



Tropical Update



1:30 PM EDT

Saturday, October 5, 2024

Tropical Depression Fourteen Forms In the Southwestern Gulf of Mexico

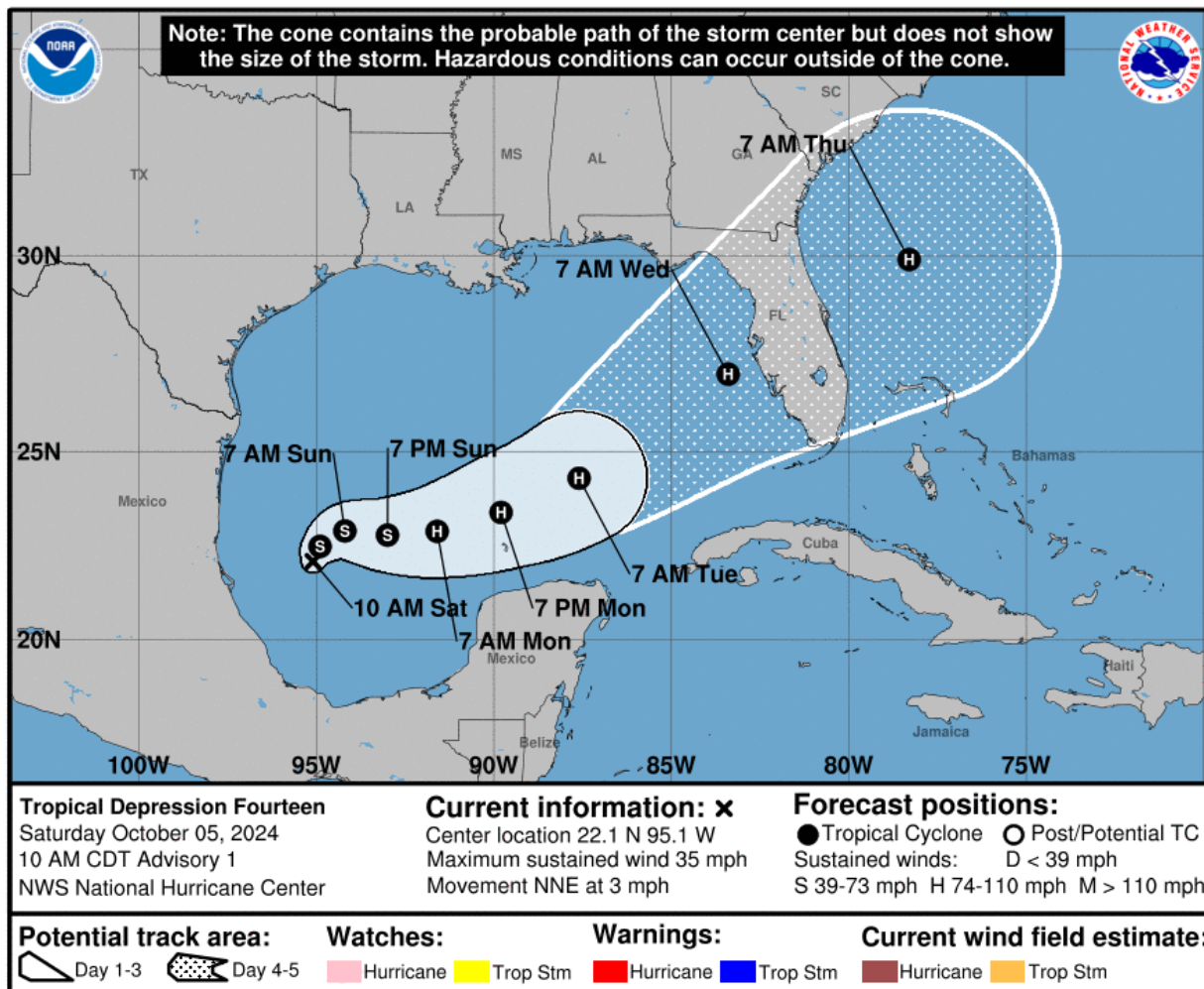
**Forecast to Strengthen and Bring The Risk of Life-Threatening
Impacts to Portions of The West Coast of Florida Next Week**

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.



Tropical Depression Fourteen

From the National Hurricane Center (NHC)

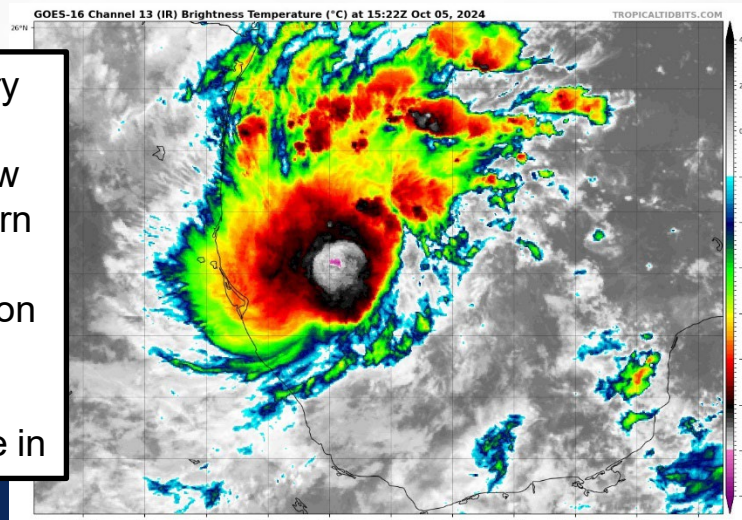


- **Location:** 210 miles NNE of the Veracruz, Mexico; 350 miles W of Progreso, Mexico
- **Maximum Sustained Winds:** 35 mph
- **Current Movement:** NNE at 3 mph

A slow northeastward or east-northeastward motion is expected during the next day or so. A faster east-northeastward to northeastward motion is forecast by Monday and Tuesday. On the forecast track, the depression is forecast to remain over the southwestern Gulf of Mexico through Sunday night, then move across the south-central Gulf of Mexico on Monday and Tuesday and approach the west coast of the Florida Peninsula by midweek. The tropical depression is forecast to become a tropical storm later today and a hurricane by early Monday. The system could become a major hurricane while it moves across the central and eastern Gulf of Mexico.

Regardless of development, multiple rounds of heavy rainfall are expected across portions of the Peninsula and Keys Sunday into next week. There is a risk of life-threatening impacts to portions of the west coast of Florida next week

Early morning satellite imagery shows that the circulation associated with the area of low pressure over the southwestern Gulf of Mexico has become better defined. Deep convection has been persistent over the northwestern portion of the circulation with some increase in banding.





