



# TROPICAL UPDATE



5:00 PM EDT

Monday, August 16, 2021

Tropical Storm Fred, Tropical Depression  
Grace & Tropical Storm Henri

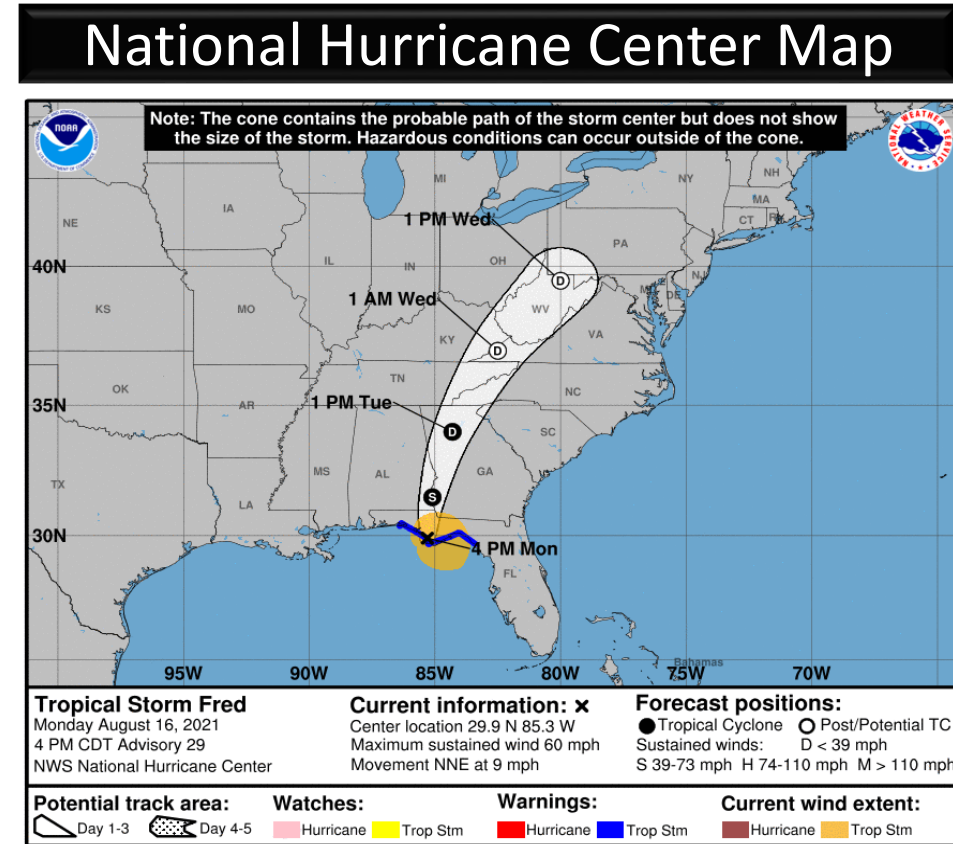
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an active weather event please contact your County Emergency Management or Public Safety Office, local National Weather Service forecast office, or visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov).



# Tropical Storm Fred

5 PM ET Monday: Florida Threats & Changes Since Last Packet

	MINIMAL	Low	MODERATE	HIGH	EXTREME
WINDS					
STORM SURGE					
FLASH FLOODING					
TORNADOES					
	Low		MODERATE		HIGH
RIP CURRENTS					



## Overview/Recent Changes:

Landfall near Cape San Blas at 3:15pm ET / 2:15pm CT.

Tropical Storm Warnings discontinued in the western Panhandle and Nature Coast. east into Jefferson and Taylor County. Winds moving onshore and inland now.

Storm surge has begun in Apalachee Bay, and will peak tonight at high tide around 3-5'.



# Current Florida Radar

As of 4:05 PM ET

Tropical Storm Fred made landfall at 3:15pm ET / 2:15pm CT near Cape San Blas in Gulf County with maximum sustained winds near 65mph.

Heavy rain bands with gusty winds of 45-65mph are affecting the eastern Panhandle and western Big Bend. These bands also have a tornado potential.

Rain bands affecting Northeast Florida and West Central Florida also contain heavy rainfall and wind gusts up to 30mph.

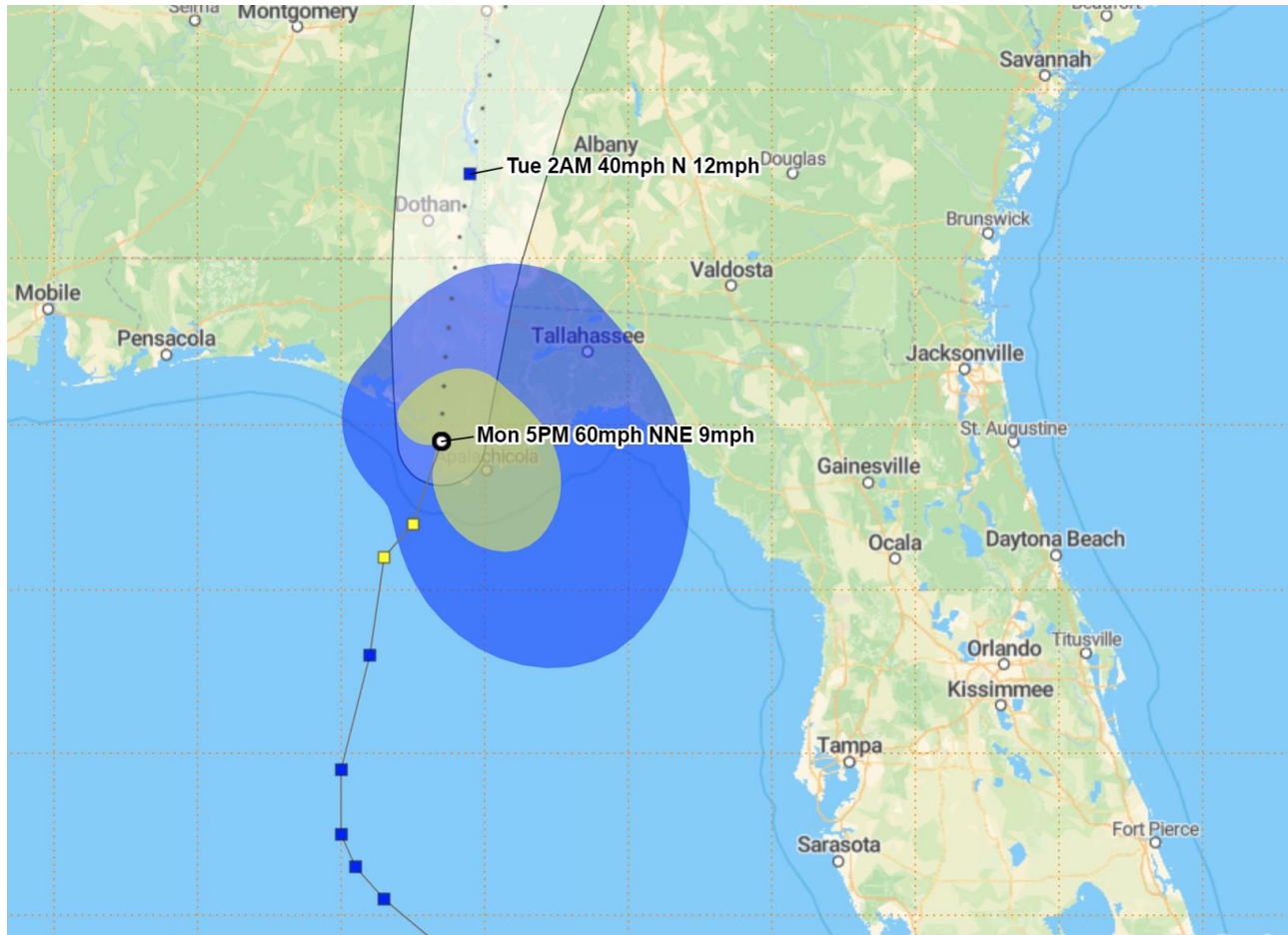






# Official Forecast Track for Fred

## From the National Hurricane Center



### TROPICAL STORM FRED - Monday, August 16, 2021 5PM EDT Advisory #29

● Center Location: 29.9 N 85.3 W Maximum Sustained Winds: 60 mph Movement: 9 mph NNE

