



# TROPICAL STORM IAN BRIEFING

6:00 AM ET

Thursday, September 29, 2022

What Has Changed: Ian now a tropical storm. Intensity of Ian increased to 70 mph at landfall Friday. Flood Watch expanded into inland SC counties.

Next Briefing: Webinar Thursday, Sept. 29, 2022 @ 11:30 AM EDT



# Situation Overview

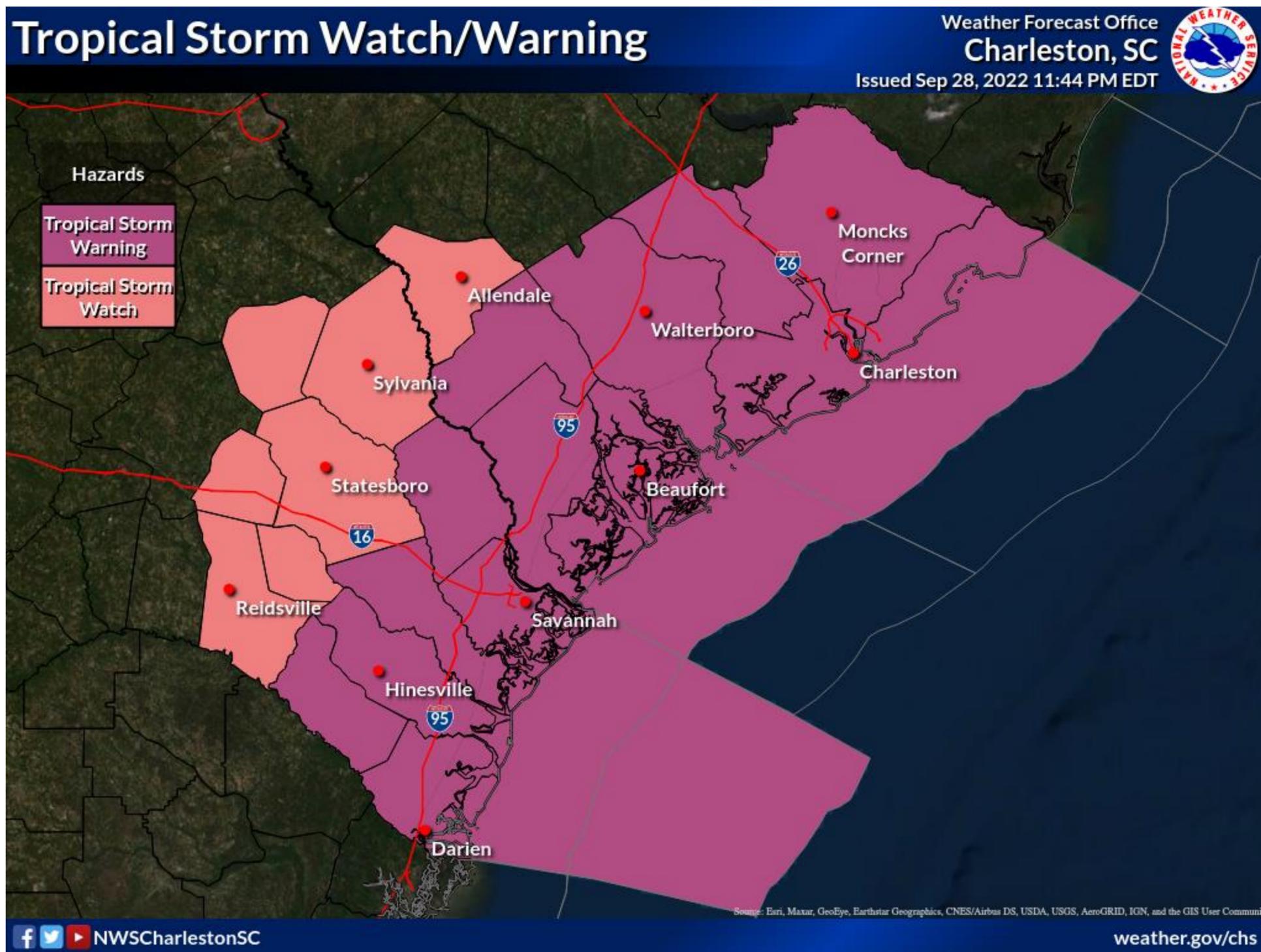
## Tropical Storm Ian

- Track and associated landfall along SC coast has shifted slightly farther east. No significant changes from the previous intensity forecast from NHC.
- Confidence continues to increase that “Ian” will make landfall along the southern SC coast Friday afternoon. However, it’s still too early for a precise, high confidence forecast of landfall location.
- Prepare for high end Tropical Storm to low end Hurricane Conditions. Now is the time to complete hurricane preparedness activities.



# Watches and Warnings

Tropical Storm Ian



- **Tropical Storm Warning** for coastal counties, marine zones and Dorchester, inland Colleton and Hampton Counties
- **Tropical Storm Watch** remains in effect for for other inland counties



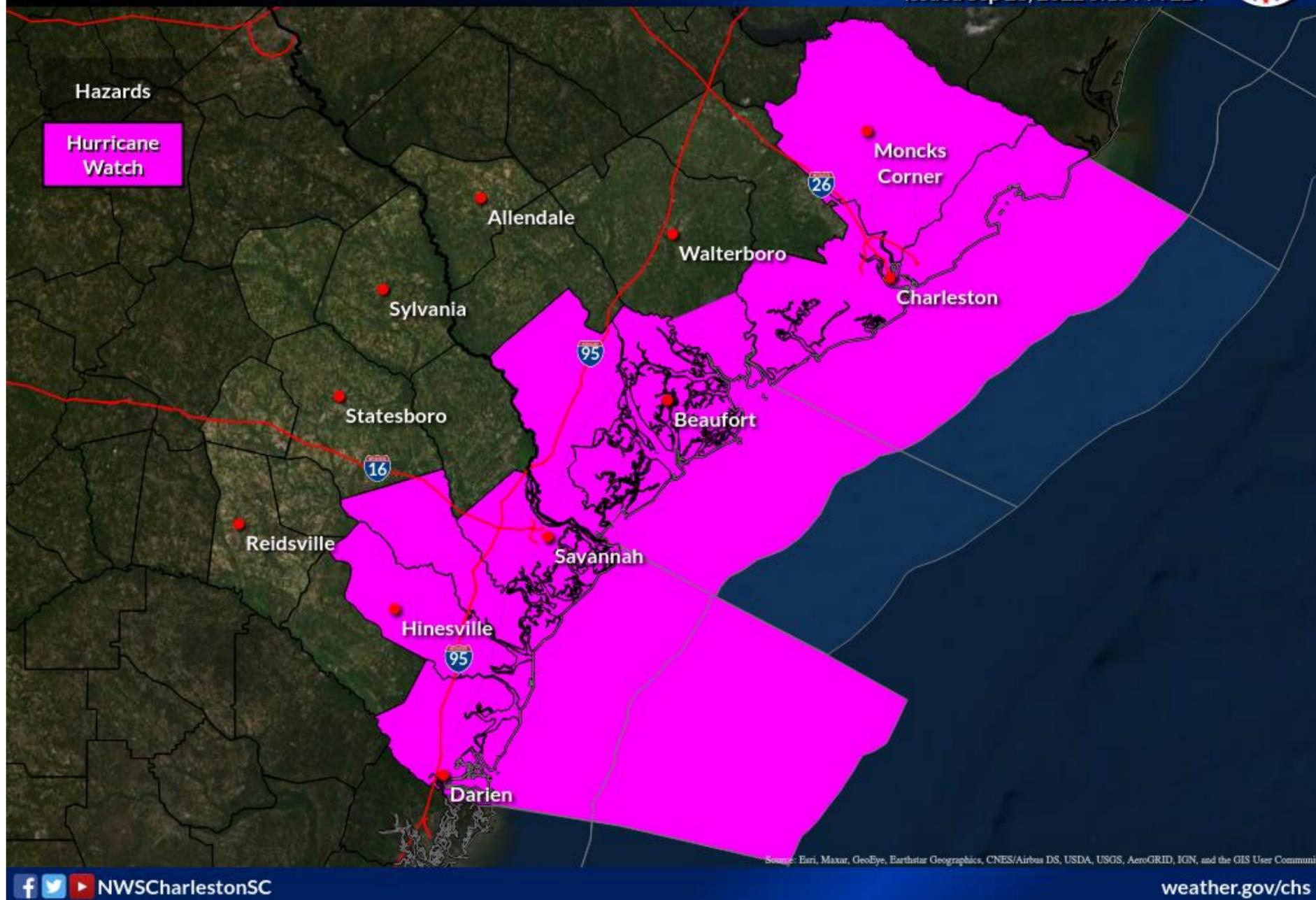
# Watches and Warnings

Tropical Storm Ian

## Hurricane Watch

Weather Forecast Office  
Charleston, SC

Issued Sep 28, 2022 5:15 PM EDT



- **Hurricane Watch** continues for coastal counties for the potential for low end Hurricane force wind/wind gusts Friday, especially close to the coast