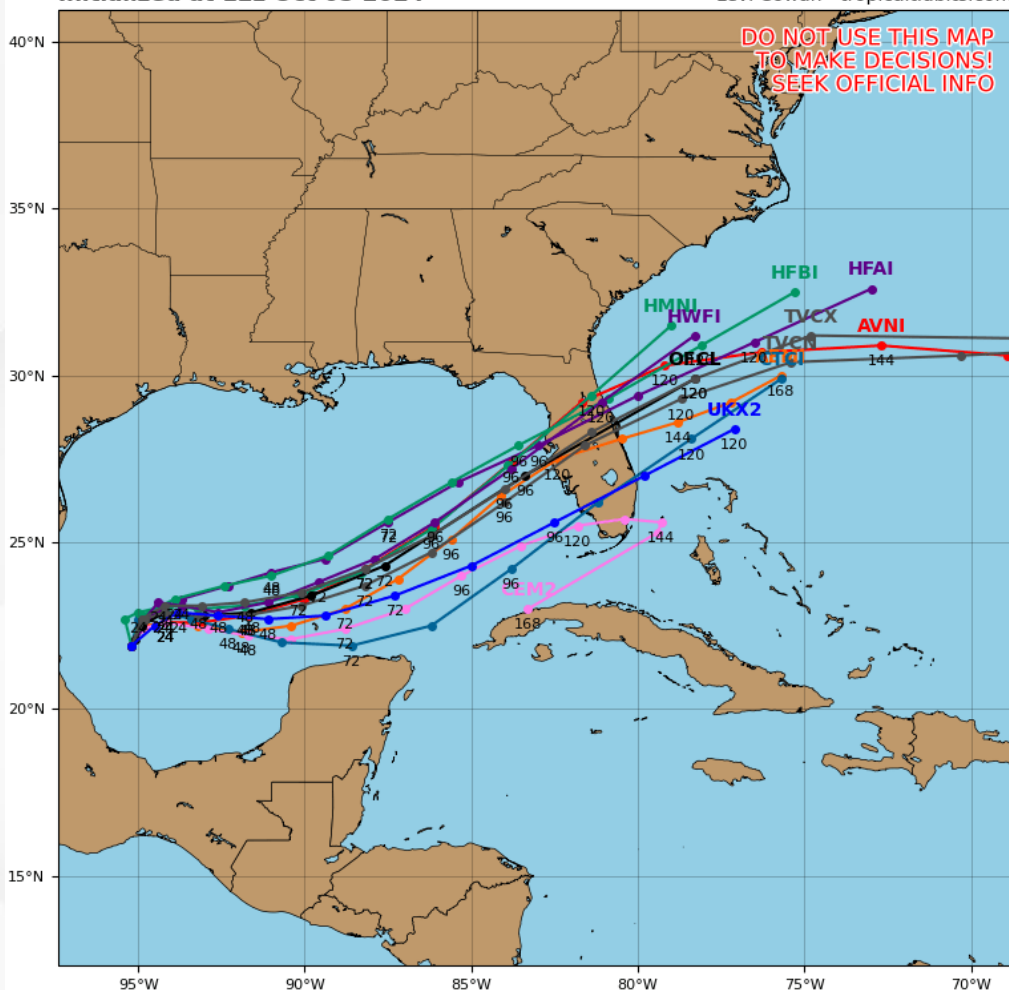
Forecast Computer Models – Next 5 Days

Tropical Depression Fourteen

Tropical Depression 14L Model Track Guidance

Initialized at 12z Oct 05 2024

Levi Cowan - tropicaltidbits.com



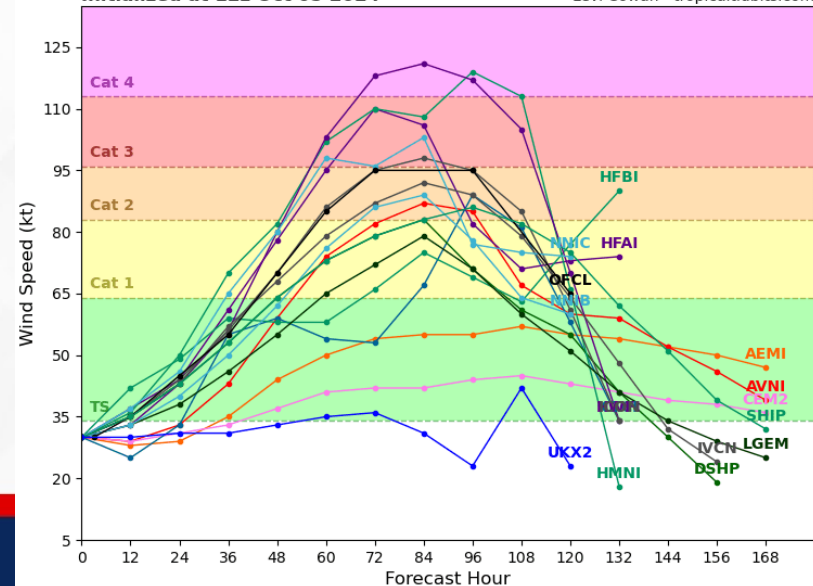
Computer forecast models are in decent agreement that Tropical Depression Fourteen (TD14) will drift northeastward or east-northeastward during the next 12-24 hours before an upper-level disturbance moving southward over the Gulf of Mexico causes the system to turn east-northeastward or northeastward at a slightly faster forward speed after 24-48 hours. Beyond the next 48 hours, disagreement between computer models begins to greatly increase as the forward speed and amount of latitude the system is able to gain will be highly dependent on the placement of a frontal boundary dropping southward into Florida and the Gulf of Mexico. An increasingly faster northeastward motion is generally expected by Tuesday, bringing the system across the west coast of the Florida Peninsula by midweek.

Tropical Depression Fourteen is within a favorable environment of weaker upper-level winds and warm sea surface temperatures. These conditions are expected to allow for steady to rapid strengthening over the next few days. The intensification is likely to be slower during the next 12-24 hours until a defined center of the system becomes more established, but after that time a faster rate of strengthening is anticipated. The system is forecast to be at or near major hurricane strength over the central or eastern Gulf of Mexico.

Tropical Depression 14L Model Intensity Guidance

Initialized at 12z Oct 05 2024

Levi Cowan - tropicaltidbits.com





Key Messages

From the National Hurricane Center (NHC)



Key Messages for Tropical Depression Fourteen

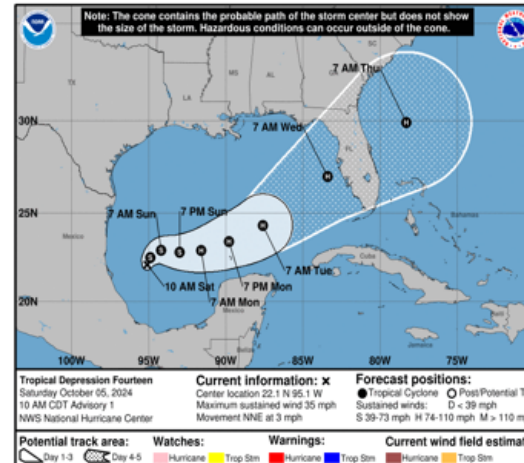
Advisory 1: 10:00 AM CDT Sat Oct 05, 2024



1. The depression is forecast to quickly intensify while it moves eastward to northeastward across the Gulf of Mexico and be at or near major hurricane strength when it reaches the west coast of the Florida Peninsula mid week.

2. There is an increasing risk of life-threatening storm surge and wind impacts for portions of the west coast of the Florida Peninsula beginning late Tuesday or Wednesday. Residents in these areas should ensure they have their hurricane plan in place, follow any advice given by local officials, and check back for updates to the forecast.

3. Areas of heavy rainfall will impact portions of Florida Sunday and Monday well ahead of the tropical system, with heavy rainfall more directly related to the system expected by later Tuesday through Wednesday. This rainfall brings the risk of flash, urban, and areal flooding, along with minor to isolated moderate river flooding.



