



Tropical Update



11:00 AM EDT

Friday, August 9, 2024

Post-Debby Florida Outlook & Hydrology; A Tropical Wave Over the Eastern Atlantic Has A Medium (60%) Chance of Development Through 7 Days

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.



Atlantic Basin Satellite Image

Chance of development: None Low Medium High



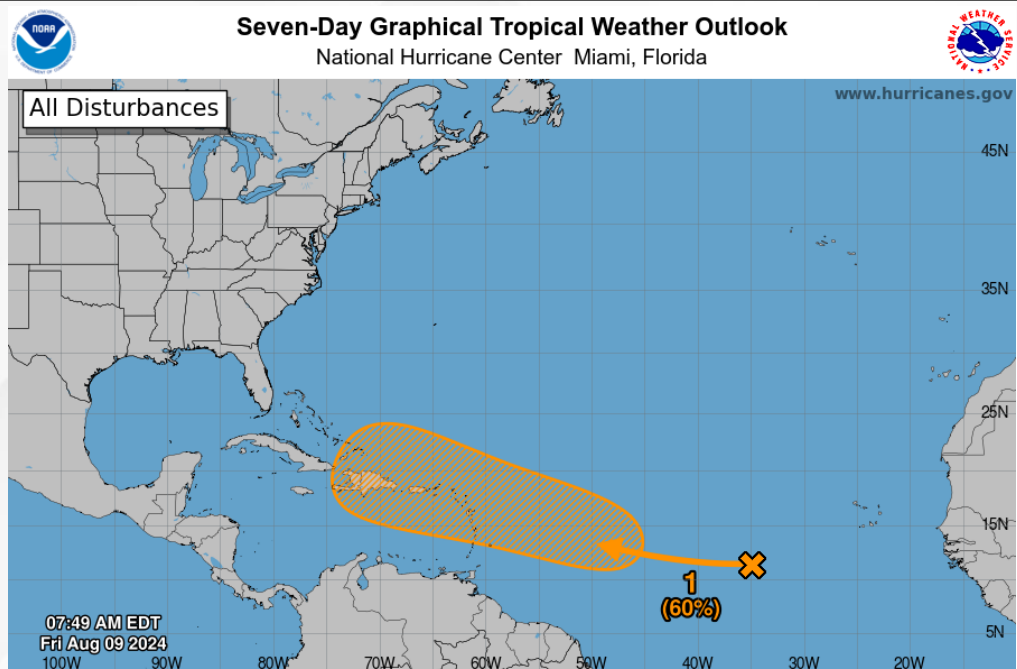
60%

FOUO – For Government Official Use Only



Tropical Weather Outlook

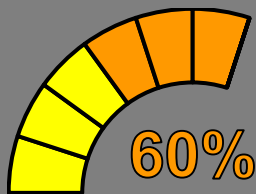
Disturbance 1 – Near the Lesser and Greater Antilles ([LINK](#))



Current Disturbances and Seven-Day Cyclone Formation Chance: < 40% 40-60% > 60%
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane
 Post-Tropical Cyclone or Remnants

Near 0%

48 Hour Formation



60%

7 Day Formation

A tropical wave located several hundred miles to the west-southwest of the Cabo Verde Islands is producing a large area of disorganized showers and thunderstorms over the tropical Atlantic. Any development of the wave should be slow to occur during the next couple of days while it moves westward across the central tropical Atlantic. Afterwards, conditions are expected to become more conducive for development while the wave moves west-northwestward. A tropical depression could form by early next week while the system approaches the Lesser Antilles. The system is then forecast to continue moving generally west-northwestward and could approach the Greater Antilles by the middle part of next week.

This system poses no direct threat to Florida during the next 7-10 days, but this system will continue to be monitored as it moves into a more favorable environment early next week.

* Formation chance through 48 hours...**low...near 0%**.

* Formation chance through 7 days...**medium...60%**.

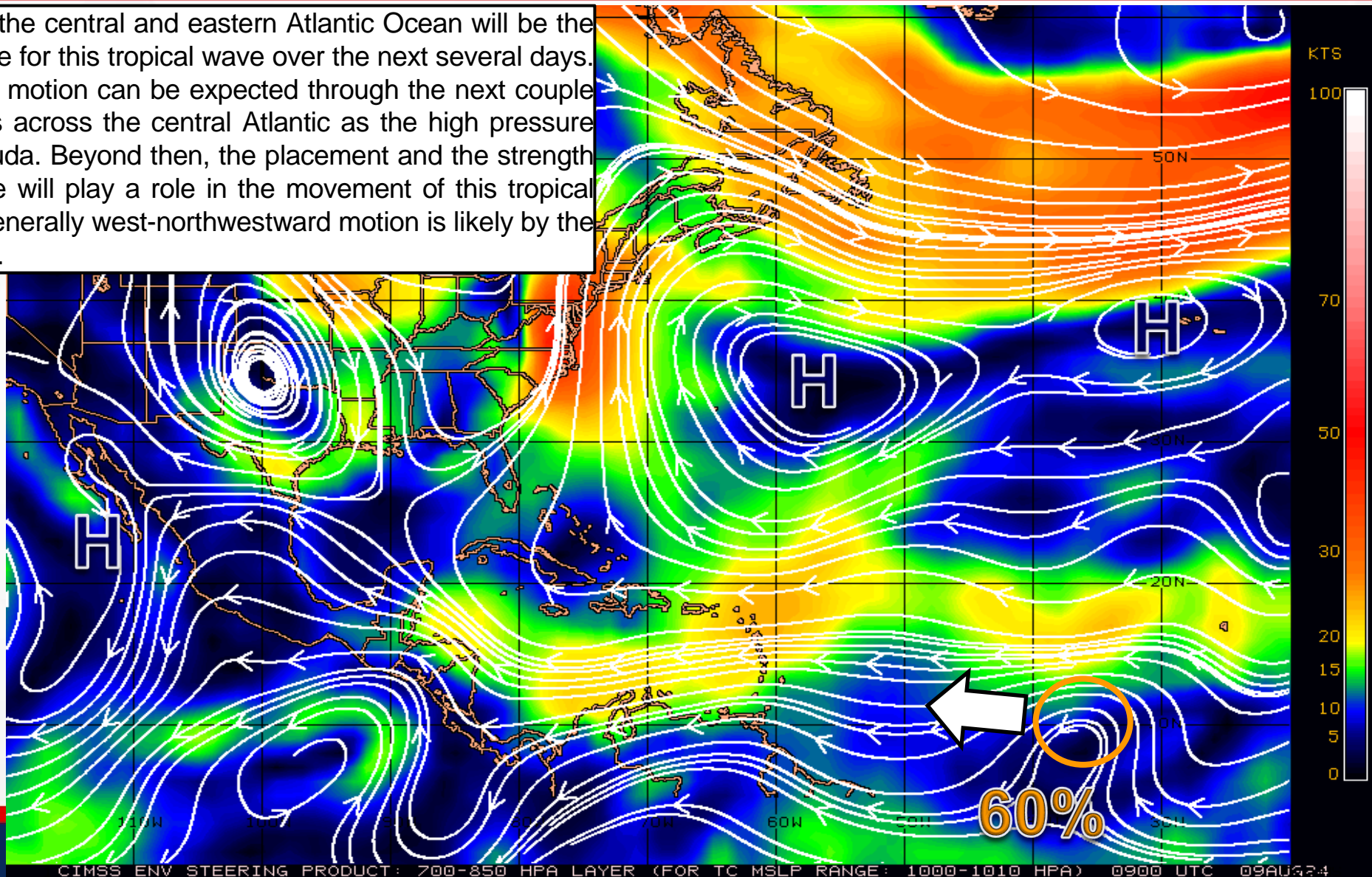


Steering Currents

What is Moving the System?

Color denotes the movement speed through the atmosphere and thin white lines denote direction. Tightly clustered white lines represent faster movement as well.

