



# Tropical Update



11:30 AM EDT

Monday, October 14, 2024

## Milton Recovery Weather & Riverine Flooding Eastern Tropical Atlantic Disturbance - Invest 94L (50%)

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).



# Atlantic Basin Satellite Image

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



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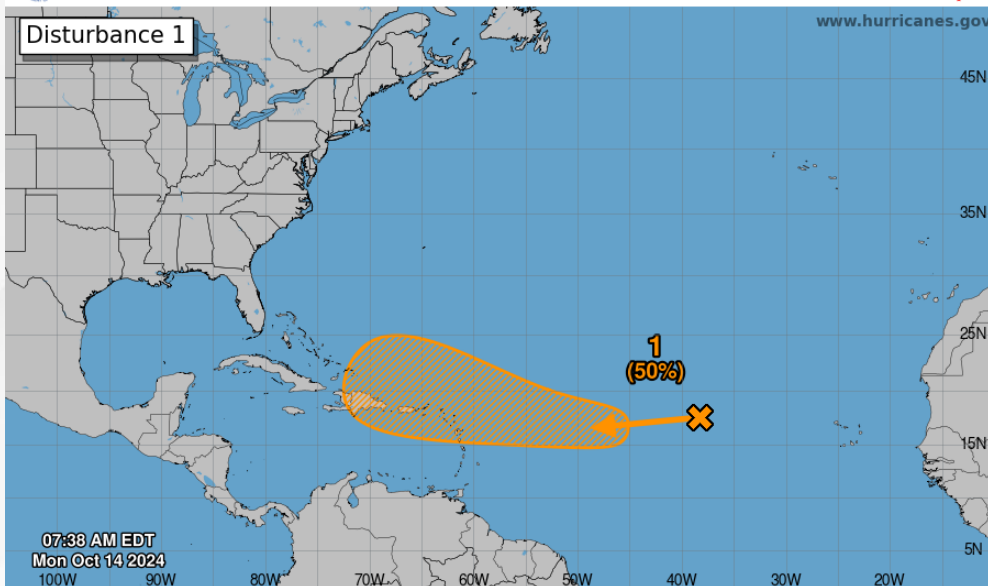
# Tropical Weather Outlook

## Invest 94L - Eastern Tropical Atlantic



### Seven-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



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

10%

48 Hour Formation

50%

7 Day Formation

A well-defined area of low pressure located several hundred miles west of the Cabo Verde Islands is producing some disorganized showers and thunderstorms. This system is currently embedded in a dry environment, and development is unlikely over the next couple of days. However, this system is forecast to move generally westward toward warmer waters, and environmental conditions could become more favorable for gradual development by the middle to latter part of this week. A tropical depression could form as the system begins moving west-northwestward and approaches or moves near the Leeward Islands late this week.

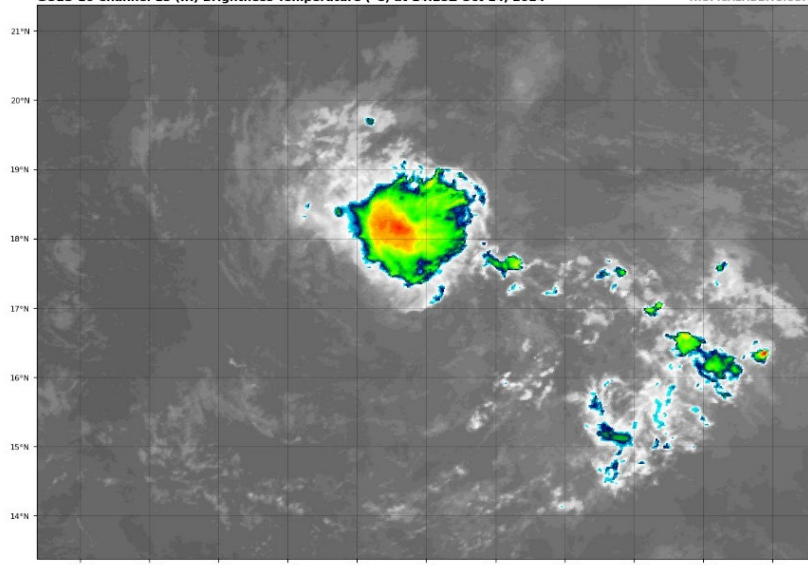
*This system poses no direct threat to Florida over the next 7-10 days, at least.*