For more information go to hurricanes.gov

FOUO – For Government Official Use Only



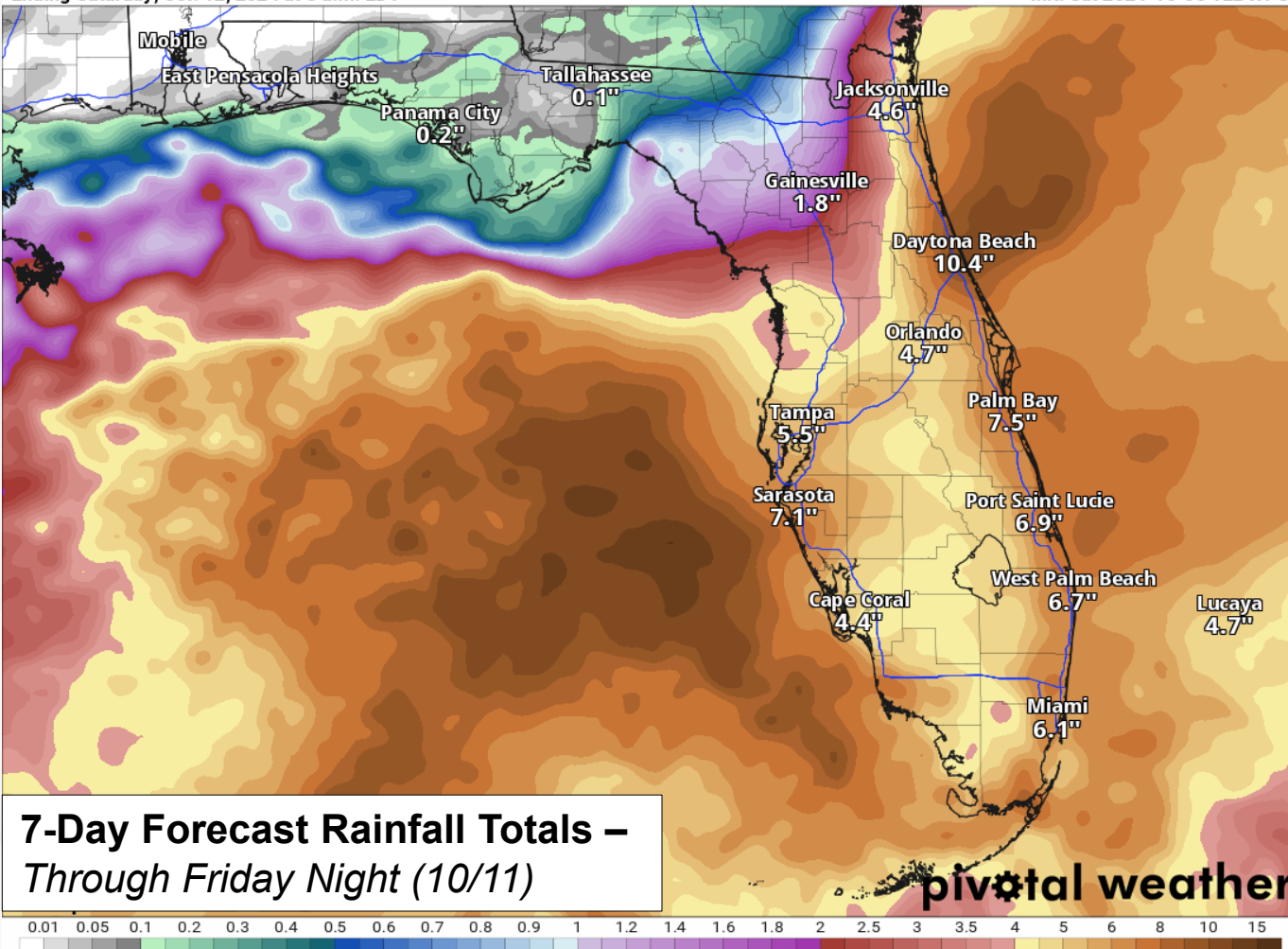
Rainfall Totals – Next 7 Days

From the Weather Prediction Center (WPC)

7-Day Precipitation (in)

Ending Saturday, Oct. 12, 2024 at 8 a.m. EDT

Init: Sat 2024-10-05 12z WPC

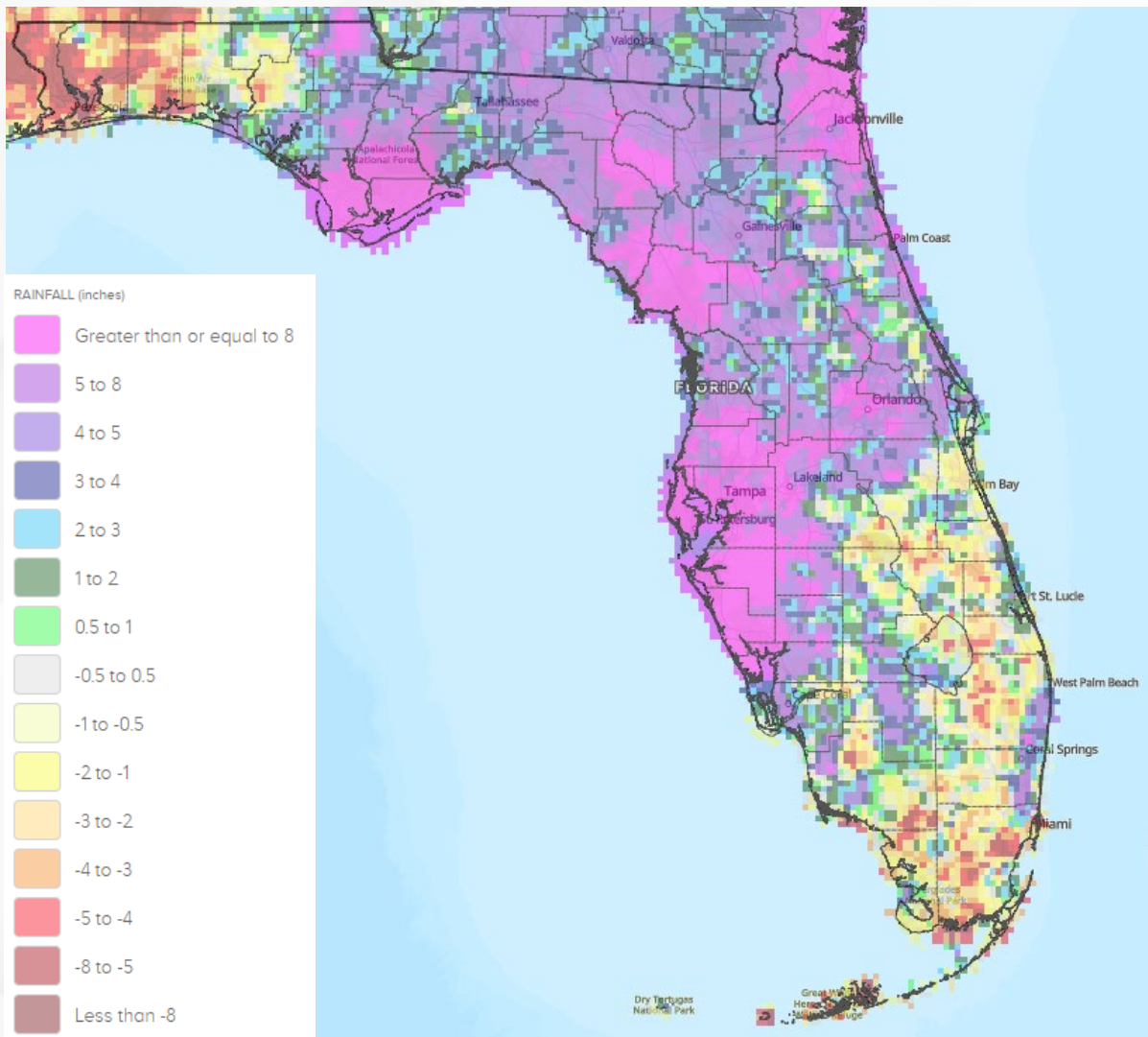


- A frontal boundary is expected to push into the state this weekend kicking off a wet and active weather pattern across the Peninsula.
- The depression is forecast to remain over the southwestern Gulf of Mexico through Sunday night, then move across the south-central Gulf of Mexico on Monday and Tuesday and approach the west coast of the Florida Peninsula by midweek as another frontal boundary sinks southward into Florida and the Gulf of Mexico.
- *Rainfall totals heavily tied to the eventual track and forward speed of the system. With computer model guidance uncertainty regarding the exact track, there remains uncertainty as to where the heaviest rainfall can be expected.*
- Widespread rainfall totals near 5-8" with **locally higher totals in excess of 8-12"** are possible across portions of the Peninsula.
 - Computer models are indicating the heaviest rainfall totals may occur along and near the I-4 corridor through Central and South Florida; however, the exact placement of these more significant totals will continue to be modified depending on the tropical disturbance's organization and track.
 - **Please continue to stay tuned for the latest computer forecast model guidance and trends in the subsequent days.**



60-Day Rainfall Departure From Normal

From the National Weather Service



Much of the Big Bend and Northern Peninsula southward through the I-4 corridor and into West-Central and Southwest Florida have experienced rainfall totals greater than 5-10" above normal over the past 60-days. More localized areas have seen rainfall totals near 10-15" above normal over the past 60-days across with isolated higher totals near 15-20" over the past 60 days across portions of Apalachicola, the Suwannee Valley, Northeast Florida, and West-Central Florida.