High pressure over the central and eastern Atlantic Ocean will be the main steering feature for this tropical wave over the next several days. A general westward motion can be expected through the next couple of days as it moves across the central Atlantic as the high pressure remains over Bermuda. Beyond then, the placement and the strength of the high pressure will play a role in the movement of this tropical wave; however, a generally west-northwestward motion is likely by the middle of next week.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm

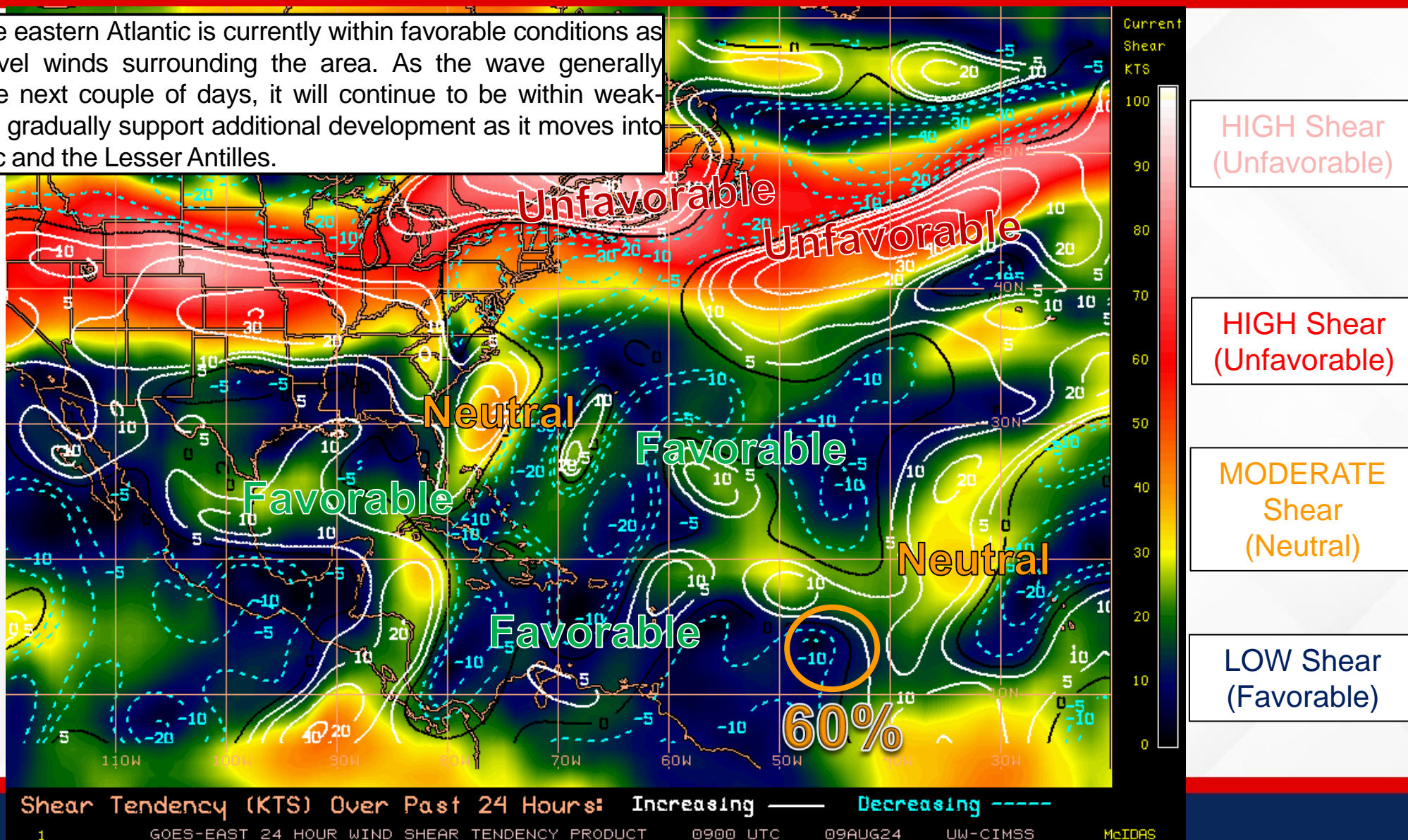


Wind Shear

Is the environment favorable for the system?

Color denotes the amount of wind shear and the lines denote how it have changed over the last 24 hours (dotted lines show decreasing shear and solid lines show increasing).

The tropical wave over the eastern Atlantic is currently within favorable conditions as there are weak upper-level winds surrounding the area. As the wave generally moves westward over the next couple of days, it will continue to be within weak-upper-level winds that will gradually support additional development as it moves into the central tropical Atlantic and the Lesser Antilles.

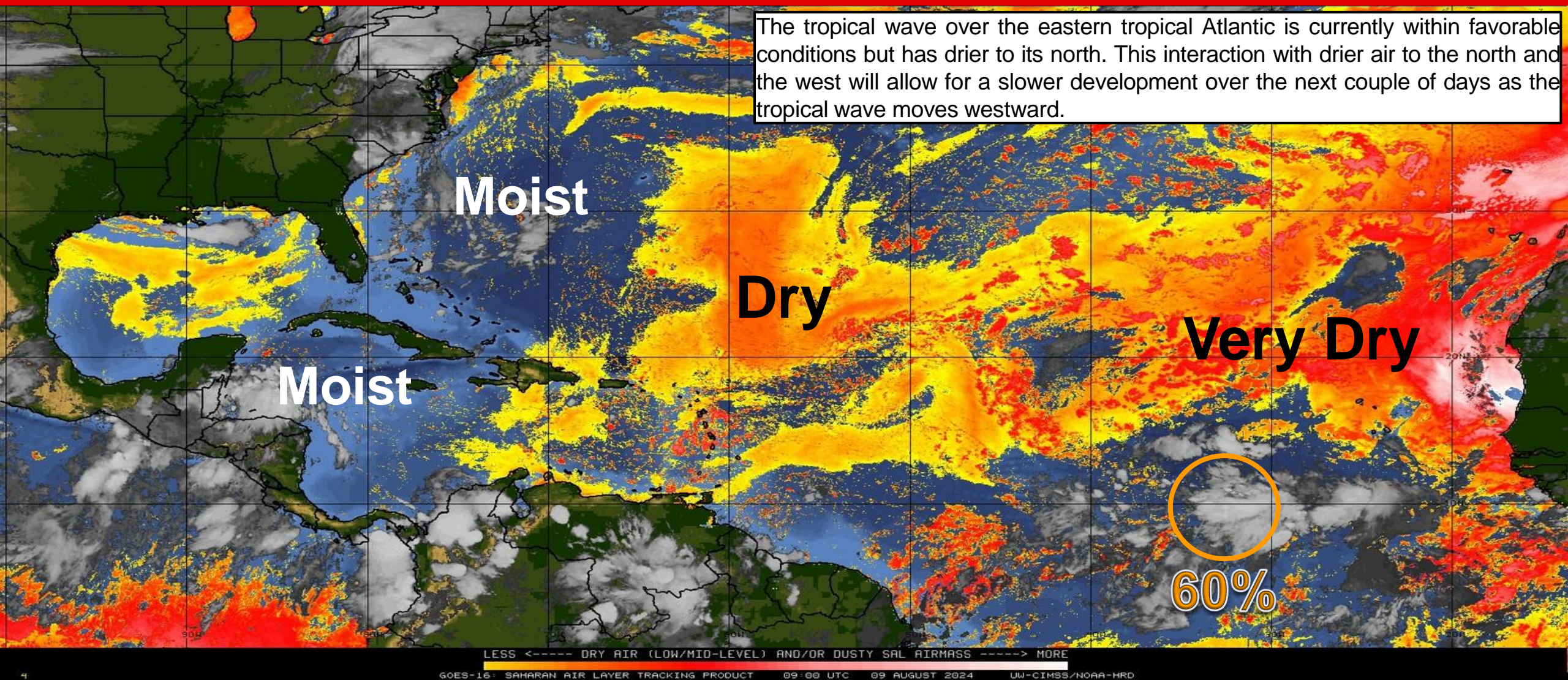




Dry Air & Saharan Dust

Is the environment favorable for the system?

