



# Tropical Storm Debby Briefing

6 AM ET

Thursday, August 8, 2024

## What has changed:

Tornado Watch in effect until 1pm Thursday

Tropical Storm Warning now in effect for: Coastal Onslow and West and East Carteret.



# Situation Overview






## Tropical Storm Debby

- Tropical Storm Debby made landfall in South Carolina early this morning and will continue lifting north through central North Carolina this afternoon into early Friday morning.
- The biggest impact from TS Debby will be **life-threatening flash flooding** due to several days of heavy rainfall, lasting through Friday. Additional rainfall amounts will range **2-6 inches, with locally higher amounts possible**. A Flash Flood Watch remains in effect through Friday evening.
- Tropical Storm Force winds will be possible for coastal portions of Onslow and Carteret Counties, resulting in storm surge inundation of **1 to 2 feet above ground** for these locations as TS Debby passes through NC today and early Friday.
- In addition, there is a threat for gusty winds and tornadoes today through Friday.



# Situation Overview

## Tropical Storm Debby

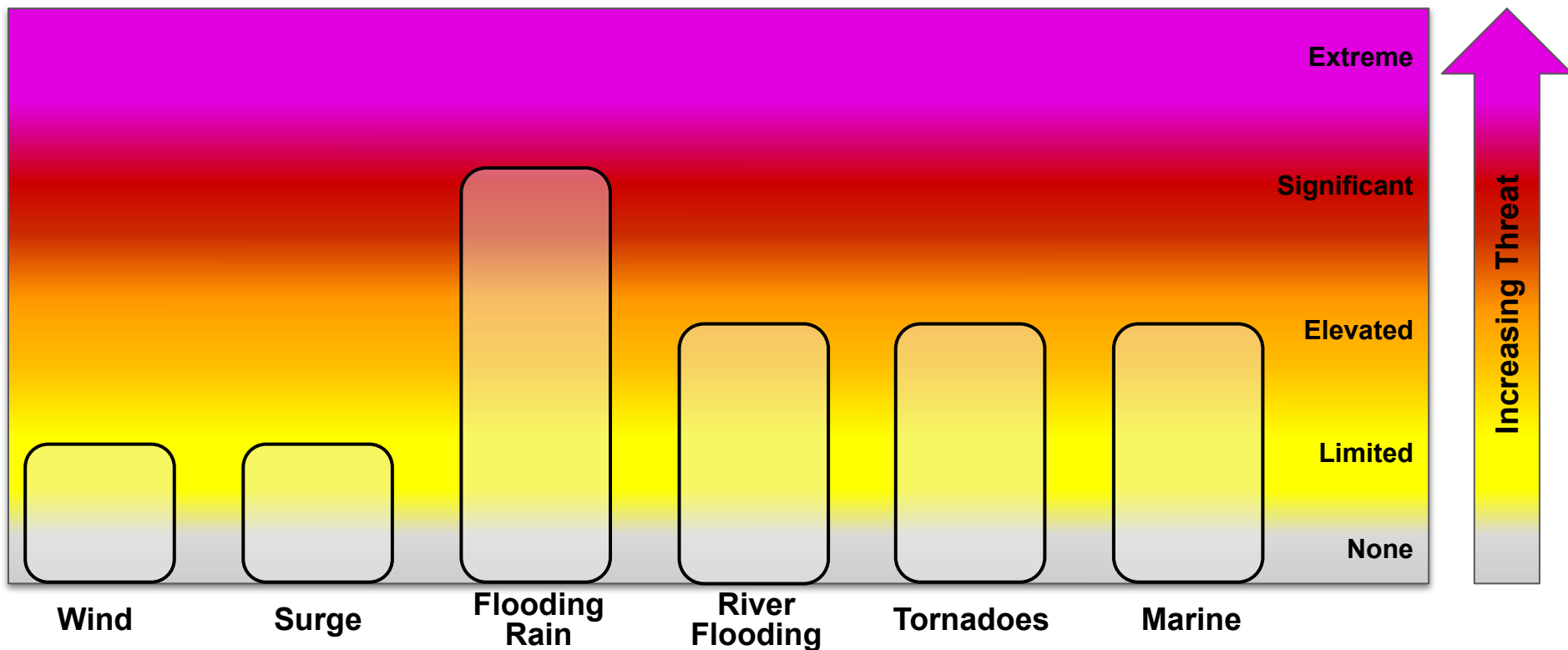
Hazard	Impacts	Location	Timing
 <b>Wind</b>	Limited impacts from tropical storm force winds will be possible	Mainly along the coast of Onslow & Carteret Counties, and adjacent coastal waters	Through Friday
 <b>Storm Surge &amp; Inundation</b>	Inundation of 1-3 feet above ground will be possible, limited impacts elsewhere	Mainly along the coast of Onslow & Carteret Counties	Through Friday
 <b>Flooding Rain</b>	Life-threatening flash flooding will be possible due to heavy rain.	All of Eastern NC	Through Friday
 <b>Tornado</b>	Potential for tornadoes.	All of Eastern NC	Through Friday
 <b>Marine</b>	Dangerous winds/seas likely, resulting in rough surf and high threat of rip currents	All coastal waters and beaches	Through Friday



