



# Tropical Update



6:30 AM EDT

Wednesday, September 25, 2024

## Tropical Storm Helene & Florida Outlook

**Hurricane Warnings For Florida Big Bend and Gulf Coast;  
Tropical Storm Warnings Through the Peninsula and Keys**

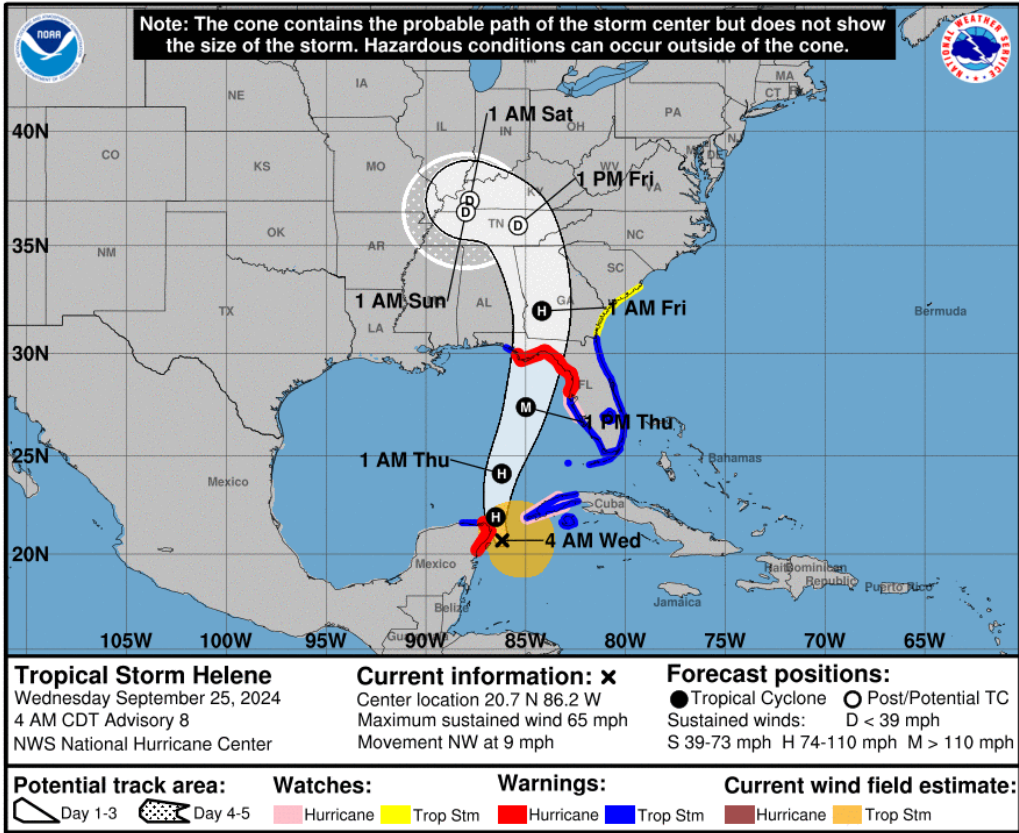
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an 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 Helene

5:00 AM EDT Wednesday: Florida Threats & Changes Since Last Packet

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



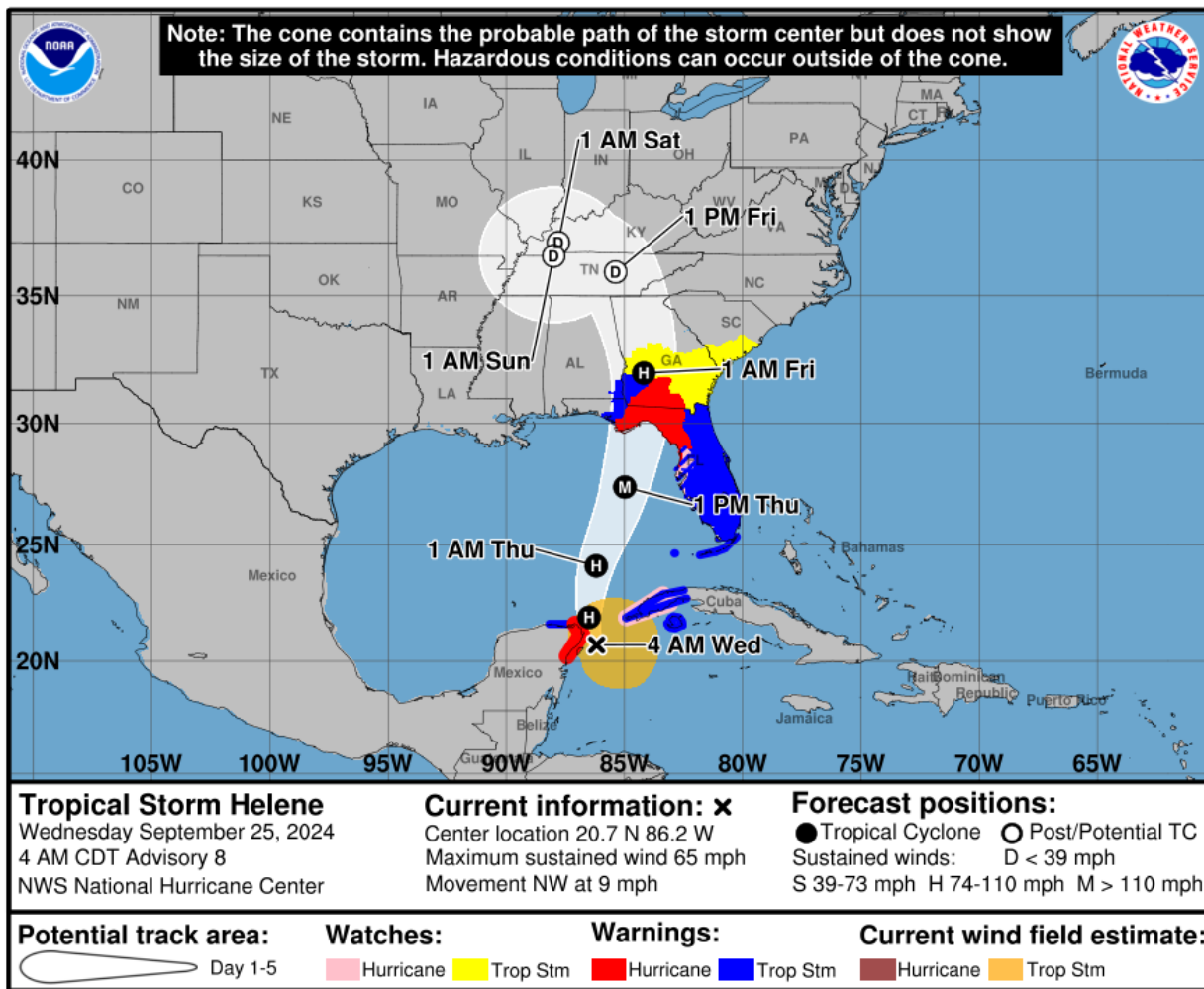
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**Overview/Recent Changes:** As of 5:00 AM EDT, Tropical Storm Helene is located about 45 miles east-northeast of Cozumel, Mexico and about 120 miles southwest of the western tip of Cuba and moving northwestward at 9 mph. This general motion should continue through this morning, followed by a general northward motion beginning later today and continuing through Friday. On the forecast track, the center of Helene will pass near the northeastern coast of the Yucatan Peninsula this morning, move across the eastern Gulf of Mexico later today and Thursday, and reach the Big Bend coast of Florida late Thursday. Maximum sustained winds have increased to near 65 mph. Strengthening is forecast, and Helene is expected to become a hurricane later today. The storm is forecast to rapidly strengthen over the eastern Gulf of Mexico and become a major hurricane on Thursday. Tropical Storm Warnings have been expanded across South Florida and the Tropical Storm and Hurricane Watches across the Northern Peninsula have been upgraded to warnings.