Color denotes concentration of Saharan Dust or dry, stable air.

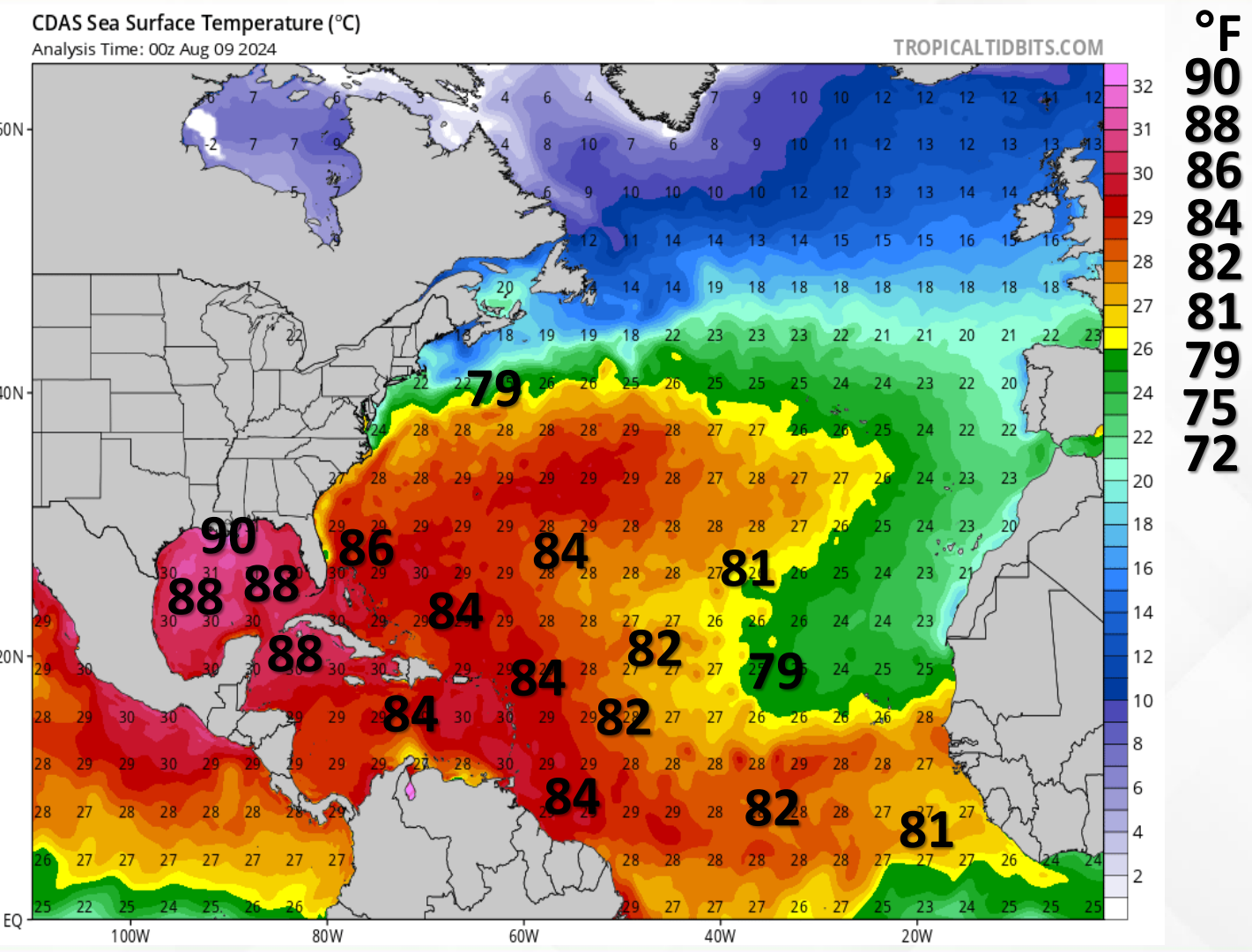
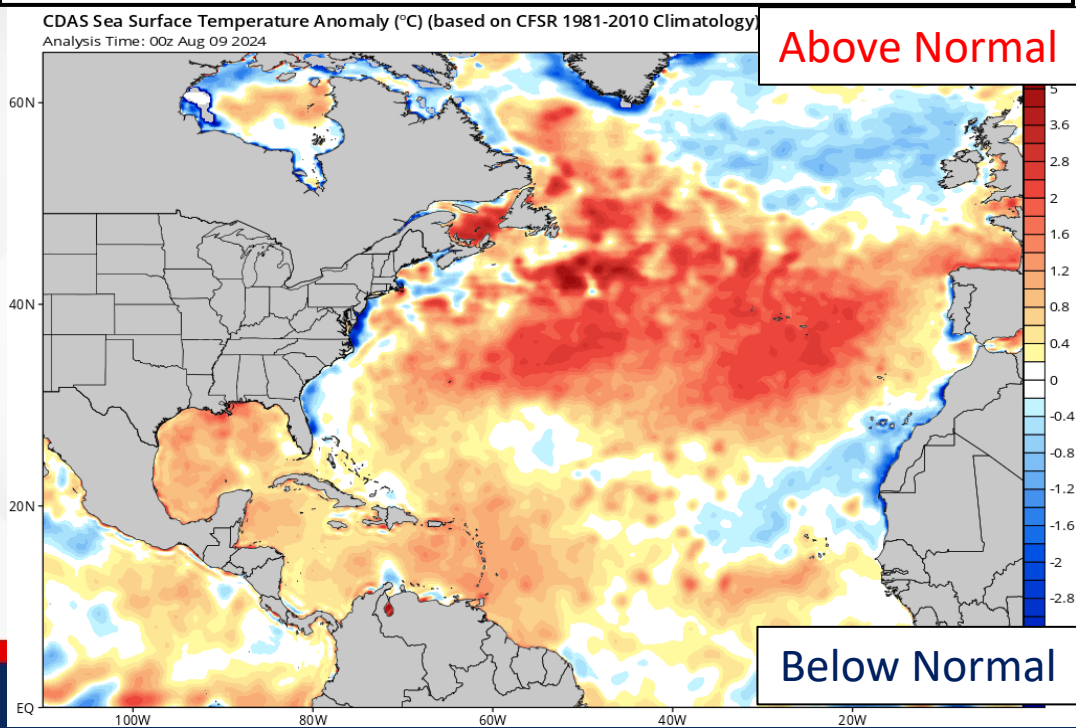




Sea Surface Temperatures & Anomalies

Is the ocean favorable for the system?