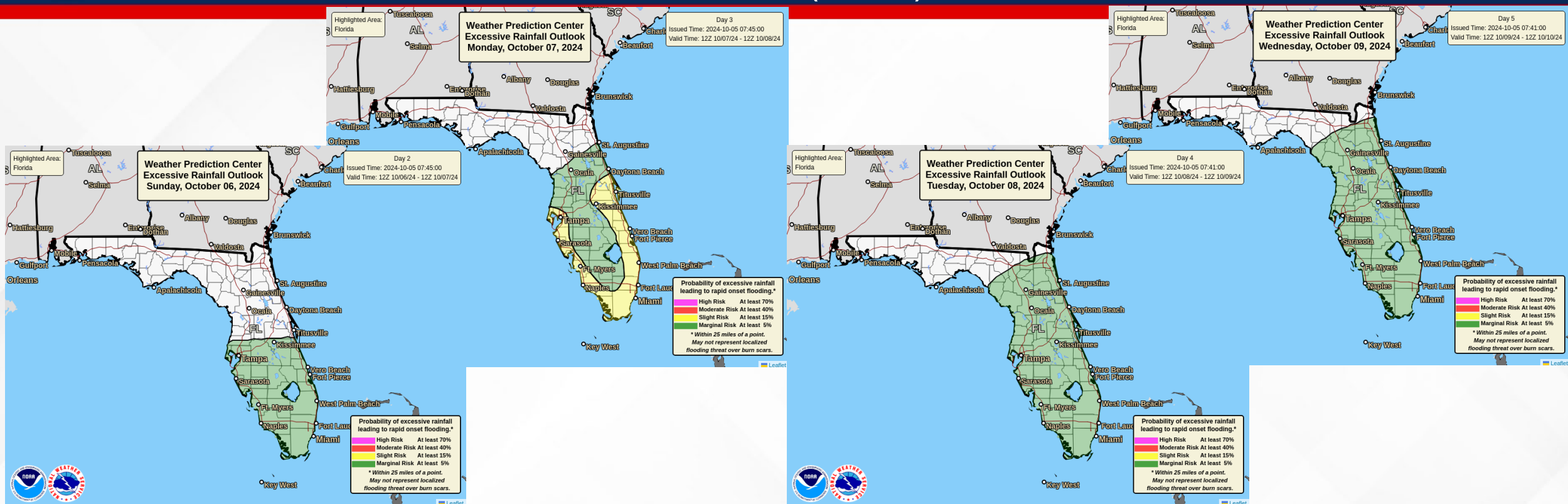
Numerous North, West-Central, and Southwest Florida rivers are already running high and/or within flood stage at this time.

Saturated areas will be more vulnerable to heavy rainfall and a faster onset of flooding.



Flash Flood Outlooks – Next 5 Days

From the Weather Prediction Center (WPC)

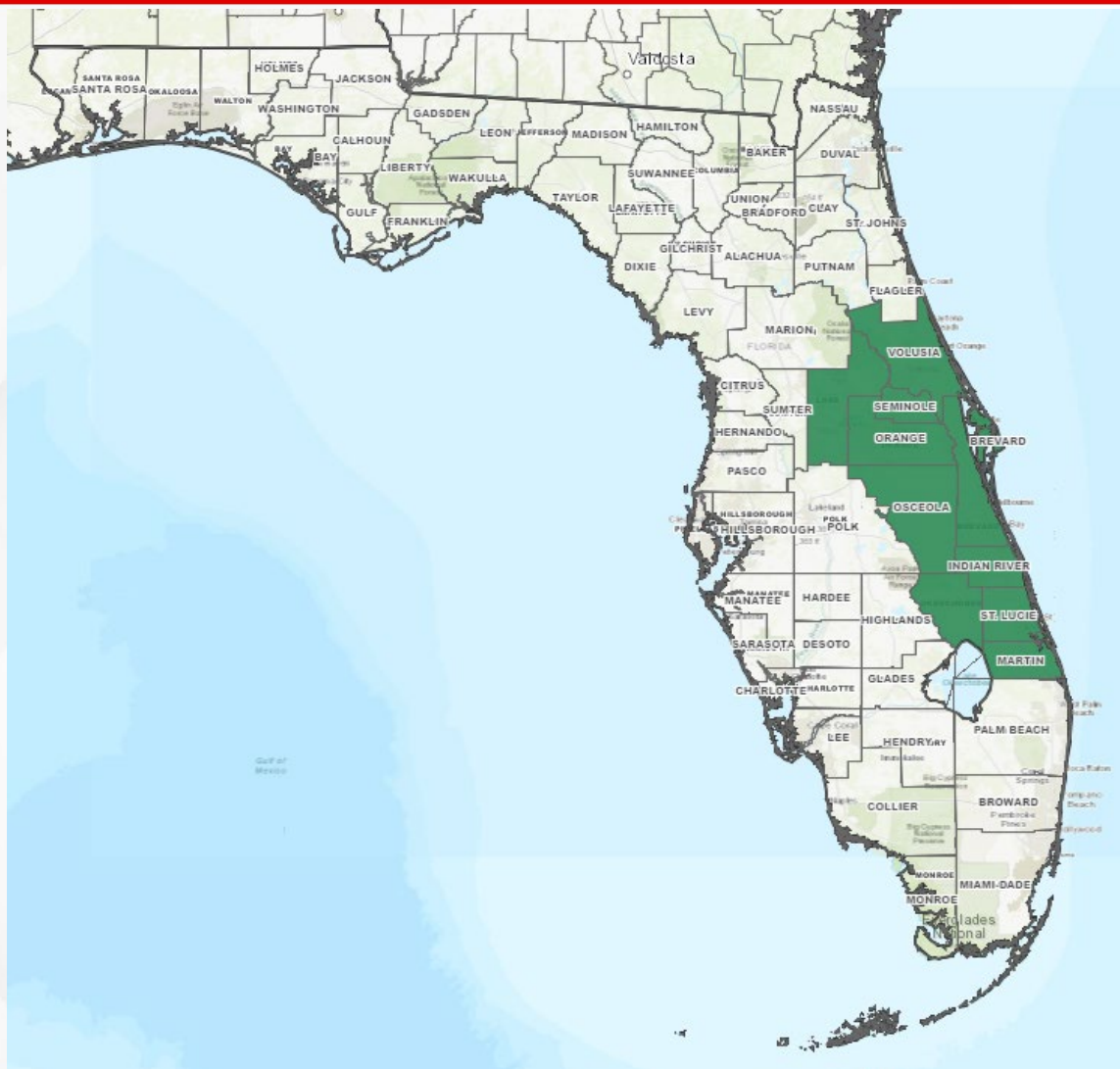


The Weather Prediction Center (WPC) is outlooking a **Marginal Risk (level 1 of 4) for Flash Flooding** along and south of the I-4 corridor through the Peninsula and Keys Sunday as rain chances and the potential for locally heavy rainfall begins to increase. A **Slight Risk (level 2 of 4) for Flash Flooding** is outlooking along coastal portions of South and Central Florida and the Keys Monday with a **Marginal Risk** maintained through the rest of the Peninsula northward to Gainesville and St. Augustine as abundant tropical moisture streaming in will allow heavy rainfall to become more widespread. Coastal locations along the West Coast experienced flooding (both tidal and rainfall) due to Major Hurricane Helene, and any coastal or low-lying areas will remain vulnerable to additional rounds of rainfall. Heavy rainfall rates will also be a concern over already saturated and vulnerable soils; ponding water and instances of flooding will be possible, especially throughout the urban and poor drainage/low-lying areas in the Florida Peninsula. There remains uncertainty as to where the heaviest rainfall will fall Tropical Depression Fourteen approaches and crosses the Florida Peninsula around mid-week. The heaviest rainfall totals will be closely tied to the future track of the system. WPC is currently outlooking a **Marginal Risk for Flash Flooding** across the Peninsula and Keys Tuesday and Wednesday; however, upgrades and updates to the level and extent of these flash flood outlooks can be expected as the future path of the system become clearer. A **Flood Watch** has been issued for portions of the Peninsula and additional **Flood Watches** will likely be issued as details become clearer.