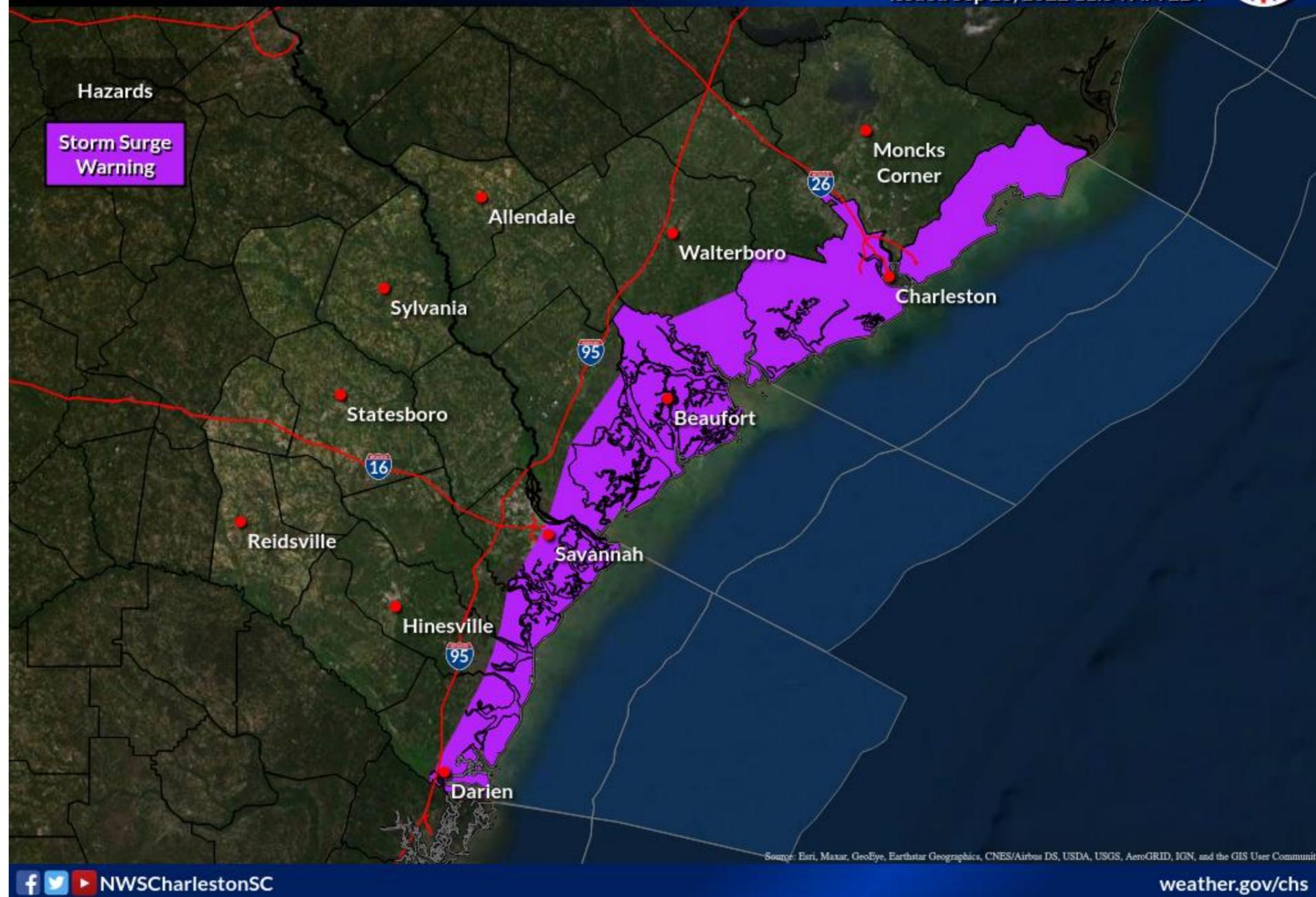
# Watches and Warnings

Tropical Storm Ian

## Storm Surge Warning

Weather Forecast Office  
Charleston, SC

Issued Sep 28, 2022 11:54 AM EDT



- **Storm Surge Warning** remains in effect for the entire coast
- Reasonable worst-case scenario: life-threatening storm surge inundation of 3-5 feet above ground level possible in/around tidal regions, especially Friday.
- **Note:** The highest inundation values are most likely to occur if the peak storm surge coincides with the time of high tide



# Situation Overview

## Tropical Storm Ian

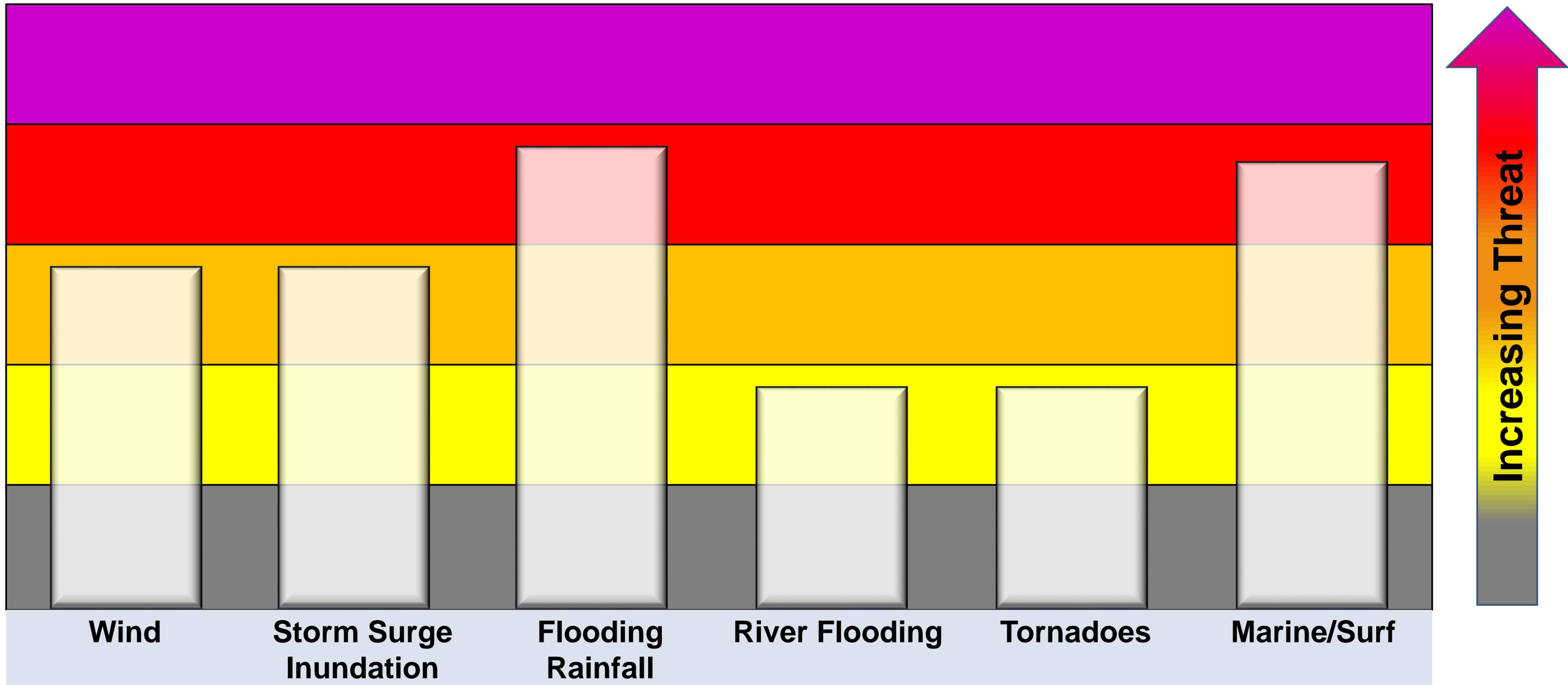
Hazard	Impacts	Location	Timing
 <b>Wind</b>	<p>Potential for tropical storm force winds/gusts, possibly low end hurricane gusts, causing scattered power outages, downed trees/limbs. Minor structural damage possible</p>	<p>All locations across our region. Strongest wind gusts are likely across coastal counties, inland counties of SC and across Atlantic waters, including Charleston Harbor</p>	<p>Early Thu-Fri Night immediate coast &amp; Atlantic waters. Fri-Fri Night inland as storm makes landfall</p>
 <b>Storm Surge Inundation</b>	<p>Life threatening storm surge inundation expected Friday. Moderate to major coastal flooding expected today and tonight. Travel disruptions, some damage to structures and coastal roads, moderate-major beach erosion</p>	<p>In/around tidal portions of the SC Lowcountry and GA Coastal Empire</p>	<p>Greatest potential for life-threatening storm surge inundation Fri. Other episodes of moderate to major coastal flooding around times of high tide today and tonight</p>
 <b>Flooding Rain</b>	<p>Potential for Moderate to Major Flash Flooding from heavy rainfall, causing flooded roads, some damage to structures</p>	<p>Much of the area from the Savannah River northward, especially the coastal regions</p>	<p>Heaviest rainfall rates and amounts Friday</p>
 <b>Tornadoes</b>	<p>Potential for isolated tornadoes, which could impact emergency plans, cause power outages</p>	<p>Mainly Charleston Tri-County region Friday into Friday evening</p>	<p>Fri-Fri Night, highest potential Fri during the day</p>
 <b>Marine/Surf</b>	<p>Potential for life-threatening marine/beach conditions, including high surf, beach erosion and rip currents</p>	<p>SC Lowcountry/GA Coastal Empire beaches/nearby Atlantic waters, including Charleston Harbor</p>	<p>Wed Night through early Sat, with the worst conditions Fri-Fri Night</p>