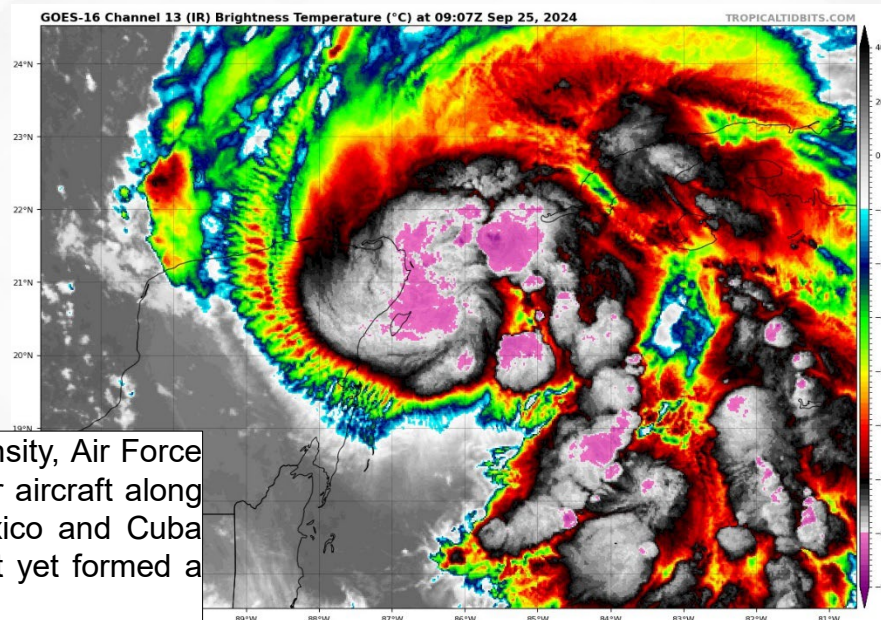
# Tropical Storm Helene

## From the National Hurricane Center (NHC)



- **Location:** 45 miles ENE of Cozumel, Mexico; 386 miles SSW of Key West, Florida
- **Maximum Sustained Winds:** 65 mph
- **Current Movement:** NW at 9 mph

This general motion should continue through this morning, followed by a general northward motion beginning later today and continuing through Friday. On the forecast track, the center of Helene will pass near the northeastern coast of the Yucatan Peninsula this morning, move across the eastern Gulf of Mexico later today and Thursday, and reach the Big Bend coast of Florida late Thursday. Strengthening is forecast, and Helene is expected to become a hurricane later today. The storm is forecast to rapidly strengthen over the eastern Gulf of Mexico and become a major hurricane on Thursday.



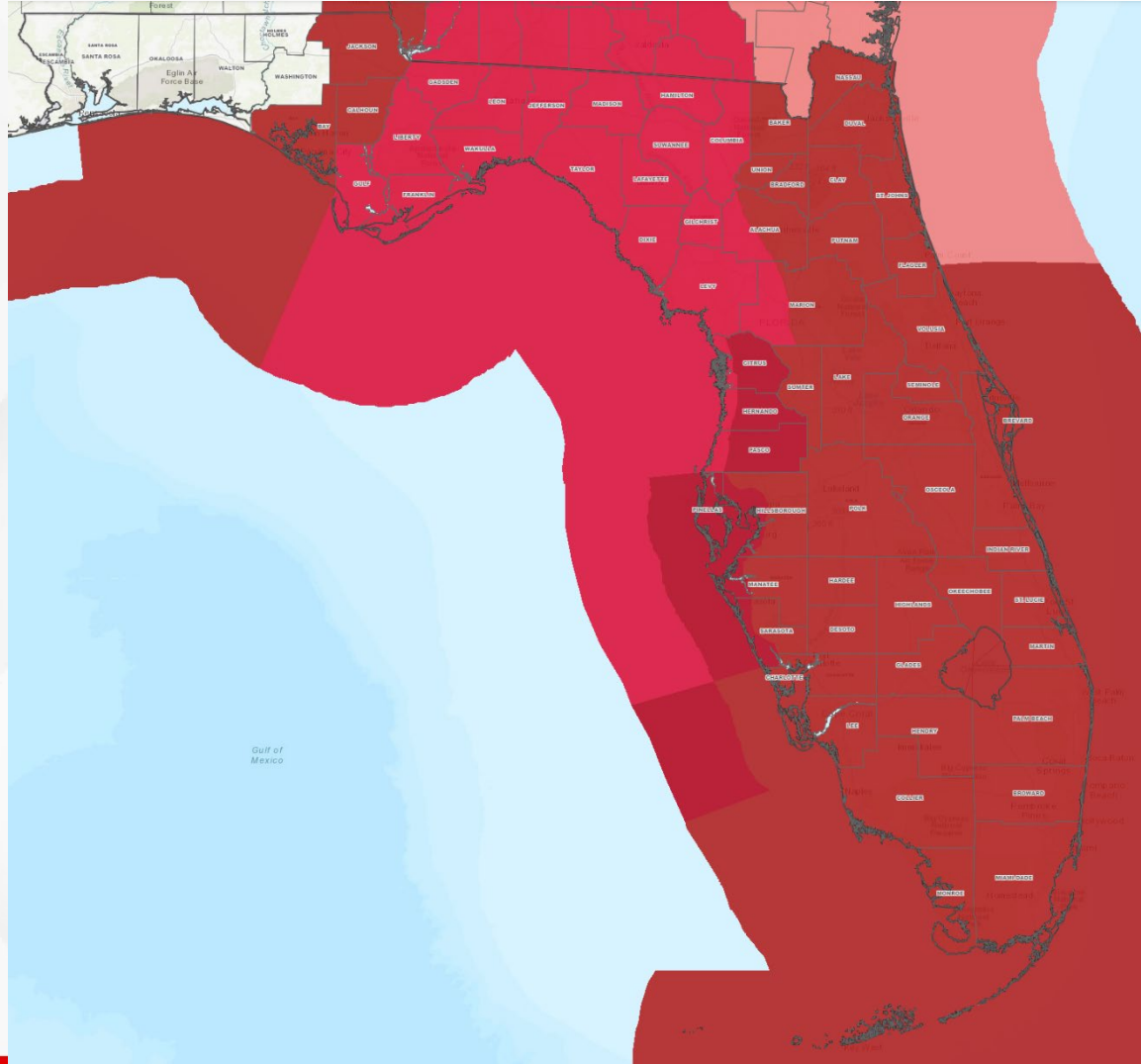
Despite its increased intensity, Air Force Reserve Hurricane Hunter aircraft along with radar data from Mexico and Cuba show that Helene has not yet formed a well-defined inner core.





# Current Tropical Wind Watches/Warnings

As of 5:00 AM EDT Wednesday



- **Hurricane Warning:**

Gulf, Liberty, Franklin, Wakulla, Gadsden, Leon, Jefferson, Madison, Taylor, Lafayette, Dixie, Levy, coastal Citrus, coastal Hernando, coastal Pasco, Suwannee, Hamilton, Columbia, Gilchrist, eastern Alachua, eastern Marion

- **Tropical Storm Warning:**

Florida Keys & Dry Tortugas (Monroe County), Mainland Monroe, Volusia, Brevard, Indian River, St. Lucie, Martin, Okeechobee, Glades, Hendry, Collier, Lee, Charlotte, DeSoto, Highlands, Sarasota, Manatee, Hardee, Osceola, Polk, Hillsborough, Pinellas, inland Pasco, inland Hernando, inland Citrus, Sumter, Lake, Orange, Seminole, Bay, Calhoun, Jackson, Miami-Dade, Broward, Palm Beach, Flagler, Putnam, central and eastern Marion, central and eastern Alachua, Union, Bradford, Baker, Nassau, Clay, Duval, St. Johns

- **Hurricane Watches:**

Inland Citrus, inland Hernando, inland Pasco, Pinellas, coastal Hillsborough, coastal Manatee, coastal Sarasota