Chance of development through 48 hours...**low...10%.**

Chance of development through 7 days...**medium...50%.**

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 14:25Z Oct 14, 2024

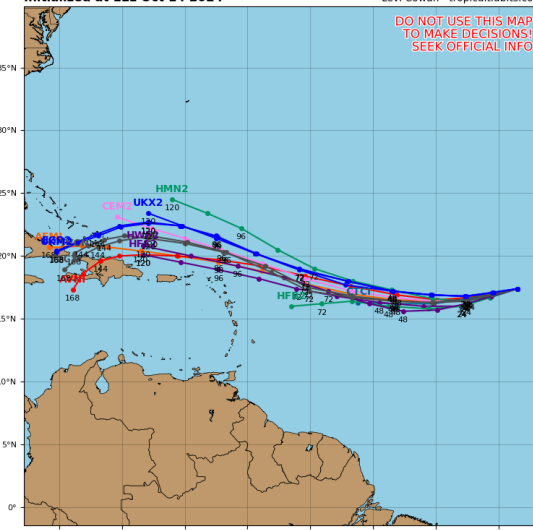
TROPICALIDBITS.COM



### Invest 94L Model Track Guidance

Initialized at 12z Oct 14 2024

Levi Cowan - tropicalidbits.com



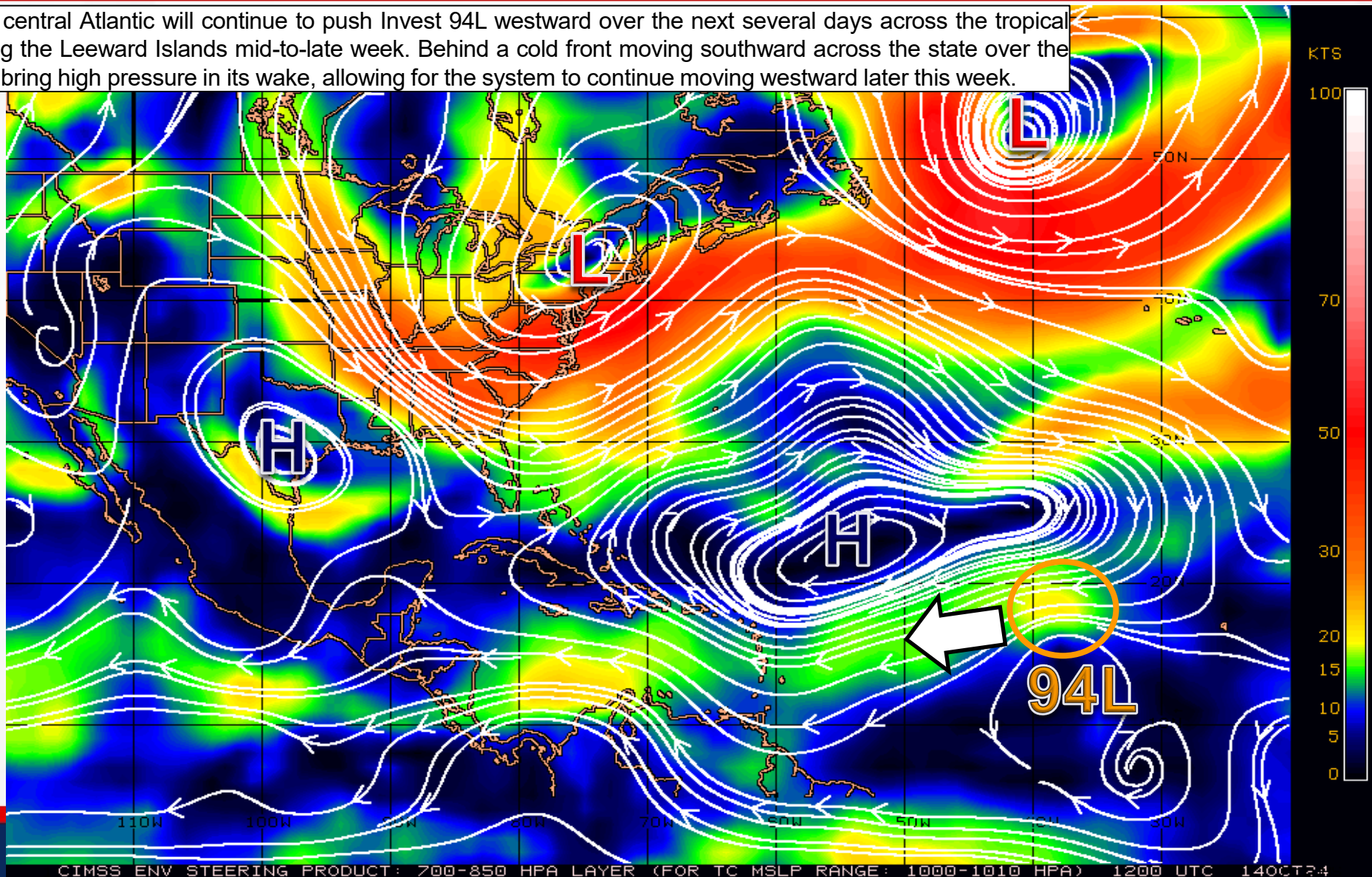


# Steering Currents

## 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 Atlantic will continue to push Invest 94L westward over the next several days across the tropical Atlantic and approaching the Leeward Islands mid-to-late week. Behind a cold front moving southward across the state over the next couple of days will bring high pressure in its wake, allowing for the system to continue moving westward later this week.