# Threat Levels

Tropical Storm Ian

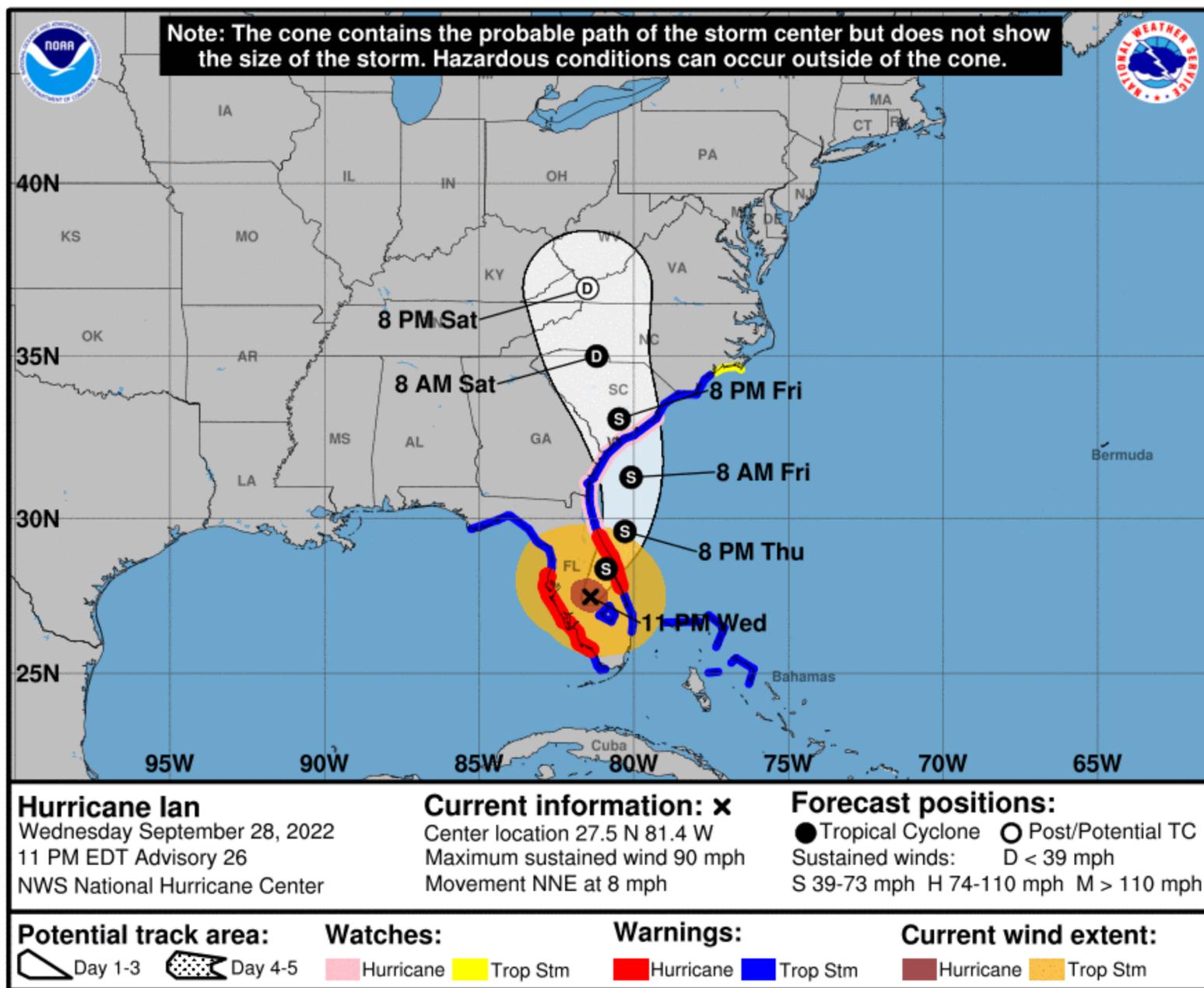
For information on specific hazards in this area, please go to <https://www.weather.gov/chs/tropical>





# Situation Overview

## Tropical Storm Ian



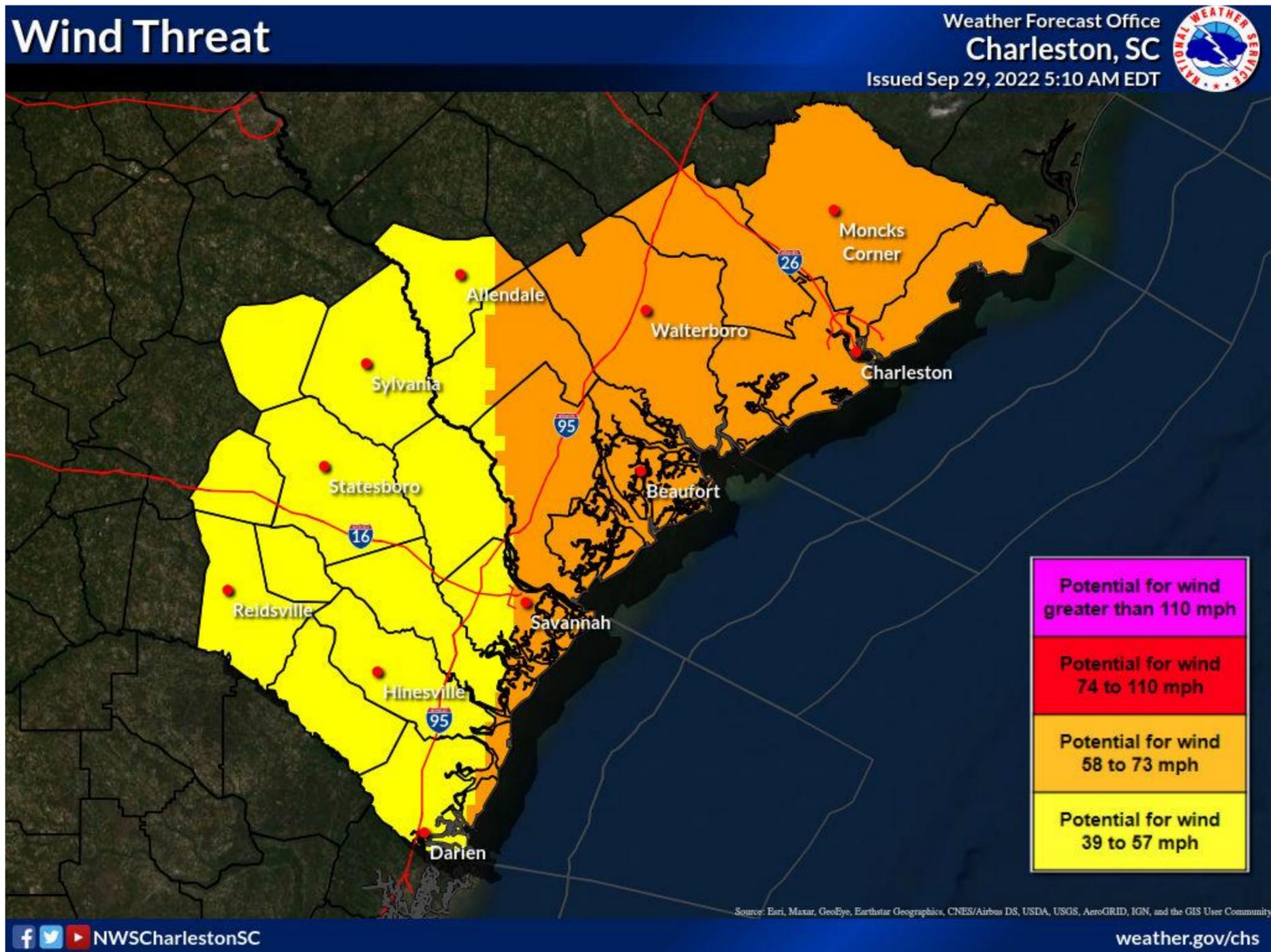
- “Ian” is a tropical storm poised to advance off the eastern FL coast and into the Atlantic. “Ian” is then expected to turn toward the north today and make landfall along the SC coast as a strong tropical storm Friday.
- Confidence in storm track continues to increase.
- **REMEMBER:** Don’t focus on the center line of the track, since impacts occur well away from the center of the storm!