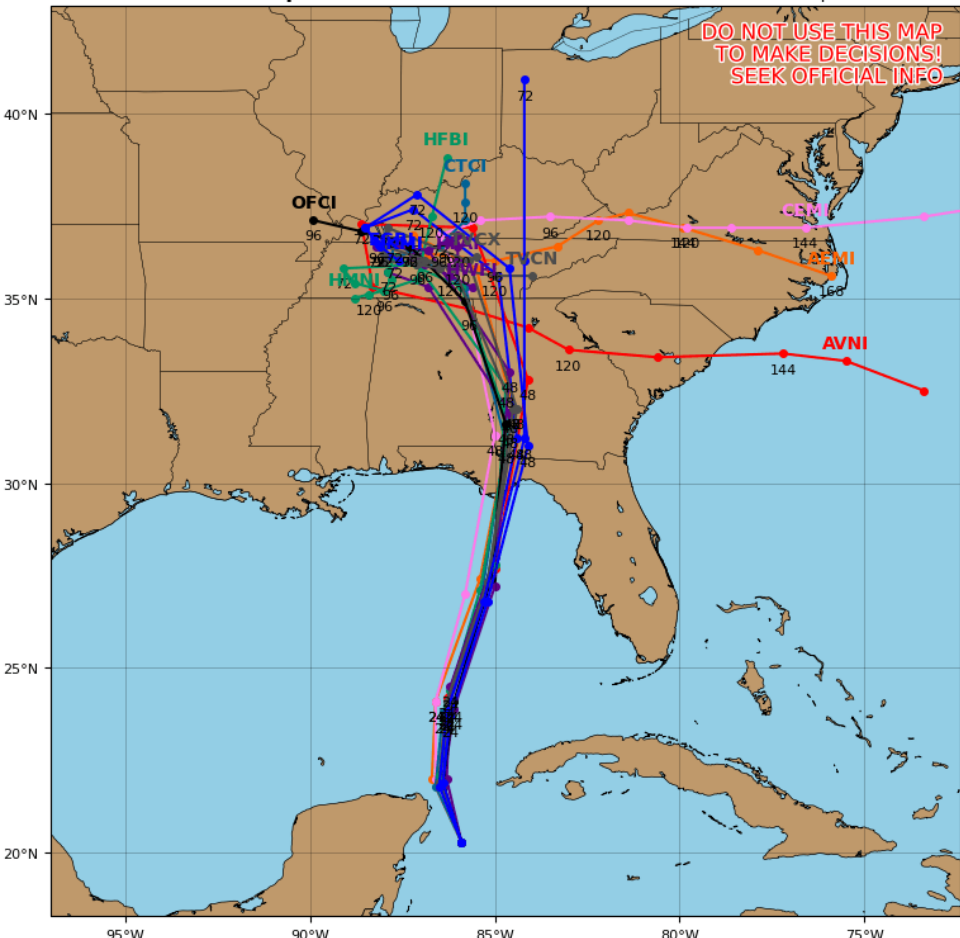


# Model Forecasts – Next 5 Days

## Tropical Storm Helene

### Tropical Storm HELENE Model Track Guidance

Initialized at 06z Sep 25 2024 Levi Cowan - tropicaltidbits.com

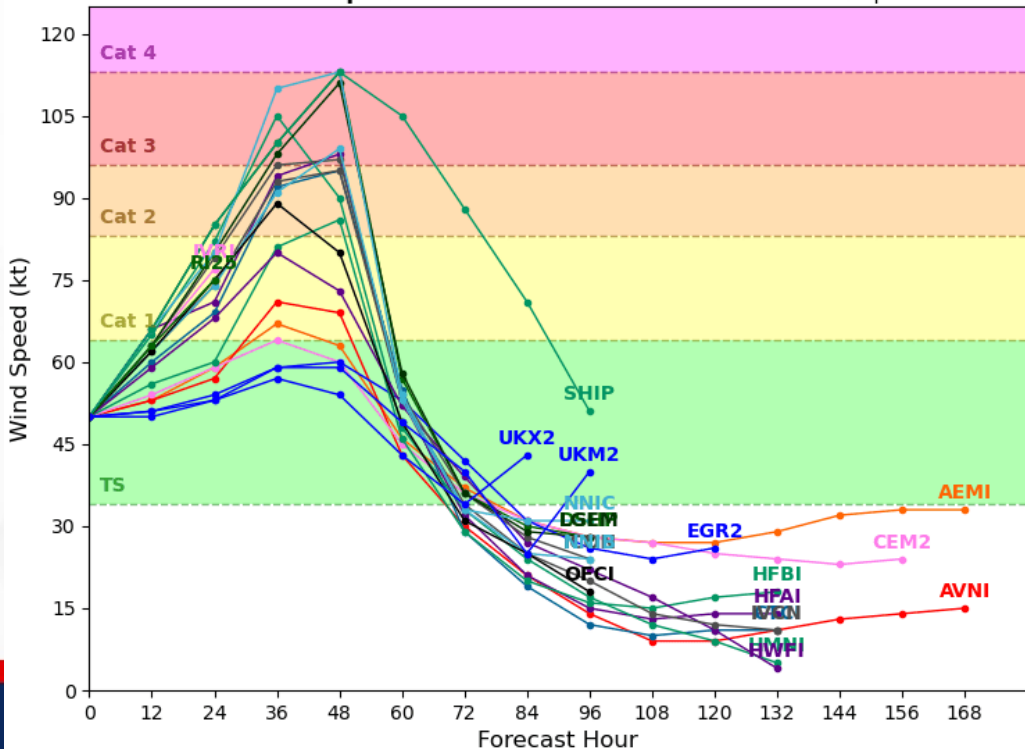


Computer models remain in very good agreement that Helene is expected to continue northwestward over the next 6-12 hours and then turn northward later today as high pressure over Florida shifts east. A general northward motion is expected to continue through the next 48 hours. Helene is still expected to accelerate while it moves northward over the eastern Gulf of Mexico.

Computer forecast models remain in good agreement that Helene will traverse areas of warm sea surface temperatures and decreasing upper-level winds while it moves across the northwestern Caribbean Sea and eastern Gulf of Mexico. Helene is forecast to become a major hurricane prior to landfall and could maintain that level of intensity through landfall.

### Tropical Storm HELENE Model Intensity Guidance

Initialized at 00z Sep 25 2024 Levi Cowan - tropicaltidbits.com





# Key Messages

## From the National Hurricane Center (NHC)



### Key Messages for Tropical Storm Helene

#### Advisory 8: 4:00 AM CDT Wed Sep 25, 2024

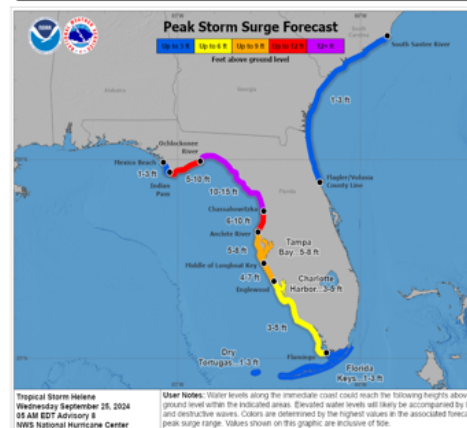
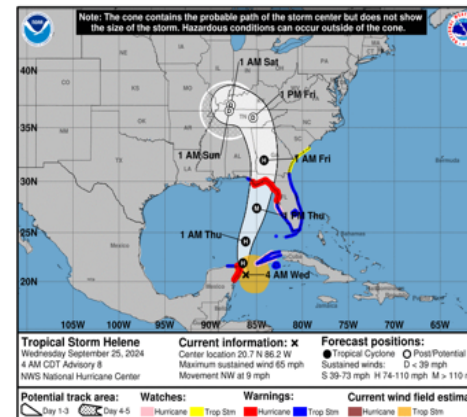


1. Helene is forecast to intensify and be near hurricane strength when it passes near the northeastern coast of the Yucatan Peninsula during the next several hours, where a Hurricane Warning is in effect.

2. Helene is expected to rapidly intensify and grow in size over the eastern Gulf of Mexico. There is a danger of life-threatening storm surge along the entire west coast of the Florida Peninsula and Florida Big Bend. The highest inundation levels are expected along the coast of the Florida Big Bend. Residents in those areas should follow advice given by local officials and evacuate if told to do so.

3. Damaging hurricane-force winds are expected along portions of coast of the Florida Big Bend, where a Hurricane Warning is now in effect. Preparations to protect life and property should be completed by early Thursday since tropical storm conditions are expected to begin within this area on Thursday.

4. Tropical Storm Helene will bring heavy rain to portions of the western Caribbean with potentially significant flooding across western Cuba and the northeastern Yucatan Peninsula. Considerable and potentially life-threatening flash and urban flooding is expected across portions of Florida, the Southeast, the Southern Appalachians, and the Tennessee Valley beginning today through Friday. This includes the risk of landslides across the southern Appalachians. Widespread minor to moderate river flooding is likely, and isolated major river flooding is possible.