# Threat Levels

Tropical Storm Debby

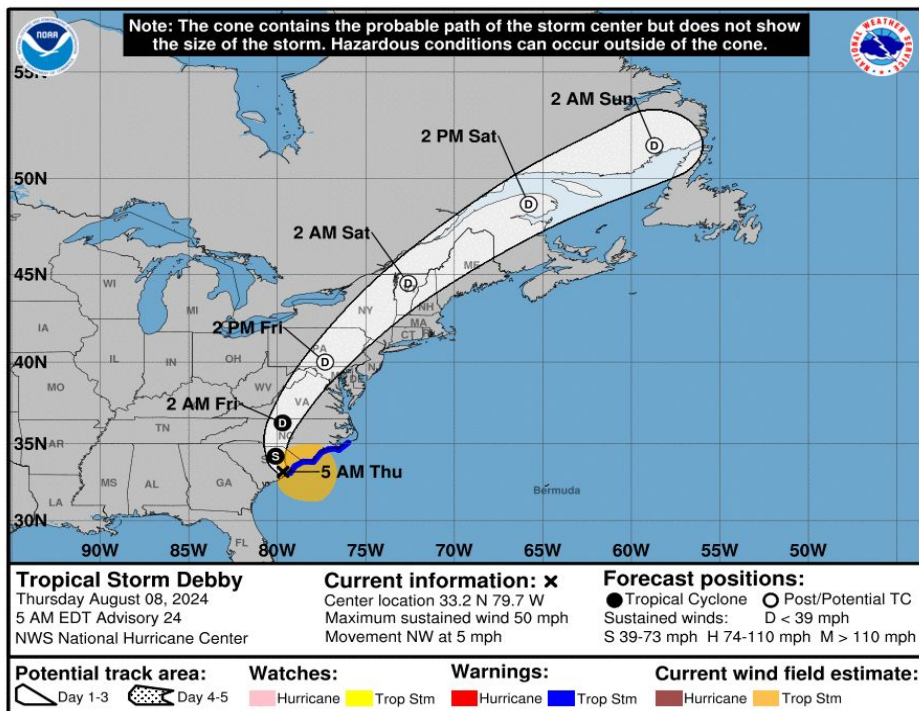
For information on specific hazards in this area, please go to: <https://www.weather.gov/mhx/tropical>





# Situation Overview

## Tropical Storm Debby



- TS Debby will slowly lift northward through SC and into central NC today into early Friday.
- Tropical Storm Warnings in effect for Onslow and Carteret counties.
- Remember, the primary impact from TS Debby will be flash flooding from heavy rainfall that will last through Friday.

