (VALID 8AM 9/4/19 – 8AM 9/5/19)



<b>MARGINAL (MRGL)</b>  Isolated flash floods possible  Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	<b>SLIGHT (SLGT)</b>  Scattered flash floods possible  Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.
<b>MODERATE (MDT)</b>  Numerous flash floods likely  Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	<b>HIGH (HIGH)</b>  Widespread flash floods expected  Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
<b>Flash flooding near me?</b>	<b>Flash Flooding NO Flash Flooding</b>

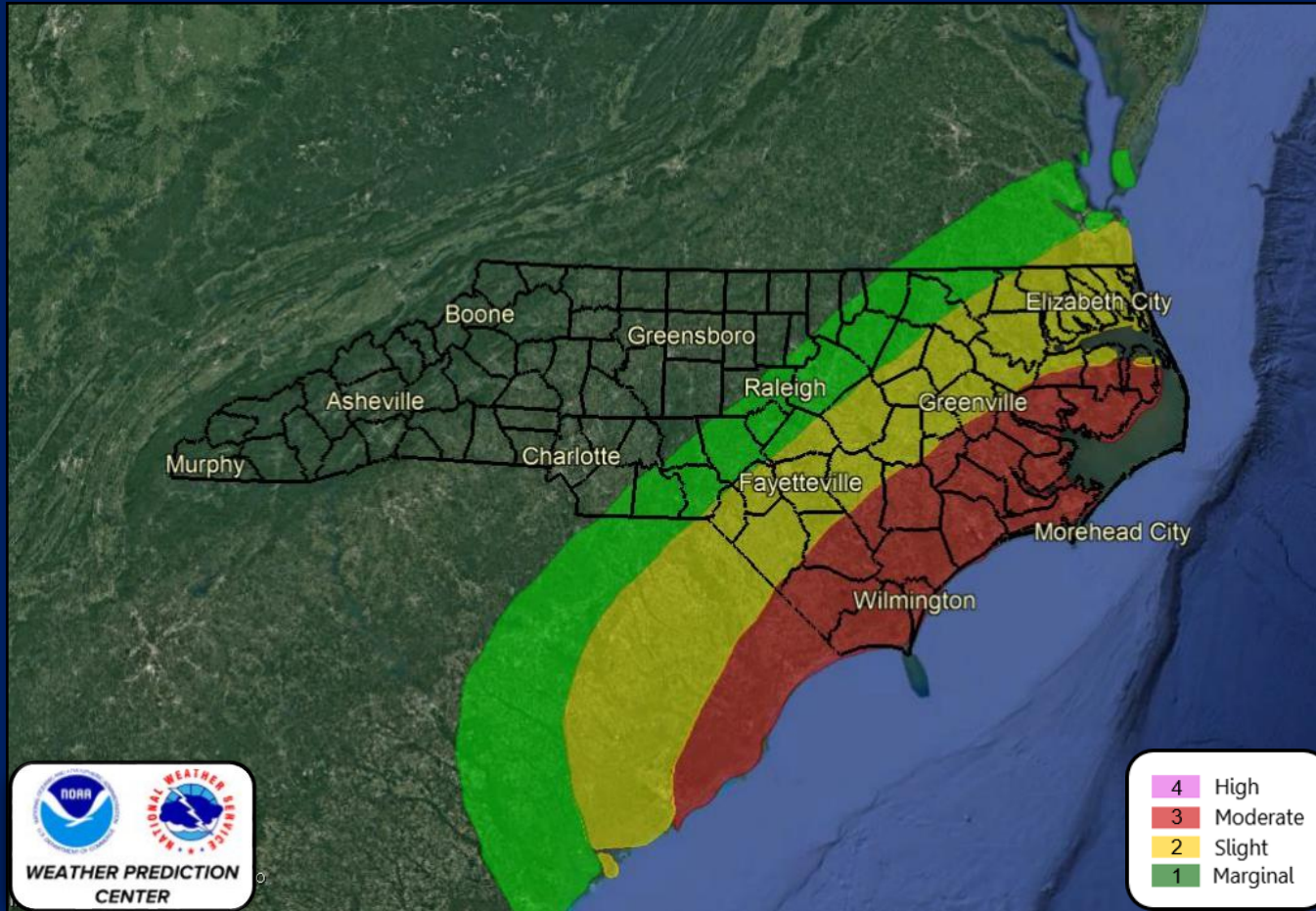
## The Threat of Flash Flooding Will Increase Wednesday Night:

- ✓ Heavy rain will move into southeastern NC Wednesday evening.
- ✓ The threat of flash flooding will expand on Thursday.