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

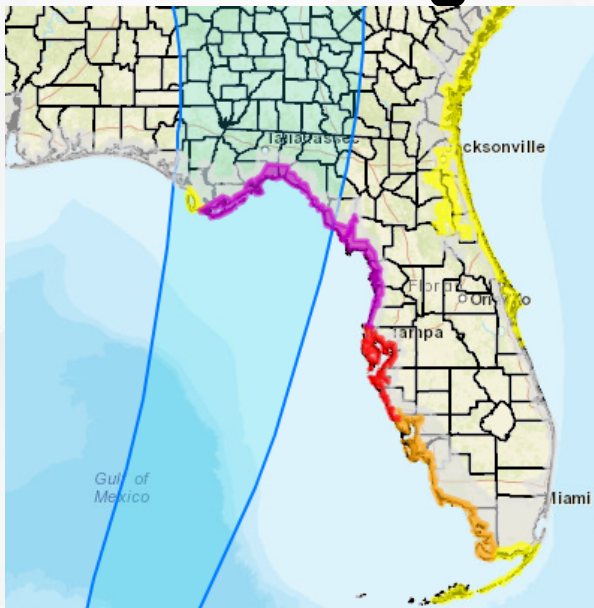




# Threats & Impacts

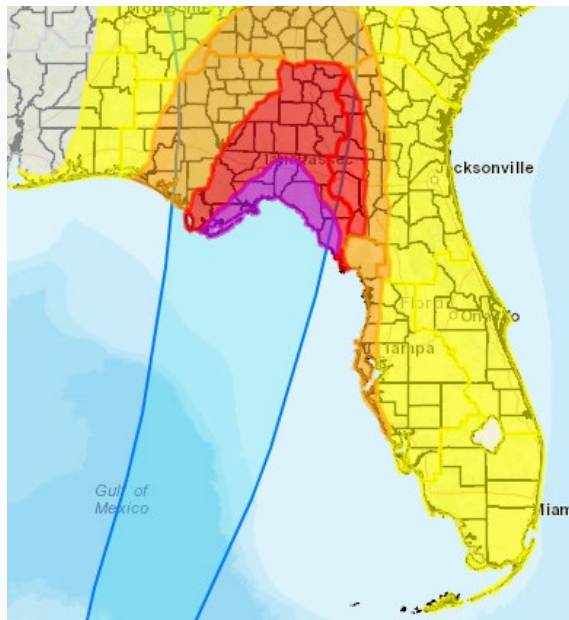
## From the National Weather Service

### Storm Surge



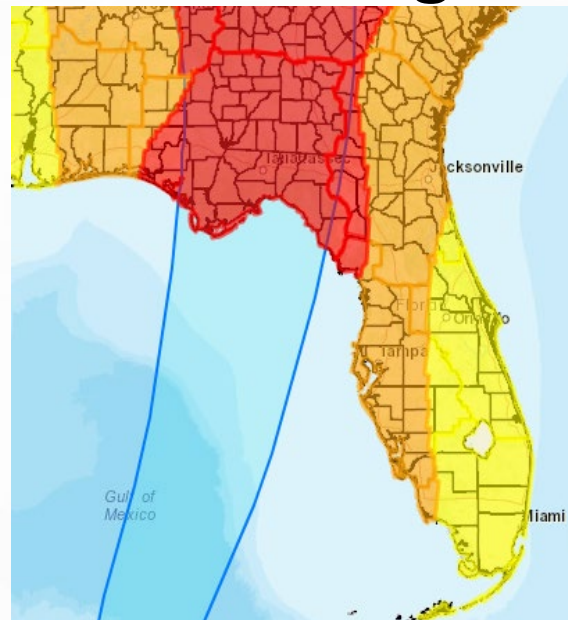
- Widespread deep inundation, with storm surge flooding greatly accentuated by powerful battering waves. Structural damage to buildings, with many washing away. Damage greatly compounded from considerable floating debris. Locations may be uninhabitable for an extended period.
- Near-shore escape routes and secondary roads washed out or severely flooded. Flood control systems and barriers may become stressed.
- Extreme beach erosion. New shoreline cuts possible.
- Massive damage to marinas, docks, boardwalks, and piers. Numerous small craft broken away from moorings with many lifted onshore and stranded.

### Wind



- Structural damage to sturdy buildings, some with complete roof and wall failures. Complete destruction of mobile homes. Damage greatly accentuated by large airborne projectiles. Locations may be uninhabitable for weeks or months.
- Numerous large trees snapped or uprooted along with fences and roadway signs blown over.
- Many roads impassable from large debris, and more within urban or heavily wooded places. Many bridges, causeways, and access routes impassable.
- Widespread power and communications outages.

### Flooding



- Major rainfall flooding may prompt many evacuations and rescues.
- Rivers and tributaries may rapidly overflow their banks in multiple places. Small streams, creeks, and ditches may become dangerous rivers. Flood control systems and barriers may become stressed.
- Flood waters can enter many structures within multiple communities, some structures becoming uninhabitable or washed away. Many places where flood waters may cover escape routes. Streets and parking lots become rivers of moving water with underpasses submerged. Driving conditions become dangerous. Many road and bridge closures with some weakened or washed out.

### Tornadoes



- The occurrence of scattered tornadoes can hinder the execution of emergency plans during tropical events.
- Several places may experience tornado damage with a few spots of considerable damage, power loss, and communications failures.
- Locations could realize roofs torn off frame houses, mobile homes demolished, boxcars overturned, large trees snapped or uprooted, vehicles tumbled, and small boats tossed about. Dangerous projectiles can add to the toll.

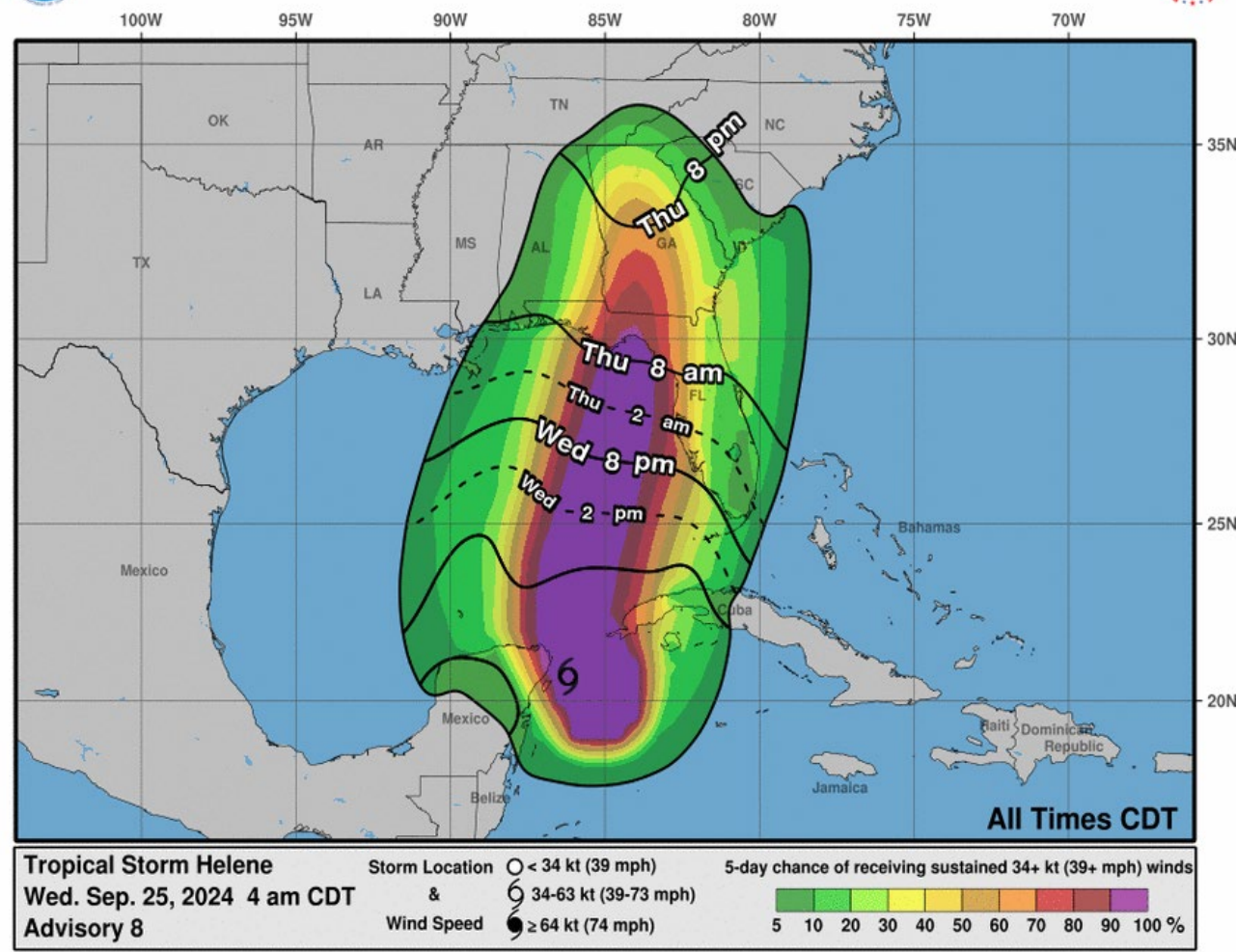


# Tropical Storm-Force Wind Probabilities

## Tropical Storm Helene



### Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



As Tropical Storm Helene moves through the northwestern Caribbean Sea and into the eastern Gulf of Mexico, tropical storm-force conditions are likely to arrive along the Florida Keys and South Florida overnight Wednesday and the pre-dawn hours on Thursday. The forecast quick forward motion will allow for tropical storm-force winds to likely arrive across Central Florida and across the Big Bend late Thursday morning and throughout the afternoon. Tropical storm-force winds are likely to reach the Capital City and the I-10 corridor by late Thursday afternoon and early Thursday evening.