**NOTE:** Do not focus on the exact track.  
Impacts can occur well outside the area enclosed by the cone.



# Inland Flooding Impacts

Tropical Storm Debby

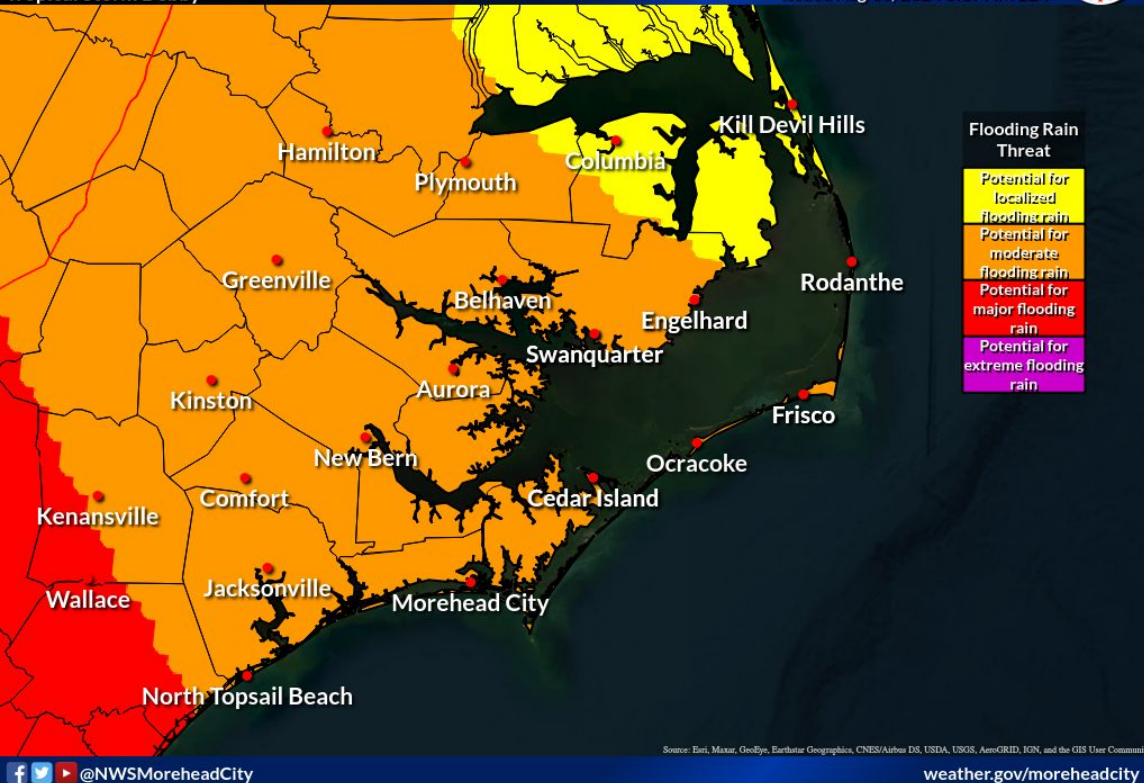
## Flooding Rain Threat

Tropical Storm Debby

Weather Forecast Office

Newport/Morehead City, NC

Issued Aug 08, 2024 6:19 AM EDT



- Areas outlined in orange and red have the greatest potential for flash flooding from tonight through Friday.
- Major rainfall flooding may prompt evacuations and rescues.
- Rivers and tributaries may rapidly overflow their banks in multiple places. Small streams, creeks, canals, and ditches may become dangerous rivers.