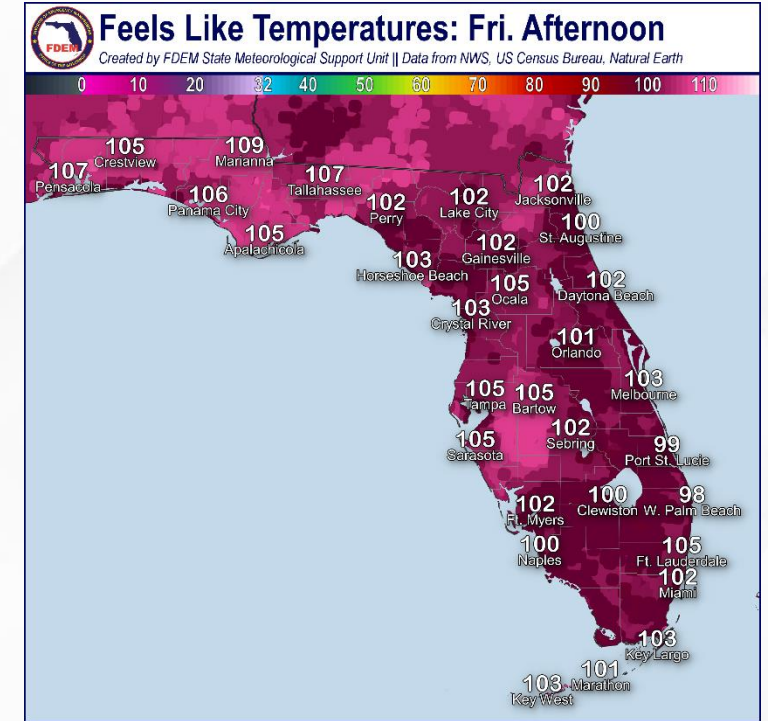
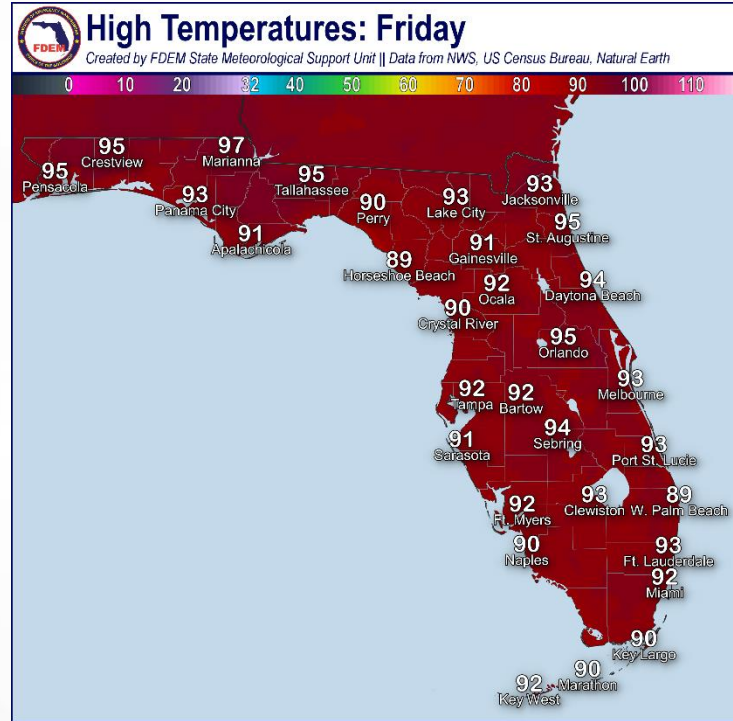
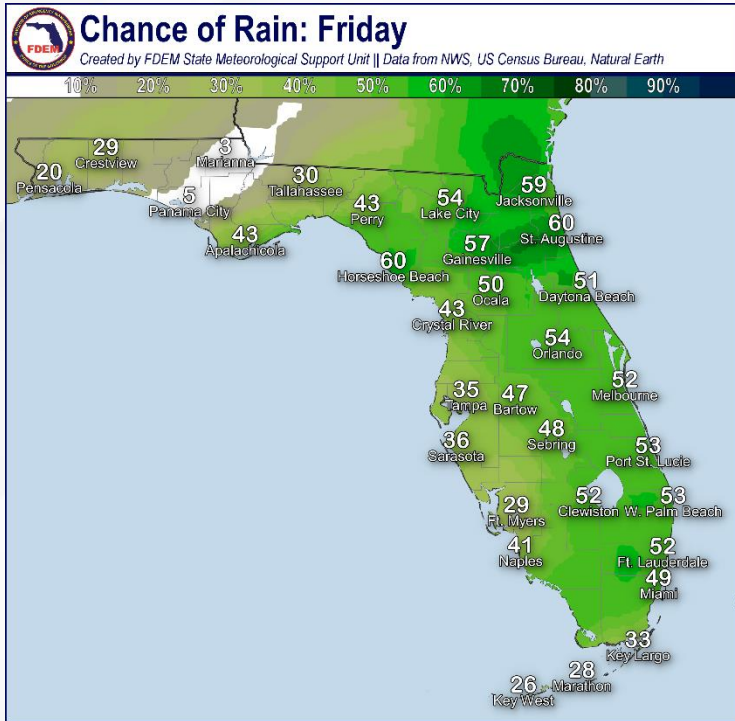
Temperatures across the Atlantic Basin are supportive of tropical cyclone development. Waters across the deep tropical Atlantic and Gulf of Mexico 0.5 to 1.5-degrees above normal for this time of year.





Recovery Weather - Friday

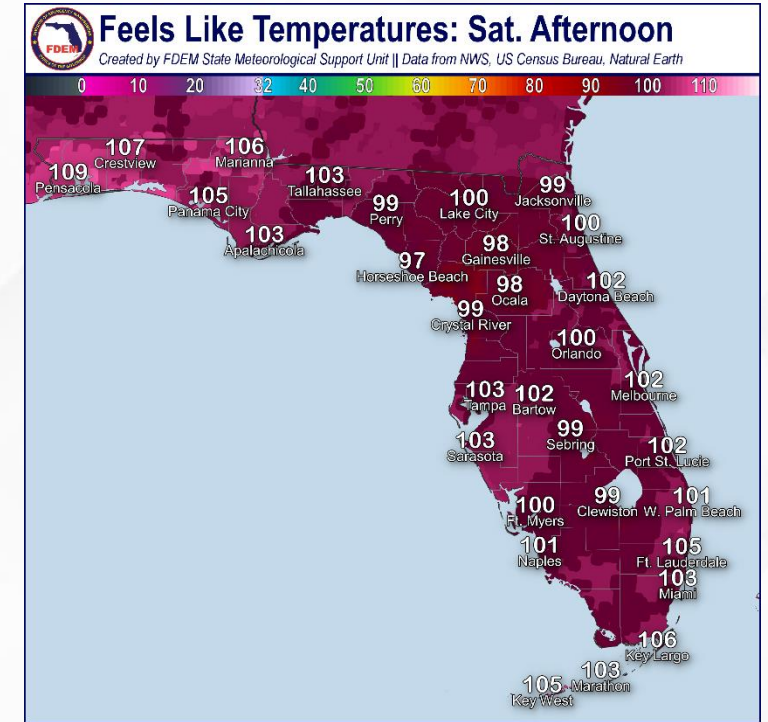
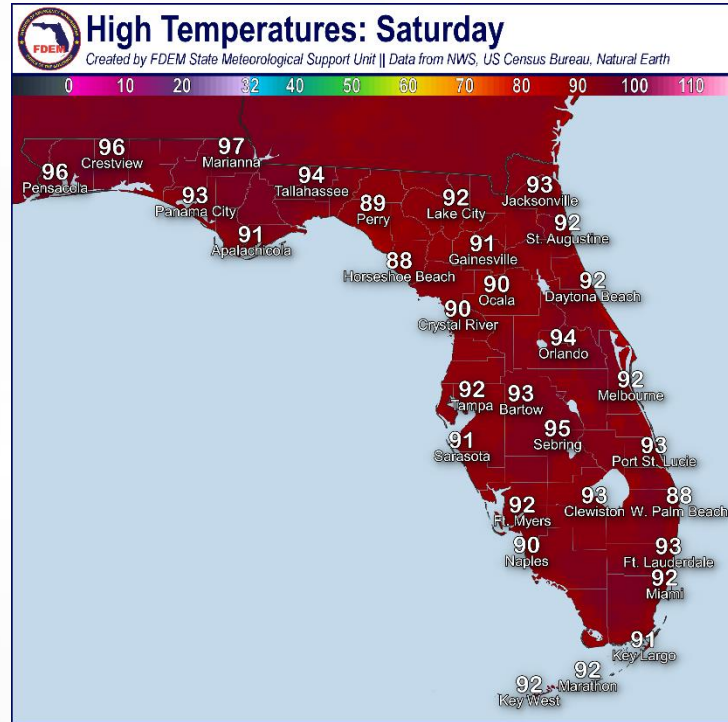
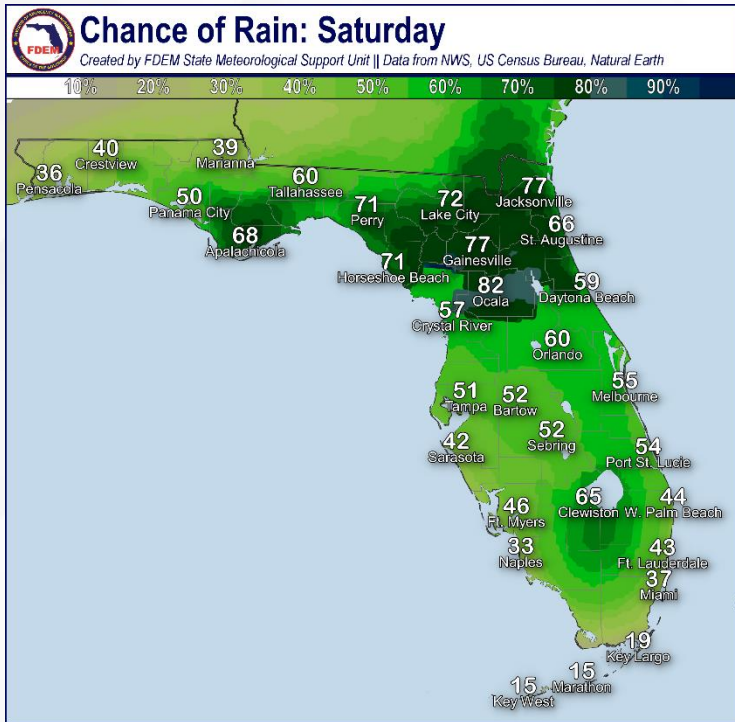
Rain Chances, High Temperature & Feels-Like Temperature