However, tropical-storm force conditions may begin as early as later this morning into this afternoon along the Lower Keys and this evening and into the overnight hours across Southwest Florida. As Tropical Storm Helene moves northward to north-northeastward along the eastern Gulf of Mexico, tropical storm-force winds could arrive as early as late this evening and overnight along the West Coast, then reach the Nature Coast and Florida Big Bend Thursday morning into the afternoon.

Wind speed probabilities will likely continue to increase in future packets as the eventual forecast track and intensity forecast become realized.

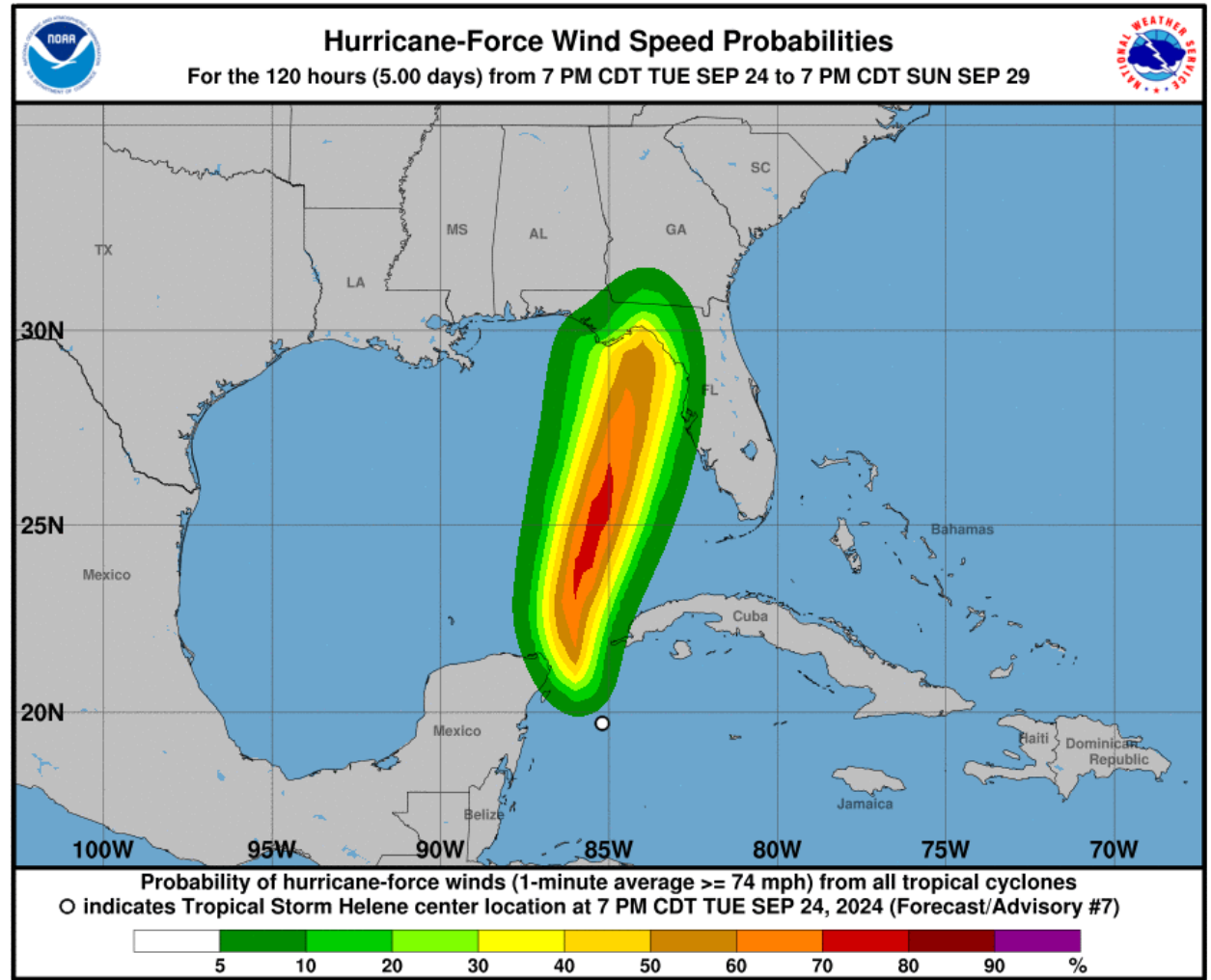
City	Tropical Storm-Force Wind Probability
Key West	27% (-6%)
Naples	40% (-4%)
Miami	7% (+1%)
Fort Myers	24% (+/-0)
Tampa	69% (-3%)
Cedar Key	81% (-3%)
Cocoa Beach	26% (-5%)
Orlando	18% (-4%)
Gainesville	48% (-10%)
Tallahassee	86% (+12%)
Jacksonville	29% (-4%)
Apalachicola	91% (+15%)
Panama City	75% (+17%)
Pensacola	11% (+1%)





# Strong Tropical Storm-Force Wind Probabilities

## Tropical Storm Helene



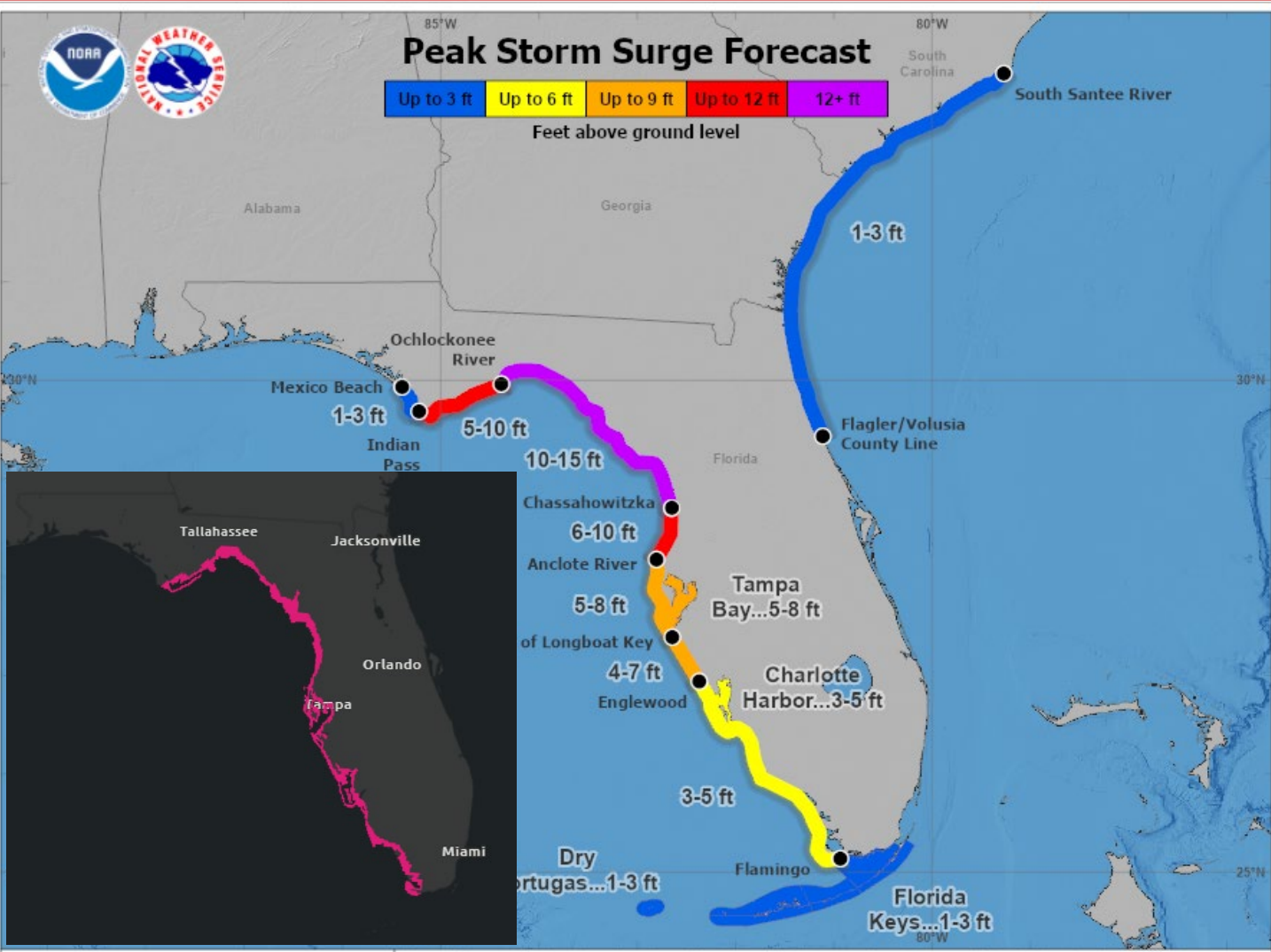
Additional strengthening of Tropical Storm Helene will also allow for strong tropical storm-force winds to extend from the Florida Panhandle, across the Big Bend and towards the I-75 corridor.

