HURRICANE DORIAN BRIEFING

6:30 AM EDT
Wednesday, September 4, 2019
Prepared by: WFO Wilmington, NC

What has changed: The track is slower. A FLASH FLOOD WATCH is now in effect.
Next Briefing: By 6:30 PM EDT Wednesday, unless more significant changes occur.
Disclaimer: The information contained within is time-sensitive. Do not use after 5:00 PM EDT Wednesday.
Situation Overview

Hurricane Dorian

- Major impacts including coastal flooding from storm surge, power outages, some structural damage, and flash-flooding becoming more likely, especially closer to the coast. Conditions will deteriorate from south to north late Wed through Thu.

- 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 in effect for Bladen, Columbus, Robeson, Dillon, Marion, Marlboro, Darlington, Florence and Williamsburg Counties.
## Situation Overview

**Hurricane Dorian**

<table>
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<th>Hazard</th>
<th>Impacts</th>
<th>Location</th>
<th>Timing</th>
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<tr>
<td>Wind</td>
<td>Tropical storm force winds are expected and hurricane force winds are possible, especially along the coast and adjacent waters. Power outages, some structural and tree damage are likely in the area with the highest winds.</td>
<td>Highest potential and strongest winds expected along the coast</td>
<td>For TS Force winds arriving Wed night for northeast SC and arriving Thu morning for southeast NC</td>
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<tr>
<td>Storm Surge/Inundation</td>
<td>Impacts from Dorian's storm surge becoming more likely, Inundation, damage to coastal structures, major beach erosion and ocean overwash expected.</td>
<td>Coastal areas of southeast North Carolina and northeast South Carolina.</td>
<td>Surge is expected to be significant with high tide Thu afternoon and possibly Thu night</td>
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<td>Flooding Rain</td>
<td>8 to 10 inches of rain (lesser amounts farther inland) with locally higher amounts up to 15 inches possible along coastal areas. Flooding of roads, small creeks/streams and poor drainage areas is likely where the heaviest rain occurs.</td>
<td>The highest amounts are expected east of I-95, especially along coastal areas.</td>
<td>Rainfall increasing through Wed night, with the heaviest rainfall rates Thu into early Fri morning</td>
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<tr>
<td>Tornado</td>
<td>Isolated tornadoes are possible.</td>
<td>Anywhere across southeast North Carolina or northeast South Carolina.</td>
<td>Especially Wed night into Thu</td>
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<tr>
<td>Marine</td>
<td>Rip Currents and dangerous surf are likely. Large/steep seas are expected along with treacherous conditions at inlet entrances. A High Surf Advisory is in effect for Brunswick, Horry, and Georgetown Counties</td>
<td>All beaches and coastal waters</td>
<td>Rip currents &amp; rough surf through Fri. More severe marine impacts developing tonight through Thu night.</td>
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Dorian expected to approach from the south through Thursday and move close to the upper SC and southeast NC coast Thursday night.

The hurricane is forecast to begin accelerating away from the Cape Fear area late Thursday night 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

Winds  Surge  Rainfall/Flooding  Tornadoes

Forecast Confidence

Overall Confidence Moderate to High. Confidence continues to increase with the progression of Dorian and potential impacts. Some changes in the details of impacts still possible based on minor changes to track.

For information on specific hazards in this area, please go to https://www.weather.gov/ilm/tropical
■ Potential for tropical storm force winds mostly ranges from 50 to 70 percent inland up to around 90 percent along the coast.

■ Potential for hurricane force winds is 10 to 20 percent farther inland up to 40 to 50 percent along the coast.
Tropical Storm force winds are expected to arrive Wednesday night for northeast SC and Thursday morning for southeast NC.

Any hurricane force winds that occur across the area would be during Thursday afternoon and evening for northeast SC and Thursday night for southeast NC.

Wind conditions improving later Thursday night for northeast SC and during Friday morning for southeast NC.
• 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 55 to 80 mph are possible along the coastal areas (slightly higher near Cape Fear). Winds of 30 to 55 mph are expected farther inland.

• Impacts in the areas with the highest winds include: downed trees, downed power lines, some structural damage – especially to weak structures, fences and signs blown down.
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 65 to 95 mph are possible along coastal areas (slightly higher near Cape Fear). Gusts of 40 to 65 mph are expected farther inland.
Storm Surge Warning Now in Effect

Hurricane Dorian

- Storm Surge Warning remains in effect
- Surge impacts are increasingly likely during Thursday through Friday morning
- High tide around 1-2pm Thursday
- Potential for 5 to 8 ft inundation from Myrtle Beach south, and 4 to 7 ft inundation north of Myrtle Beach
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 is now 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 hazardous with some road closures possible.

- **DO NOT DRIVE THROUGH FLOODED ROADWAYS**

TIMING – Scattered showers and thunderstorms are expected today. The heaviest rainfall will occur Thursday and Thursday night. Rainfall will begin to exit the area Friday morning.
Isolated tornadoes are possible for portions of the SC coast, with the risk greatest across the upper SC coast tonight.

Isolated tornadoes are possible across the area during Thursday, with the risk shifting into eastern NC by Thursday night.
As Dorian makes its closest approach during Thursday night, wave heights across the adjacent coastal waters will range from 15-25 feet.

Seas farther offshore will exceed 25 feet.

Conditions will gradually improve during Friday, but more-so Friday night.
Key Take Away Messages

Hurricane Dorian

- Tropical Storm force winds are expected, with increasing likelihood of hurricane force winds along the coast. The storm’s closest approach will be Thursday night & 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 coast.

- The risk for storm surge is increasing with the greatest risk Thursday and Thursday night. However, the amount of inundation is highly dependent on storm’s track.

- Flash flooding is likely, especially Thu through Thu night, with 8 to 10 inches expected along coastal areas. Isolated amounts up to 15 inches are also possible. Minor to moderate river flooding will be possible as a result, especially along the Cape Fear, Northeast Cape Fear, Black (in NC), and Waccamaw rivers.

- Marginal risk for isolated tornadoes Wednesday night for portions of the upper SC coast. The risk will extend from the upper SC coast to the southeast NC coastal areas Thursday.

- Building swells will continue to support strong rip currents and rough surf. More severe marine conditions are expected to develop later today and tonight, but more-so Thu and Thu night.
Contact and Next Briefing Information

Next Briefing:
When: By 7:00 PM EDT Wednesday
Method: E-mail

Web: [http://weather.gov/ilm](http://weather.gov/ilm)
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Facebook: [NWSWilmingtonNC](https://www.facebook.com/NWSWilmingtonNC)
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