**NOTE:** Do not focus on the exact track as impacts can occur well outside the area enclosed by the cone!



# Wind Threat & Potential Impacts

Tropical Storm Ian



## Main Threat Area:

- Coastal Counties and Atlantic Waters. Tropical Storm conditions are expected, and Hurricane force wind gusts are possible, especially coastal and marine areas. Strongest wind gusts should occur within rain bands

## Main Threat Timing:

- Tropical Storm Force Wind Gusts will continue along immediate coastal areas/barrier islands, through Thursday. Tropical Storm winds will increase in coverage and intensity from south to north Thursday night, and strongest winds are expected Friday into Friday evening.

## Main Potential Impacts:

- Scattered power outages possible due to downed limbs/trees
- [Additional Potential Impact Statements](#)

\*NOTE: Graphic incorporates forecast uncertainty and represents what should be prepared for



# Tropical Storm Wind Speed Probabilities

Tropical Storm Ian



## Main Threat Area:

- All areas, with strongest winds most likely across coastal counties, inland SC counties and Atlantic Waters

## Main Threat Timing:

- Tropical Storm Force Wind Gusts along the coast and across coastal waters today. Tropical storm winds will increase in coverage and intensity tonight. Strongest winds expected Friday into Friday evening.

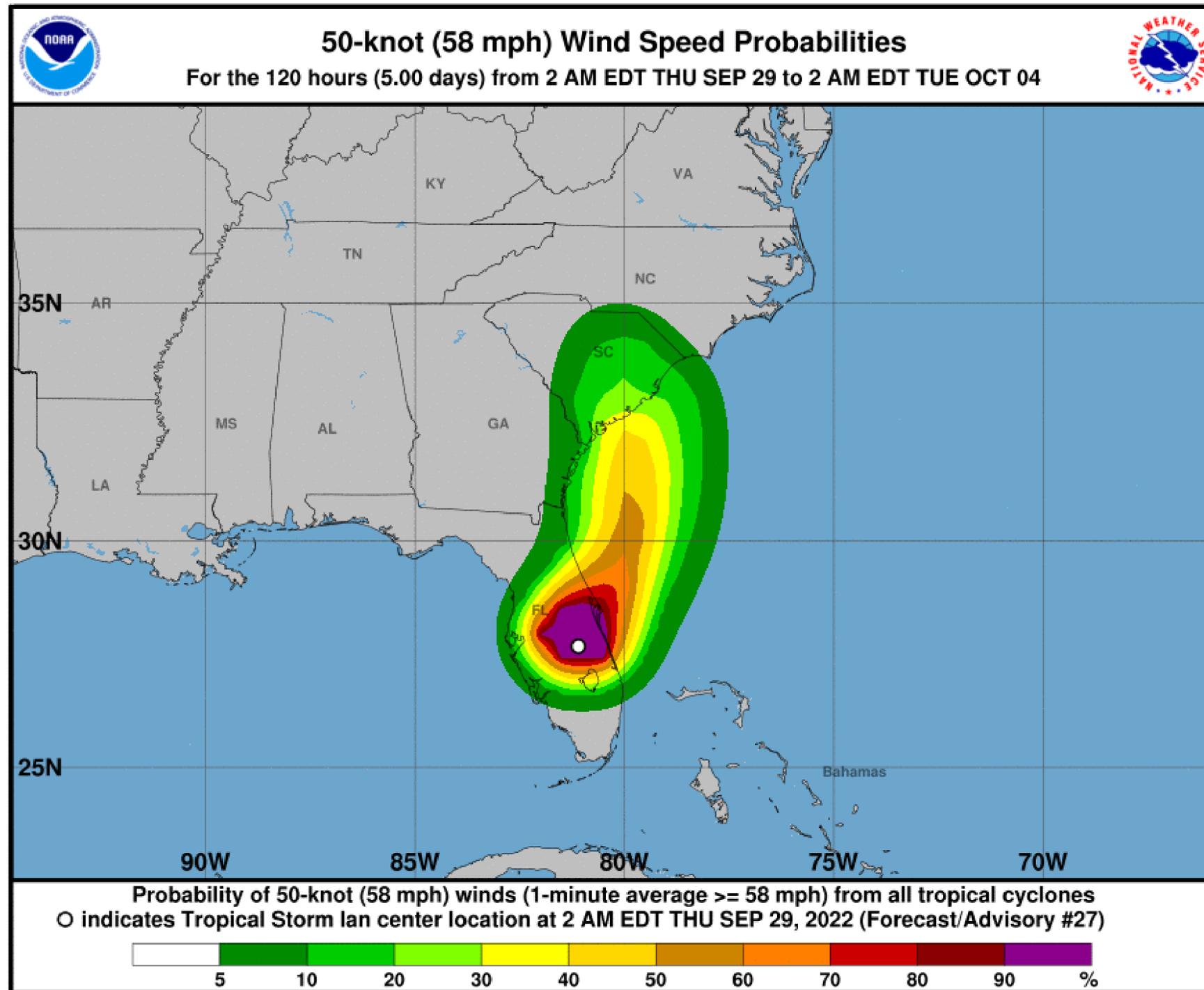
## Main Potential Impacts:

- Scattered power outages due to downed limbs/trees possible
- Minor structural damage possible.
- [Additional Potential Impact Statements](#)