City	Strong Tropical Storm-Force Wind Probability
Key West	0% (+/- 0)
Naples	0% (+/- 0)
Miami	0% (+/- 0)
Fort Myers	0% (+/- 0)
Tampa	4% (-3%)
Cedar Key	15% (-11%)
Cocoa Beach	0% (+/- 0)
Orlando	0% (+/- 0)
Gainesville	1% (-1%)
Tallahassee	11% (+/- 0)
Jacksonville	0% (+/- 0)
Apalachicola	45% (+4%)
Panama City	22% (-4%)
Pensacola	0% (+/- 0)



# Current Storm Surge Watch

As of 5:00 AM EDT Wednesday



Tropical Storm Helene  
Wednesday September 25, 2024  
05 AM EDT Advisory 8  
NWS National Hurricane Center

**User Notes:** Water levels along the immediate coast could reach the following heights above ground level within the indicated areas. Elevated water levels will likely be accompanied by large and destructive waves. Colors are determined by the highest values in the associated forecast peak surge range. Values shown on this graphic are inclusive of tide.

Based on the forecast size, forward motion and intensity of Tropical Storm Helene, **peak storm surge of 10-15'** is possible for much of the Florida Big Bend and extending towards the northern Nature Coast. Throughout the rest of the Big Bend from Indian Pass to the Anclote River, **storm surge of 5-10'** is possible. Across the West-Central Florida Coast, including Tampa Bay, **storm surge of 4-8'** is possible, with 2-5' possible storm surge along the Southwest Florida Coast. 1-3' peak storm surge is now forecast along the Northeast Coast from the Florida-Georgia line southward to the Flagler/Volusia County Line.

A **Storm Surge Warning** is in effect along the entire Florida Big Bend and West Coast through Southwest Florida.



# Rip Current Risk - Today

From the National Weather Service (NWS)



Onshore winds and increasing surf will create a **moderate to high risk for rip currents** along the Florida East Coast. Numerous beaches along the Panhandle can be expect a **moderate to high risk rip currents** as hazardous conditions will continue to develop over the next couple of days as Tropical Storm Helene moves into the eastern Gulf of Mexico. By later today, an **elevated risk for rip currents** can be expected to extend along the entire Gulf Coast. A **high risk for rip currents** can be expected nearly statewide later today through the latter portions of the week.