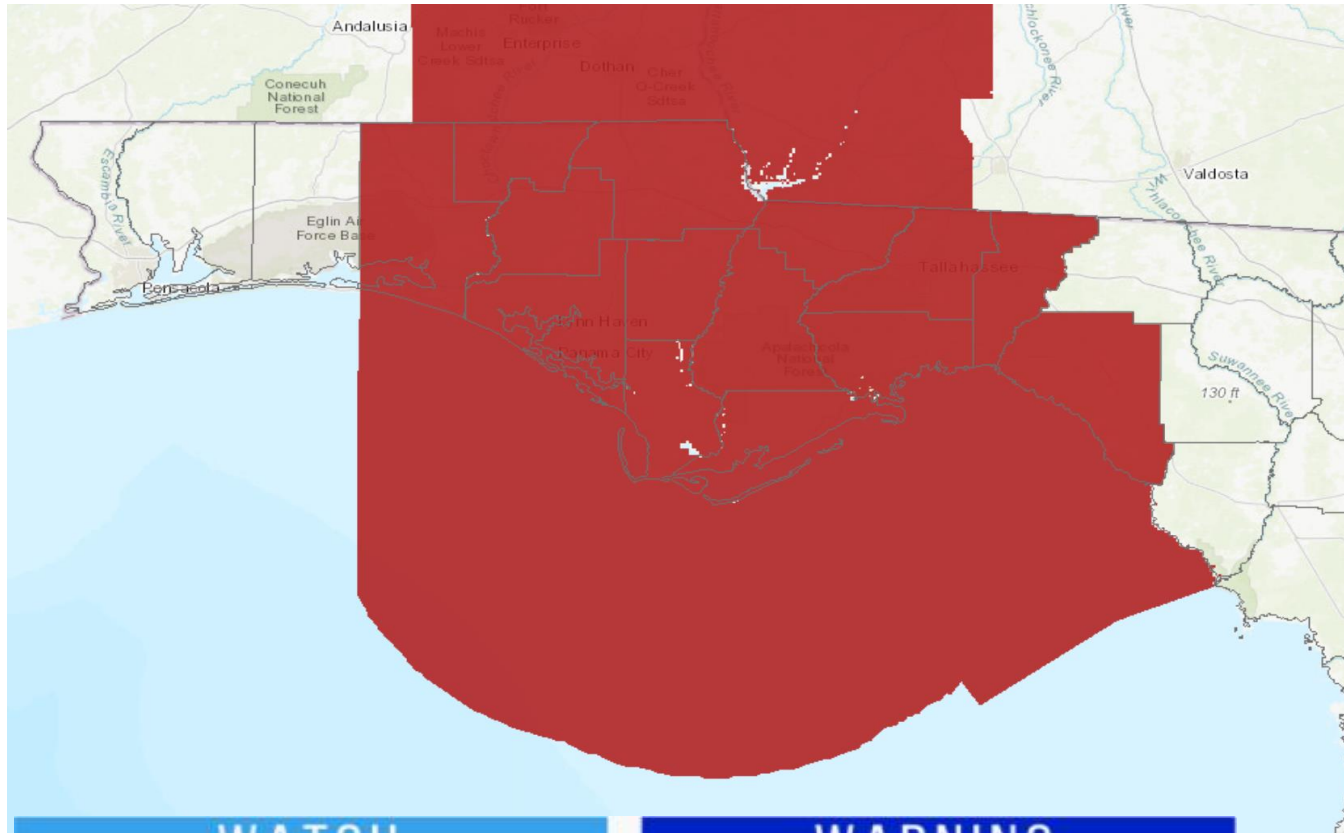
Potential Track Area: 1-3 day 4-5 day Wind Field: ● at current location

Sustained Wind Speed: ■ tropical storm  $\geq 34$ kt/39mph ■ strong tropical storm  $\geq 50$ kt/58mph ■ hurricane  $\geq 64$ kt/74mph

- The center of Fred is located about 25 miles northwest of Apalachicola, Florida.
- Maximum sustained winds are around 60 mph with higher gusts, and Fred is moving to the north-northeast at 9 mph.
- Tropical storm force winds extend out about 115 miles, mainly to the east of the center.



# Active Tropical Watches/Warnings



## WATCH

Tropical storm and/or hurricane conditions are POSSIBLE in the "watch area"

Issued up to 48 hours in advance of the onset of tropical storm force winds

## WARNING

Tropical storm and/or hurricane conditions are EXPECTED in the "warning area"

Issued up to 36 hours in advance of the onset of tropical storm force winds

- **Tropical Storm Warnings** remain in effect for the Florida Panhandle and western Big Bend.
- Bay, Calhoun, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Tayylor, Wakulla, Walton, and Washington

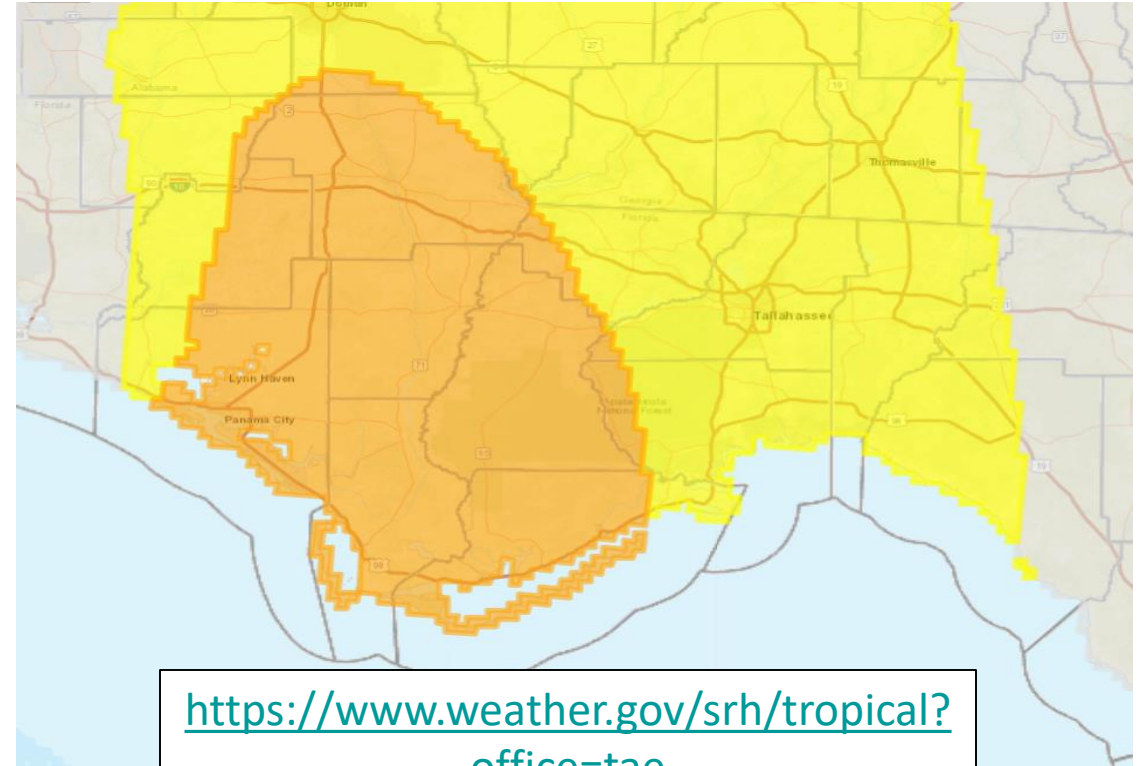


# Damaging Wind Threat Overview

## Tropical Storm Fred

Sustained winds from 40-60 mph are possible in the orange area, with gusts as high as 70 mph possible.

Wind gusts from 30-50 mph are possible into the eastern Big Bend in the yellow shaded area.