Fast Moving Storm

Fast Moving Storm

Typical Moving Storm

Slow Moving Storm



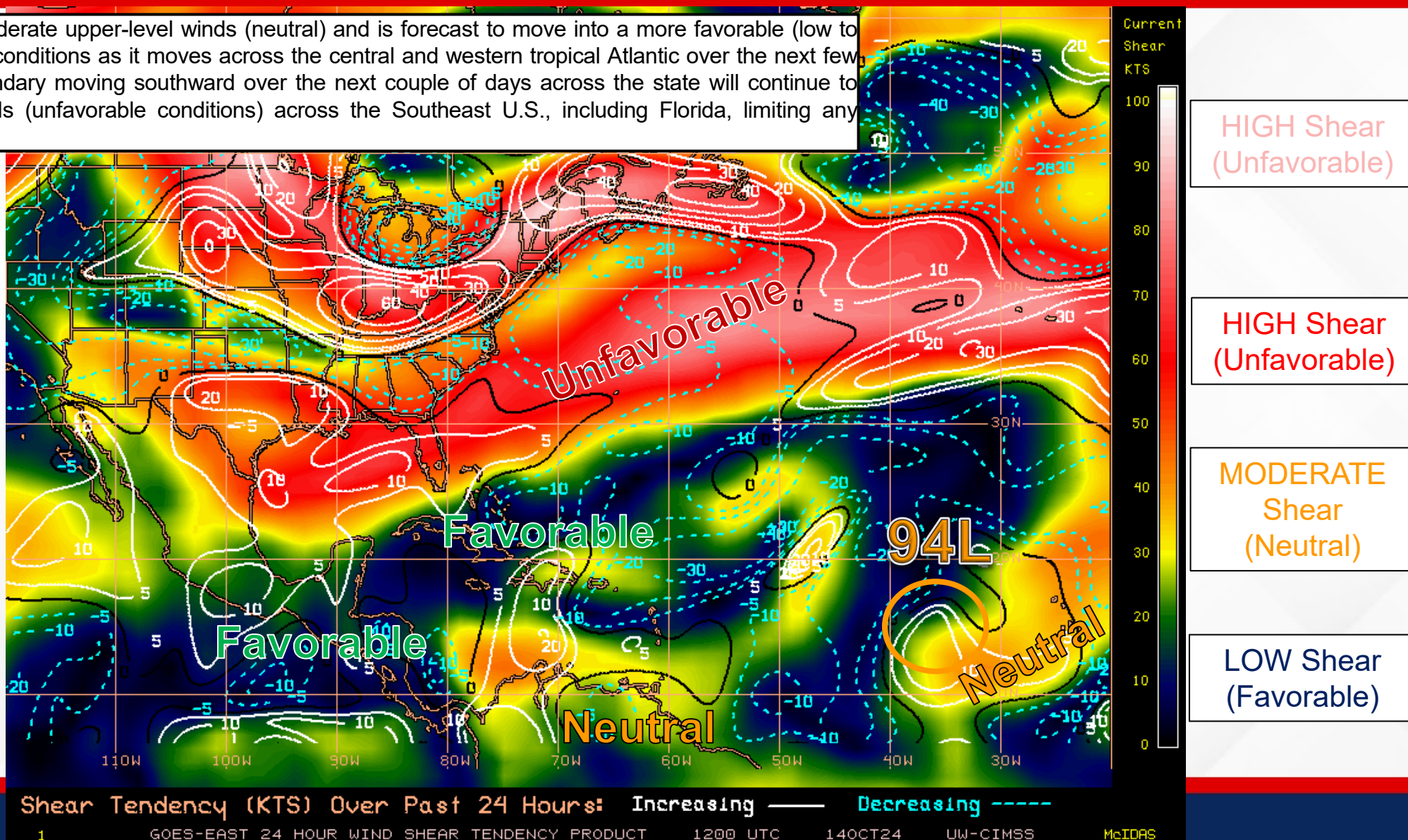


# Wind Shear

## 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).

Invest 94L remains within moderate upper-level winds (neutral) and is forecast to move into a more favorable (low to moderate upper-level winds) conditions as it moves across the central and western tropical Atlantic over the next few days. As another frontal boundary moving southward over the next couple of days across the state will continue to bring strong upper-level winds (unfavorable conditions) across the Southeast U.S., including Florida, limiting any additional development.





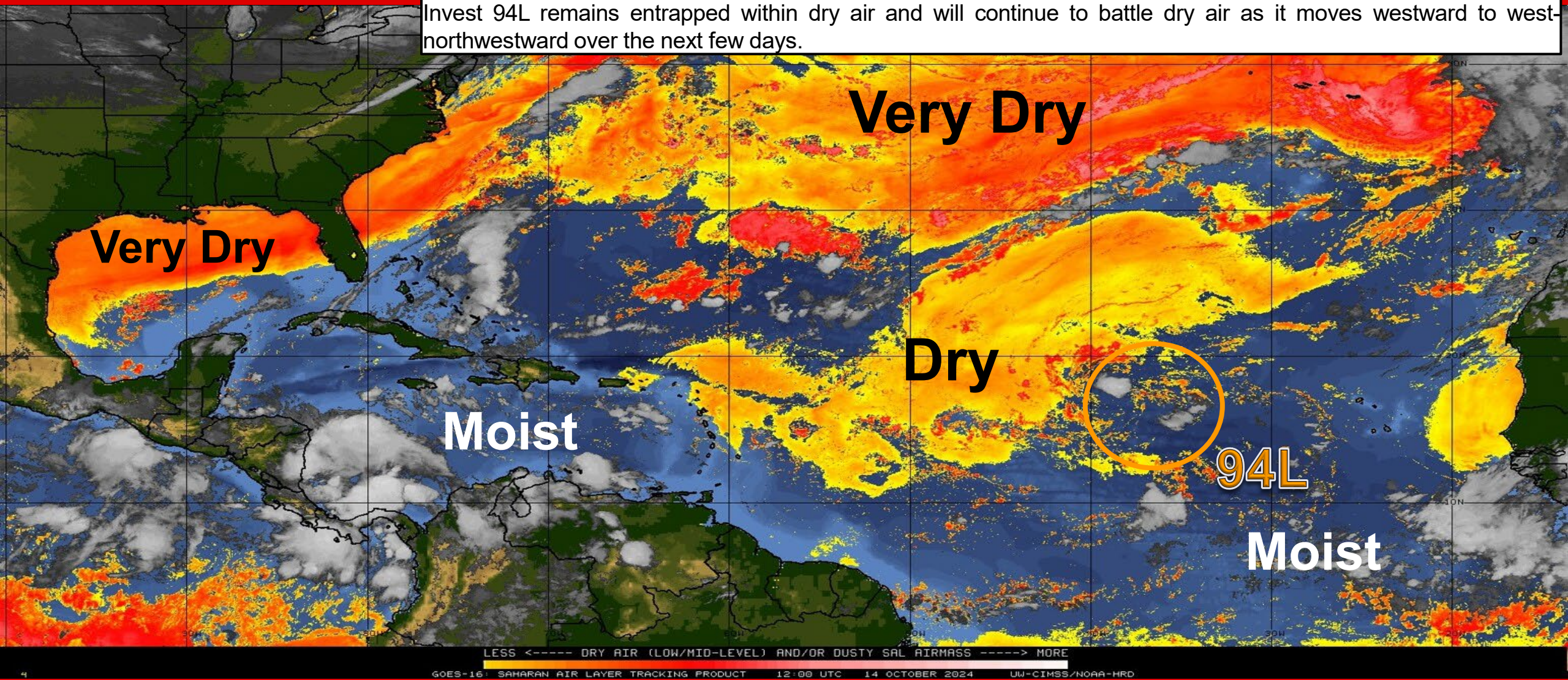


# Dry Air & Saharan Dust

Is the environment favorable for the system?

