



# Strong Storm System to Bring Multiple Hazards this Week

Decision Support Briefing # 5
As of 7 AM Thu, December 22<sup>nd</sup>, 2022

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



#### What Has Changed?

- A Wind Advisory is now in effect for portions of the Outer Banks
- Gale Warnings are now in effect for all coastal and inland waters











Main	Po	ini	tS

Flooding of low lying roadways,

parking lots, and properties.

Minor ocean overwash possible.

Travel impacts possible along NC 12 and properties

immediately adjacent to the beach.

Hazard	Impacts
	Minor to moderate impacts with water levels 2-4 ft. above ground.

## Location

**Timing** 

Soundside Locations from Kitty Hawk to Hatteras Island, including Roanoke Island Minor to moderate inundation

**Through Saturday Entire Coast** Minor ocean overwash



Coastal

Low

Water

Levels

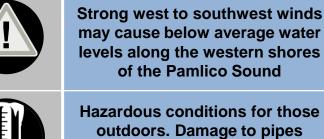
Cold

Wind

**Marine** 

Weather

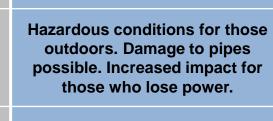
Flooding











All of Eastern North Carolina





Scattered power outages and tree damage.

All of eastern NC susceptible; strongest winds along the Outer Banks.

rivers.





Dangerous seas and strong, Gale force winds. Storm Force gusts possible.

All coastal waters, sounds, and

**Friday Through Saturday** morning





**Main Points** 

mpacts

## Location

## **Timing**



A few strong to marginally severe thunderstorms possible, capable of damaging winds

**Greatest risk from the Crystal Coast northeast through Hatteras** Island

11 AM - 8 PM **Today** 





Ponding of water in low-lying and poor drainage areas. Isolated instances of flash flooding possible

**Greatest risk from the Crystal** Coast north through the Northern **Outer Banks** 

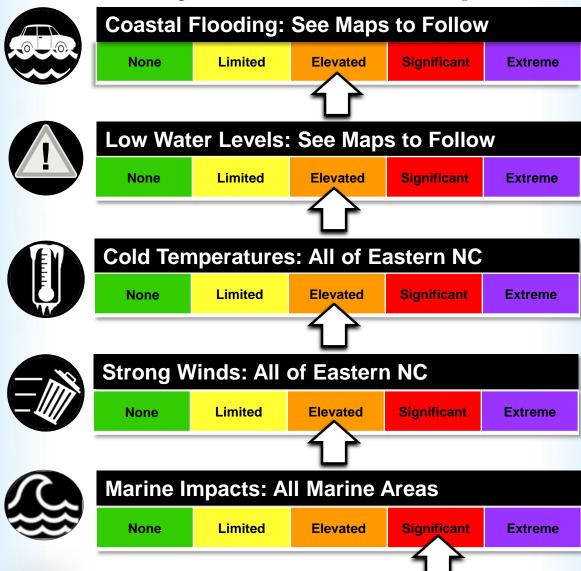
11 AM - 8 PM **Today** 







## **Summary of Greatest Impacts**

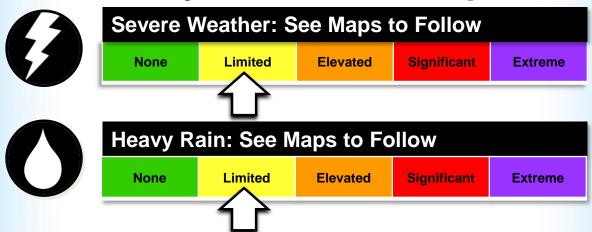








## **Summary of Greatest Impacts**





## Weather Forecast Office **Coastal Flooding** Newport/Morehead City, NC Friday into early Saturday Morning Issued Dec 22, 2022 5:48 AM EST Large breaking waves, beach Moderate Flooding Possible erosion and minor 2 to 4 feet above ground overwash sound side. through early Saturday Southern Shores Friday into Early Saturday morning morning Kill Devil Hills Columbia East Lake regon **Gum Neck Stumpy Point** Rodanthe

**Engelhard** 

## Coastal Flooding

Thursday into early Saturday Morning

Weather Forecast Office
Newport/Morehead City, NC
Issued Dec 22, 2022 5:51 AM EST

Moderate Flooding Possible

2 to 4 feet above ground
sound side.