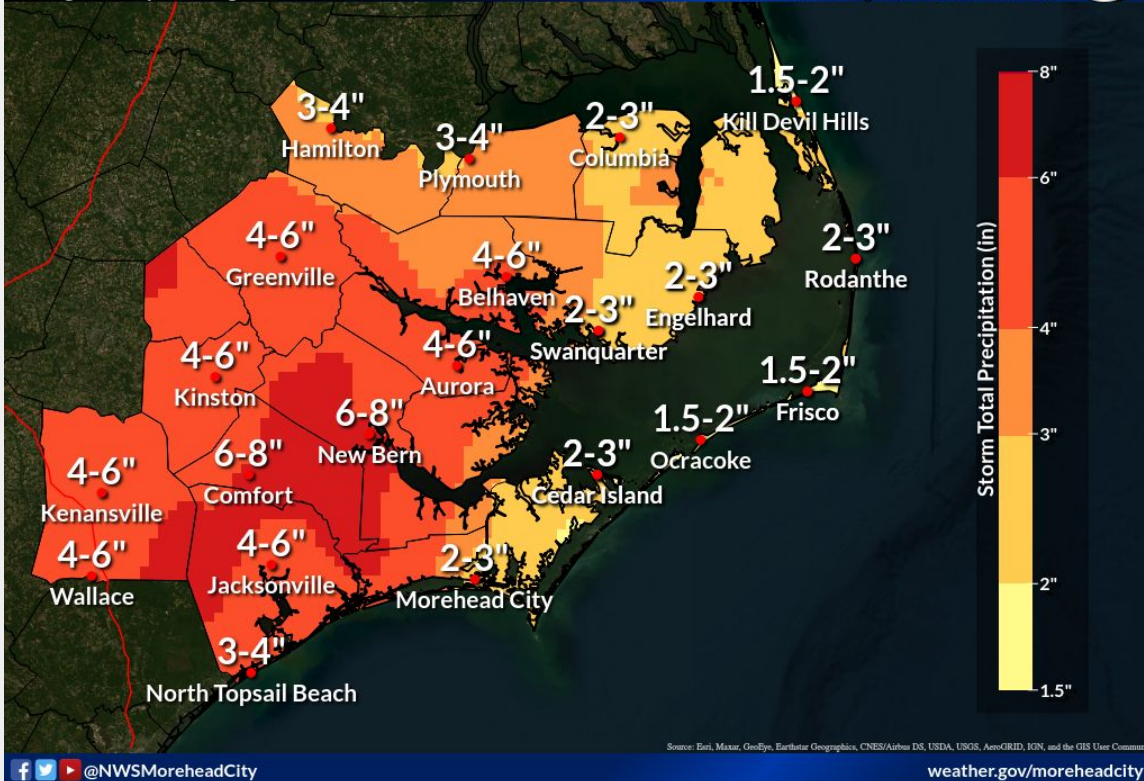
# Expected Storm Total Rainfall

Tropical Storm Debby

## Storm Total Rainfall

Through Sunday Morning

Weather Forecast Office  
Newport/Morehead City, NC  
Issued Aug 08, 2024 6:24 AM EDT



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

[weather.gov/moreheadcity](http://weather.gov/moreheadcity)

- Storm Total Rainfall through Sunday morning will range from 2 to 6 inches with locally higher amounts possible.
  - Eastern NC has already observed 2 to 5 inches of rainfall from TS Debby with locally heavier amount of up to 7 inches in some locations.
- Greatest potential for Flash Flooding will be along and west of HWY 17.
- Do not drive through flooded roads. The majority of flood deaths are in vehicles. Turn around don't drown!

[f](https://www.facebook.com/NWSMoreheadCity) [i](https://www.instagram.com/NWSMoreheadCity) [y](https://www.youtube.com/NWSMoreheadCity) @NWSMoreheadCity