Recovery Weather - Saturday

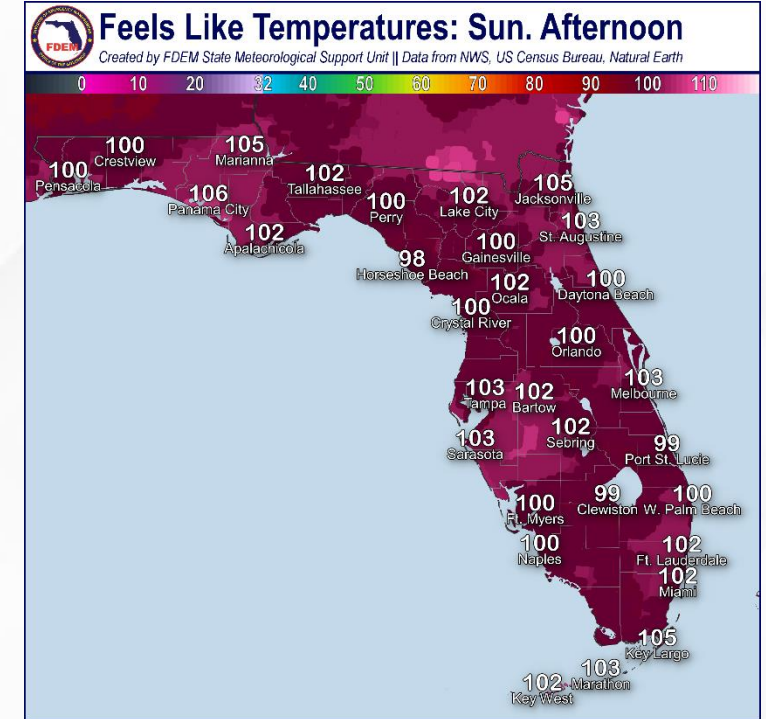
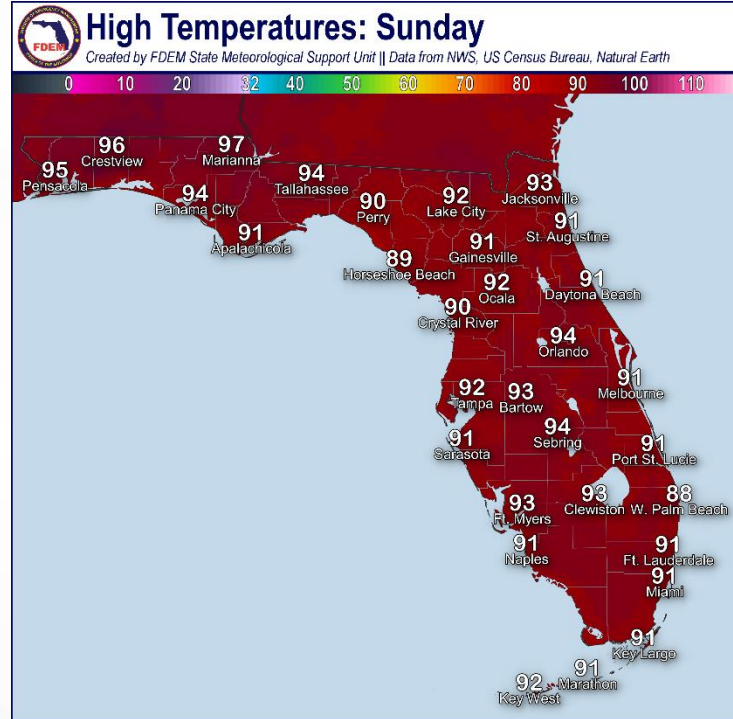
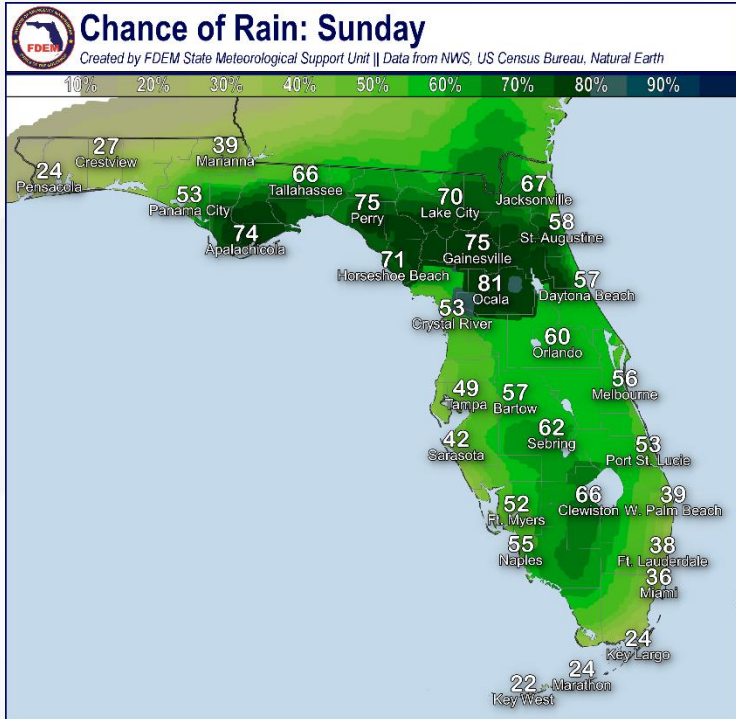
Rain Chances, High Temperature & Feels-Like Temperature