Friday into early Saturday morning

Ocracoke

### **Swanquarter**

Cedar

Island

Minor Flooding Possible
I to 2 feet above ground sound side. Friday into early
Saturday morning

Hatteras Village

Large breaking waves, beach erosion and minor overwash through early Saturday morning

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

## **Coastal Flooding**

Thursday into early Saturday Morning



Minor Flooding Possible
Up to I foot above
ground
through tonight

Low Water Likely Friday into early Saturday as winds shift into the west and may poise a navigation hazard

Kenansville

Washington Belhaven

Aurora

Engelhard Swanquarter

7

New Bern

Oriental

Havelock

**Jacksonville** 

Swansboro

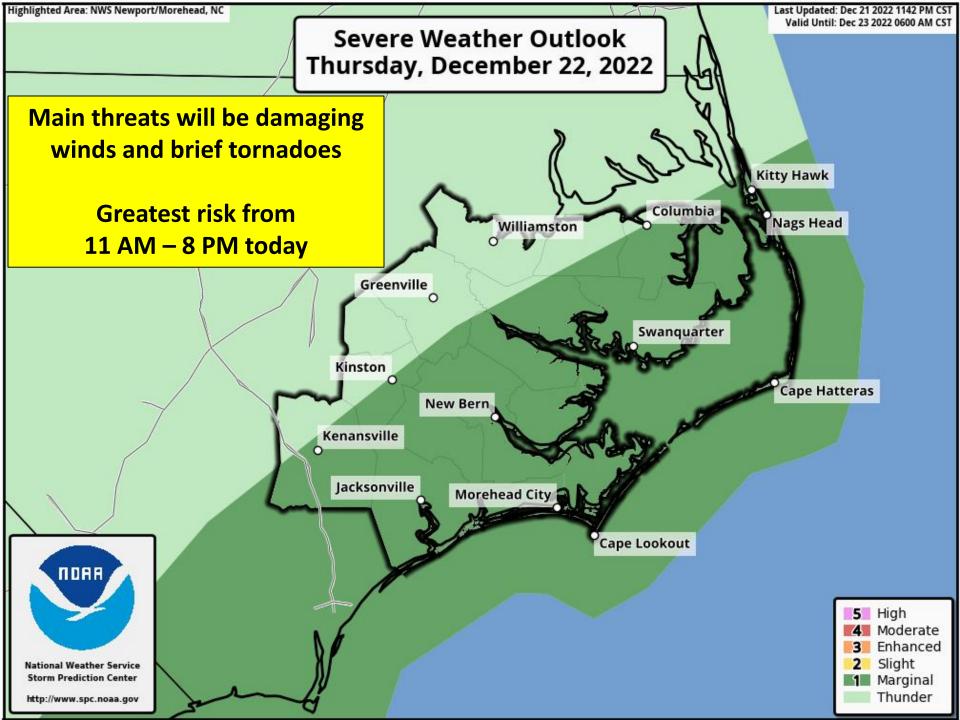
Morehead City

Davi

Large breaking waves, beach erosion and minor overwash through into early Saturday morning