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

Invest 94L remains entrapped within dry air and will continue to battle dry air as it moves westward to west-northwestward over the next few days.



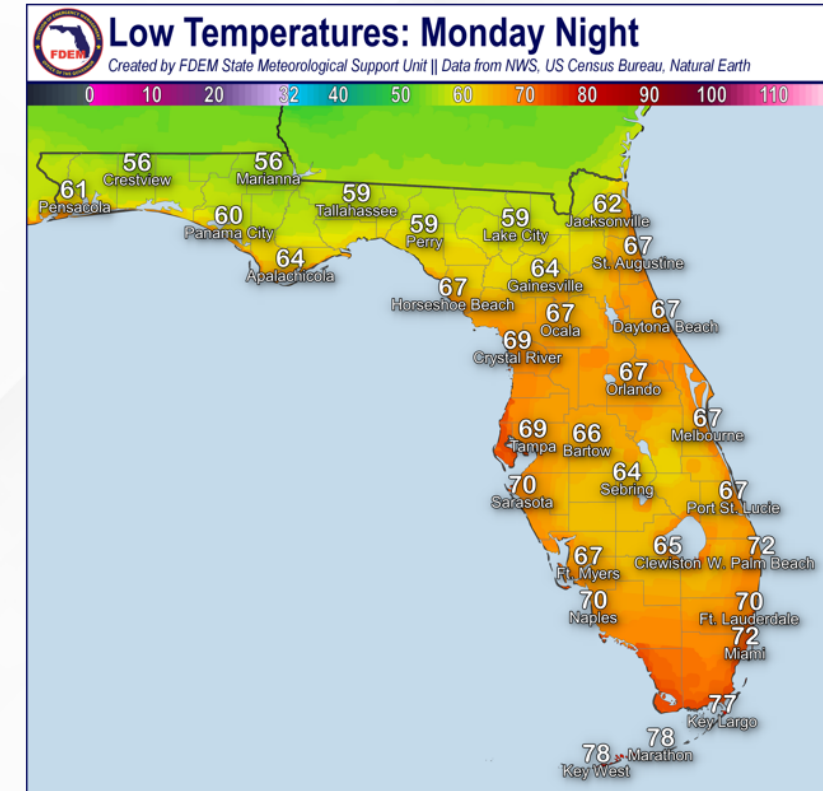
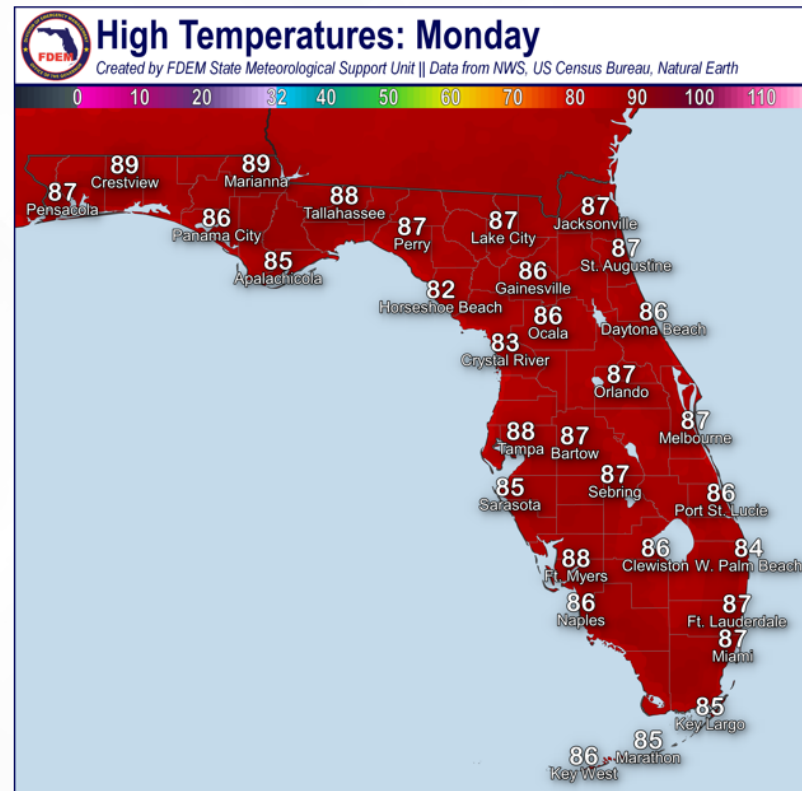
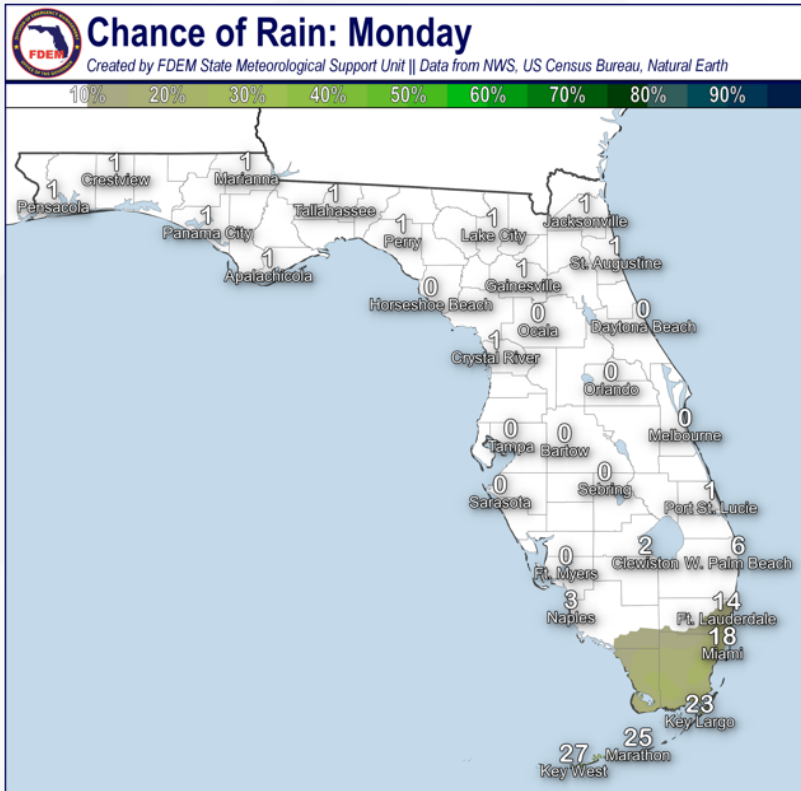
LESS <----- DRY AIR (LOW/MID-LEVEL) AND/OR DUSTY SAL AIRMASS -----> MORE