Recovery Weather - Sunday

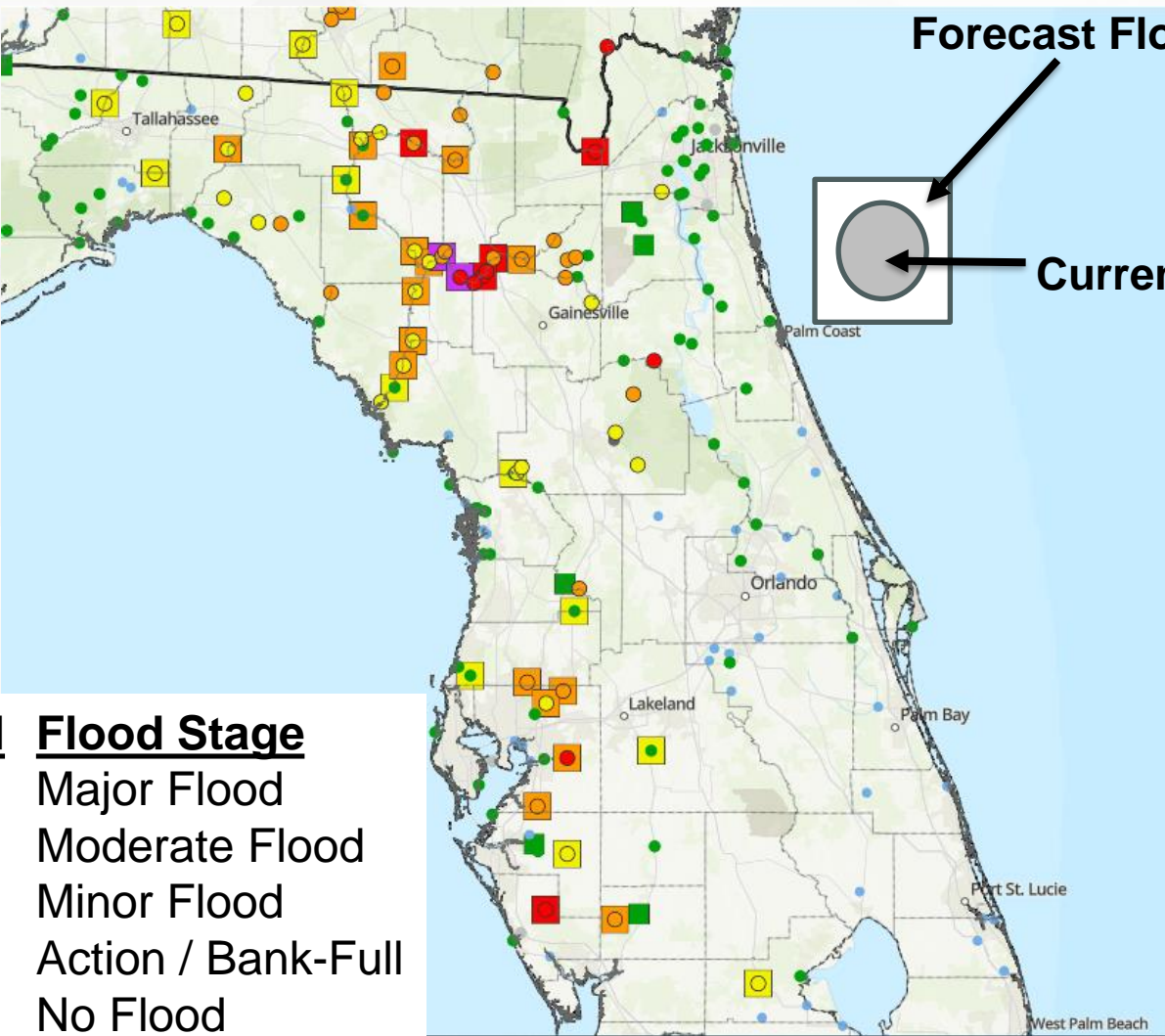
Rain Chances, High Temperature & Feels-Like Temperature





Riverine Flooding

Chance of River Flooding Based on Range of Forecast Rainfall



Forecast Flood Stage

Current Flood Stage

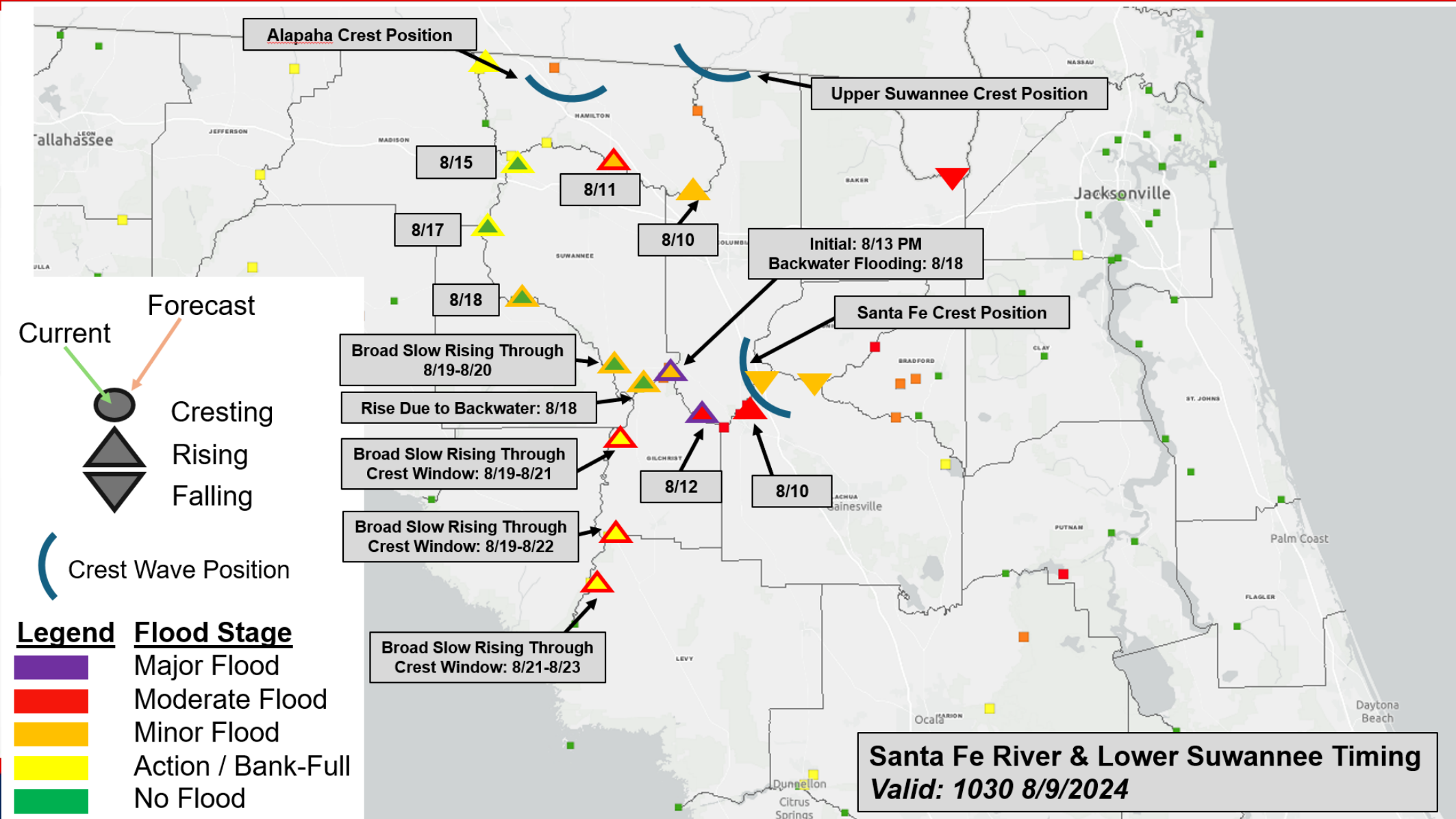
Rainfall continues to deposit into the rivers, creeks and waterways across the Florida Big Bend, Northeast Florida and West-Central Florida following Debby. Numerous **River Flood Warnings** remain in effect due expected riverine flooding. Portions of the Santa Fe River are forecast to rise into **major flood stage** over the coming weeks due to back-flooding within the Santa Fe and Suwannee River basins. **Moderate flooding** is ongoing for the St. Mary's River at Macclenny, Santa Fe River near High Springs, Myakka River at Myakka River State Park and Alafia River at Lithia Pinecrest, but is forecast for the Santa Fe River at O'Leno State Park and Suwannee River near Suwannee Springs. **Minor flooding** is ongoing or forecast throughout numerous rivers and waterways including the upper Suwannee, lower Suwannee, Aucilla River, Cypress Creek, Hillsborough, Little Manatee and Horse Creek.