<https://www.weather.gov/srh/tropical?office=tae>

Click on “Threats and Impacts” Tab

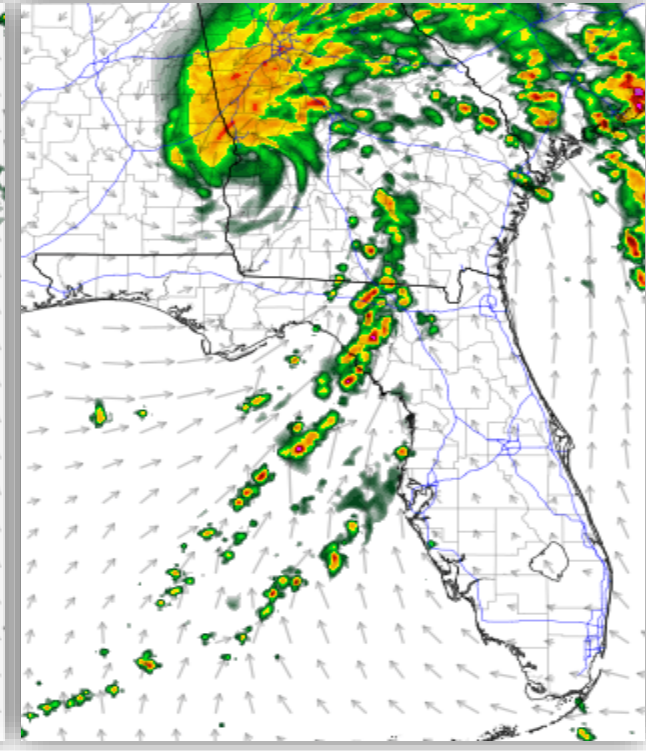
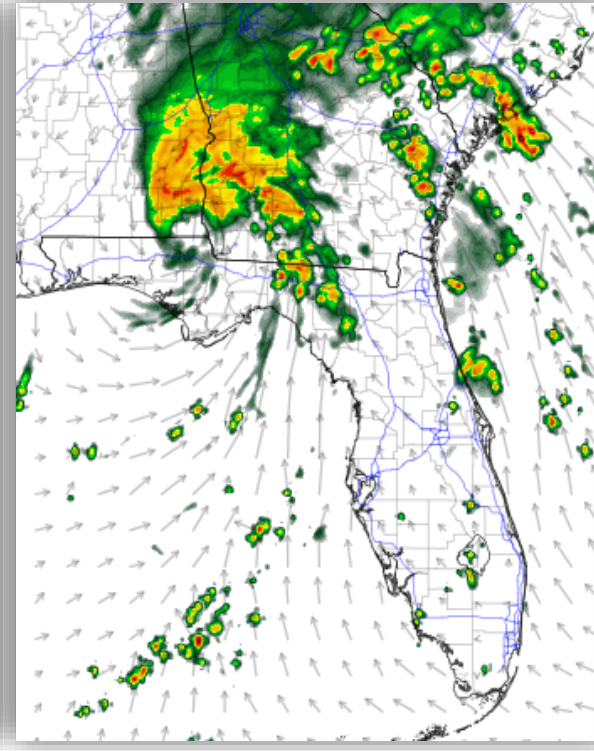
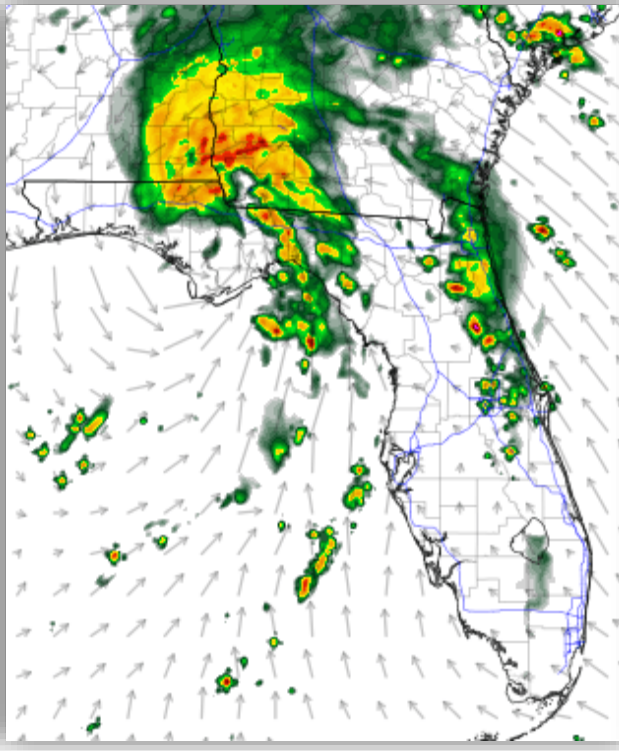
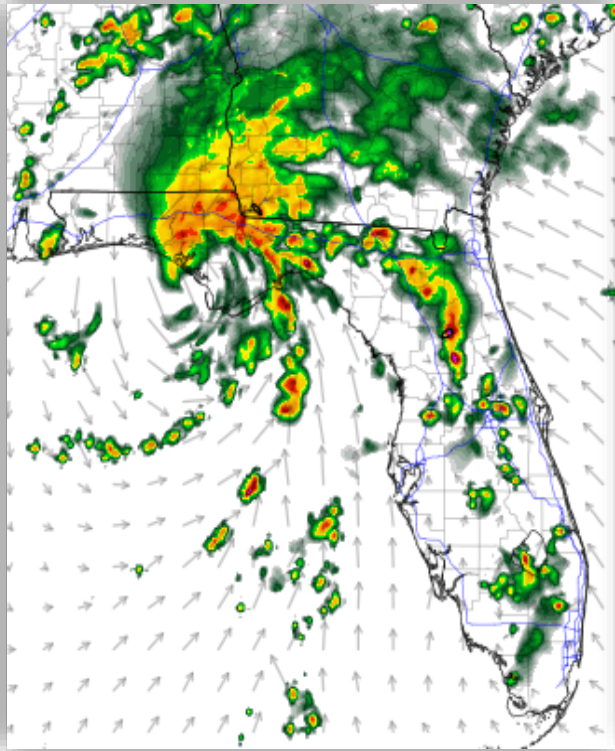
Wind Threat
Potential for wind greater than 110 mph
Potential for wind 74 to 110 mph
Potential for wind 58 to 73 mph
Potential for wind 39 to 57 mph
Wind less than 39 mph





# Model Forecast Radar

**\*\*\*Only Model Guidance – Time & Position Will Vary\*\*\***



8pm ET / 7pm CT

11pm ET / 10pm CT

2am ET / 1am CT

6am ET / 5am CT

Conditions will begin to improve later tonight along the Panhandle coast and tropical storm force winds should exit the state by 4am ET/ 3 am CT Tuesday morning. A lingering eastern rain band could persist overnight across the eastern Big Bend and Suwannee Valley which may produce heavy rain of 1-3" as well as gusty winds (40-50mph) and a small tornado threat





# Surge Watches and Warnings

In Effect Until Further Notice



**Storm Surge Warnings remain in effect from Franklin County to Levy County.**

**Coastal Flood Advisories for lower surge values are in effect along the entire Panhandle coast as well as the Nature Coast of Citrus and Hernando Counties.**

## Storm Surge Warning

There is a **danger of life-threatening inundation** from rising water moving inland from the shoreline generally **within 36 hours**.

Promptly follow evacuation and other instructions from local officials.

## Storm Surge Watch

There is a **possibility of life-threatening inundation** from rising water moving inland from the shoreline generally **within 48 hours**.

Promptly follow evacuation and other instructions from local officials.