# Recovery Weather - Today

## Rain Chances, High Temperatures, & Low Temperatures



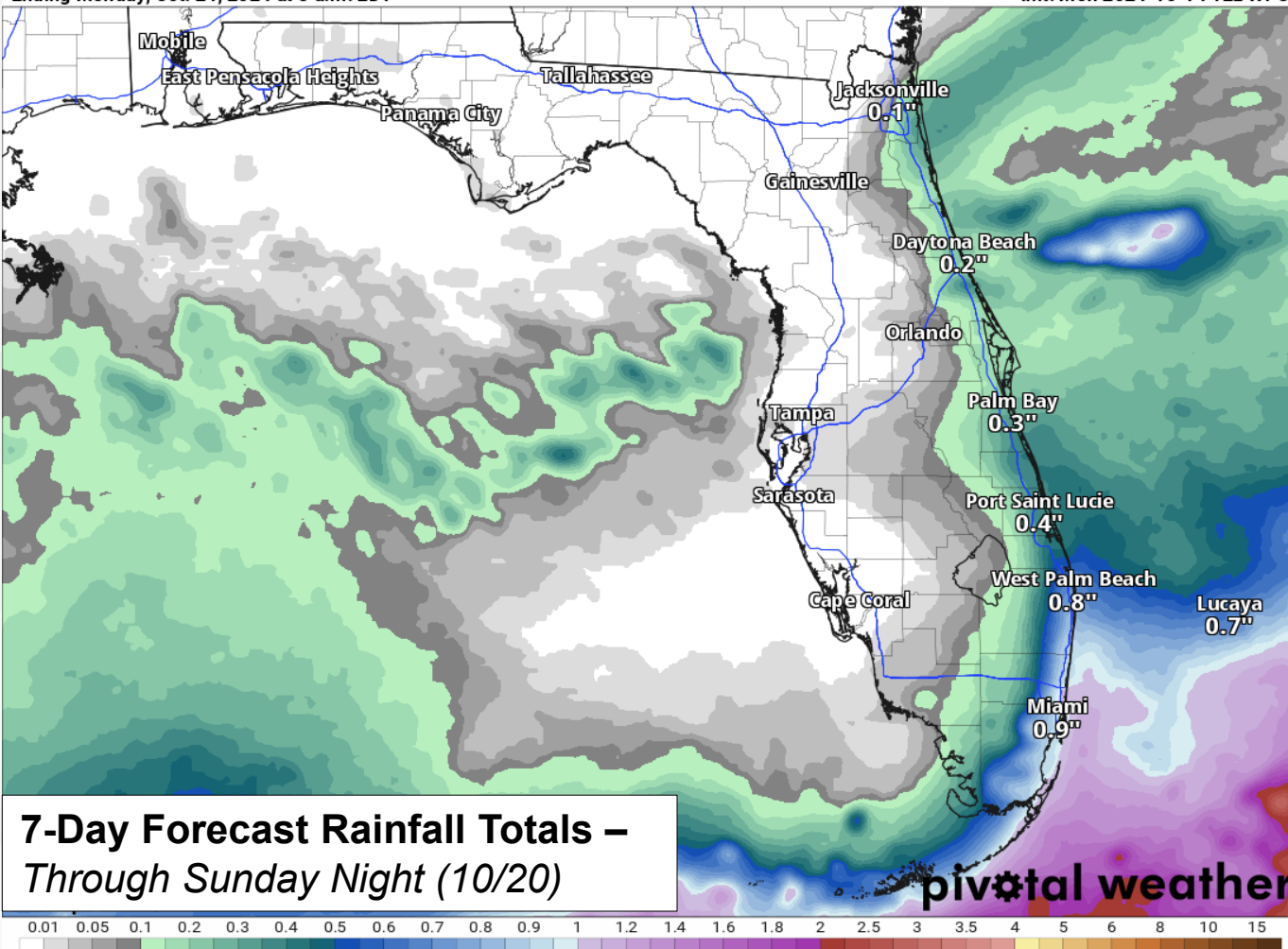


# Rainfall Totals – Next 7 Days

## From the Weather Prediction Center (WPC)

7-Day Precipitation (in)  
Ending Monday, Oct. 21, 2024 at 8 a.m. EDT

Init: Mon 2024-10-14 12z WPC



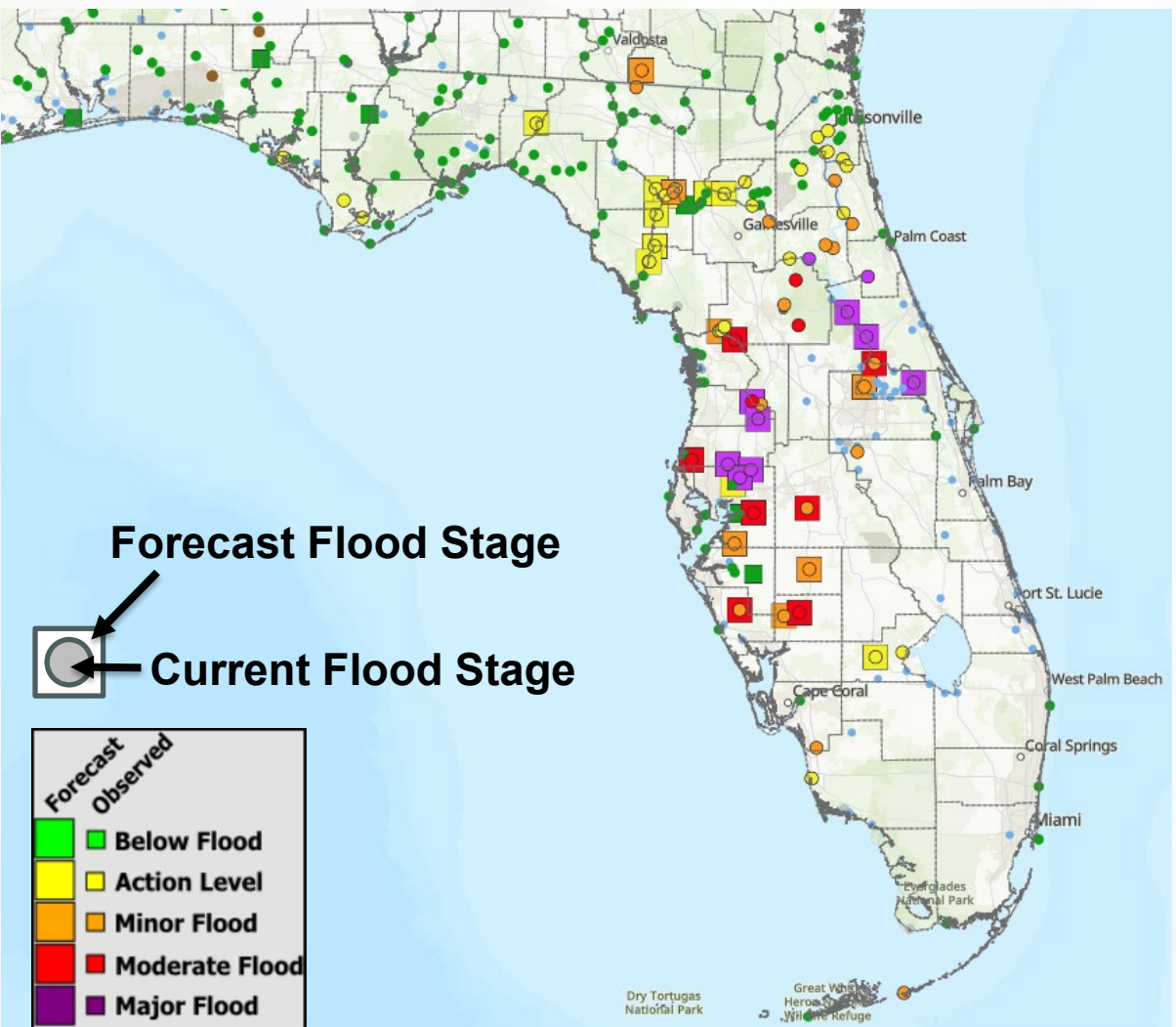
- Cold front to move from north to south beginning this evening; however, rainfall associated with this front will be minimal.
- The greatest shower and thunderstorm potential will reside along the immediate Florida East Coast and along the Florida Keys over the next 7 days.
- Widespread rainfall totals near 1-2" are expected across South Florida and northward along the Treasure and Space Coasts with **locally higher totals upwards of 2-3"** possible along the Southeast Florida Coast and Keys.





# Current & Forecast River Conditions

From the National Weather Service



Heavy and widespread rainfall from Hurricane Milton has already led to a riverine response across numerous basins extending from West-Central Florida, Central Florida and Northeast Florida. **Widespread moderate to major riverine flooding** has developed and is expected to continue for the next several days as above normal streamflows continue, and **some rivers remain above or forecast to rise to or above record flood stage**.

**Major Flood Stage** is ongoing along the [Withlacoochee River at US-301 Trilby](#), [Cypress Creek at SR-54](#), Hillsborough River ([near Zephyrhills](#) and [at Morris Bridge](#)), and St. Johns River ([at Astor](#), [near Deland](#), [above Lake Harney](#)). The Anclote River, Hillsborough River near Zephyrhills, Alafia River, and Little Wekiva River have crested, and water levels are forecast to gradually fall this weekend into next week. The St. Johns River at Astor has crested and will hold steady or very slowly fall over the next few weeks.

**Moderate flooding** is ongoing along the [Anclote River near Elfers at Little Road](#) and [Alafia River at Lithia Pinecrest Road at Lithia](#), and [Peace River at SR-70 Arcadia](#). The [Withlacoochee River near Croom](#) is currently within **moderate flood stage** and is forecast to reach **major flooding** in the next couple of days; further downstream, water levels are quickly approaching **moderate flood stage** [near Holder](#).

Water levels have reached **Minor Flood Stage** along the [Peace River at SR-60 Bartow](#), and the [St. Johns River near Sanford](#) and are forecast to continue rising, reaching **Moderate Flood Stage** in the coming days. For more details, please visit the [River Forecast Center](#).