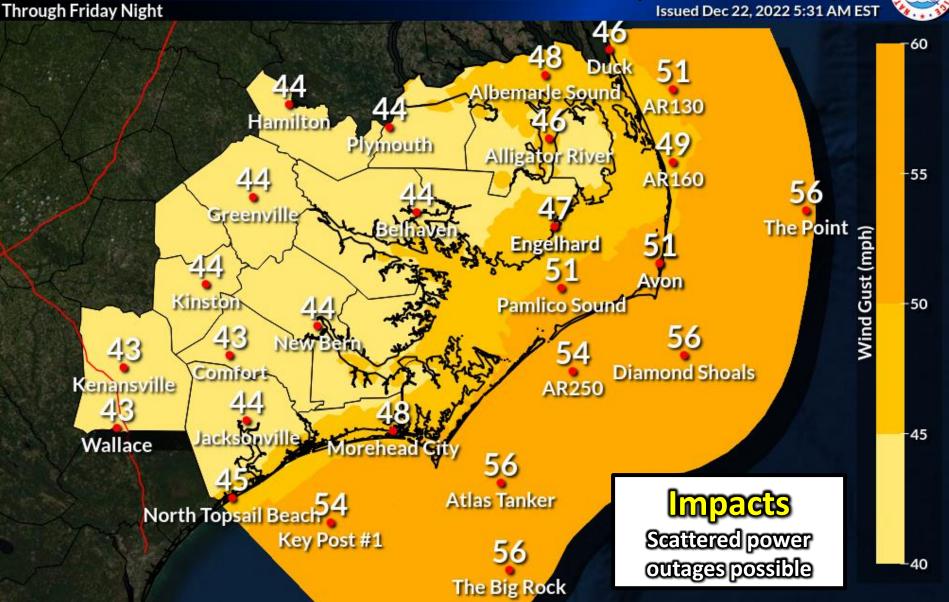
North Topsail Beach

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



## **Maximum Wind Gusts**

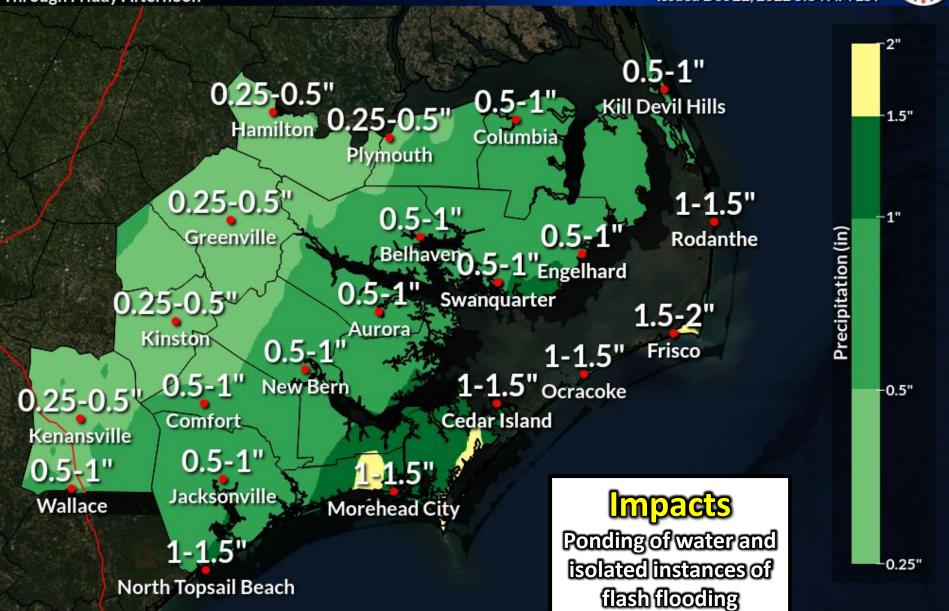
Weather Forecast Office
Newport/Morehead City, NC
Issued Dec 22, 2022 5:31 AM EST



## **Total Rainfall**

Through Friday Afternoon





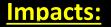


ce: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA,

## Maximum Wave Heights

Weather Forecast Office
Newport/Morehead City, NC
Issued Dec 22, 2022 5:38 AM EST

**Friday** 



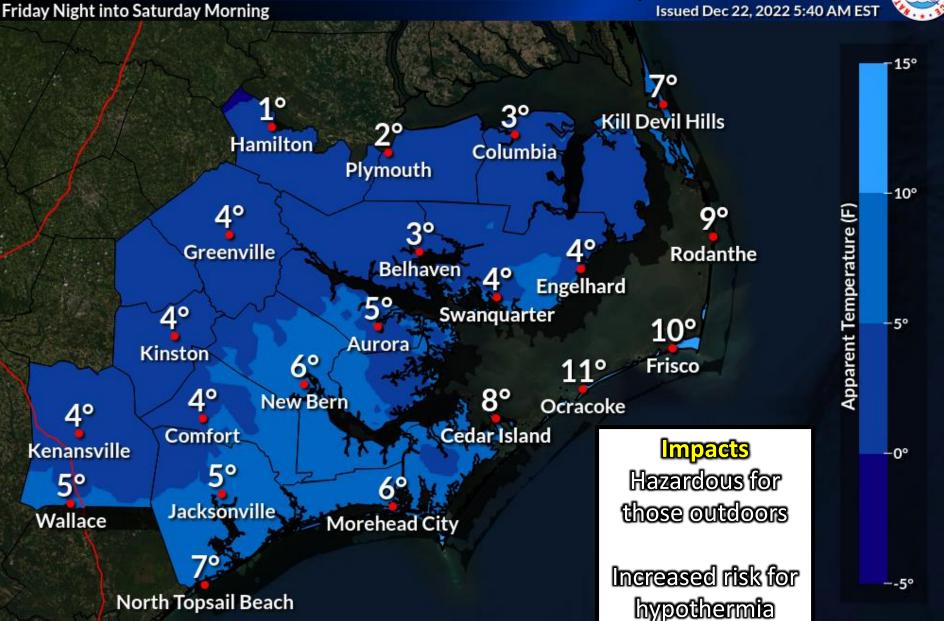
- 7 to 11 foot waves in the surf zone
- Dangerous surf, beach erosion
- Hazardous for small craft