Flood Watches

From the National Weather Service (NWS)



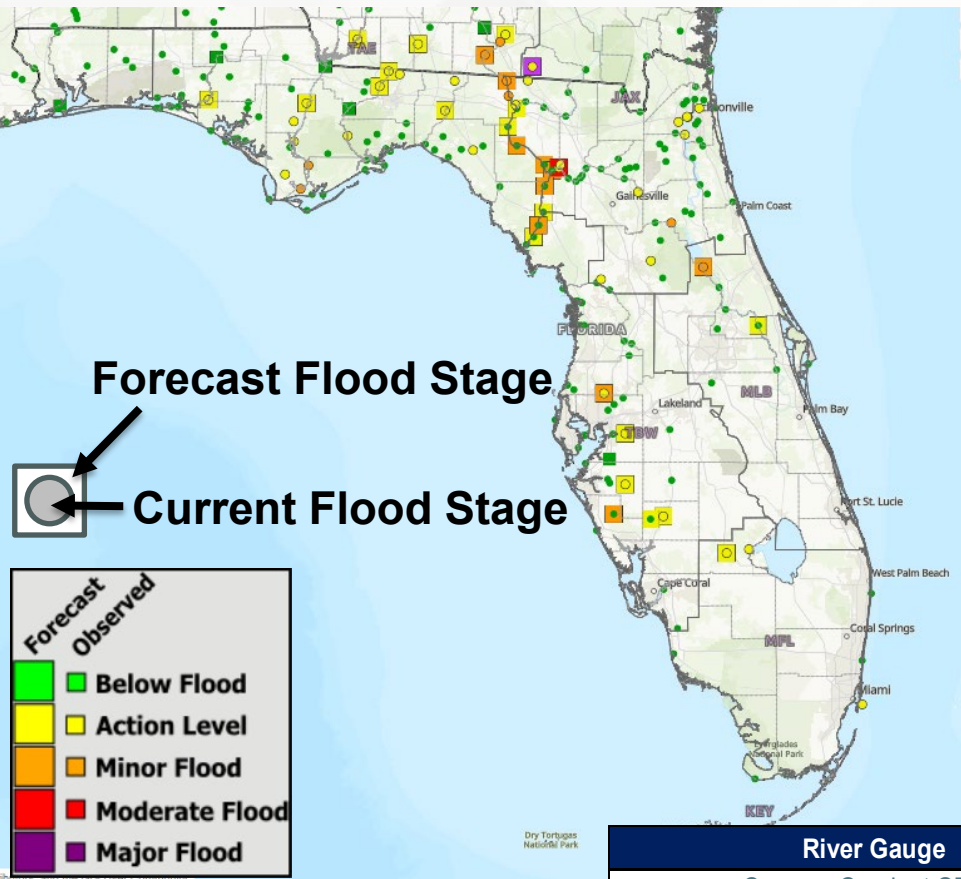
A **Flood Watch** has been issued for portions of the East-Central Florida Peninsula and will go into effect at 11:00 AM EDT Sunday morning (10/6) ahead of multiple rounds of heavy rainfall anticipated Sunday and into next week. Additional **Flood Watches** will likely be issued as details on the extent and location of the heaviest rainfall totals become clearer. This watch currently includes the following counties:

- Lake
- Volusia
- Seminole
- Orange
- Brevard
- Osceola
- Indian River
- Okeechobee
- St. Lucie
- Martin



Current & Forecast River Conditions

From the National Weather Service



River Flood Warnings remain in effect along the [St. Johns River at Astor](#) as water levels very slowly decline but remain within **minor flood stage**.

The lower Withlacoochee and the middle Suwannee Rivers will continue to rise over the next several days into **minor flood stage**.

The [Withlacoochee River near Pinetta \(CR-150\)](#) will crest later today with the flood wave progressing down the Suwannee River well into next week.

Flood waters continue to travel down the Suwannee, with backwater flooding possible up the [Santa Fe River including at Three Rivers Estates](#) by late weekend; **minor to moderate riverine flooding** will be possible.

River Flood Warnings are also in effect for the [Manatee River near Myakka Head at SR-64](#), [Myakka River at Myakka River State Park](#), and [Cypress Creek at SR-54](#) as **minor flooding** is occurring or forecast due to recent locally heavy rainfall and additional heavy rainfall anticipated late this weekend into next week.

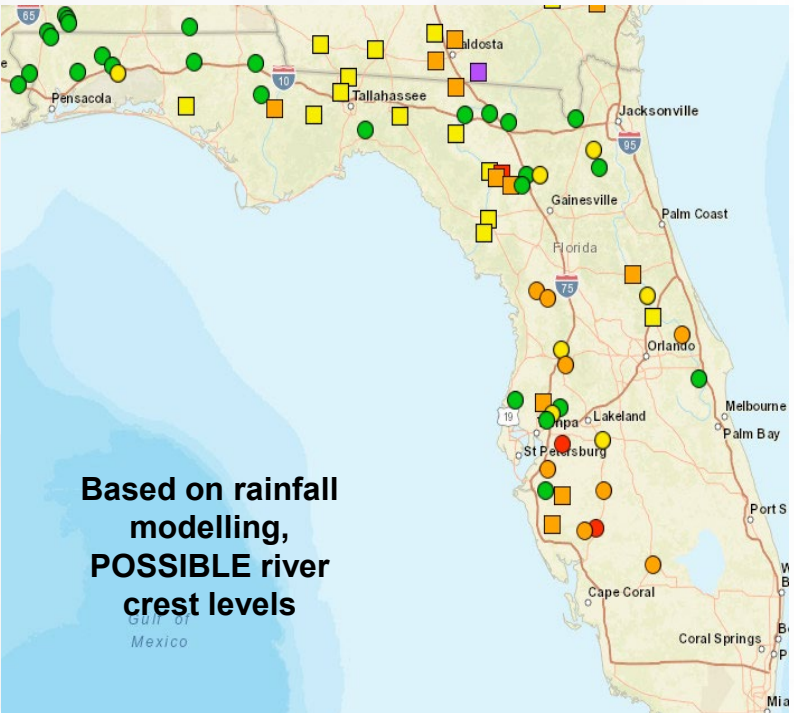
For more details, please visit the [River Forecast Center](#).

River Gauge	County(ies) Affected	Current Level	Crest Level	Record Level	Status	Crest Date	Warning Expires
Cypress Creek at SR-54	Pasco	Action: 7.98 ft	Minor: 8.90 ft	13.80 ft	Rising	8-Oct	Until Further Notice
Little Manatee River near Wimauma at US-301	Hillsborough	Action: 10.00 ft	Minor: 11.60 ft	20.10 ft	Falling	5-Oct	0342 EDT 5-Oct
Manatee River near Myakka Head at SR-64	Manatee	Action: 10.63 ft	Minor: 13.80 ft	20.90 ft	Falling	Crested	1435 EDT 5-Oct
Myakka River at Myakka River State Park	Sarasota	Below: 6.44 ft	Minor: 7.30 ft	12.80 ft	Rising	9-Oct	Until Further Notice
Withlacoochee River near Pinetta	Hamilton, Madison	Minor: 77.10 ft	Minor: 78.40 ft	87.80 ft	Cresting	5-Oct	1830 EDT 8-Oct
St. Johns River at Astor	Volusia, Lake	Minor: 2.62 ft	Minor: 2.60 ft	4.70 ft	Rising	5-Oct	Until Further Notice



Riverine Flooding

Chance of River Flooding Based on Range of Forecast Rainfall



Rivers, creeks/streams, and waterways across North and West-Central Florida are already running above normal for this time of year due to widespread heavy rainfall from Hurricane Debby. **River Flood Warnings** remain in effect along portions of the Withlacoochee, St. Johns, and several West-Central Florida rivers, creeks, and waterways for ongoing **minor flooding**.

Water will continue to filter through the river basins and further downstream from heavy rainfall across the Southeast U.S. from Hurricane Helene over the next few weeks. Computer models are suggesting the potential for **minor flooding** along portions of the Suwannee River as excess heavy rainfall discharge through the basin from the Georgia headwaters with **minor to moderate backwater flooding** possible along the Santa Fe River. The Alapaha River near Jennings may also see water levels rise above flood stage in the next week or so as the Alapaha River at Statenville, Georgia is forecast to crest in major flood stage early next week before the crest wave moves further downstream into Florida.

Heavy rainfall is anticipated Sunday and next week due frontal boundary and Tropical Depression Fourteen, likely leading to water level rises in the Peninsula. Computer models are currently suggesting there is potential for locally **moderate flooding** along a few rivers, creeks, and waterways in West-Central Florida with more widespread **minor flooding** along the Peninsula.

Chance of Exceedance		
30%	Level	70%
	Action	
	Minor Flood	
	Moderate Flood	
	Major Flood	
= less than 30% chance of reaching Action level		

Significant River Flooding impacts include road hazards and damage to residential, commercial, and/or agricultural areas. Evacuation may be required. Flash flooding or Minor river flooding are NOT included in this outlook. Check your local weather forecast frequently for the most up-to-date information for your area.