# River Flood Warnings

From the National Weather Service

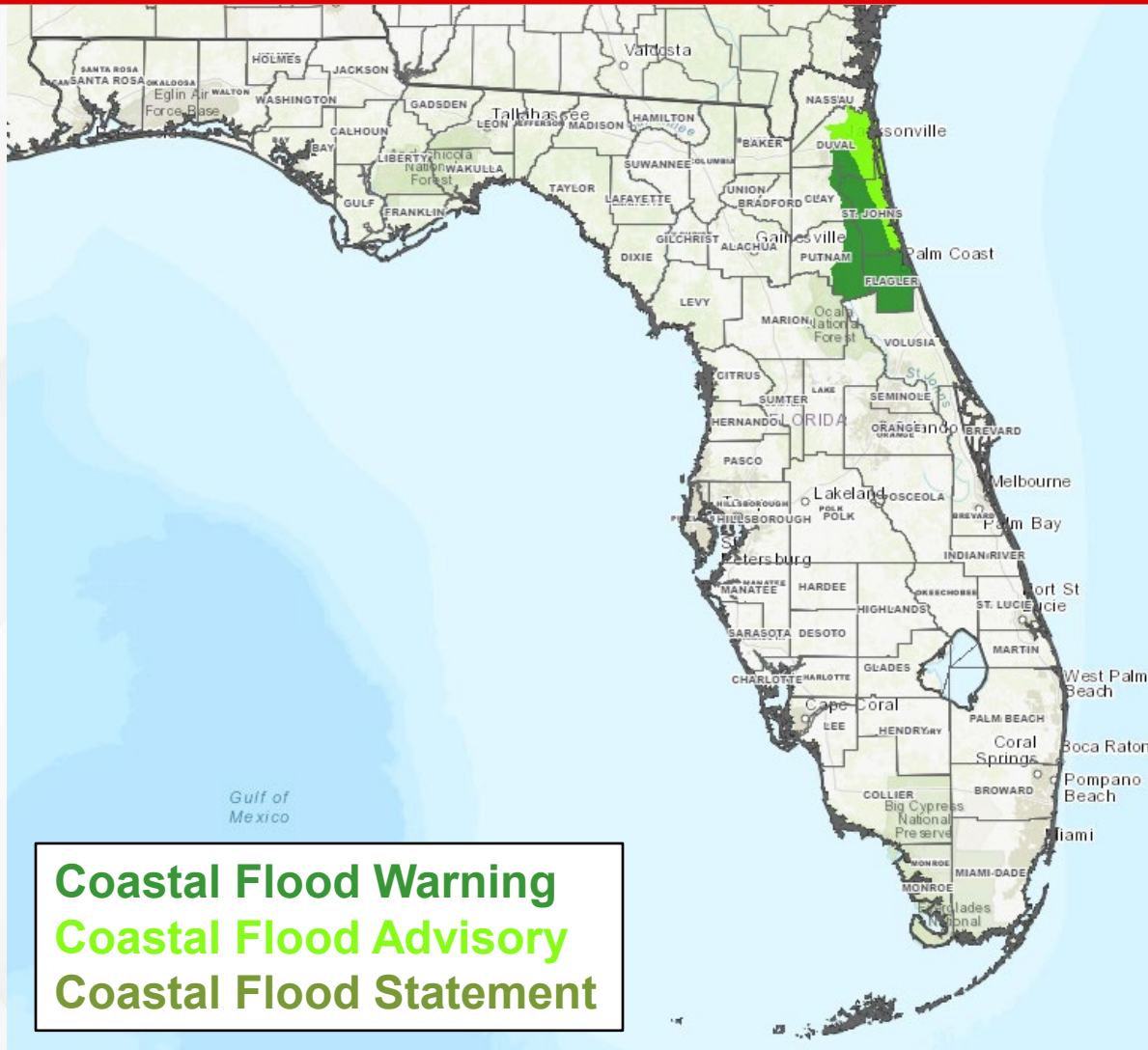
River Gauge	County(ies) Affected	Current Level	Crest Level	Record Level	Status	Crest Day	Warning Expires
<a href="#">Alafia River at Lithia Pinecrest Road at Lithia</a>	Hillsborough	Moderate: 16.90 ft	Major: 24.34 ft	28.50 ft	Falling	Crested	0001 EDT 18-Oct
<a href="#">Anclote River near Elfers at Little Road</a>	Pasco	Moderate: 22.10 ft	Major: 25.30 ft	27.70 ft	Falling	Crested	0030 EDT 15-Oct
<a href="#">Cypress Creek at SR-54 Worthington Gardens</a>	Pasco	Major: 14.80 ft	Major: 15.08 ft	15.08 ft	Cresting	13-Oct	Until Further Notice
<a href="#">Hillsborough River near Zephyrhills</a>	Hillsborough	Major: 14.00 ft	Major: 17.14 ft	17.14 ft	Falling	Crested	Until Further Notice
<a href="#">Hillsborough River at Morris Bridge</a>	Hillsborough	Major: 37.50 ft	Major: 38.16 ft	38.16 ft	Cresting	13-Oct	Until Further Notice
<a href="#">Horse Creek near Arcadia at SR-72</a>	DeSoto	Minor: 13.3 ft	Moderate: 14.37 ft	21.20 ft	Falling	11-Oct	Until Further Notice
<a href="#">Little Manatee River near Wimauma at US-301</a>	Hillsborough	Minor: 13.30 ft	Major: 17.12 ft	20.10 ft	Falling	Crested	0800 EDT 15-Oct
<a href="#">Myakka River at Myakka River State Park</a>	Sarasota	Moderate: 8.50 ft	Moderate: 9.00 ft	12.80 ft	Steady	14-Oct	Until Further Notice
<a href="#">Peace River at SR-60 Bartow</a>	Polk	Minor: 8.81 ft	Moderate: 9.30 ft	11.10 ft	Rising	16-Oct	Until Further Notice
<a href="#">Peace River at Zolfo Springs</a>	Hardee	Minor: 18.00 ft	Minor: 18.72 ft	27.20 ft	Falling	Crested	Until Further Notice
<a href="#">Peace River at SR-70 Arcadia</a>	DeSoto	Moderate: 14.46ft	Moderate: 14.50 ft	23.70 ft	Cresting	13-Oct	Until Further Notice
<a href="#">Santa Fe River at Three Rivers Estates</a>	Columbia, Gilchrist, Suwannee	Minor: 18.80 ft	Minor: 18.89 ft	33.40 ft	Steady	16-Oct	Until Further Notice
<a href="#">Single Creek at Campbell</a>	Osceola	Minor: 60.18 ft	Minor: 60.61 ft	64.20 ft	Falling	13-Oct	Until Further Notice
<a href="#">St. Johns River at Astor</a>	Volusia, Lake	Major: 4.60 ft	Major: 4.81 ft	4.81 ft	Steady	Crested	Until Further Notice
<a href="#">St. Johns River near Deland</a>	Lake	Major: 5.49 ft	Major: 5.80 ft	6.30 ft	Rising	TBD	Until Further Notice
<a href="#">St. Johns River near Sanford</a>	Seminole	Minor: 6.78 ft	Moderate: 7.60 ft	9.00 ft	Rising	TBD	Until Further Notice
<a href="#">St. Johns River above Lake Harney</a>	Seminole, Volusia	Major: 10.02 ft	Major: 10.30 ft	12.70 ft	Rising	TBD	Until Further Notice
<a href="#">Little Wekiva River near Altamonte Springs 2N</a>	Seminole	Minor: 28.70 ft	Major: 30.08 ft	31.1 ft	Falling	Crested	Until Further Notice
<a href="#">Withlacoochee River at US-41 Dunnellon</a>	Citrus, Marion	Action: 28.90 ft	Minor: 29.10 ft	33.00 ft	Rising	TBD	Until Further Notice
<a href="#">Withlacoochee River near Holder</a>	Cirtus	Moderate: 9.01 ft	Moderate: 9.40 ft	13.30 ft	Rising	TBD	Until Further Notice
<a href="#">Withlacoochee River at Croom</a>	Pasco, Sumter	Moderate: 11.11 ft	Moderate: 13.10 ft	15.20 ft	Rising	TBD	Until Further Notice
<a href="#">Withlacoochee River at US-301 Trilby</a>	Hernando, Pasco	Major: 18.22 ft	Major: 19.00 ft	20.40 ft	Rising	TBD	Until Further Notice