# THURSDAY'S FLASH FLOODING THREAT

WEATHER PREDICTION CENTER (VALID 8AM 9/5/19 – 8AM 9/6/19)



<b>MARGINAL (MRGL)</b> Isolated flash floods possible  Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	<b>SLIGHT (SLGT)</b> Scattered flash floods possible  Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.
<b>MODERATE (MDT)</b> Numerous flash floods likely  Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	<b>HIGH (HIGH)</b> Widespread flash floods expected  Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.
Flash flooding near me?	Flash Flooding NO Flash Flooding

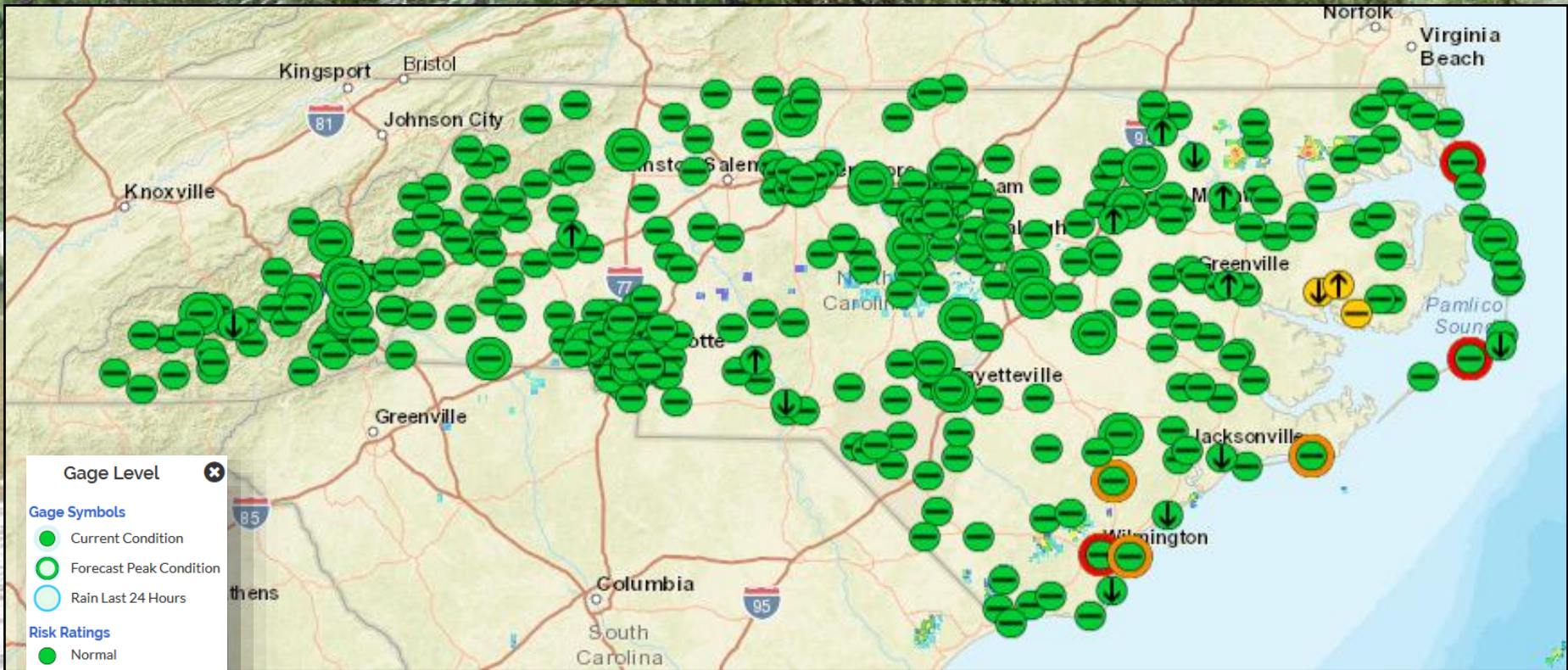
## The Greatest Risk of Flash Flooding Will Be Thursday – Friday AM:

- ✓ Widespread 5-10", with isolated amounts up to 15" closer to the coast
- ✓ Additional heavy rain is possible through midday Friday across NE NC



# RIVER FLOOD OUTLOOK

September 3, 2019 – 6PM



**Gage Level**

**Gage Symbols**

- Current Condition
- Forecast Peak Condition
- Rain Last 24 Hours

**Risk Ratings**

- Normal
- Monitor
- Minor Flooding
- Moderate Flooding
- Major Flooding
- Not Risk Rated
- Out of Service