## FL Panhandle



Rip Current

Today



Thu



Fri



Sat



Sun



Marine Hazard







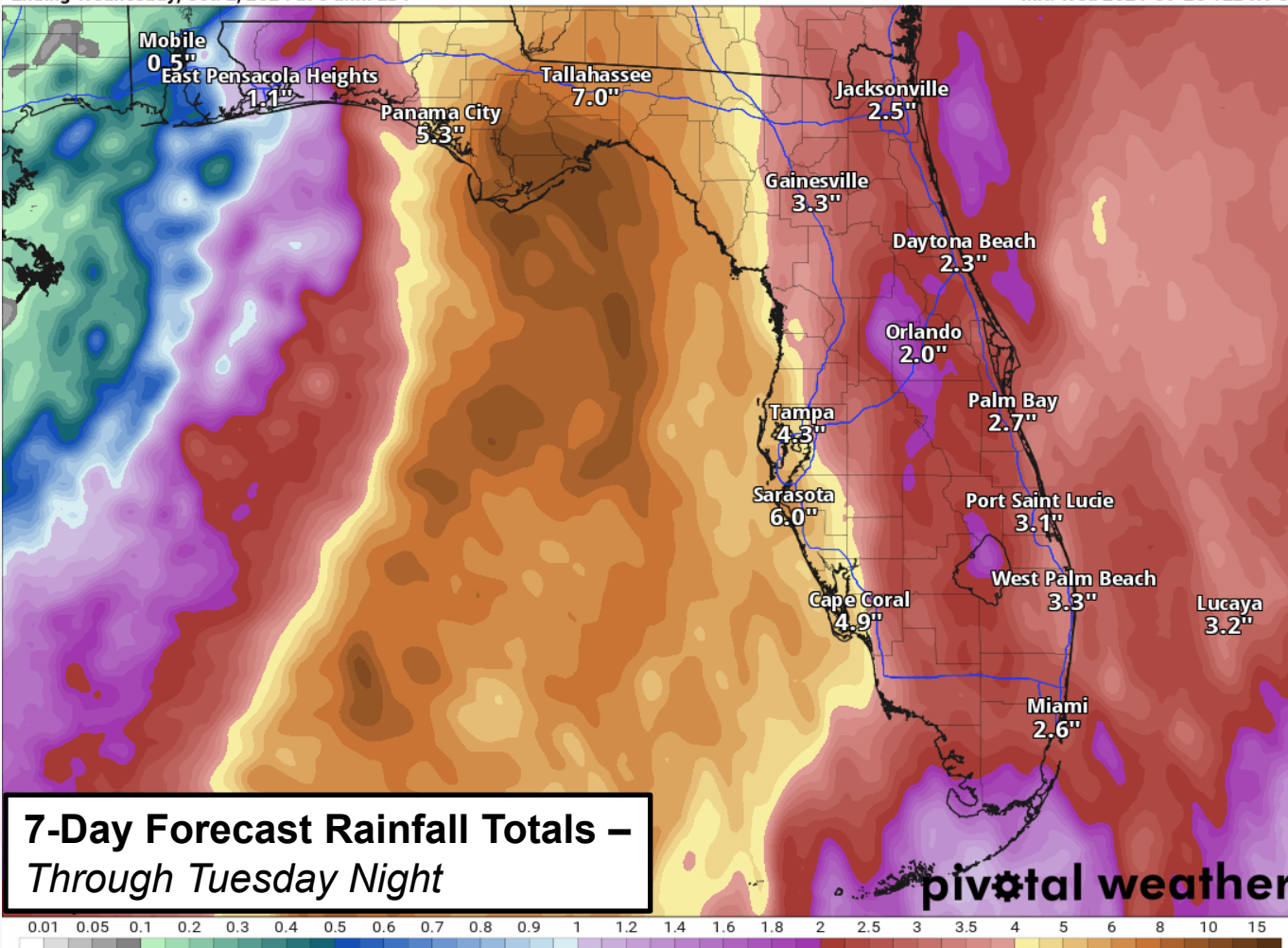
# Rainfall Totals – Next 7 Days

## From the Weather Prediction Center (WPC)

### 7-Day Precipitation (in)

Ending Wednesday, Oct. 2, 2024 at 8 a.m. EDT

Init: Wed 2024-09-25 12z WPC

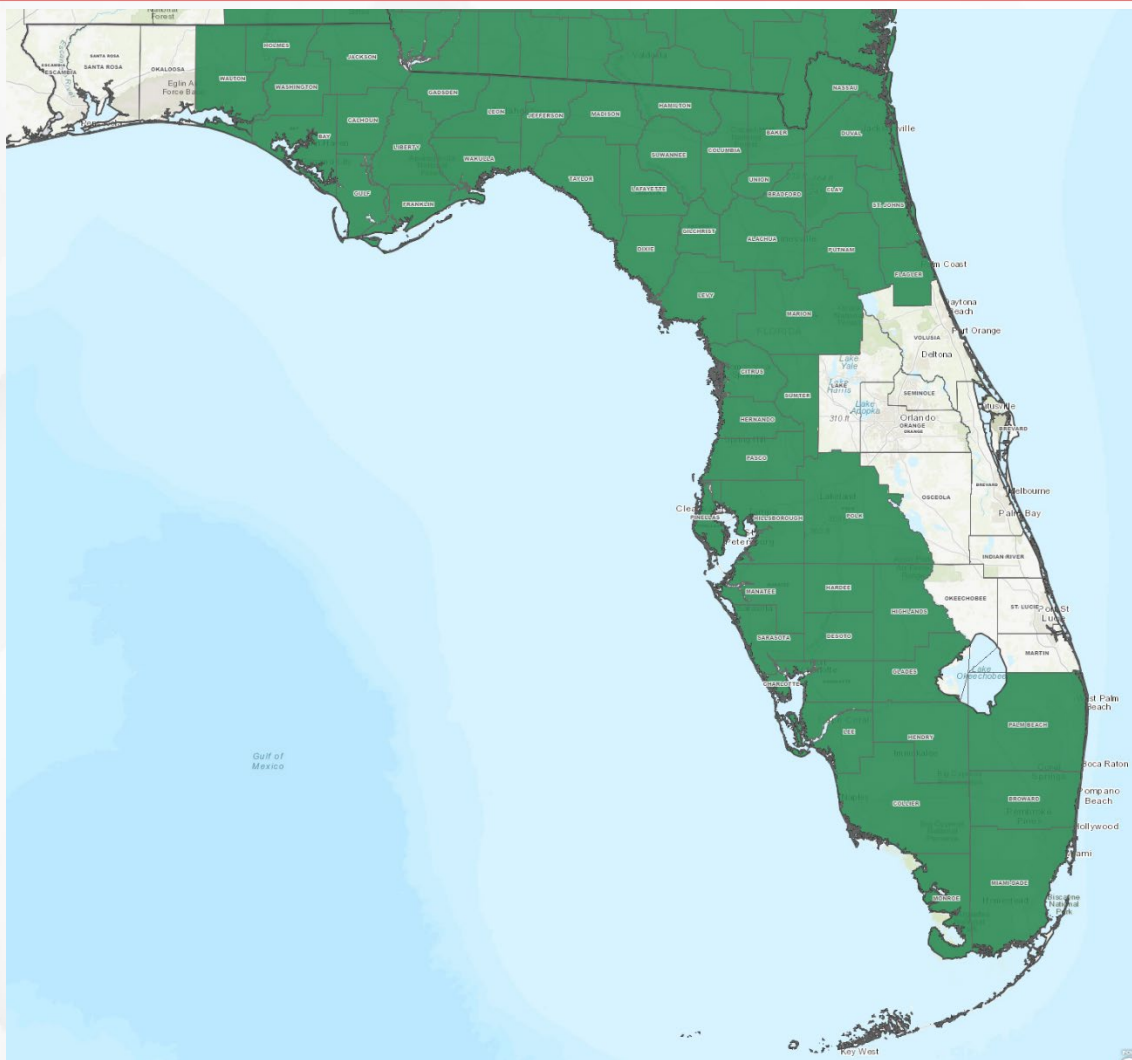


- South Florida and the Keys have begun to feel the outer influences of Hurricane Helene as the system pushes northward across the northwestern Caribbean Sea and pulls deep tropical moisture northward. A few outer bands from Helene will likely move across South and South-Central Florida and the Keys today with breaks of sunshine in between.
- As Tropical Storm Helene moves through the northwestern Caribbean and towards the southern Gulf of Mexico, tropical moisture will push northward through the state today and Thursday.
- Increasing rain chances can be expected along to increase from south to north along the Peninsula, then extend into northeastern 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 of 2-4" can be expected across the state through the next 7 days, with locally higher totals upwards of 6-10" along the Panhandle and immediate Gulf Coast. Localized instances upwards of 12-15" cannot be ruled out along portions of the western coastal Big Bend.



# Flood Watch

From the National Weather Service (NWS)



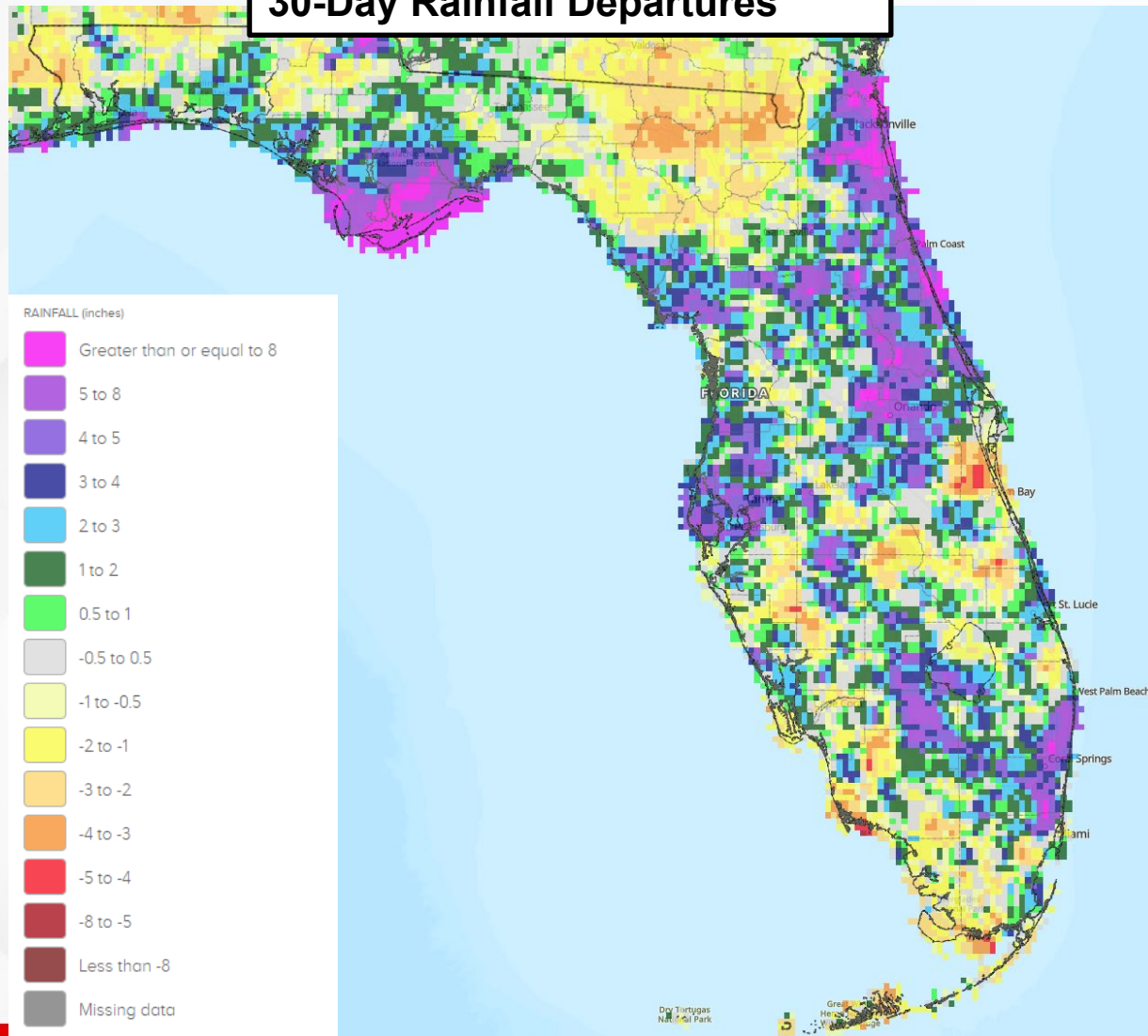
- **Flood Watches** have been issued across much of North Florida, West-Central Florida, and South Florida as tropical downpours associated with Tropical Storm Helene could bring instances of **localized flooding** beginning today.
- **Moderate to heavy rainfall** is expected with this system, which could lead to instances of localized flash flooding.
- With recently saturated grounds and soils, additional heavy rainfall across low-lying/poor drainage areas could **exacerbate the potential for localized flooding**.
- As well, with elevated water levels along the coast and extending into rivers and creeks along the coast due to storm surge, heavy rainfall over surrounding areas could **slow the rate of heavy rainfall depositing into system and running off** towards the gulf waters. This may also exacerbate potential flooding concerns.