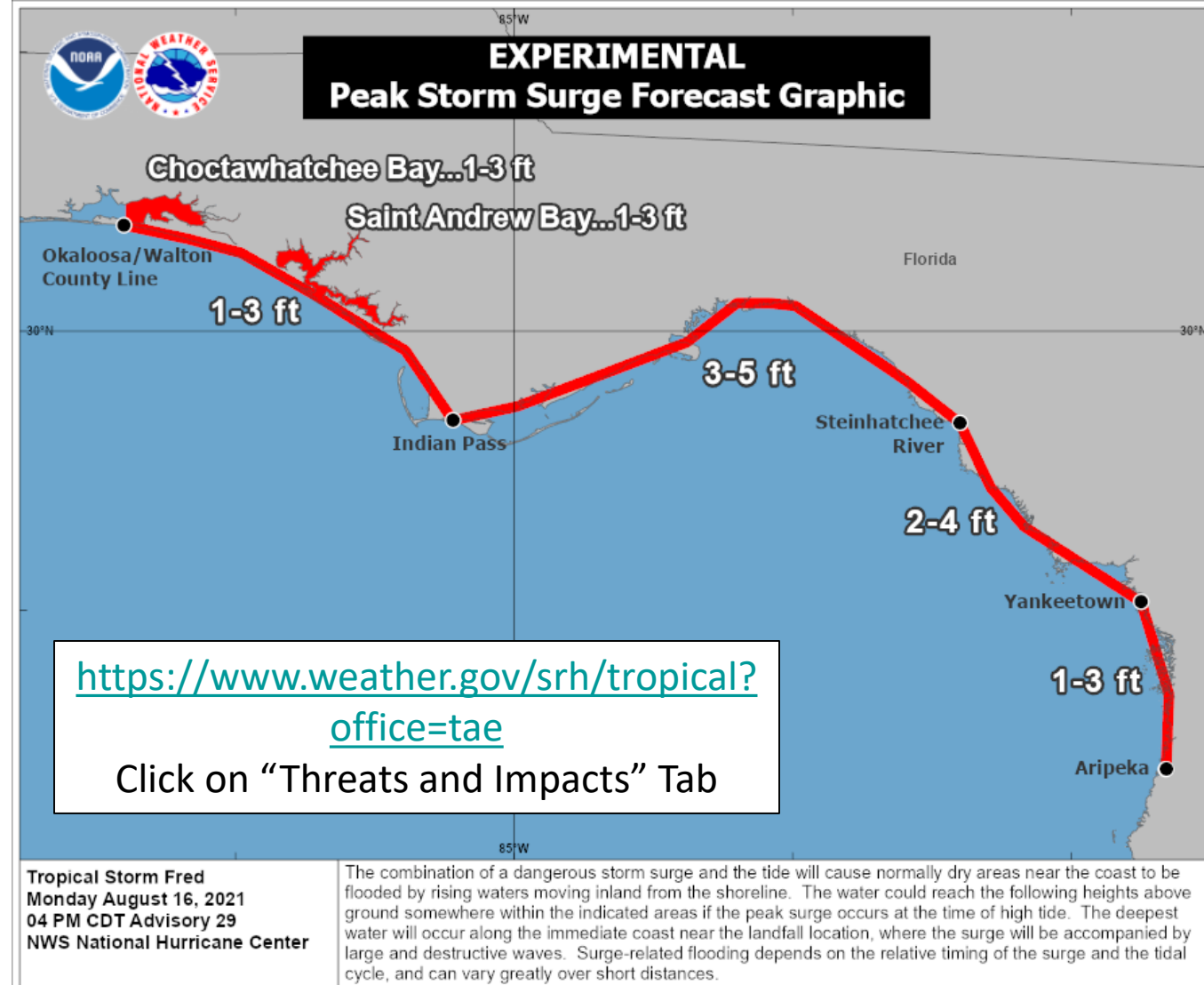
# Storm Surge Threat Overview

## Tropical Storm Fred

3-5' of storm surge remains possible tonight in Apalachee Bay as onshore winds continue during the next high tide cycle.

Surge values should decrease for the Panhandle as winds are now in an offshore direction.

However, wave heights of 3-6' are forecast to continue through tomorrow afternoon, keeping the rip current threat high.





# Tornado Watch

## From the Storm Prediction Center

### Tornado Watch

Valid Until  
8:00 PM EDT Monday  
August 16, 2021

#### Threat Information



#### TORNADOES

A few Tornadoes  
Possible



#### HAIL

No Hail Expected



#### WIND

Isolated Gusts  
Up To 70 MPH Possible

#### Potential Exposure



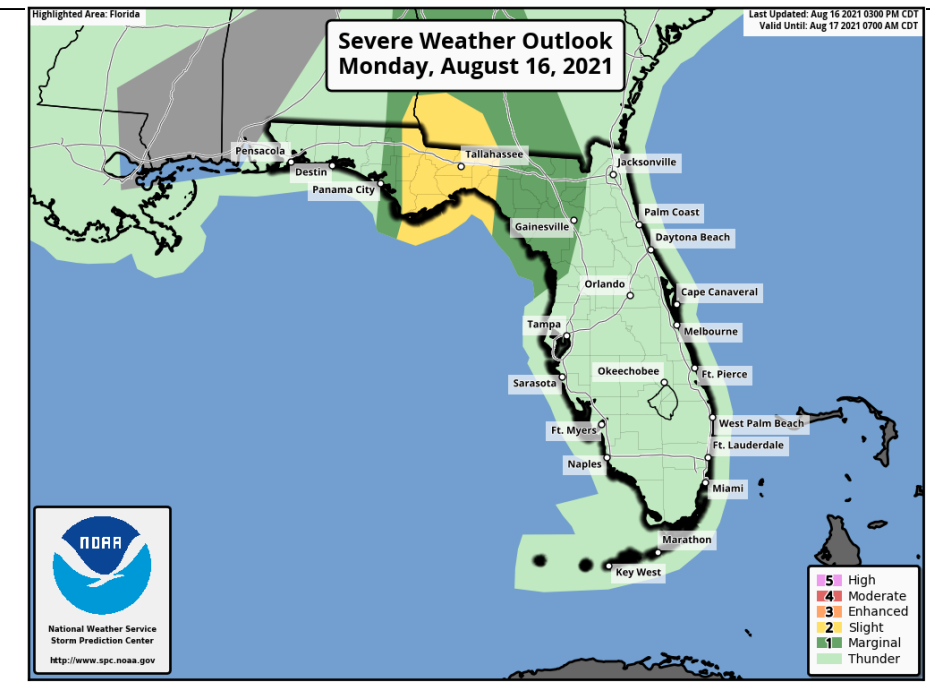
Population: 995,188  
Schools: 339  
Hospitals: 32



Until 8 PM ET / 7 PM CT

Isolated tornadoes will be possible in the outer bands of Fred in the Panhandle, Big Bend, and into the Nature Coast and Northeast Florida.