River Crest Timing

Sante Fe and Lower Suwannee

FOUO – For Government Official Use Only





River Flood Warnings

From the National Weather Service

FOUO – For Government Official Use Only

River Gauge	County(ies) Affected	Current Level	Crest Level	Record Level	Status	Crest Date	Warning Expires Date
Alafia River at Lithia Pinecrest Road at Lithia	Hillsborough	Moderate: 15.60 ft	Major: 20.17 ft	28.50 ft	Falling	7-Aug	1300 EDT 9-Aug
Aucilla River at Lamont	Madison, Jefferson, Taylor	Action: 52.52 ft	Minor: 54.70 ft	58.80 ft	Rising	11-Aug	0345 EDT 10-Aug
Cypress Creek at SR-54 Worthington Gardens	Pasco	Minor: 9.43 ft	Minor: 9.80 ft	13.80 ft	Rising	Aug 10-11	Until Further Notice
Hillsborough River at Morris Bridge	Hillsborough	Minor: 31.97 ft	Minor: 32.20 ft	32.90 ft	Rising	Aug 9-10	0800 EDT 11-Aug
Hillsborough River near Zephyrhills at State Park	Hillsborough	Minor: 11.40 ft	Moderate: 13.54 ft	15.30 ft	Falling	6-Aug	0100 EDT 10-Aug
Hillsborough River near Hillsborough River State Park	Hillsborough	Minor: 11.40 ft	Minor: 12.2 ft	11.3 ft	Falling	8-Aug	0200 EDT 10-Aug
Horse Creek near Arcadia at SR 72	DeSoto	Minor: 12.97 ft	Minor: 13.40 ft	21.20 ft	Falling	Aug 10-11	Until Further Notice
Little Manatee River at Mimauma at US 301	Hillsborough	Minor: 13.48 ft	Major: 19.47 ft	20.10 ft	Falling	6-Aug	1300 EDT 9-Aug
Myakka River at Myakka River State Park	Sarasota	Moderate: 10.22 ft	Moderate: 10.22 ft	12.80 ft	Rising	9-Aug	Until Further Notice
Santa Fe River at Fort White	Gilchrist, Columbia	Moderate: 27.57 ft	Major: 29.9 ft	35.40 ft	Rising	12-Aug	Until Further Notice
Santa Fe River at Three Rivers Estates	Gilchrist, Suwannee, Columbia	Minor: 20.10 ft	Major: 26.00 ft	33.40 ft	Rising	18-Aug	Until Further Notice
Santa Fe River at Worthington Springs	Alachua, Union	Minor: 62.80 ft	Moderate: 65.28 ft	71.20 ft	Falling	7-Aug	Until Further Notice
Santa Fe River near High Springs	Alachua, Columbia	Moderate: 41.13 ft	Moderate: 41.6 ft	48.50 ft	Rising	10-Aug	Until Further Notice
Santa Fe River near Hildreth	Suwannee, Gilchrist	Action: 19.23 ft	Minor: 24.80 ft	33.40 ft	Rising	18-Aug	Until Further Notice
Santa Fe River near O'Leno State Park	Alachua, Columbia	Moderate: 52.00 ft	Moderate: 52.21 ft	57.10 ft	Falling	8-Aug	Until Further Notice
St. Mary's near Macclenny	Baker, Nassau	Moderate: 17.80 ft	Major: 19.71 ft	24.40 ft	Falling	7-Aug	Until Further Notice
Steinhatchee River near Cross City	Dixie, Taylor	Minor: 20.77 ft	N/A	N/A	Rising	N/A	Until Further Notice
Suwannee River at White Springs	Hamilton, Suwannee, Columbia	Minor: 78.78 ft	Minor: 78.80 ft	87.70 ft	Cresting	10-Aug	Until Further Notice
Suwannee River near Suwannee Springs	Suwannee, Hamilton	Minor: 63.54 ft	Moderate: 65.00 ft	78.20 ft	Rising	11-Aug	Until Further Notice

For more details on the hydrographs as well as impact statements, click the links for each river gauge.



River Flooding Outlook

From the National Weather Service

FOUO – For Government Official Use Only

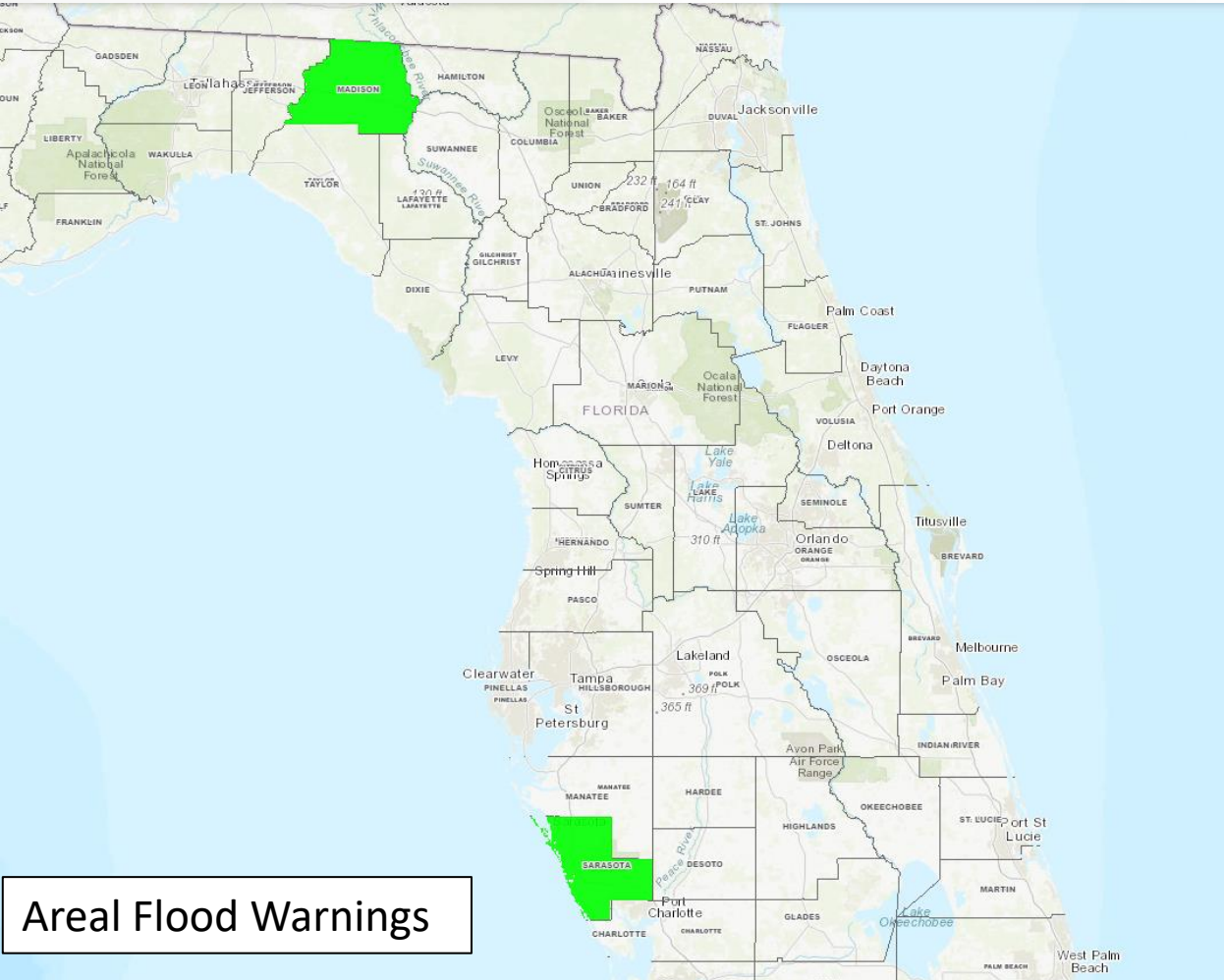
River Gauge	County(ies) Affected	Current Level	Crest Level	Record Level	Status	Crest Date	Warning Expires Date
Suwannee River at Ellaville	Hamilton, Madison, Suwannee	Below: 46.77 ft	Minor: 52.00 ft	67.40 ft	Rising	15-Aug	N/A
Suwannee River at Dowling Park	Lafayette, Madison, Suwannee	Below: 38.98 ft	Action: 44.8 ft	60.80 ft	Rising	16-Aug	N/A
Suwannee River at Luraville	Lafayette, Suwannee	Below: 31.96 ft	Minor: 36.4 ft	52.80 ft	Rising	18-Aug	Until Further Notice
Suwannee River at Branford	Lafayette, Suwannee	Below: 22.95 ft	Minor: 28.00 ft	38.10 ft	Rising	19-Aug	Until Further Notice
Suwannee River at Rock Bluff (Bell)	Dixie, Gilchrist, Lafayette	Action: 16.03 ft	Moderate: 21.00 ft	N/A	Rising	19-Aug	Until Further Notice
Suwannee River at Wilcox	Dixie, Gilchrist, Levy	Action: 7.98 ft	Moderate: 13.00 ft	21.10 ft	Rising	19-Aug	Until Further Notice
Suwannee River at Manatee Springs	Dixie, Levy	Action: 5.56 ft	Moderate: 10.00 ft	16.00 ft	Rising	21-Aug	N/A

For more details on the hydrographs as well as impact statements, click the links for each river gauge.