# 50kt (58mph) Wind Speed Probabilities

Tropical Storm Ian

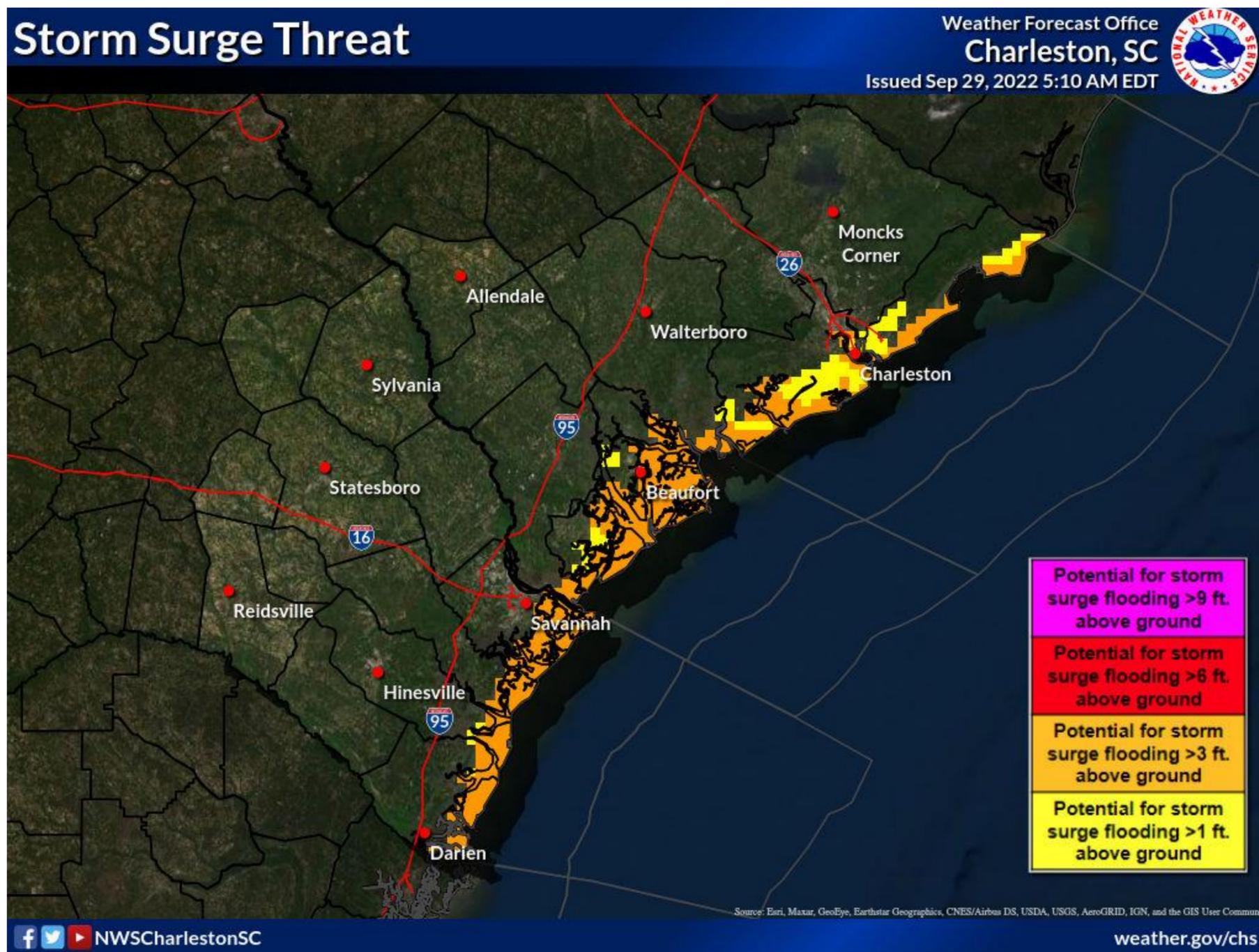


- The probability for 50 knot (58 mph) winds continues to increase in many areas
- Probabilities are highest along the SC coast
- The probability for 50 knot winds may continue to increase within subsequent Advisories



# Storm Surge Threat & Potential Impacts

Tropical Storm Ian



## Main Threat Area:

- Tidal portions of coastal SC and GA from the Altamaha to the South Santee River

## Main Threat Timing:

- Thursday through Friday. Greatest potential for life-threatening storm surge Friday.

## Potential Impacts:

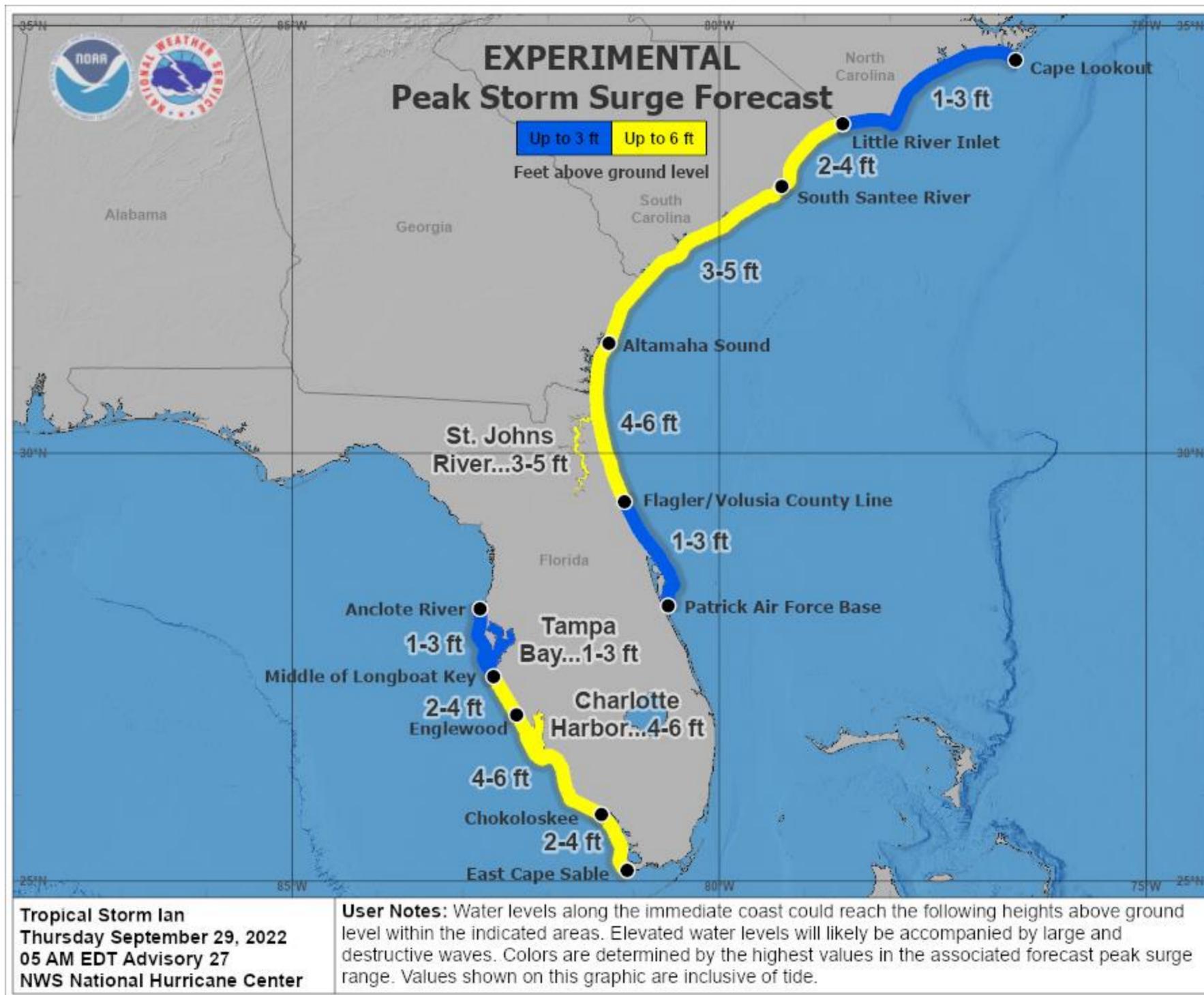
- Reasonable worst-case scenario: 3-5 feet of life-threatening storm surge inundation possible for all coastal areas
- Significant coastal flooding of roads/properties
- Moderate to major beach erosion
- [Additional Potential Impact Statements](#)

\*NOTE: Graphic incorporates forecast uncertainty and represents what should be prepared for