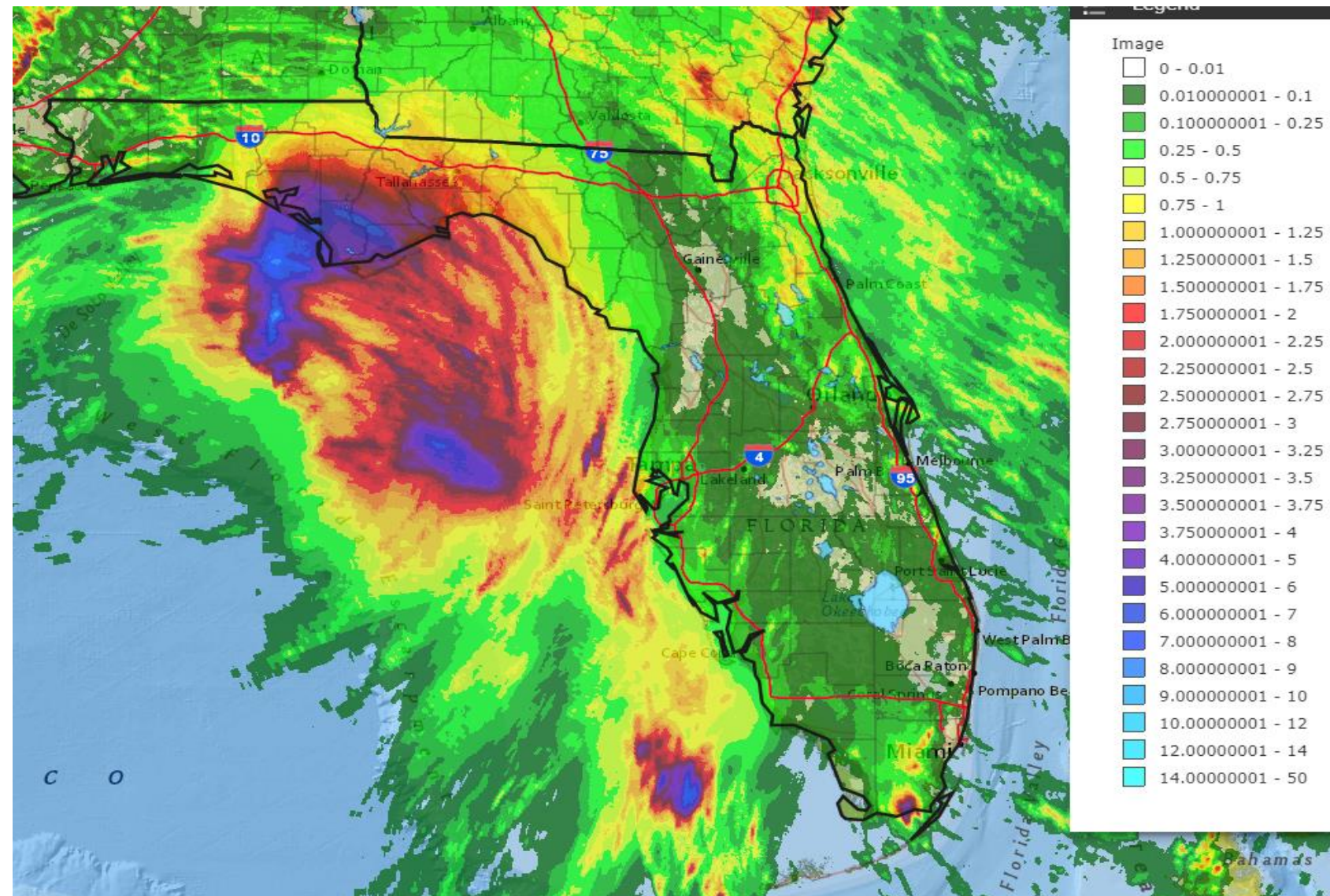
Additional watches could be issued later tonight.







# Observed Rainfall – Past 24 Hours

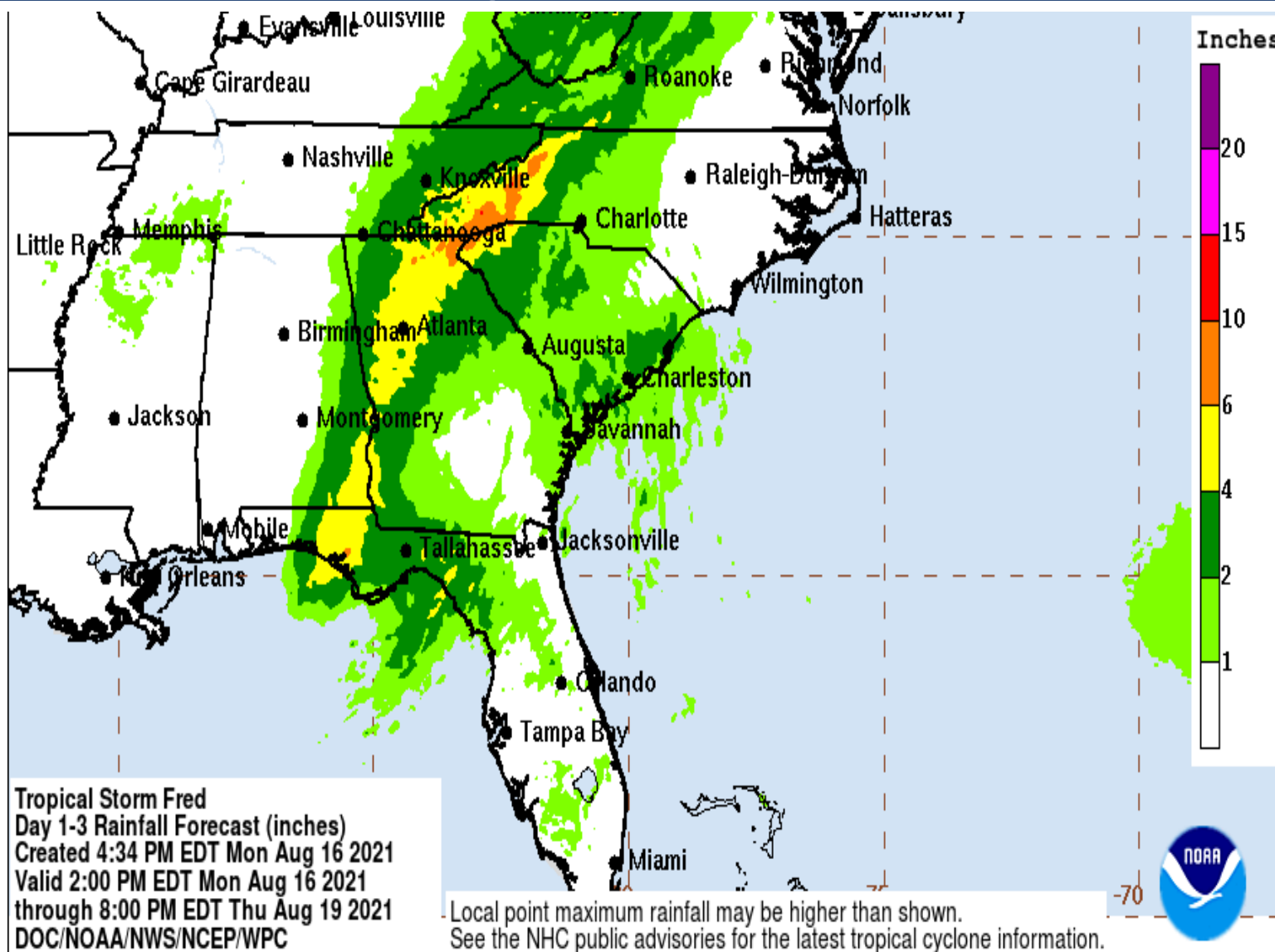


- Rainfall amounts of 3-7" estimated for much of Franklin, Gulf and Bay Counties.
- 1-3" of rain has been observed across portions of the Big Bend.



# Rainfall Totals Next 48 Hours

Ending 8 PM ET Thursday



Rainfall will gradually end overnight, but some trailing rain bands may continue in the Big Bend.