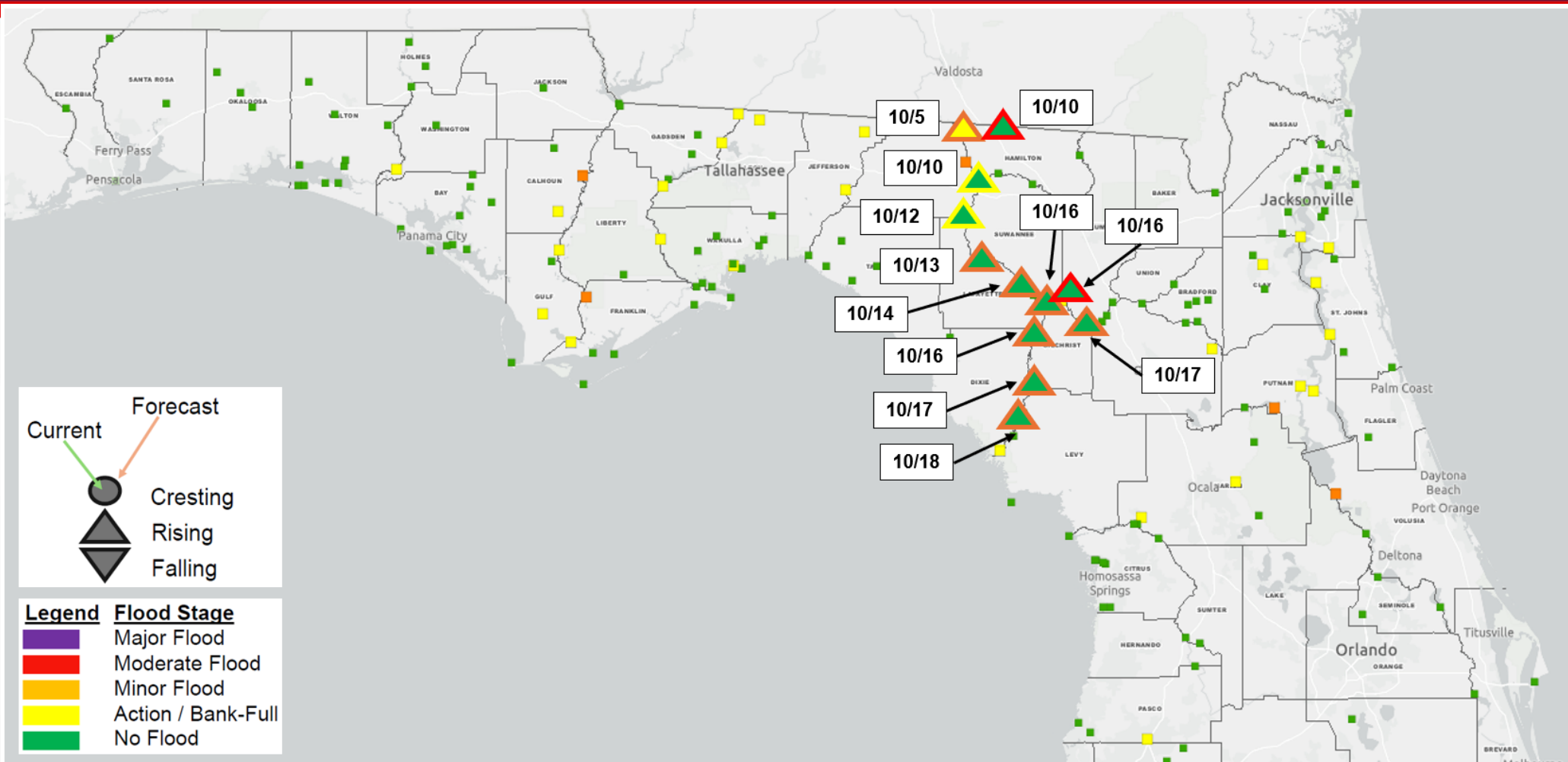
Shaded areas are the forecast region of the Southeast River Forecast Center

Significant River Flooding Not Expected	Significant River Flooding Possible Weather conditions indicate, without certainty that significant river flooding could occur
Significant River Flooding Likely Weather conditions indicate that significant river flood conditions can be expected	Significant River Flooding Occurring Significant river flooding is occurring at this time



