

# Coastal Storm Sunday through Monday

Decision Support Briefing # 6  
As of: 3 PM Saturday, Dec 16, 2023

Briefing applies to the  
Morehead City/Newport, NC  
Area Only







## What Has Changed?

- Coastal Flood Watches upgraded to Warnings/Advisories with confidence increasing.
- No major changes to forecast.



# Main Points

Hazard	Impacts	Location	Timing
<b>Coastal Flooding and Overwash</b> 	<p><b>Coastal Flooding:</b> Up to moderate to major inundation of low lying properties and roadways near tidal waterways.</p> <p><b>Ocean Overwash:</b> Minor to moderate inundation of properties and roadways near vulnerable dune structures.</p>	<p>See map on following slides for full summary of impact locations.</p>	<p>See map on following slides for full summary of inundation timing.</p>
<b>Wind</b> 	<p>Strong winds could damage outdoor items, bring scattered power outages, and result in hazardous driving conditions for high-profile vehicles.</p>	<p>Highest winds Central/Southern Outer Banks and Down East. Wind impacts also expected remainder of coastal counties.</p>	<p>Highest winds Sunday evening.</p>
<b>Rainfall Amounts</b> 	<p>2 to 4 inches of rainfall, with localized amounts to around 5 inches, could bring localized flooding of poor drainage areas and hazardous travel.</p>	<p>All of Eastern NC.</p>	<p>Heaviest rainfall Sunday afternoon and evening.</p>
<b>Severe Storms</b> 	<p>Strong storms and a tornado or two could produced locally enhanced wind damage.</p>	<p>All of Eastern NC. Greatest tornado threat closer to the southeast coast.</p>	<p>Sunday evening.</p>
<b>Marine &amp; Rip Currents</b> 	<p>Large, dangerous seas and rip currents.</p> <p>Winds with gusts to storm force.</p>	<p><b>Seas and Rip Currents:</b> All coastal marine zones and area beaches.</p> <p><b>Storm Force Winds:</b> Offshore waters from Surf City to Oregon Inlet.</p> <p><b>Gales:</b> Remaining waters/sounds/rivers.</p>	<p>Sunday afternoon through Monday morning. Highest winds and seas Sunday evening.</p>