# Potential Storm Surge

Tropical Storm Ian



## Main Risk Area:

- All coastal counties from Altamaha River to South Santee River

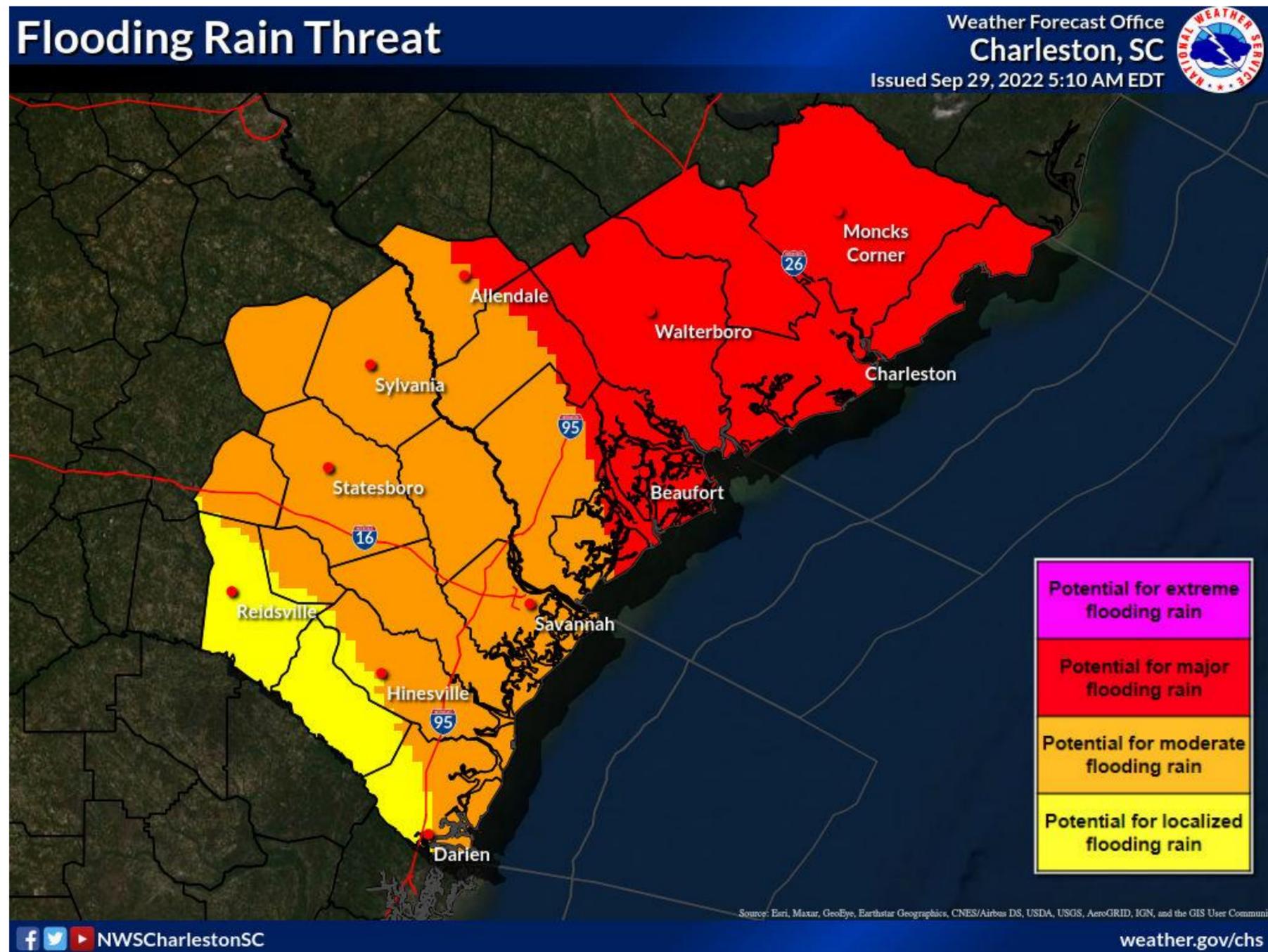
## Timing:

- Highest probability for life-threatening storm surge inundation Friday



# Flooding Rainfall Threat & Potential Impacts

Tropical Storm Ian



## Main Threat Area:

- SC counties

## Main Threat Timing:

- Friday through Friday evening. Heavy rain falling around the times of Friday high tides will exacerbate flooding along the coast, including downtown Charleston

## Main Potential Impacts:

- 4-8 inches of rainfall expected, with local maximum amounts 12 inches possible.
- Moderate to major flooding of low-lying/poorly drained areas, especially in/around urban coastal areas around times of high tide
- [Additional Potential Impact Statements](#)

\*NOTE: Graphic incorporates forecast uncertainty and represents what should be prepared for