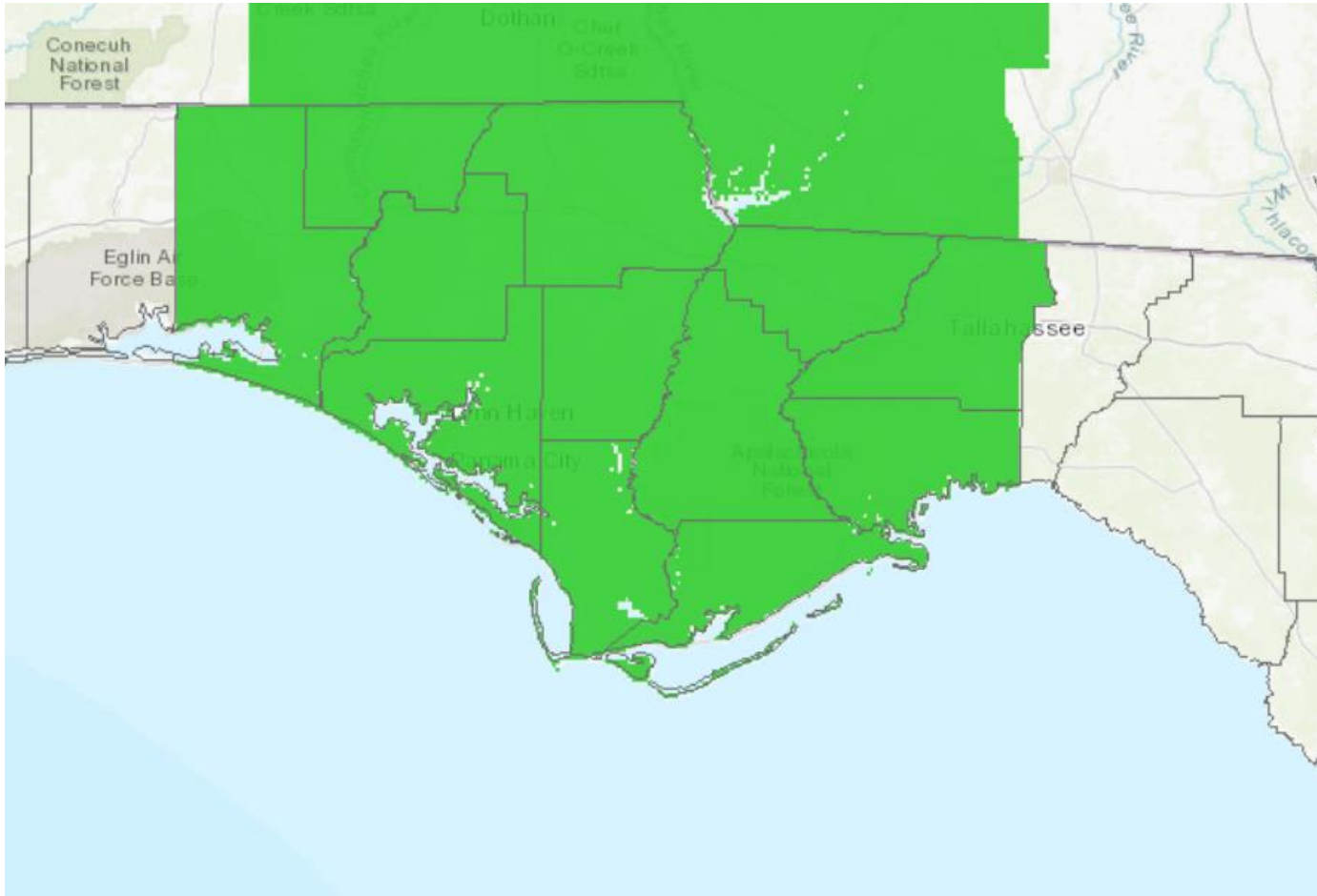
An additional 2-5" of rain is possible through tonight for the eastern Panhandle, with 1-3" possible for the Big Bend with isolated totals as high as 5".

These amounts may lead to flash flooding, riverine flooding, and any gusty winds may allow for shallow-rooted or weak trees to fall.





# Active Flood Watches - NWS



- **Flash Flood Watch** until Tuesday afternoon for the Panhandle.

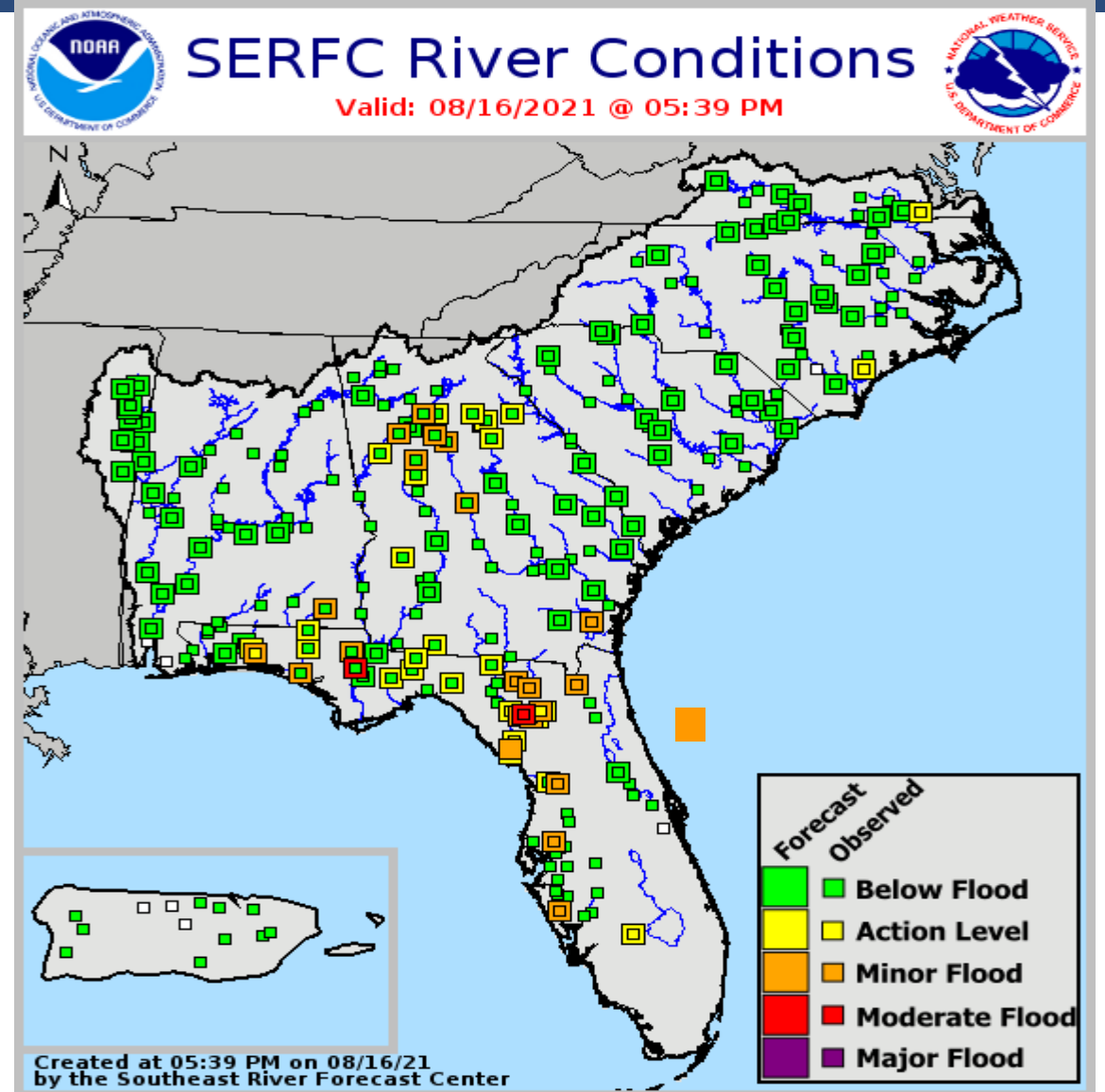


# Current & Forecast River Flooding

## Southeast River Forecast Center

Minor to moderate river flooding will continue across Northeast Florida this week. Heavy rain could fall on rivers already in minor to moderate flood stage which could prolong or worsen flooding. Minor flooding is ongoing along the West Coast as well. **Minor to moderate flooding is also possible in the Panhandle this week.**

More details on river levels available at the [Southeast River Forecast Center website.](https://www.southeastriverforecastcenter.com/)







# Key Messages

## From the National Hurricane Center



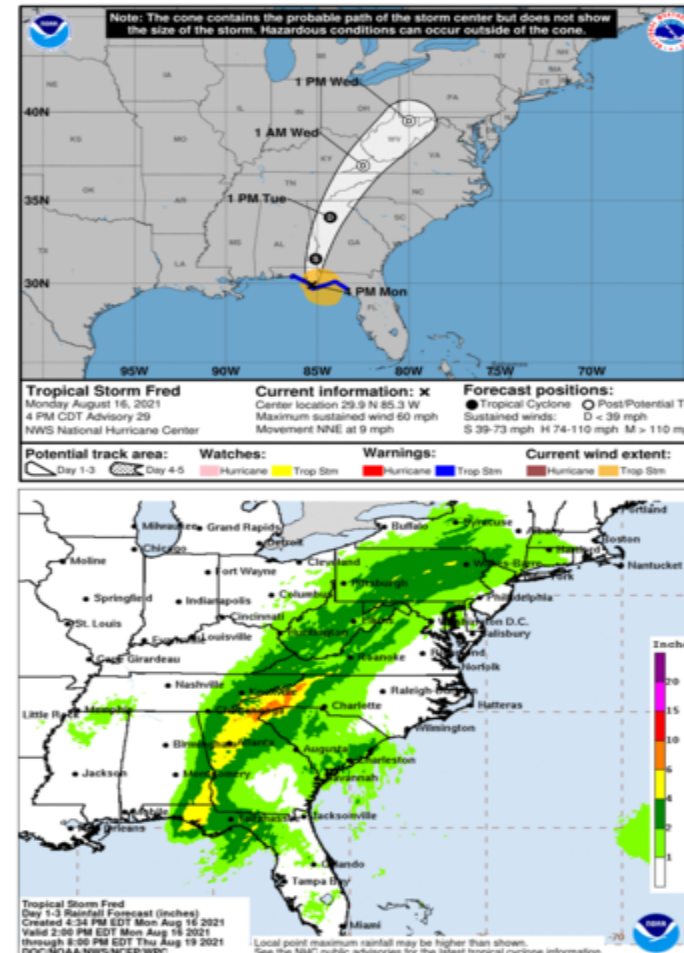
### Key Messages for Tropical Storm Fred Advisory 29: 4:00 PM CDT Mon Aug 16, 2021