Forecast River Crest Timing

Chance of River Flooding Based on Range of Forecast Rainfall

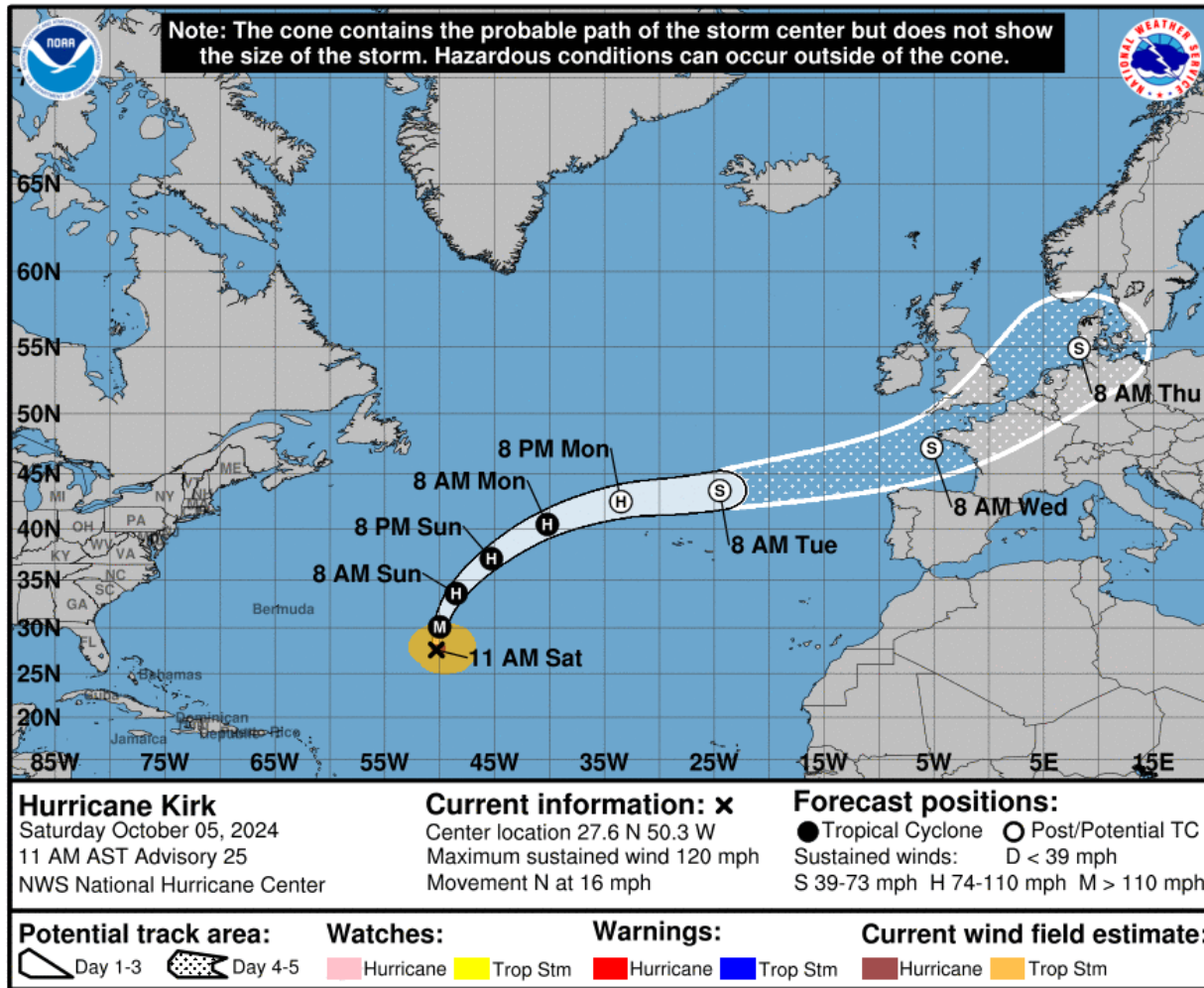


Santa Fe & Suwannee River Forecast Timing
Valid: 10/4/2024



Major Hurricane Kirk

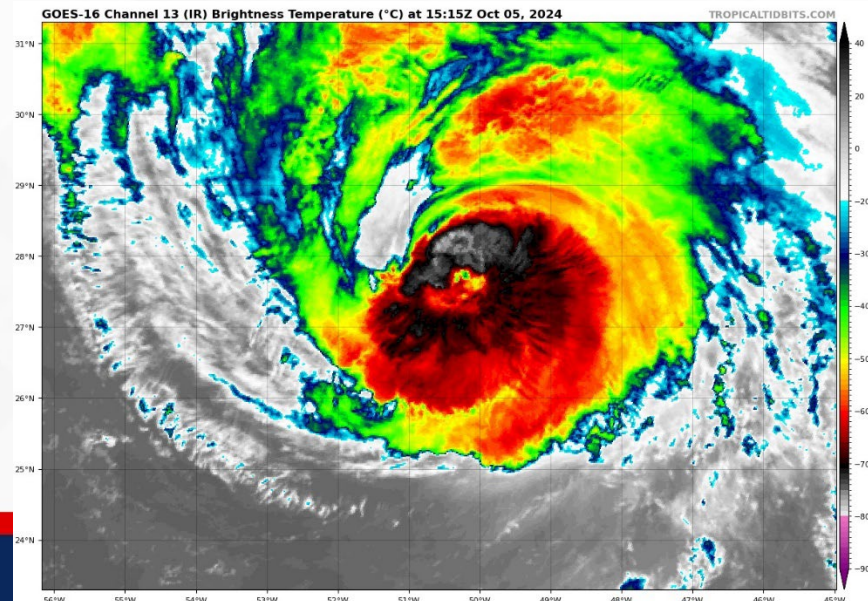
From the National Hurricane Center (NHC)



- **Location:** 1040 miles NE of the Northern Leeward Islands; 1525 miles WSW of the Azores
- **Maximum Sustained Winds:** 120 mph; Category 3
- **Current Movement:** N at 16 mph

This motion is expected to continue through tonight. A faster northeastward motion is expected on Sunday and Monday. Weakening is forecast through early next week, but Kirk will remain a large hurricane for the next couple of days.

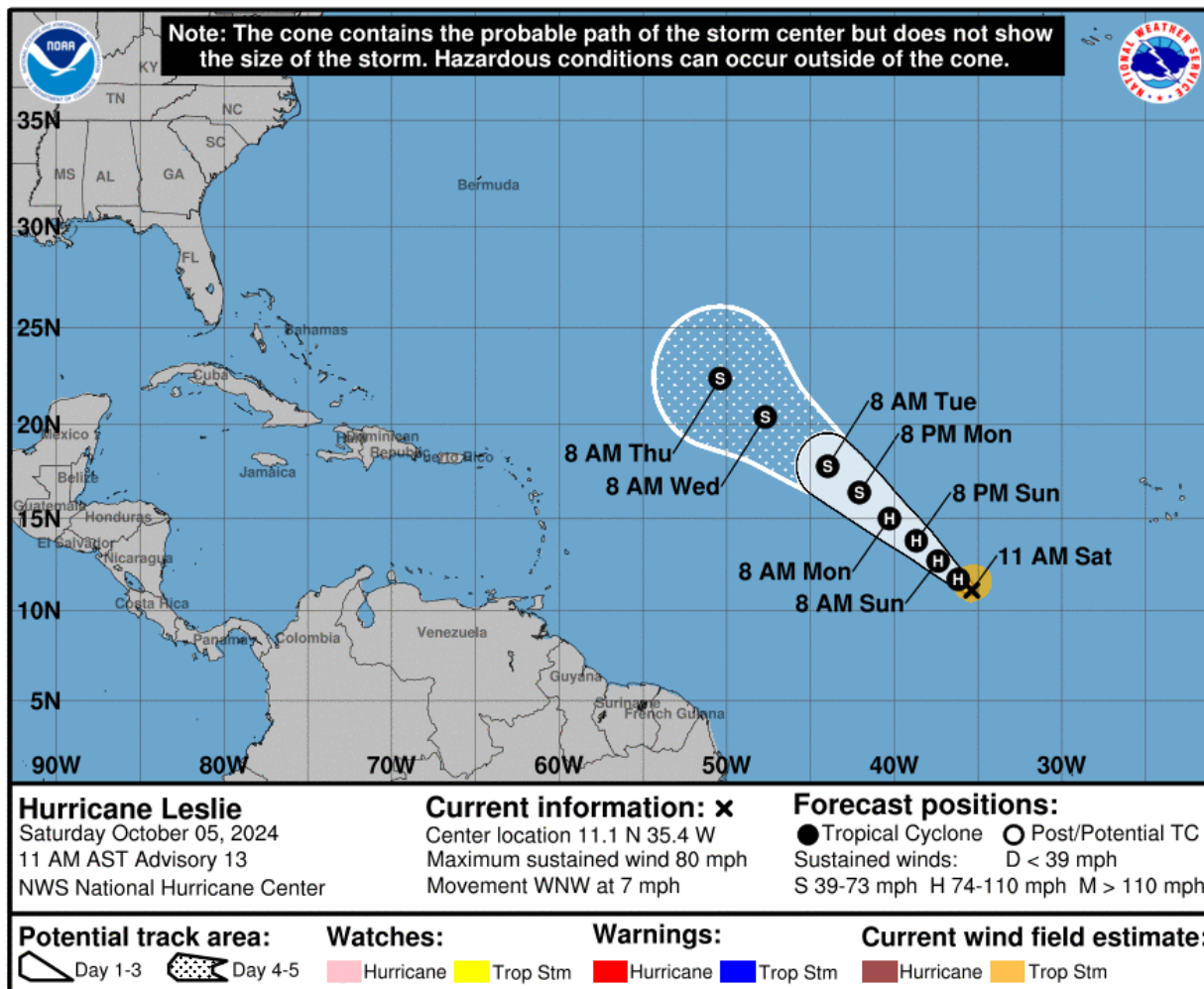
Kirk poses no direct threat to Florida.





Hurricane Leslie

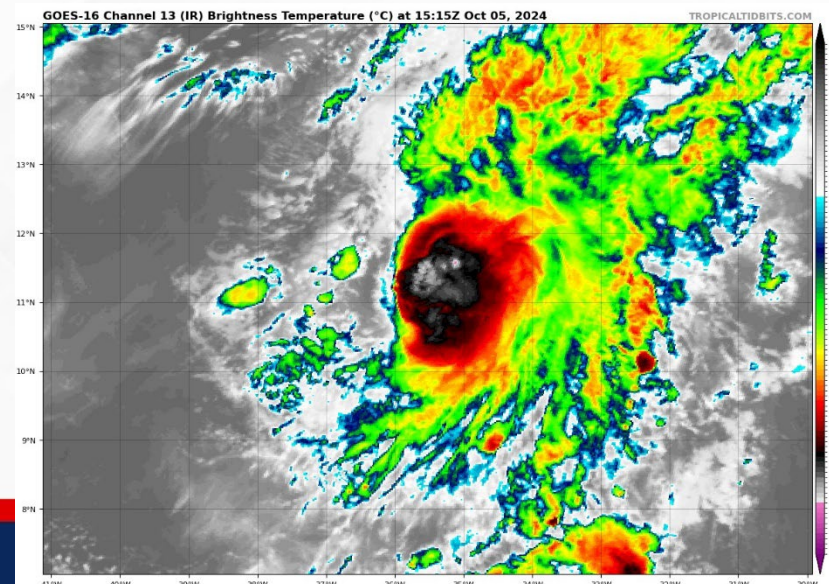
From the National Hurricane Center (NHC)



- **Location:** 785 miles WSW of the Southernmost Cabo Verde Islands
- **Maximum Sustained Winds:** 80 mph
- **Current Movement:** WNW at 7 mph

This general motion is expected to continue today. A northwestward motion with an increase in forward speed is forecast to begin by tonight and continue through Tuesday. Some additional strengthening is possible through tonight. A gradual weakening trend is forecast to begin on Sunday.