**Trend**

- Rising
- Falling
- Constant

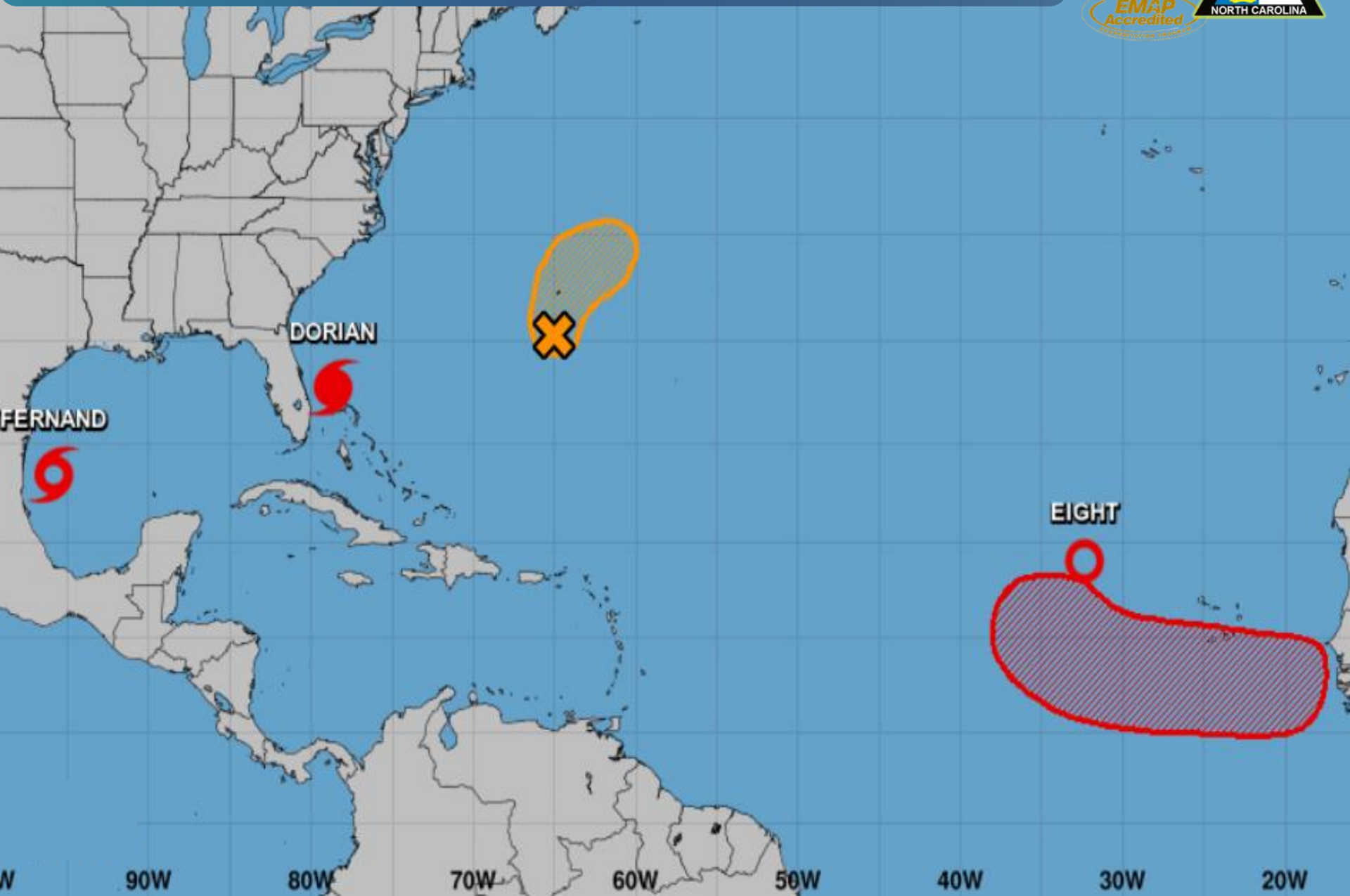


**FIMAN** Flood Inundation Mapping and Alert Network



# TROPICAL WEATHER OUTLOOK

September 3, 2019 – 2PM





# HAZARDS SUMMARY: DORIAN

September 3, 2019 – 5PM



HAZARD	DETAILS	IMPACTS	TIMING
<b>Storm Surge</b>	4-7' above ground south of Cape Lookout 3-5' Cape Lookout to Duck (including Pamlico/Albemarle Sounds & Neuse/Pamlico Rivers)	Life-threatening storm surge inundation will be possible along the coast, sounds, and adjacent rivers.	Wed Night – Friday *High tide Thu PM & Fri AM*
<b>Inland Flooding</b>	5-10" near the coast (isolated 15") 2-6" east of I-95 <3" across central NC	Rainfall may cause life-threatening flash flooding. Greatest threat east of I-95.	Wed Night – Friday
<b>Damaging Winds</b>	Tropical storm force winds expected; hurricane force winds possible near the immediate coast	Downed trees, widespread power outages, structure damage. Tropical storm force winds will most likely begin late Wed night across SE NC.	TS Force Winds: Late Wed Night – Friday
<b>Tornadoes</b>	Isolated tornadoes are possible across far eastern NC Wed night – Thu night.		Wed Night – Thu Night
<b>Marine &amp; Coastal</b>	Rip currents & dangerous surf. Severe beach erosion with significant dune loss		Through Friday

**Threat Levels:** None Low Moderate High Extreme