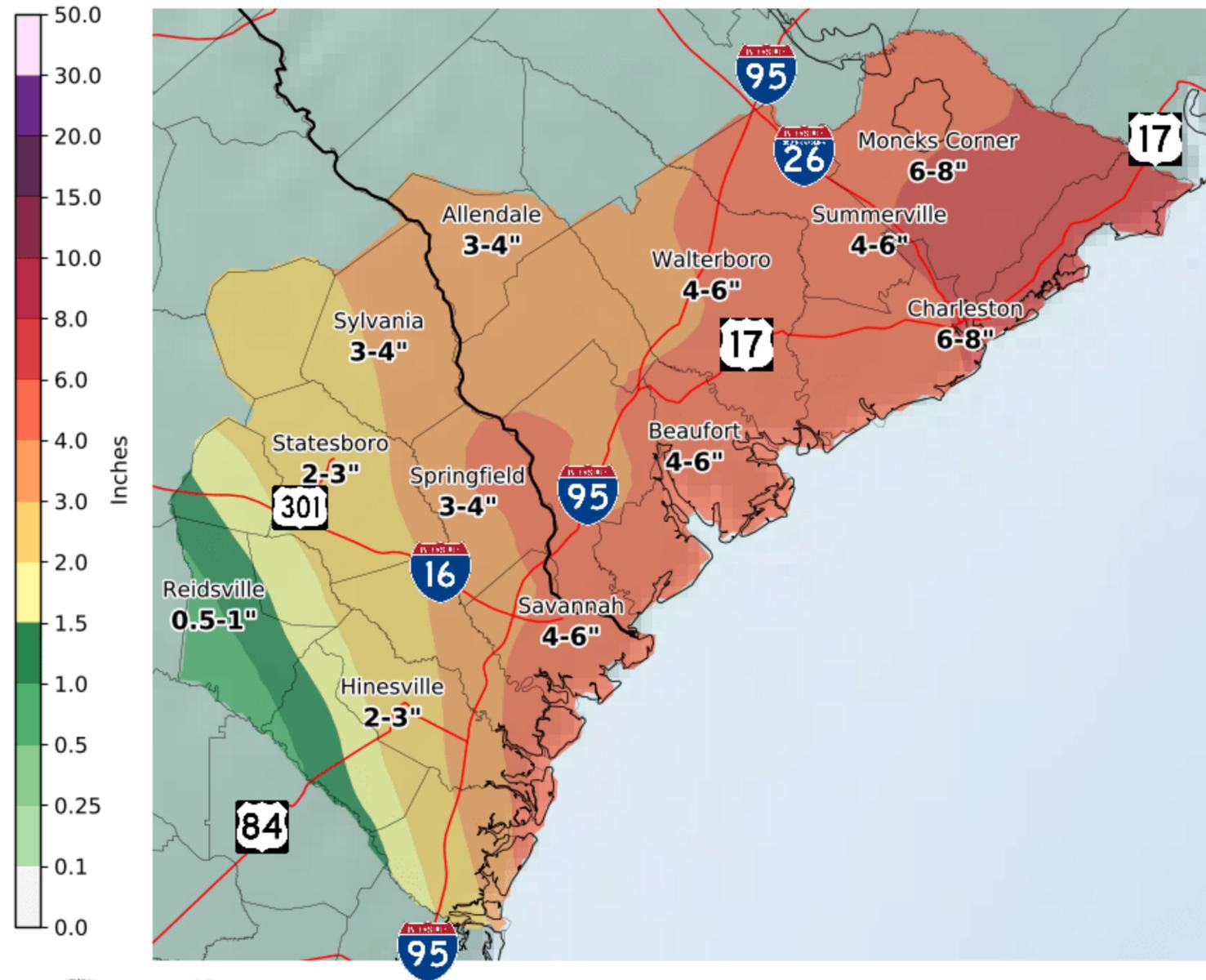


# Expected Storm Total Rainfall

Tropical Storm Ian

## Precipitation Forecast

Valid: 09/29/2022 08:00 AM - 10/01/2022 08:00 AM



National Weather Service  
Charleston, SC  
09/29/2022 03:50 AM EDT

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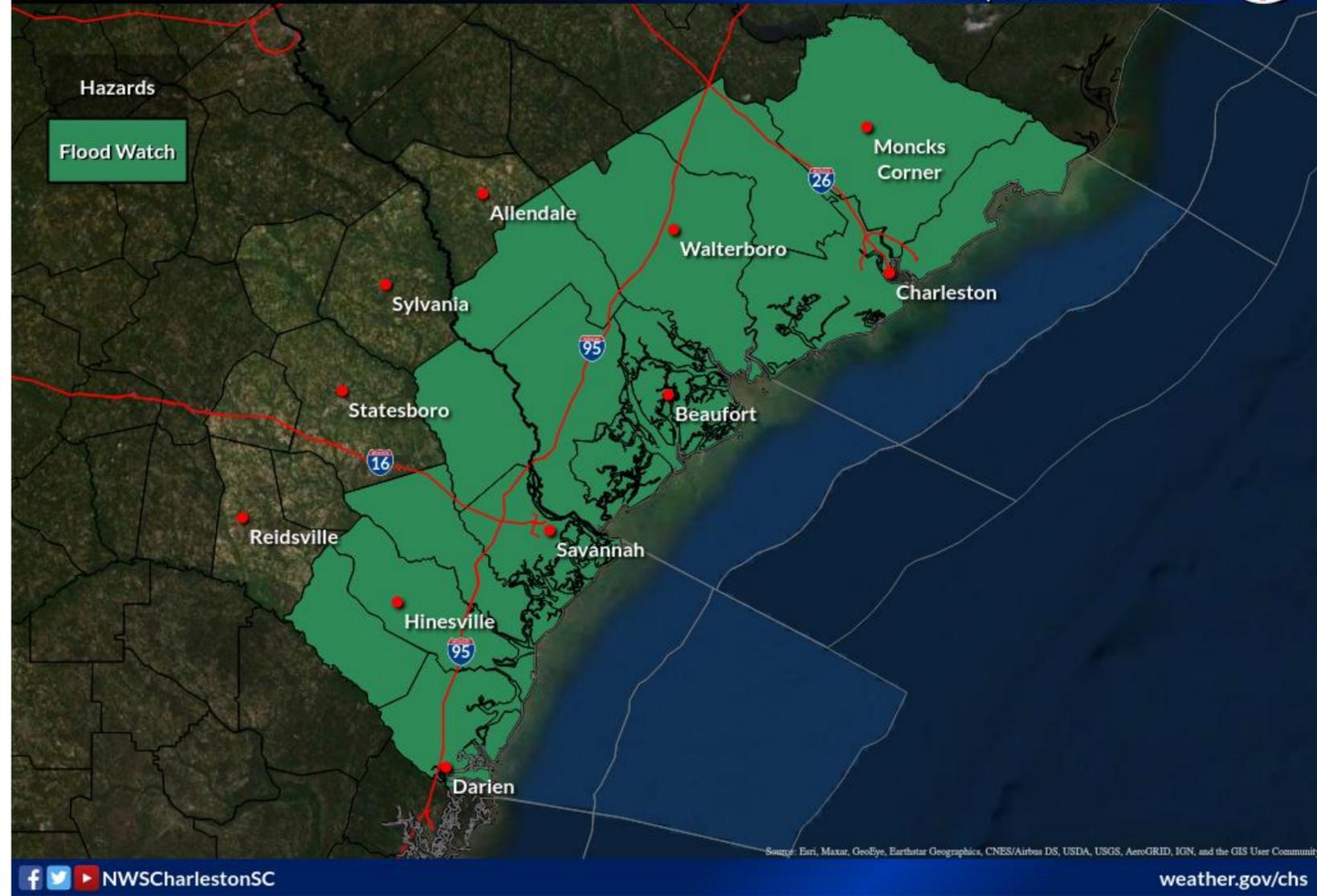


[weather.gov/chs](https://www.weather.gov/chs)

## Flood Watch

Weather Forecast Office  
Charleston, SC

Issued Sep 29, 2022 5:00 AM EDT

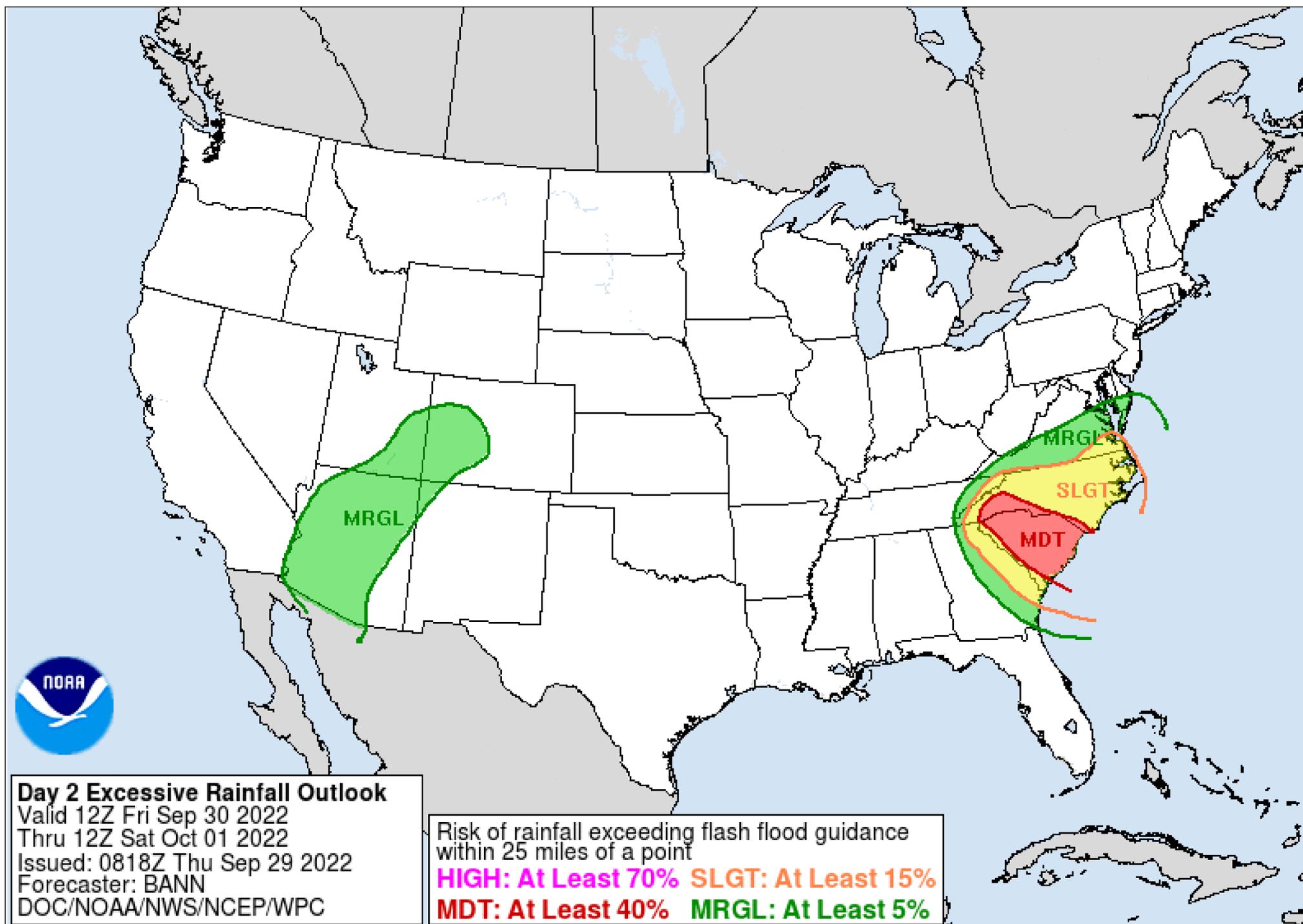


4-8 inches of rainfall. Localized amounts as high as 12 inches along and east of I-95