Last updated: 8/8/2024 6 AM EDT

National Weather Service - Newport/Morehead City, NC



# Wind Threat / Potential Impact

Tropical Storm Debby

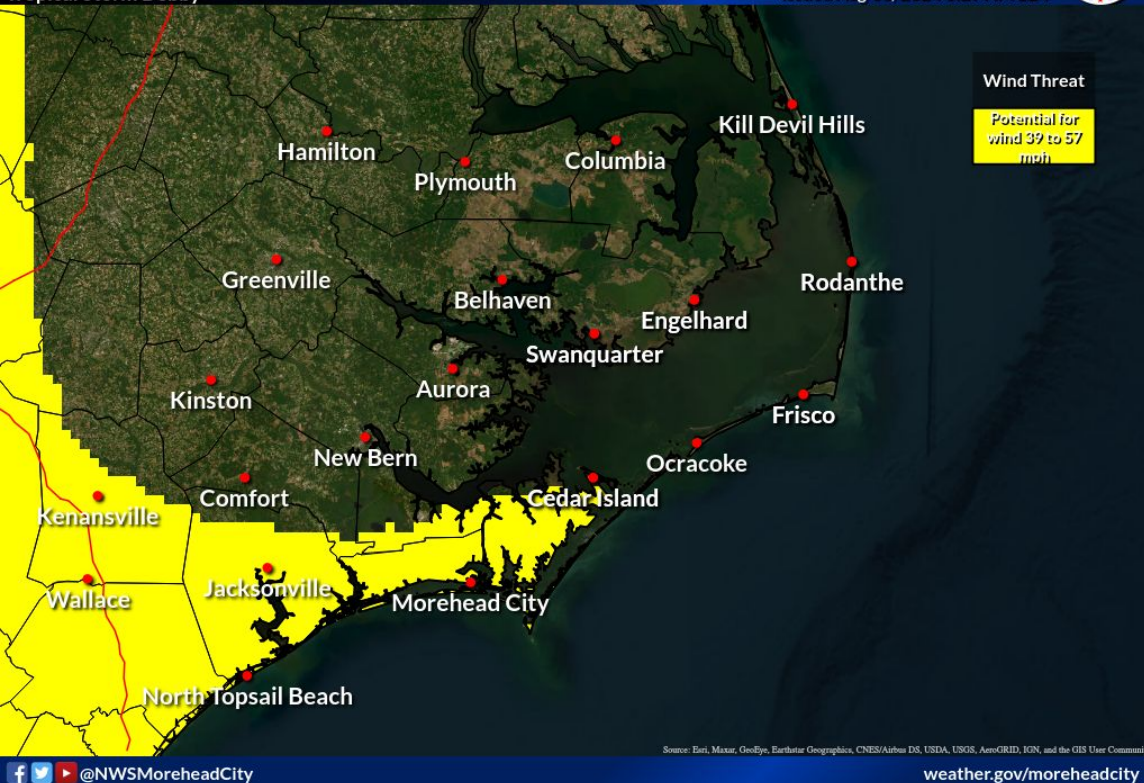
## Wind Threat

Tropical Storm Debby

Weather Forecast Office

Newport/Morehead City, NC

Issued Aug 08, 2024 6:29 AM EDT



There is a potential for:

- Damage to porches, awnings, carports, sheds, and unanchored mobile homes. Unsecured lightweight objects blown about.
- A few trees snapped or uprooted, but with greater numbers in places where trees are shallow rooted and soils are saturated.
- Scattered power and communication outages.