## **Minimum Wind Chills**

Weather Forecast Office Newport/Morehead City, NC

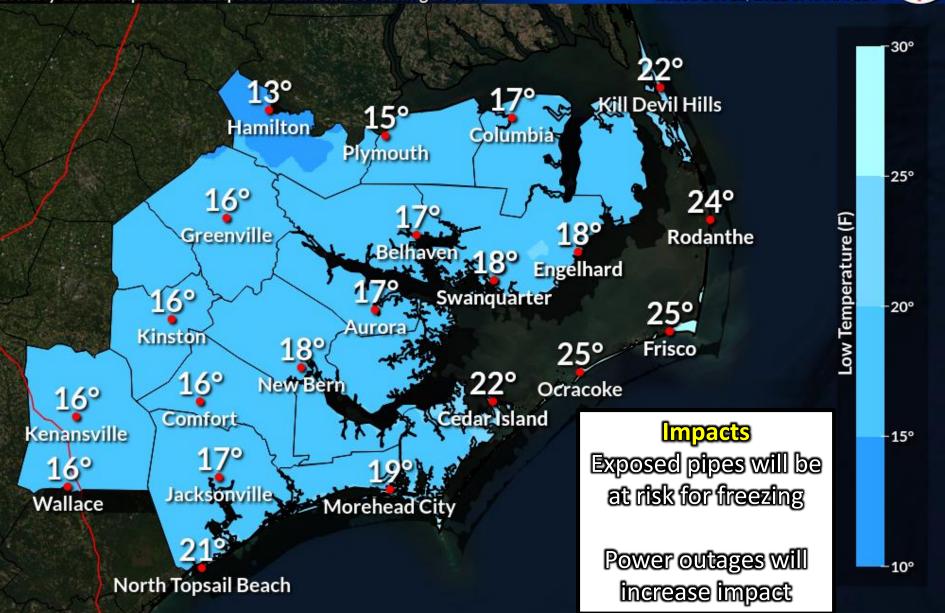
Issued Dec 22, 2022 5:40 AM EST



## Low Temperatures Friday Night into Saturday Morning

Weather Forecast Office
Newport/Morehead City, NC
Issued Dec 22, 2022 5:45 AM EST

Bitterly Cold Temperatures Expected Christmas Morning as well







## **Event Summary**

✓ Confidence is HIGH that this event will occur, and we are expecting minor to moderate impacts



**Coastal Flooding:** Minor to moderate impacts adjacent to the eastern Pamlico, Croaton and Roanoke Sounds, and Roanoke Island. Very low-lying roads and properties flooded.

**Ocean Overwash:** Minor overwash possible, large breaking waves, beach erosion. Portions of Hwy 12 could be impacted, especially around high tides.



**Low Water Levels:** Below normal water levels could impact marine traffic along the Neuse, Bay, Pamlico, and Pungo Rivers.



**Cold Weather:** Dangerously cold temperatures for those outdoors, and possible damage to pipes. There will be an increased impact for any location where power outages occur.



**Strong Winds:** Wind gusts 40 to 55 mph area wide (highest along the coast) could bring scattered power outages and damage outdoor items.



**Very Dangerous Marine Conditions:** Seas 10-15 ft and strong Gale Force winds with occasional gusts to Storm Force possible. Powerful surf and minor erosion at the beaches.









## **Event Summary**

✓ Confidence is HIGH that this event will occur, and we are expecting minor to moderate impacts



**Severe Weather:** Strong damaging winds and isolated, brief tornadoes in thunderstorms could lead to downed trees and power lines. Primary threat is expected this afternoon from the Crystal Coast through Hatteras Island.



**Heavy Rainfall:** Rainfall totals 1-2 inches, with isolated higher amounts could bring localized flash flooding









## **Contact and Next Briefing Information**



Next Briefing can be expected by 6 PM Thursday

**Briefing Webpage** 