# Excessive Rainfall Outlook

Tropical Storm Ian

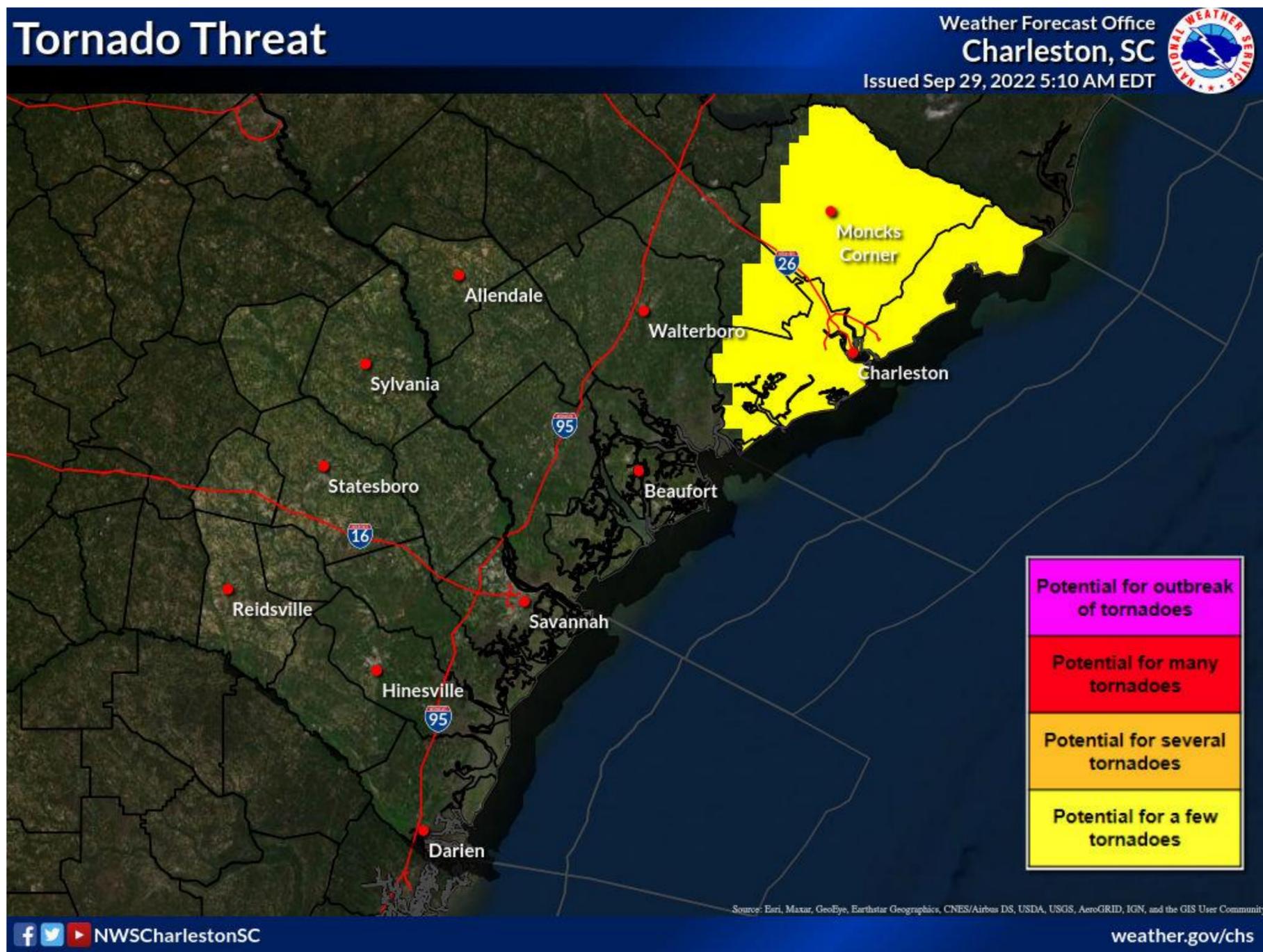


- Moderate Risk for excessive rainfall (Areas outlined in red have the greatest potential for flash flooding on Friday)



# Tornado Threat & Potential Impacts

Tropical Storm Ian



## Main Threat Area:

- Mainly the Charleston Tri-County region

## Main Threat Timing:

- Early Friday through Friday evening

## Main Potential Impacts:

- Isolated damage to trees, power lines and mobile homes
- Isolated power outages
- [Additional Potential Impact Statements](#)

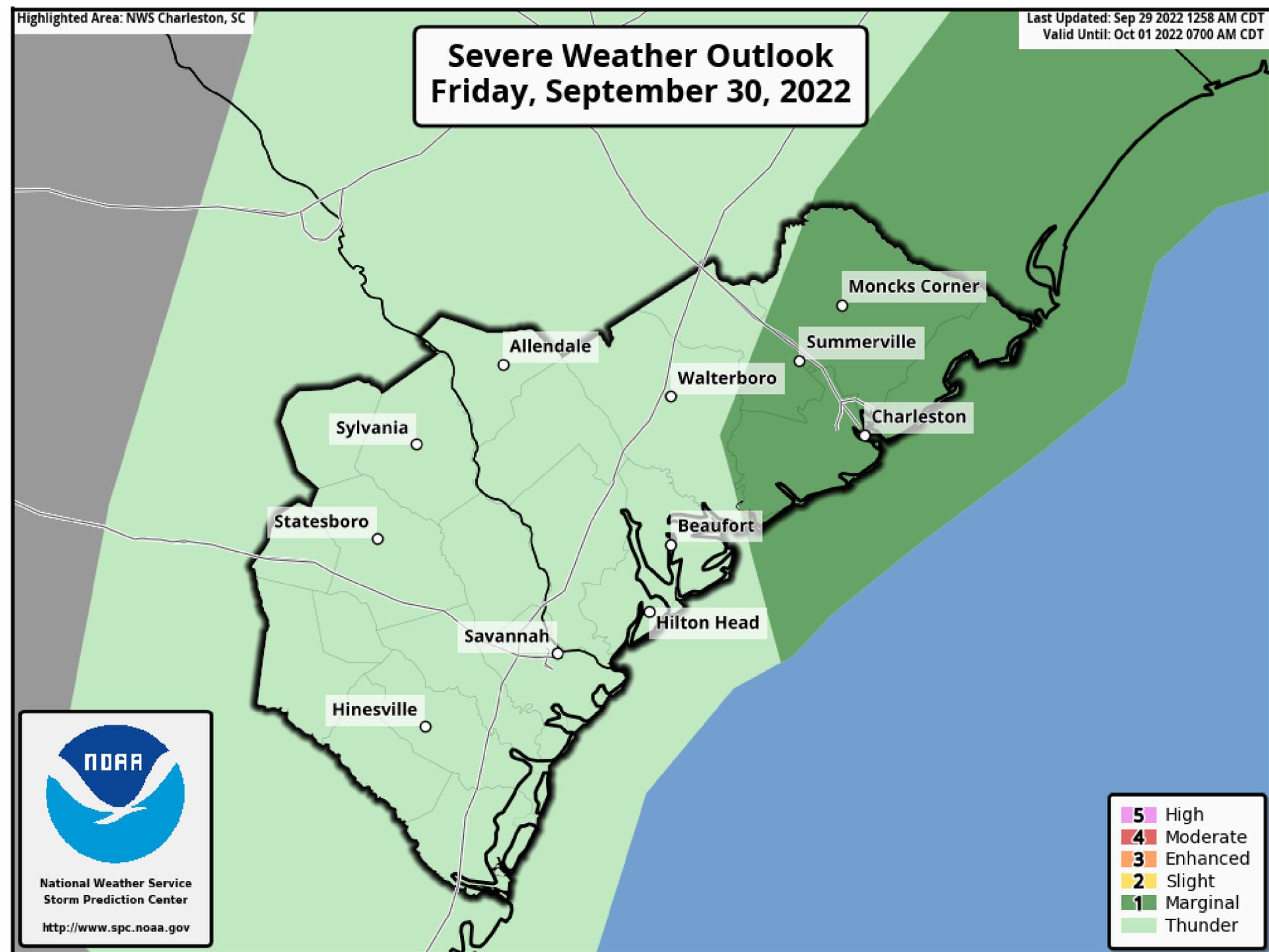
**NOTE:** Tropical tornadoes are typically weak and short-lived and may occur with little to no warning.

\*NOTE: Graphic incorporates forecast uncertainty and represents what should be prepared for



# Tornado Potential

Tropical Storm Ian



## Main Threat Area:

- Charleston Tri-County region

## Main Threat Timing:

- Friday into Friday evening

## Main Potential Impacts:

- Isolated tornadoes capable of damaging trees, power lines and mobile homes
- Isolated power outages

NOTE: Tropical tornadoes are typically weak, small and short-lived and thus may occur with little to no warning.



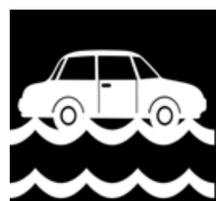
# Key Take-Aways

## Tropical Storm Ian

- ✓ Confidence that the storm will impact the area is HIGH
- ✓ Confidence in extent of impacts is MODERATE to HIGH



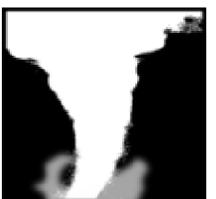
**Minor wind damage possible today and tonight. Minor to moderate wind damage possible** Friday into Friday evening. Strongest tropical storm force winds, and possibly low end hurricane wind gusts, are expected along the immediate coast and within any rain bands Friday into Friday evening.



**Life threatening storm surge inundation expected, especially Friday. Moderate to major coastal flooding expected today and tonight**, especially during times of high tide.



**Moderate to High threat for flooding rainfall**, especially Friday. Greatest potential for rainfall flooding is expected along and east of I-95, including coastal communities around the times of high tide Friday.



**Isolated tornadoes possible**, mainly within stronger rain bands Friday into Friday evening, especially across the Charleston Tri-County region.



**Life-threatening marine/surf conditions through Friday.** Moderate to severe beach erosion, high surf conditions and dangerous rip currents expected.



# Next Briefing/Contact Info

## Next Briefing (Webinar):

Thursday 11:30 AM EDT

NOTE: slides also posted at: [weather.gov/chs/briefing](http://weather.gov/chs/briefing)



**Web:** [weather.gov/chs](http://weather.gov/chs)



**Phone:** (843) 747-5860 (public line)



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



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