1. Through Tuesday, heavy rainfall may lead to considerable flash, urban, small stream, and isolated river flooding impacts across portions of the Florida Big Bend and Panhandle. By the middle of the week as Fred lifts north and inland, heavy rainfall and flooding will impact the southern and central Appalachians, the Piedmont of the Southeast and Mid-Atlantic. Landslides are possible across the mountains of North Carolina and Blue Ridge Escarpment on Tuesday.

2. Dangerous storm surge inundation is ongoing along portions of the coast of the Florida Panhandle and the Florida Big Bend region.

3. Tropical storm conditions will continue along the coastline within the warning area over the next few hours and will continue to spread farther inland later today and tonight across portions of the Florida Panhandle, southwestern Georgia, and southeastern Alabama.

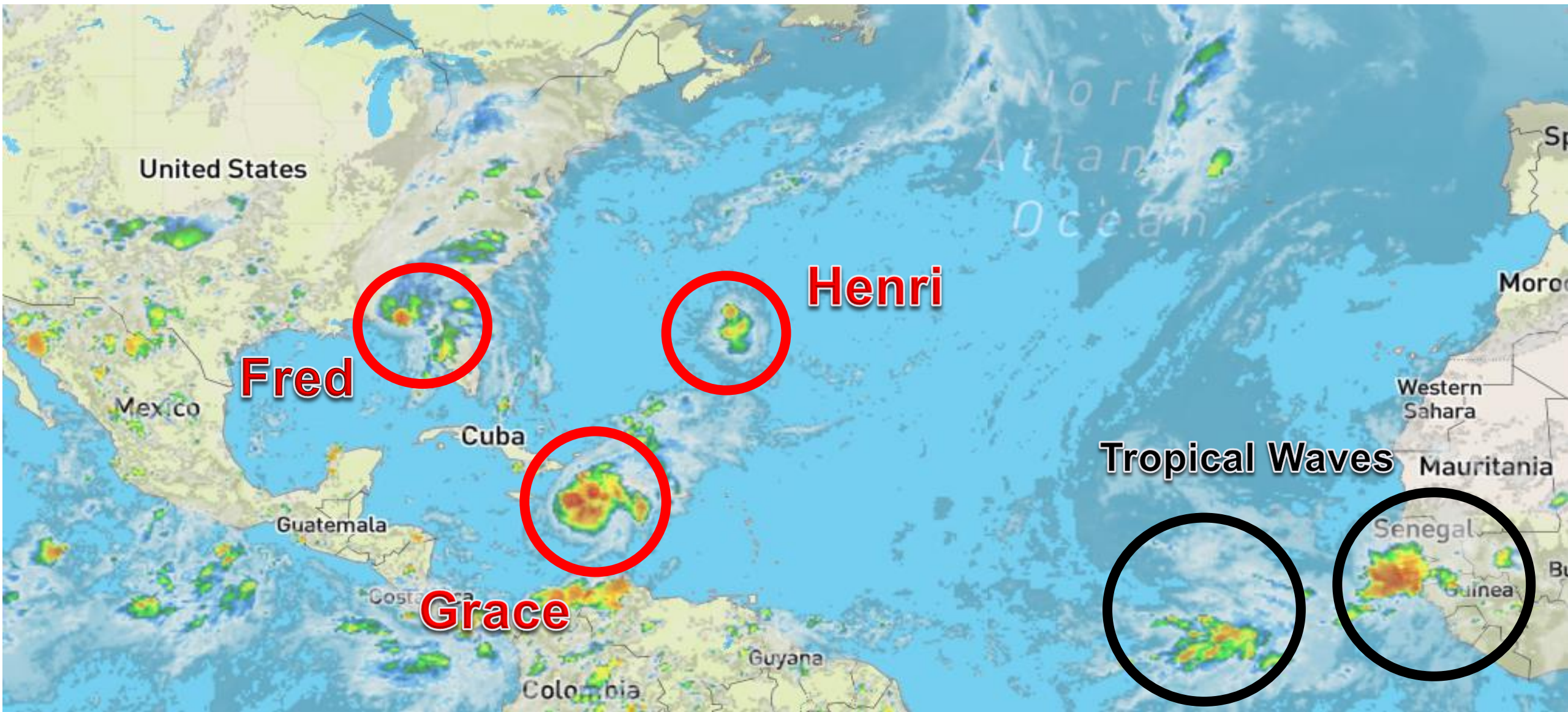


For more information go to [hurricanes.gov](https://hurricanes.gov)