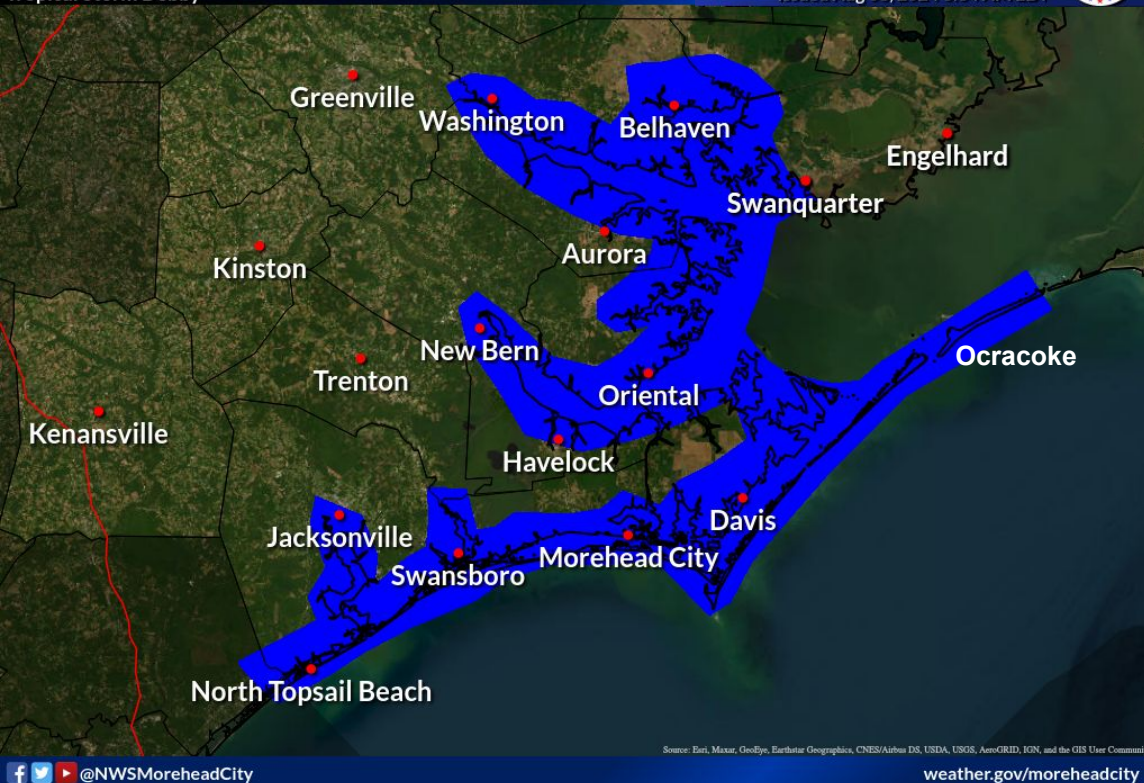
# Peak Storm Surge

Tropical Storm Debby

## Storm Surge

Tropical Storm Debby

Weather Forecast Office  
Newport/Morehead City, NC  
Issued Aug 08, 2024 6:34 AM EDT



Source: Earth, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

[weather.gov/moreheadcity](http://weather.gov/moreheadcity)

[f](#) [t](#) [v](#) [@NWSMoreheadCity](#)

- Storm surge inundation of 1 to 2 feet will be possible for coastal portions of Onslow, Carteret, and Hyde Counties (Surf City to Ocracoke Island), and for Counties adjacent to the Pamlico, Pungo, Neuse and Bay Rivers
- Coastal Flood Advisory remains in effect for Carteret & Onslow Counties. The Coastal Flood Advisory has been expanded to include Beaufort, Craven, Hyde, and Pamlico Counties.
- Elsewhere, limited storm surge inundation up to 1 foot will be possible.



# Maximum Wind Gusts

Tropical Storm Debby

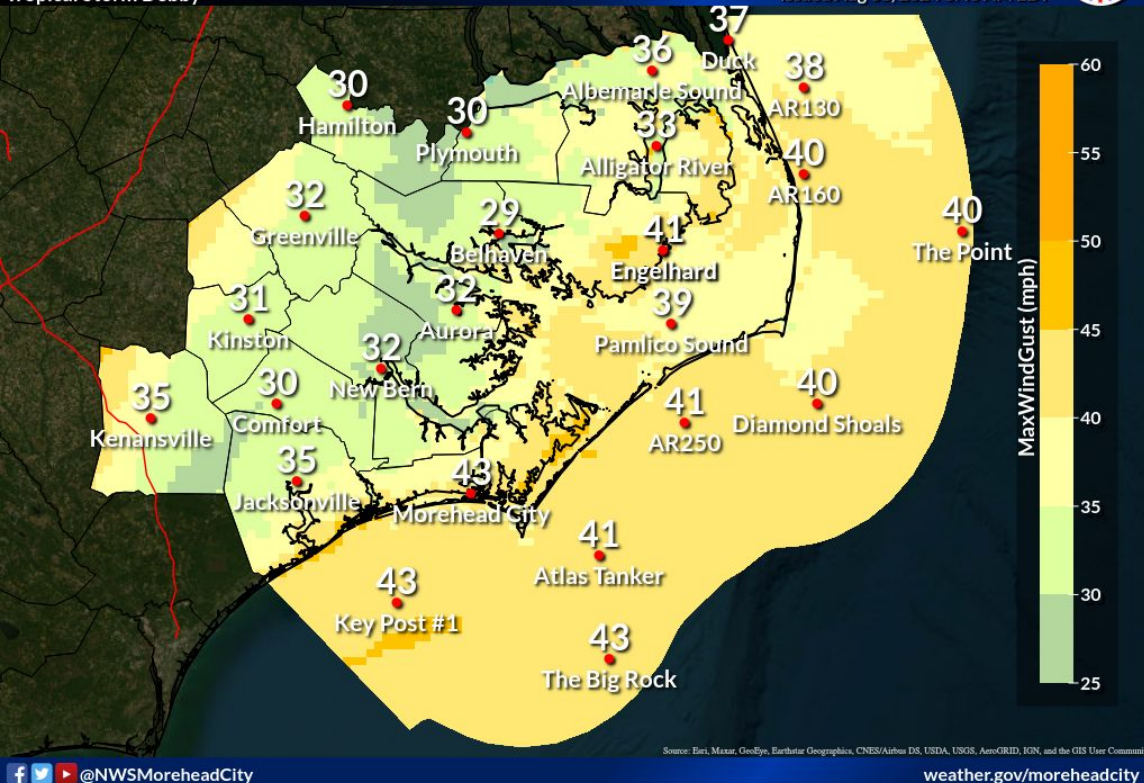
## Maximum Wind Gust (mph)