Areal Flood Warnings in Effect

From the National Weather Service



Areal Flood Warnings have been issued for portions of Madison and Sarasota Counties regarding recent flooding.

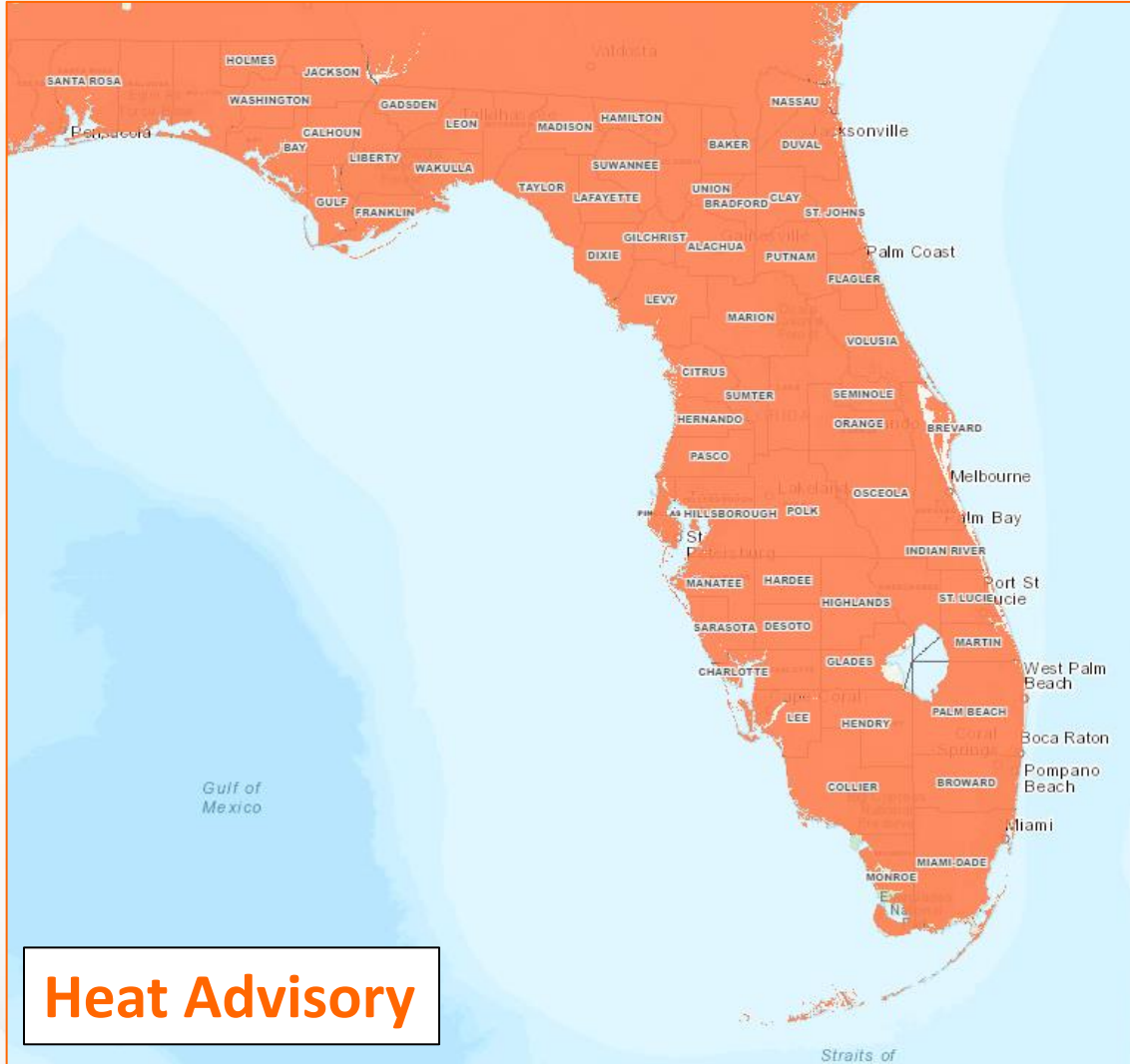
Along southeastern Madison County, water levels continue to rise due to runoff from recent heavy rainfall from Hurricane Debby. Flooding will likely persist into the weekend, and the Areal Flood Warning will continue to be extended as needed.

Portions Sarasota County could see moderate riverine flooding from the Myakka River at Myakka State Park extending southward into this weekend.



Hot & Humid Conditions

From the National Weather Service (NWS)



Dangerously hot and humid conditions can be expected to develop statewide as high temperatures will reach well into the 90s with **heat index values in the triple digits (104-112-degrees)**.

Heat Advisories have been issued statewide and will go into effect later this morning.

It should be noted that several of these counties within the Heat Advisories are ones that were impacted by Debby, which could make clean-up/response activities more difficult for those without power or AC.

Please remember to practice heat safety when outdoors including, taking breaks from direct sunlight when you can, wear loose fitting clothing and drink plenty of water.



Summary

FOUO – For Government Official Use Only

Near the Lesser and Greater Antilles:

- A tropical wave located several hundred miles to the west-southwest of the Cabo Verde Islands is producing disorganized shower and thunderstorm over the tropical Atlantic.
- Any development of the wave should be slow to occur during the next couple of days while it moves westward across the central tropical Atlantic.
- Afterwards, conditions are expected to become more conducive for development while the wave moves west-northwestward.
- A tropical depression could form by early next week while the system approaches the Lesser Antilles.
- The system is then forecast to continue moving generally west-northwestward and could approach the Greater Antilles by the middle part of next week.
- *This system poses no direct threat to Florida during the next 7-10 days, but this system will continue to be monitored as it moves into a more favorable environment early next week.*
- This system has a **low (near 0%)** chance of formation through 48 hours, but a **medium (60%)** chance of formation through 7 days.
- The next name on the list is Ernesto (er-NES-toh).

Florida Outlook:

- **River Flood Warnings** have been issued across numerous North and West Florida Rivers as they have reached or are forecast to reach moderate to major flood stage with several others forecast to reach minor flood stage.
 - Additional River Flood Warnings will be possible over the next several days as water filters through the basins into the rivers and waterways and further downstream; and updates to existing riverine flooding forecasts can be expected.
- **Dangerous heat and humidity** can be expected statewide today, with **heat index values** rising to **104 to 112-degrees** during the peak heating hours of the day.
 - **Heat Advisories** have been issued across the state and will go into effect later this morning, then continue throughout the afternoon and early evening hours.
 - *When outdoors and helping with response efforts, please make sure to practice heat safety. Be sure to take breaks from direct sunlight, wear loose fitting clothing and drink plenty of water.*
- Grounds and soils are very saturated following heavy rainfall before and after landfall, and any additional rainfall may **exacerbate the potential for additional flooding**; Any heavy downpours over urban and low-lying/poor drainage areas could bring **localized instances of flash flooding**.
- Locally strong to severe thunderstorms producing frequent lightning, gusty winds (40-50 mph), and heavy downpours cannot be ruled out during peak heating hours of the day.

The next briefing packet will be issued Saturday. For the latest information, please visit the [National Hurricane Center website](#).



Tropical Update

FOUO – For Government Official Use Only



Created by:

Kennedy Tartt, Assistant State Meteorologist

Kennedy.Tartt@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at:

https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic_id=SERT_Met_Tropics.

Other reports available for subscription are available at:

<https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true>