# Atlantic Basin Satellite Image

Chance of development: — None — Low — Medium — High

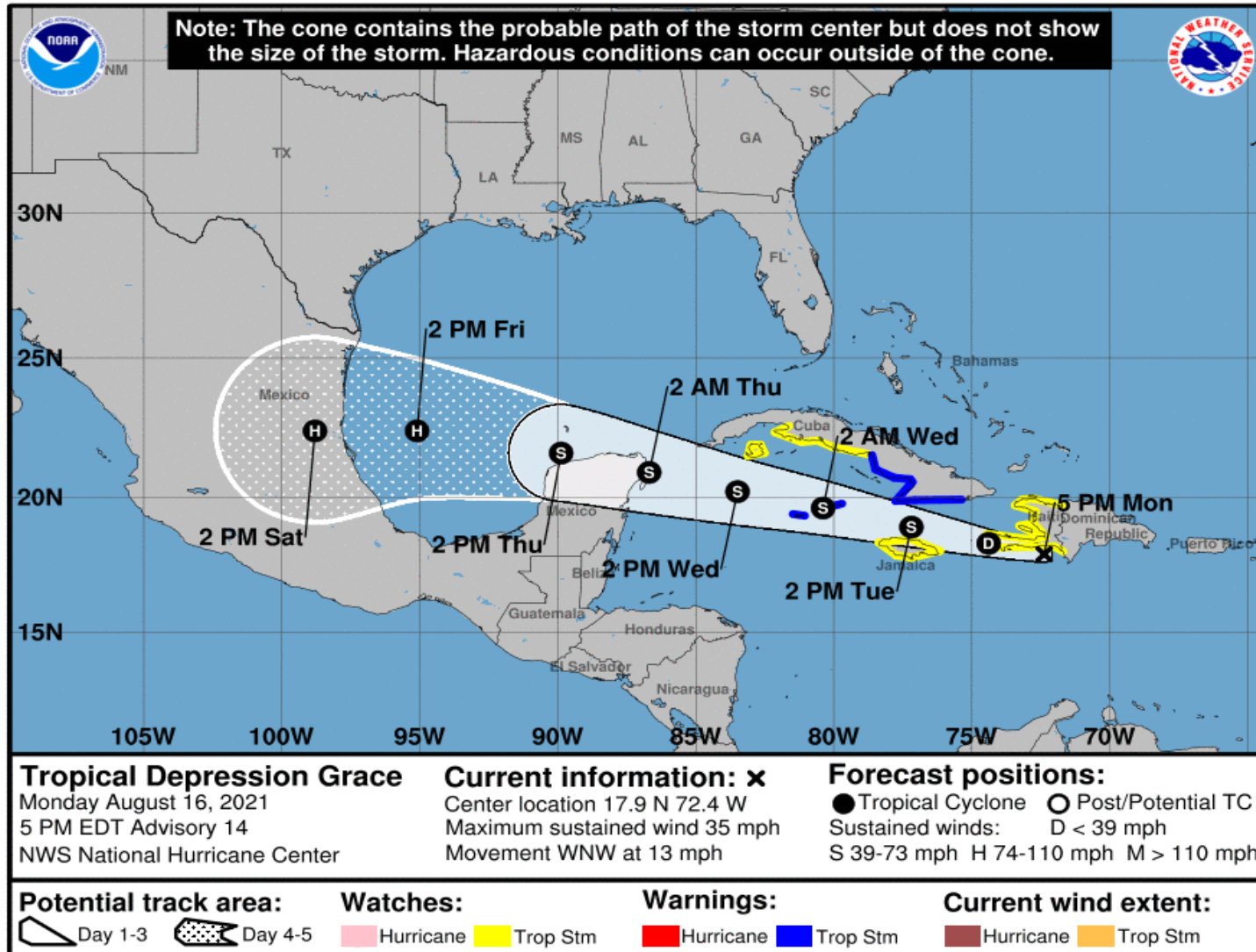






# Official Forecast Track

From the National Hurricane Center - Grace



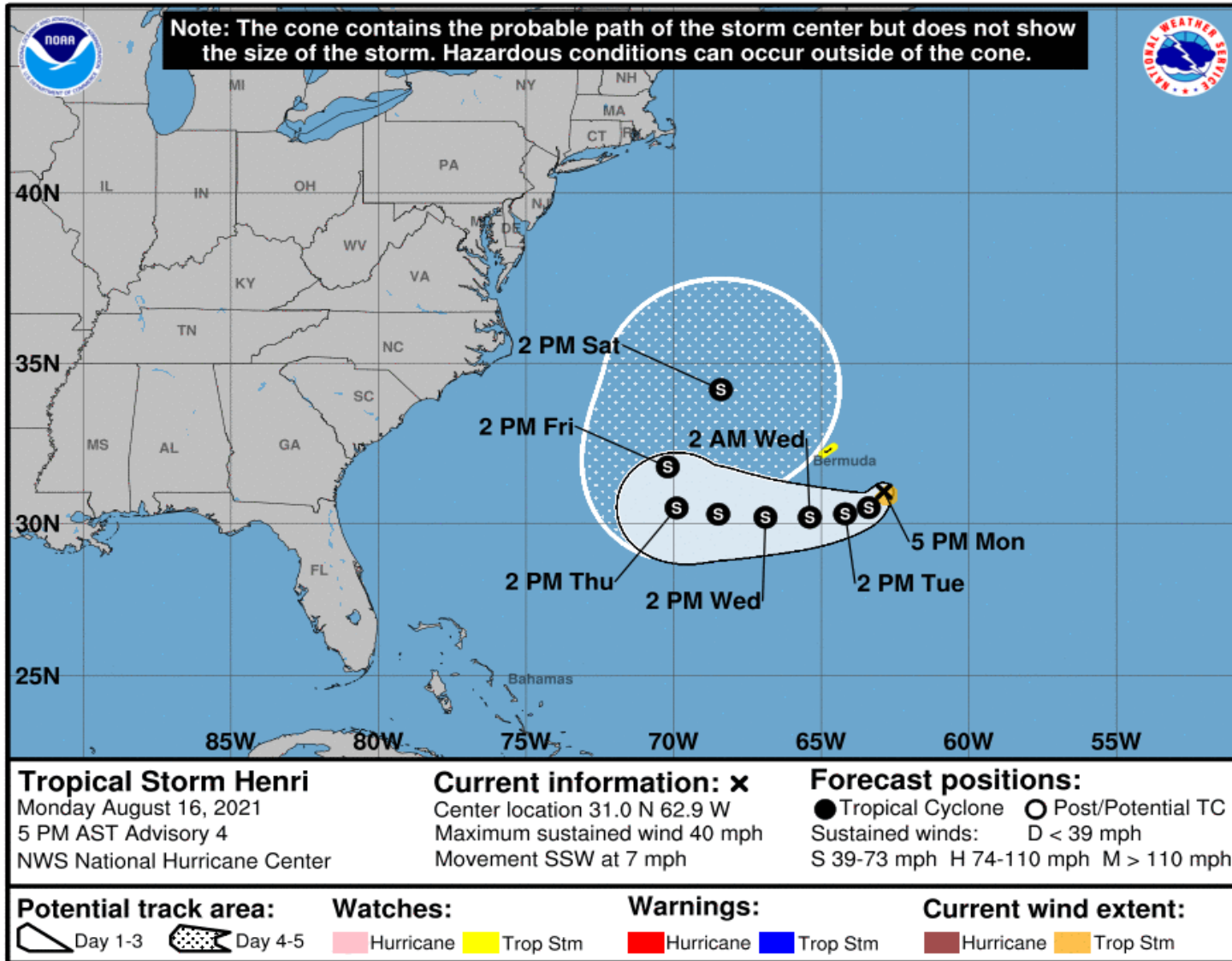
- The center of Grace is located about 50 miles south of Port Au Prince, Haiti, or about 740 miles southeast of Miami, Florida.
- Maximum sustained winds are around 35 mph and Grace is moving to the west-northwest at 13 mph.
- On the forecast track, the Grace will travel through the Caribbean and towards Mexico this week.





# Official Forecast Track

From the National Hurricane Center – TS Henri



- T.D. #8 was upgraded to Tropical Storm Henri at 5pm.
- Henri is located about 145 miles southeast of Bermuda, or about 1,100 miles east of Jacksonville, Florida
- Maximum sustained winds are around 40 mph and moving to the south-southwest at 7 mph.
- On the forecast track, the center is forecast to loop around Bermuda and then move back to the north later in the week.



# Overall Summary

## Tropical Storm Fred:

- Tropical Storm Fred made landfall at 3:15pm ET / 2:15pm CT near Cape San Blas in Gulf County with maximum sustained winds near 65mph.
- The center of Fred is located about 25 miles northwest of Apalachicola, Florida.
- Maximum sustained winds are around 60 mph with higher gusts, and Fred is moving to the north-northeast at 9 mph.
- Tropical storm force winds extend out about 115 miles, mainly to the east of the center.
- Heavy rain bands with gusty winds of 45-65mph are affecting the eastern Panhandle and western Big Bend. These bands also have a tornado potential.
- Rain bands affecting Northeast Florida and West Central Florida also contain heavy rainfall and wind gusts up to 30mph.
- Fred should exit the state late tonight, though lingering impacts may continue through Tuesday morning.

## Florida Outlook:

- **Tropical Storm Warnings** remain for: Bay, Calhoun, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Taylor, Wakulla, Walton, and Washington County.
- **Storm Surge Warnings** remain for coastal portions of Dixie, Franklin, Jefferson, Levy, Taylor, and Wakulla. Storm surge of 3-5' is expected from Indian Pass to the Steinhatchee River, with 2-4' further east to Yankeetown. 1-3' is expected across the rest of the Florida Panhandle and Nature Coast.
- Peak storm surge levels in Apalachee Bay may occur with tonight's high tide cycle.
- In addition to gusty winds, heavy rainfall remains a large threat to Florida. Rainfall amounts of 3-7" estimated to have already occurred for much of Franklin, Gulf and Bay Counties. 1-3" of rain has been observed across portions of the Big Bend.
- An additional 2-5" of rain is possible through tonight for the eastern Panhandle, with 1-3" possible for the Big Bend with isolated totals as high as 5".
- These amounts may lead to flash flooding, riverine flooding, and any gusty winds may allow for shallow-rooted or weak trees to fall.
- Isolated tornadoes remain possible in the Panhandle and Big Bend. A **Tornado Watch** is in effect until 8 PM ET.
- T.D. Grace and T.S. Henri are not forecast to affect Florida.

Another briefing packet will be issued Tuesday morning. For the latest information on the tropics, please visit the National Hurricane Center website at [www.hurricanes.gov](http://www.hurricanes.gov).



# TROPICAL UPDATE



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State Meteorological Support Unit

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