Tropical Storm Debby

Weather Forecast Office

Newport/Morehead City, NC

Issued Aug 08, 2024 6:40 AM EDT



Source: Erii, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

weather.gov/moreheadcity

@NWSMoreheadCity

- A core of high winds is expected near and to the east of the final storm track, which currently takes the center of TS Debby through central NC.
- Higher winds are also expected near the coast and exposed areas to water.
- Strongest winds are expected today into Friday morning.



# Potential Tornado Impacts

Tropical Storm Debby

## Tornado Threat

Tropical Storm Debby

Weather Forecast Office  
Newport/Morehead City, NC

Issued Aug 08, 2024 6:41 AM EDT



- Main threat of tornadoes will be today through Friday morning for all of Eastern NC.
- All residents should have multiple ways to receive tornado warnings should any be issued (NOAA Weather Radio, cell phone, TV, etc.).



# Dangerous Rip Currents

Tropical Storm Debby

## Rip Current Risk

Forecast for Thursday, Aug. 8, 2024

Weather Forecast Office  
Newport/Morehead City, NC



Elevated Rip Currents Through Saturday

<b>HIGH</b>	Life-threatening rip currents are likely in the surf zone.
<b>MODERATE</b>	Life-threatening rip currents are possible in the surf zone.
<b>LOW</b>	The threat for rip currents is low. However, life-threatening rip currents may occur in the vicinity of jetties and piers.



## For Thursday, August 8th:

- High Rip Current Risk from Duck to Surf City
- High Surf advisory for breaking waves of 5-9 feet from Oregon Inlet to Surf City

## For Friday through Saturday:

- High Rip Current Risk from Duck to Surf City
- High Surf advisory for breaking waves of 5-9 feet from Oregon Inlet to Surf City through Friday.



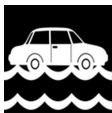
# Key Take-Aways

## Tropical Storm Debby

Confidence is HIGH that the event will occur  
Confidence is HIGH regarding impacts



Tropical storm force winds possible across portions of Eastern NC, with scattered tree damage and power outages possible. Tropical Storm Warnings in effect for coastal Onslow and Carteret Counties.



Surge surge inundation of 1 to 2 ft above ground will be possible for coastal Onslow, Carteret and Hyde counties, and for the waters adjacent to the Neuse, Pamlico, Bay and Pungo Rivers. Elsewhere, limited impacts are anticipated, with 1 ft of inundation or less possible.



Life-threatening flash flooding will be possible due to several days of heavy rainfall, with amounts ranging from 2 to 6 additional inches expected, with locally higher amounts across Eastern NC.



Potential for tornadoes across all of Eastern NC through Friday.



Dangerous marine conditions across the coastal waters. High threat of rip currents will continue through the weekend.



# Local Resources

Tropical Storm Debby

Next Briefing:  
7 PM ET - August 8, 2024  
Method: Email



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



**Phone:** 252-223-5737 ext. 6



**E-mail:** [wxobs.mhx@noaa.gov](mailto:wxobs.mhx@noaa.gov)



**Facebook:** [NWSMoreheadCity](#)



**Twitter:** [NWSMoreheadCity](#)



**YouTube:** [NWSMoreheadCity](#)