Tropical Storm Ian Briefing

For northeast South Carolina and southeast North Carolina

7:40 AM EDT
Thursday September 29, 2022

What has changed: Stronger wind gusts are expected and higher rainfall amounts extended farther inland into northeast SC, increased wind threat matrix

Next Briefing: Thursday September 29th at 6:00 PM EDT

Disclaimer: The information contained within is time-sensitive. Do not use after 4pm EDT September 29th.
Situation Overview

- Ian’s track has been shifted slightly east and confidence is increasing that the storm will make landfall along the southern SC coast during Friday given the latest advisory.

- Some wind impacts are expected Friday, especially across areas of northeast SC and coastal southeast North Carolina. Storm surge is another concern, especially with high tide during Friday (~11:30 AM).

- Additionally, heavy rainfall could cause flash flooding and a threat exists for isolated tornadoes.

- Prepare for high end tropical storm, and potentially low end hurricane conditions. Those preparations should be finished today.
<table>
<thead>
<tr>
<th>Hazard</th>
<th>Impacts</th>
<th>Location</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wind</td>
<td>There is a potential for downed trees and scattered power outages from strong wind gusts up to 60 mph</td>
<td>Strongest gusts are expected across portions of northeast SC.</td>
<td>Friday and Friday night, gusty winds also expected today though they are not directly associated with Ian</td>
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<tr>
<td>Storm Surge/Inundation</td>
<td>Coastal flooding is likely along with beach erosion, and high surf (inundation of 2-4 ft south of Little River and 1-3 ft north of Little River along low-lying coastal areas)</td>
<td>Along the coast from southeast NC to northeast SC</td>
<td>For coastal flooding/erosion with each high tide today through Sat – highest levels with each high tide Fri (high surf conditions today through Sat)</td>
</tr>
<tr>
<td>Flooding/Rain</td>
<td>Heavy rainfall is expected which could lead to flash flooding, widespread 4 to 6 inches with a swath of 6 to 8 inches also possible</td>
<td>Anywhere across southeast NC and northeast SC, highest amounts across portions of northeast SC.</td>
<td>Heaviest amounts Friday &amp; Friday night</td>
</tr>
<tr>
<td>Tornado</td>
<td>There is the potential for isolated tornadoes</td>
<td>Anywhere across southeast NC and northeast SC</td>
<td>Especially from early Friday morning through Friday night</td>
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<tr>
<td>Marine</td>
<td>Hazardous maritime conditions are expected</td>
<td>All adjacent coastal waters</td>
<td>Today through Saturday</td>
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</table>
Increasing Threat

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

Impact Outlook and Confidence

Ian

Wind: Increasing Confidence
Surge: Confident
Rainfall/Flash Flooding: Confident
River Flooding: Low Confidence
Tornadoes: Low Confidence
Marine: Confident
Ian is now a Tropical Storm and is expected to move back over the Atlantic today, then make landfall along the southern SC coast on Friday.

- As a strong tropical storm, Ian is expected to produce strong winds, heavy rainfall and storm surge.

- Remember that the cone does not represent where impacts occur. Impacts will occur well outside of the cone.

**Situation Overview**

Ian

**Tropical Storm Ian**
Thursday September 29, 2022
5 AM EDT Advisory 27
NWS National Hurricane Center

**Current information:**
- Center location: 28.0 N 80.9 W
- Maximum sustained wind: 65 mph
- Movement: NE at 8 mph

**Forecast positions:**
- Tropical Cyclone
- Post-Potential TC
- Sustained winds: D < 39 mph
- H: 39-73 mph
- J: 74-110 mph
- M: > 110 mph

**Potential track area:**
- Day 1-3
- Day 4-5

**Watches:**
- Hurricane
- Trop Storm

**Warnings:**
- Hurricane
- Trop Storm

**Current wind extent:**
- Hurricane
- Trop Storm

**NOTE:** Do not focus on the exact track. Impacts will occur well outside the area enclosed by the cone.
Current Tropical Storm & Storm Surge Watches/Warnings

Tropical Storm Watches and Warnings
- Wilmington, NC
- Issued Sep 29, 2022 7:34 AM EDT

Storm Surge Watches
- Wilmington, NC
- Issued Sep 29, 2022 6:56 AM EDT

Source: NWS Wilmington, NC
Probabilities for TS conditions have increased across the area. There is now a 30-50% chance TS conditions will occur across southeast NC & 50-70% across northeast SC.

Although winds will be gusty today the TS winds directly associated with Ian are expected to arrive during Friday.
In the area with the highest winds there is a potential for:

- Damage to roofing, siding, awnings, porches, carports, sheds, fences, and unsecured objects
- Additionally, downed trees and large limbs are expected
- Scattered power outages are also possible

*Note that the wind threat may be expanded depending on any subsequent changes to Ian’s forecast.

*This graphic accounts for the latest forecast and includes a reasonable safety margin to account for any forecast deviation. It represents the potential impacts to prepare for.
Widespread rainfall of 4 to 6 inches is expected along with a swath of 6 to 8 inches across portions of northeast SC.

The heaviest rainfall is expected during Friday and Friday night. Drier conditions are expected to develop during the weekend.

This amount of rainfall could result in flash flooding, especially near low-lying and other locations prone to flooding.
The potential for minor river flooding has increased in the latest ensemble river forecasts.

Black Creek at Quinby has a 40% chance of reaching minor flood and a less than 10% chance of reaching moderate flood.

Several river points have a 25% chance or less of reaching minor flood with a 10% or less chance for moderate flooding. These points are:

- NE Cape Fear River at Burgaw
- Pee Dee River at Pee Dee
- Lynches River at Effingham
- Waccamaw River at Conway

Most other rivers have a less than 10% chance of reaching minor flood.

Rainfall amount forecast in the ensembles has been trending up the last several days.

People along all rivers in southeast NC and northeast SC are encouraged to take action now to prepare for minor river flooding.
Do not focus just on the intensity of the storm when it comes to determining actions/decisions regarding the storm surge threat

Surge inundation of 2 to 4 ft is expected along the coastal areas between Little River and the South Santee River including bays, waterways, and tidal creeks. From Surf City to Little River surge inundation is expected to be 1 to 3 ft.

The inundation associated with the high tides during Friday are expected to be the worst during this event

Any further deviation with Ian’s forecast could result in higher values
There is a Marginal Risk (1 of 5) for tornadoes across portions of northeast SC and southeast NC.

The risk for isolated tornadoes will increase during early Friday morning and persist through Friday night.
Need to prepare for a high end tropical storm and low end hurricane with respect to winds. Winds from Ian will arrive during Friday with gusts up to 60 mph possible, especially across portions of northeast SC.

Surge inundation is likely with each high tide from Thursday through Saturday, with the worst surge during high tide Friday.

Heavy rainfall is likely especially during Friday and Friday night. This rainfall could lead to flash flooding, especially near low-lying and other flood prone locations.

Isolated tornadoes are possible, with the risk developing early Friday morning and persisting into Friday night.

Hazardous marine conditions are expected across the coastal waters Thursday through Saturday.
Tropical Storm Ian

National Weather Service Wilmington, NC - serving southeast NC and northeast SC

The Next Briefing for northeast SC and southeast NC: Thursday September 29th at 6:00 PM EDT

Web: http://weather.gov/ilm
E-mail: nws.ilm.operations@noaa.gov

Facebook: NWSWilmingtonNC
Twitter: NWSWilmingtonNC
YouTube: NWSWilmingtonNC

For the latest graphics and information go to: www.hurricanes.gov or https://www.weather.gov/ilm/tropical