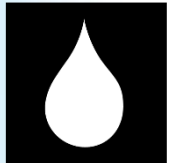
# Summary of Greatest Impacts



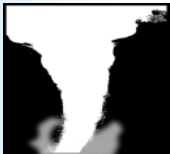
## Coastal Flooding: See Maps to Follow



## Strong Winds: See Maps to Follow



## Rainfall: See Maps to Follow



## Severe Storms/Tornadoes: All of ENC



## Marine: All Marine Areas

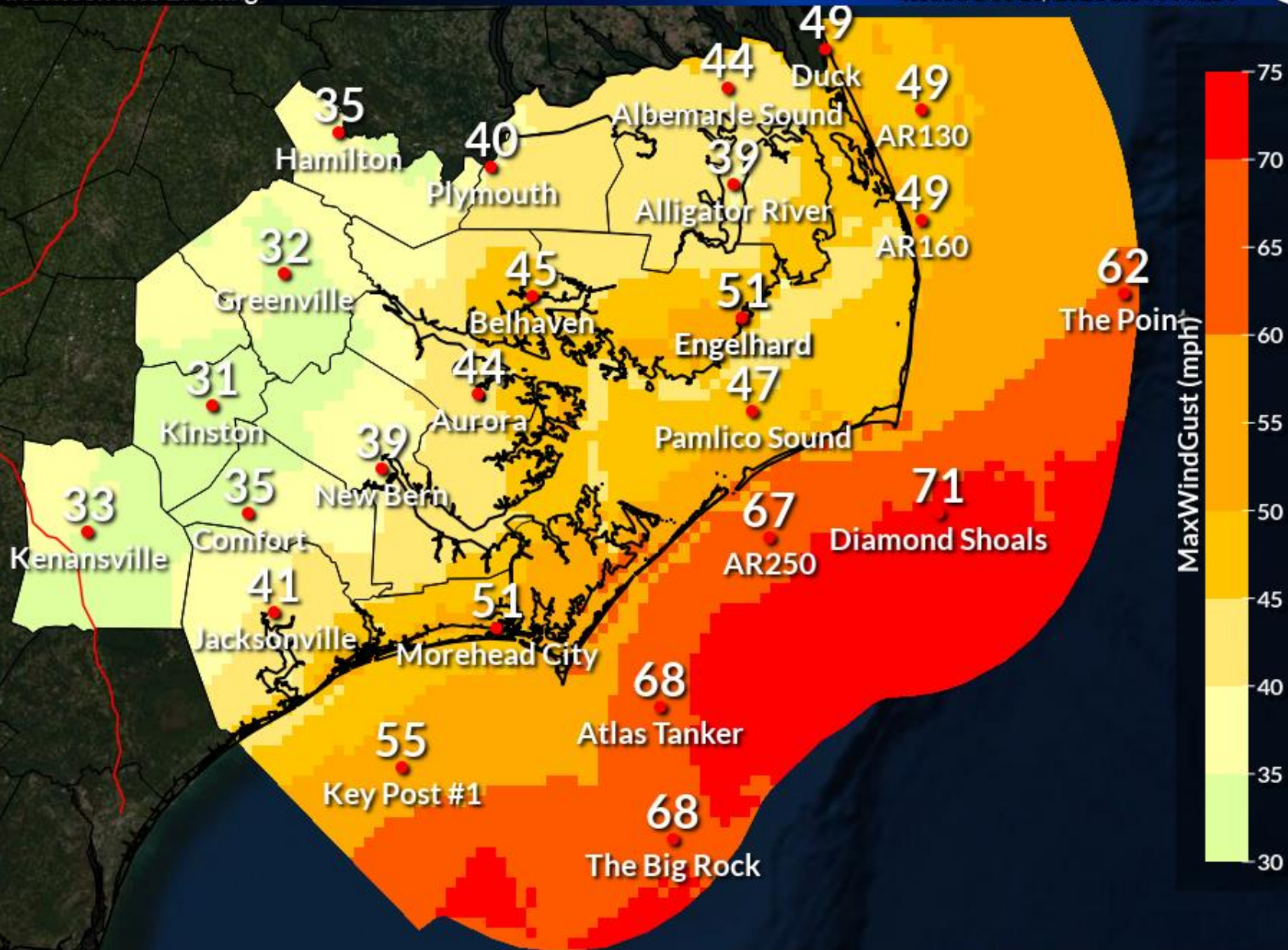


# Peak Wind Gusts

Sunday Afternoon into Evening

Weather Forecast Office  
Newport/Morehead City, NC

Issued Dec 16, 2023 2:54 PM EST

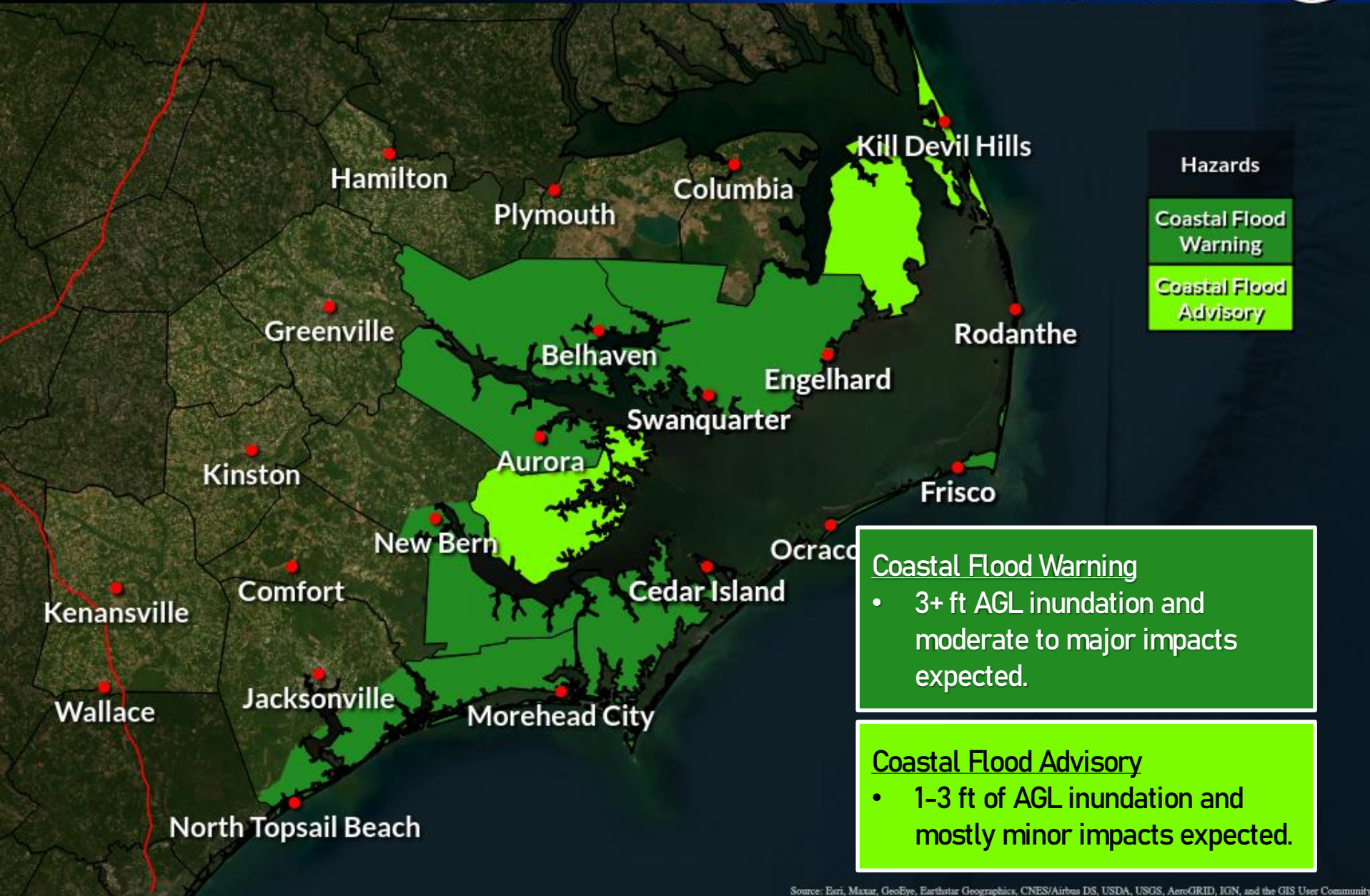


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

# Coastal Flood Headlines

Weather Forecast Office  
Newport/Morehead City, NC

Issued Dec 16, 2023 3:30 PM EST



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

# Coastal Flooding Threat

Weather Forecast Office  
Newport/Morehead City, NC



Potential Inundation (above ground)

## Beaufort and Western Hyde Counties

- 3 to 6 feet of inundation.
- Moderate flooding of low lying roads and properties.
- Timing: Sunday Late Morning through Monday morning.

## Pamlico & Craven Counties

- 2 to 4 feet of inundation near New Bern, 1 to 3 feet of inundation elsewhere on the lower Neuse River.
- Minor to locally Moderate flooding of low lying roads and properties.
- Timing: Sunday afternoon through late Sunday night.

## Carteret and Onslow Counties

- 2 to 4 feet of inundation possible Sunday into early Monday morning.
- Minor to locally Moderate overwash for vulnerable dune areas Sunday and Sunday night.
- Minor to Moderate flooding of low lying roads and properties.