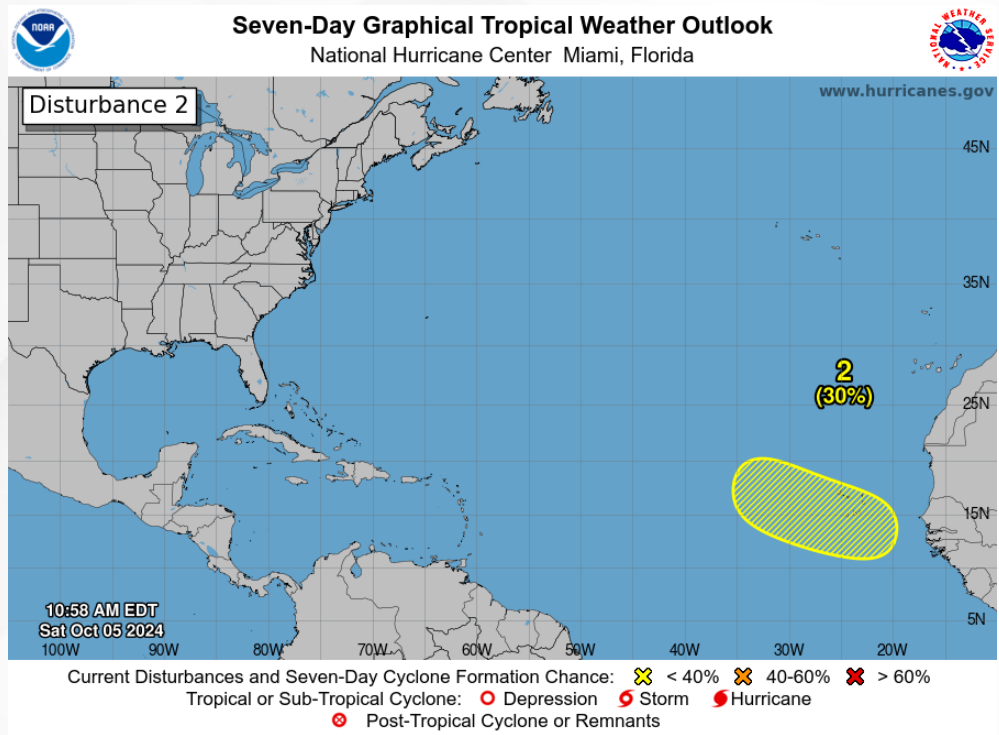
Leslie poses no direct threat to Florida over the next 10 days, at least.





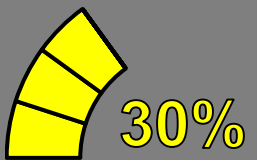
Tropical Weather Outlook

Disturbance 1 – Far Eastern Tropical Atlantic



Near 0%

48 Hour Formation



30%

7 Day Formation

A tropical wave is expected to move off the west coast of Africa on Monday or Tuesday. Some development of this system is possible thereafter while it moves westward or west-northwestward across the eastern tropical Atlantic. The system is expected to move near or over the Cabo Verde Islands on Wednesday and Thursday.

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

Chance of development through 48 hours... **low...near 0%**

Chance of development through 7 days... **low...30%**



Summary

FOUO – For Government Official Use Only

Tropical Depression Fourteen:

- As of 11:00 AM EDT, Tropical Depression Fourteen is located about 210 miles north-northeast of Veracruz, Mexico and 350 miles west of Progreso, Mexico and moving north-northeastward at 3 mph.
- A slow northeastward or east-northeastward motion is expected during the next day or so.
- A faster east-northeastward to northeastward motion is forecast by Monday and Tuesday.
- On the forecast track, the depression is forecast to remain over the southwestern Gulf of Mexico through Sunday night, then move across the south-central Gulf of Mexico on Monday and Tuesday and approach the west coast of the Florida Peninsula by midweek.
- Maximum sustained winds are near 35 mph.
- The tropical depression is forecast to become a tropical storm later today and a hurricane by early Monday.
- The system could become a major hurricane while it moves across the central and eastern Gulf of Mexico.
- *Regardless of development, multiple rounds of heavy rainfall are expected across portions of the Peninsula and Keys Sunday into next week. There is a risk of life-threatening impacts to portions of the west coast of Florida next week.*

Major Hurricane Kirk:

- As of 11:00 AM EDT, Kirk is located about 1040 miles northeast of the Northern Leeward Islands or 1525 miles west-southwest of the Azores and moving northward at 16 mph.
- This motion is expected to continue through tonight.
- A faster northeastward motion is expected on Sunday and Monday.
- Maximum sustained winds are near 120 mph with higher gusts, making Kirk a Category 3 hurricane on the Saffir-Simpson scale.
- Weakening is forecast through early next week, but Kirk will remain a large hurricane for the next couple of days.
- *Kirk poses no direct threat to Florida at this time.*

Tropical Storm Leslie:

- As of 11:00 AM EDT, Leslie is located about 785 miles west-southwest of the southernmost Cabo Verde Islands and moving west-northwestward at 7 mph.
- This general motion is expected to continue today.
- A northwestward motion with an increase in forward speed is forecast to begin by tonight and continue through Tuesday.
- Maximum sustained winds have increased to near 80 mph with higher gusts, and some additional strengthening is possible through tonight.
- A gradual weakening trend is forecast to begin on Sunday.
- *This system poses no direct threat to Florida over the next 10 days, at least.*

Far Eastern Tropical Atlantic:

- A tropical wave is expected to move off the west coast of Africa on Monday or Tuesday.
- Some development of this system is possible thereafter while it moves westward or west-northwestward across the eastern tropical Atlantic. The system is expected to move near or over the Cabo Verde Islands on Wednesday and Thursday.
- *This system poses no direct threat to Florida over the next 10 days, at least.*
- The NHC is outlooking a **low (near 0%) chance of development** over the next 48 hours, and a **low (30%) chance of development** over the next 7 days.

The next briefing packet will be issued on Saturday evening. For the latest information, please visit the National Hurricane Center website.



Summary

FOUO – For Government Official Use Only

Florida Outlook:

- Regardless of development of Tropical Depression Fourteen, multiple rounds of heavy rainfall are expected across portions of the Peninsula and Keys Sunday into next week.
 - Widespread rainfall totals near 5-8" with **locally higher totals in excess of 8-12"** are possible across portions of the Peninsula.
 - *Rainfall totals heavily tied to the eventual track and forward speed of the system. With computer model guidance uncertainty regarding the exact track, there remains uncertainty as to where the heaviest rainfall can be expected.*
 - The Weather Prediction Center (WPC) is outlooking a **Marginal Risk (level 1 of 4) for Flash Flooding** along and south of the I-4 corridor through the Peninsula and Keys Sunday as rain chances and the potential for locally heavy rainfall begins, increasing Monday to a **Slight Risk (level 2 of 4)** along coastal portions of South and Central Florida and the Keys with a **Marginal Risk** maintained through the rest of the Peninsula northward to Gainesville and St. Augustine.
 - WPC is currently outlooking a **Marginal Risk for Flash Flooding** across the Peninsula and Keys Tuesday and Wednesday; however, upgrades and updates to the level and extent of these flash flood outlooks can be expected as the future path of the system become clearer.
 - A **Flood Watch** has been issued for portions the East-Central Peninsula as **flash, urban, and areal flooding** will be possible, and additional **Flood Watches** will likely be issued as details become clearer.
- Rivers, creeks/streams, and waterways across North and West-Central Florida are already running above normal for this time of year due to widespread heavy rainfall from Hurricane Debby. **River Flood Warnings** remain in effect along portions of the Withlacoochee, St. Johns, and several West-Central Florida rivers, creeks, and waterways for ongoing **minor flooding**.
 - Water will continue to filter through the river basins and further downstream from heavy rainfall across the Southeast U.S. from Hurricane Helene over the next few weeks, likely leading to minor to moderate flooding along portions of the Suwannee, Alapaha, and Santa Fe Rivers.
 - Heavy rainfall is anticipated Sunday and next week due frontal boundary and Tropical Depression Fourteen, likely leading to water level rises in the Peninsula. Computer models are currently suggesting there is potential for locally **moderate flooding** along a few rivers, creeks, and waterways in West-Central Florida with more widespread **minor flooding** along the Peninsula.
- There is an increasing risk of life-threatening impacts for portions of the west coast of Florida Peninsula beginning late Tuesday or Wednesday; *however, the extent and locations of these impacts remain uncertain as it will be heavily tied to the eventual track and forward speed of the system.*
- The next name on the list is Milton (*MIL-ton*).

The next briefing packet will be issued on Saturday evening. For the latest information, please visit the National Hurricane Center website.



Tropical Update

FOUO – For Government Official Use Only



Created by:

Melissa James, Assistant State Meteorologist

Melissa.James@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>