# Coastal Flooding

From the National Weather Service (NWS)



**Coastal Flood Warnings and Coastal Flood Advisories** remain in effect along the St. Johns River Basin and the Northeast Florida Coast as **minor coastal flooding** will largely continue, especially at or near times of high tide.

In the wake of this week's cold front, we will have to monitor the reintroduction of strong northerly to northeasterly winds along the St. Johns River basin. Winds out of this direct will likely lead to further drainage and discharge issues from locations upstream (south of Lake George). Onshore winds in addition to already above normal high tides (King Tide), water levels along the downstream/tidal portions of the St. Johns River will likely return to widespread **minor to moderate flood stage**. *Additional Coastal Flood products will be issued as conditions warrant.*



# Summary

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## Eastern Tropical Atlantic – Invest 94L:

- A well-defined area of low pressure located several hundred miles west of the Cabo Verde Islands is producing some disorganized showers and thunderstorms.
- This system is currently embedded in a dry environment, and development is unlikely over the next couple of days.
- However, this system is forecast to move generally westward toward warmer waters, and environmental conditions could become more favorable for gradual development by the middle to latter part of this week.
- A tropical depression could form as the system begins moving west-northwestward and approaches or moves near the Leeward Islands late this week.
- The NHC is outlooking a **low (10%) chance of development** over the next 48 hours, and a **medium (50%) chance of development** over the next 7 days.
- *This system poses no direct threat to Florida over the next 7-10 days at least.*

## Florida Outlook:

- Mostly sunny and pleasant conditions expected statewide today with isolated to scattered showers and thunderstorms across eastern and southern portions of the Peninsula and the Keys.
- Widespread heavy rainfall from Hurricane Milton has led to a riverine response across numerous basins extending from West-Central Florida, Central Florida and Northeast Florida.
  - **Widespread moderate to major riverine flooding** continues across West-Central, Central, and Northeast Florida rivers, creeks, and waterways with numerous River Flood Warnings in effect. Many water level records have been broken with the excess heavy rainfall from Hurricane Milton.
  - Many of these rivers have crested and begun to slowly decline; however, water levels continue to rise along Cypress Creek, the Myakka River, and portions of the Withlacoochee, Peace, and St. Johns Rivers.
- Instances of coastal flooding continue in the wake of Hurricane Milton.
  - **Coastal Flood Warnings** remain in effect along the St. Johns River Basin and coastal St. Flagler county through Monday morning as heavy rainfall filtering in and trapped tides within the basin continue to give way to **minor coastal flooding**, especially at or near times of high tide.
  - A **Coastal Flood Advisory** remains in effect through this evening along coastal St. Johns and coastal Duval County for **minor coastal flooding** near and during times of high tide.
  - In the wake of this week's cold front, we will have to monitor the reintroduction of strong northerly to northeasterly winds along the St. Johns River basin. Winds out of this direct will likely lead to further drainage and discharge issues from locations upstream (south of Lake George). Onshore winds in addition to already above normal high tides (King Tide), water levels along the downstream/tidal portions of the St. Johns River will likely return to widespread minor to moderate flood stage.
  - Additional Coastal Flood products will be issued as conditions warrant.

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





# Tropical Update

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**State Meteorological Support Unit**

**Florida Division of Emergency Management**

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