North Topsail Beach

Jacksonville

Swansboro

Morehead City

Davis

Havelock

Oriental

New Bern

Aurora

Swanquarter

Engelhard

Belhaven

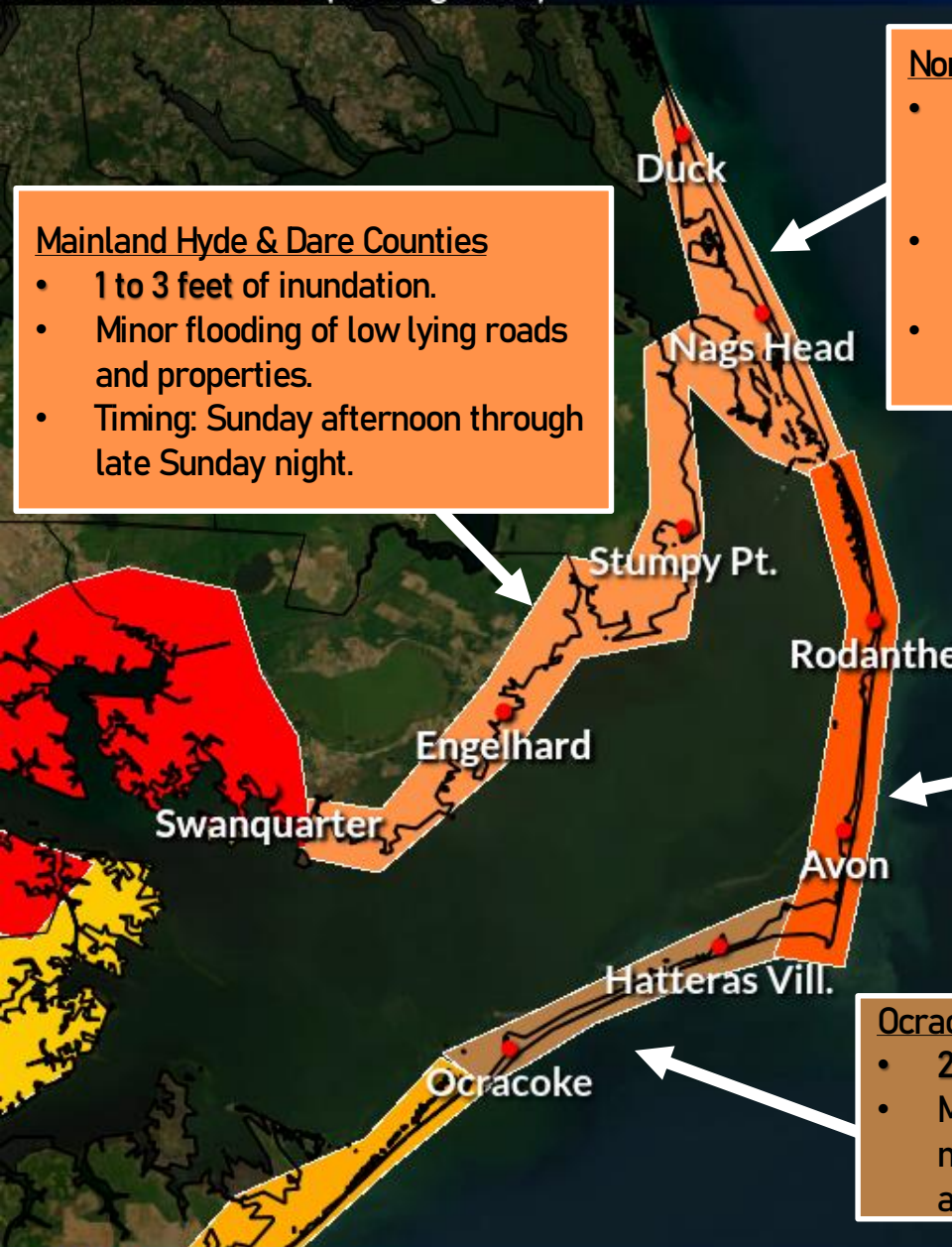
Washington

Source: Esri, Maxar, GeoEye, Earthstar Geographics

# Coastal Flooding Threat



Potential Inundation (above ground)



## Mainland Hyde & Dare Counties

- 1 to 3 feet of inundation.
- Minor flooding of low lying roads and properties.
- Timing: Sunday afternoon through late Sunday night.

## Northern Outer Banks & Roanoke Island

- 1 to 3 feet of inundation. Potential for rapid water level rises early Monday morning.
- Minor flooding of low lying roads and properties.
- Timing: Later Sunday through Monday Afternoon.

## Hatteras Island

- 3 to 4 feet of inundation. Potential for very rapid water level rises Sunday night
- Minor to Moderate flooding of low lying roads and properties.
- Minor to locally moderate ocean overwash near vulnerable dune structures Sunday.
- Timing: Sunday afternoon thru Monday Afternoon

## Ocracoke Island & Southern Hatteras Island

- 2 to 4 feet of inundation.
- Minor to locally moderate ocean overwash near vulnerable dune structures Sunday and Sunday night.

# Storm Total Rainfall

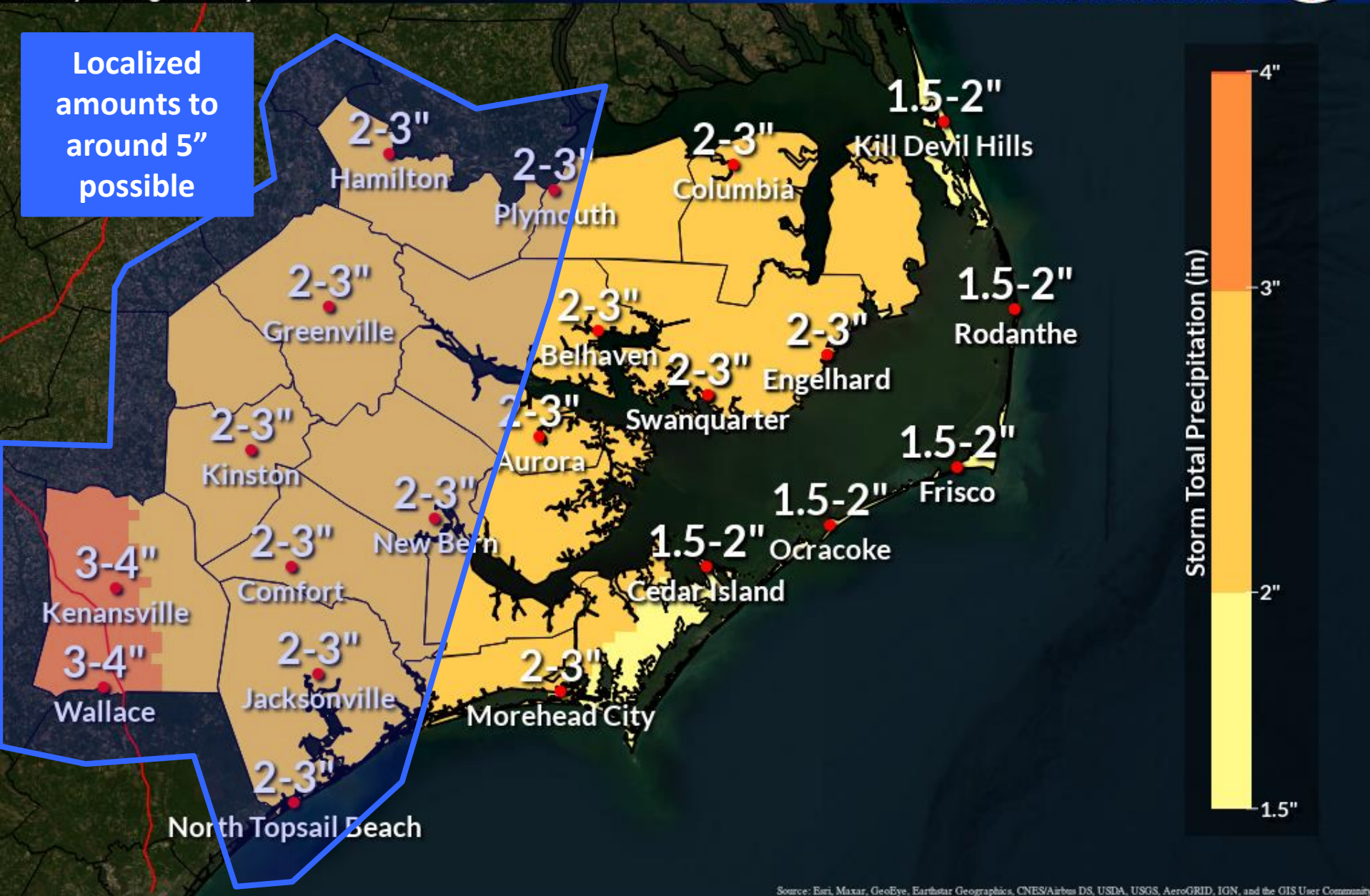
Sunday through Sunday

Weather Forecast Office  
Newport/Morehead City, NC

Issued Dec 16, 2023 2:39 PM EST



Localized amounts to around 5" possible

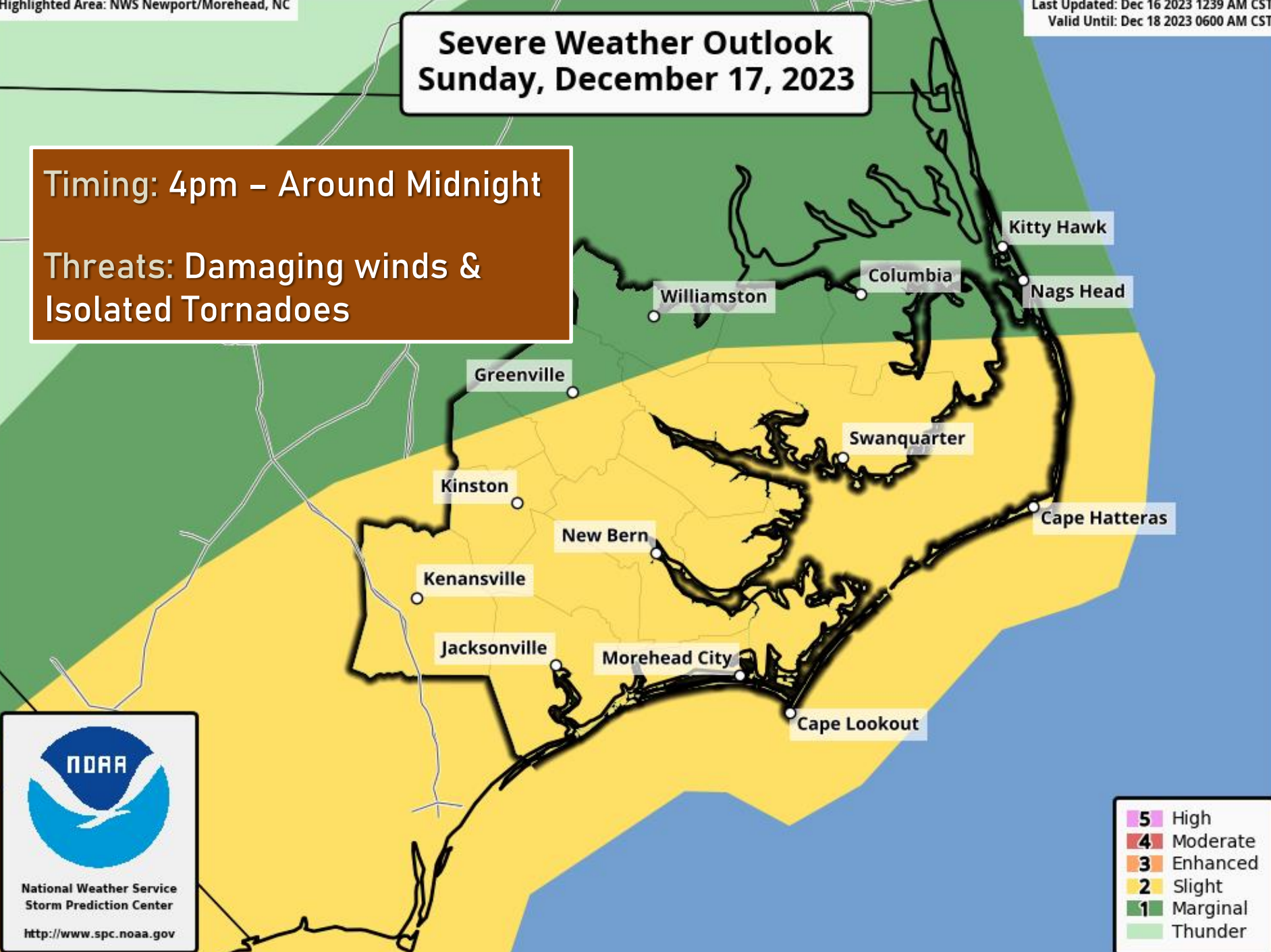


Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



# Severe Weather Outlook Sunday, December 17, 2023

**Timing: 4pm – Around Midnight**  
**Threats: Damaging winds & Isolated Tornadoes**



- 5** High
- 4** Moderate
- 3** Enhanced
- 2** Slight
- 1** Marginal
- Thunder



# Event Summary

- ✓ Confidence is **HIGH** that this event will occur, and we are expecting **MODERATE to MAJOR** impacts.



**Coastal Flooding:** Moderate to major soundside flooding possible on Sunday night along the Pamlico and Pungo Rivers. Minor to moderate inundation possible across much of the rest of ENC, with rapid water level rises possible for the soundside Outer Banks early Monday morning.  
**Ocean Overwash:** Large surf is expected for beaches from Rodanthe to Surf City, particularly late Sunday into early Monday, leading to potential beach erosion and overwash in vulnerable areas.



**Winds:** Windy conditions could damage outdoor items, bring scattered power outages, and result in hazardous driving conditions for high-profile vehicles. Strongest winds along the Outer Banks and Downeast Carteret Sunday evening.



**Rainfall:** 2 to 4 inches of rainfall across most of eastern NC, with localized amounts up to 5 inches possible. Minor flooding of poor drainage areas possible, especially along and west of US Hwy 17.



**Severe:** A few strong to severe storms and a tornado or two could produce locally enhanced damage, highest threat near the southeastern coast.



**Very Dangerous Marine Conditions:** Dangerous seas 15-25 ft with up to Storm Force winds Sunday afternoon through evening.

# Contact and Next Briefing Information



The next briefing will be sent out by noon Sunday 12/17/2023



[Briefing Webpage](#)



**Web:**

<http://www.weather.gov/mhx/>



**Phone (public):**

(252) 223-5737 ext. 6



**E-mail:**

[wxobs.mhx@noaa.gov](mailto:wxobs.mhx@noaa.gov)



**Facebook:**

[NWS Newport/Morehead City](#)



**Twitter:**

[@NWSMoreheadCity](#)



**YouTube:**

[NWSMoreheadCity](#)