# Rainfall Departures – 30 Days

## How Saturated Are Our Soils?

### 30-Day Rainfall Departures



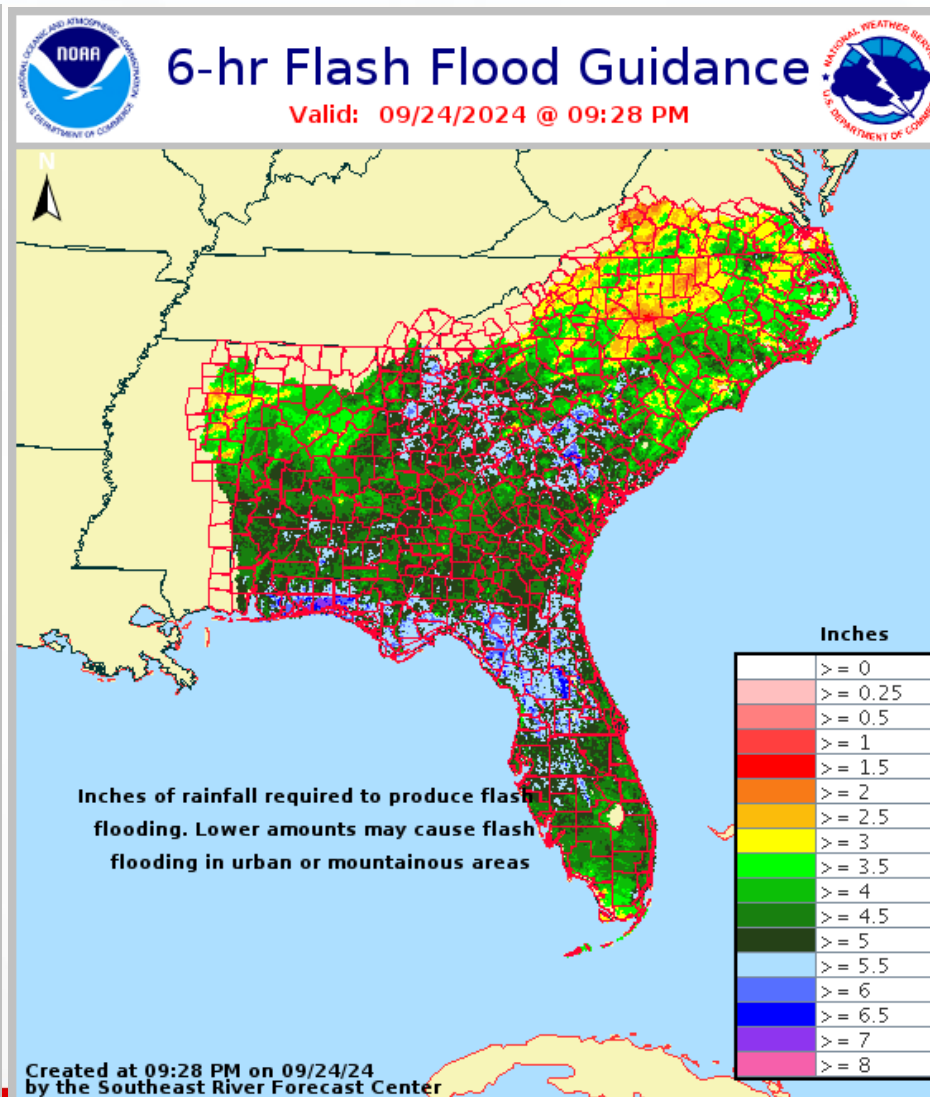
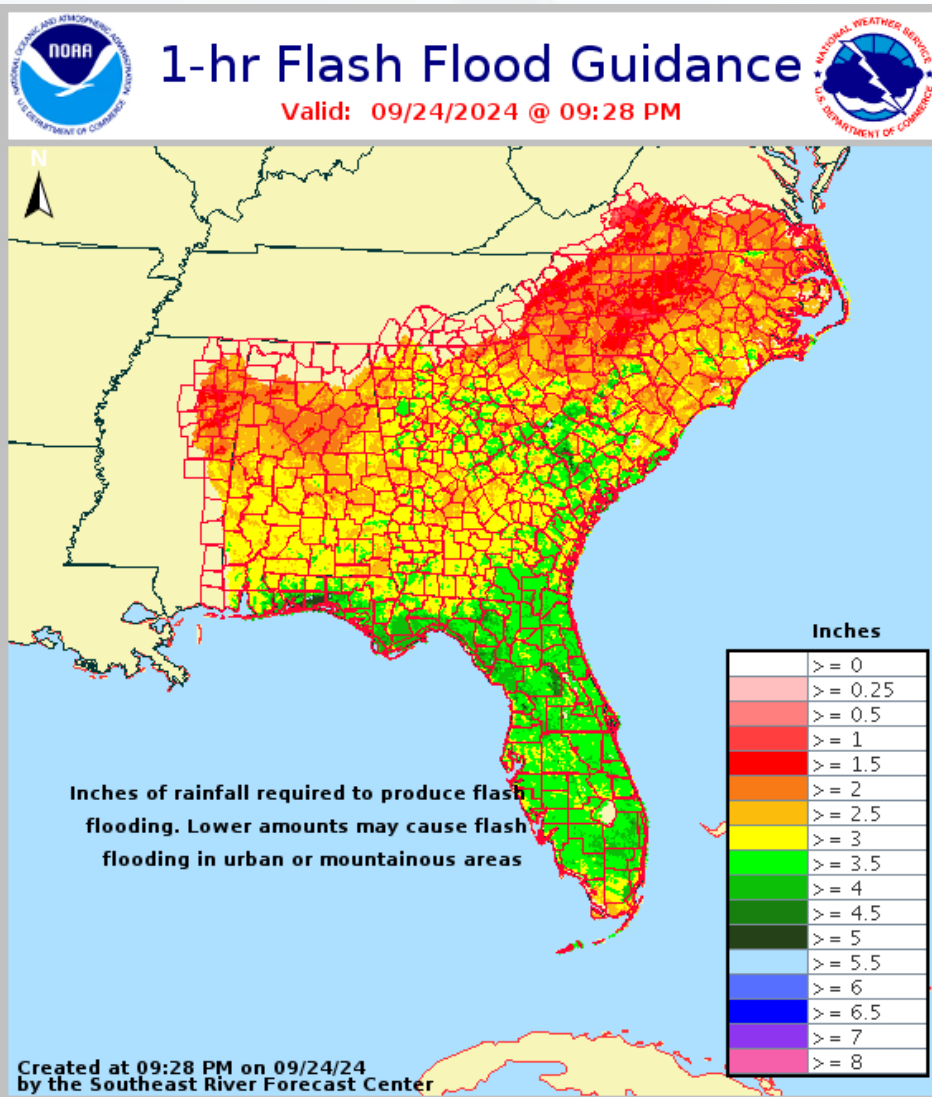
- Coastal portions of the Panhandle and south of the I-10 corridor are 5-8" above normal for rainfall from the last 30-days. This would increase the potential for onset flooding with additional heavy rainfall over the region.
- *Recent heavy rainfall over the Panhandle has allow for rises within water levels, but all rivers, creeks and waterways are currently below flood stage.*
- Interior portions of the Panhandle and Big Bend have seen below normal rainfall totals of 2-4" over the last 30-days.





# Flash Flood Guidance

## How Much Rain is Needed to Create Flash Flooding?

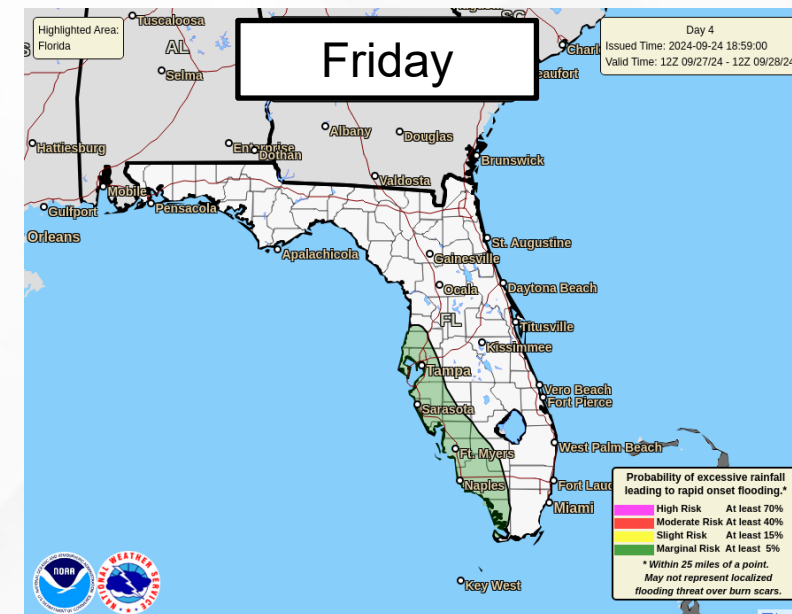
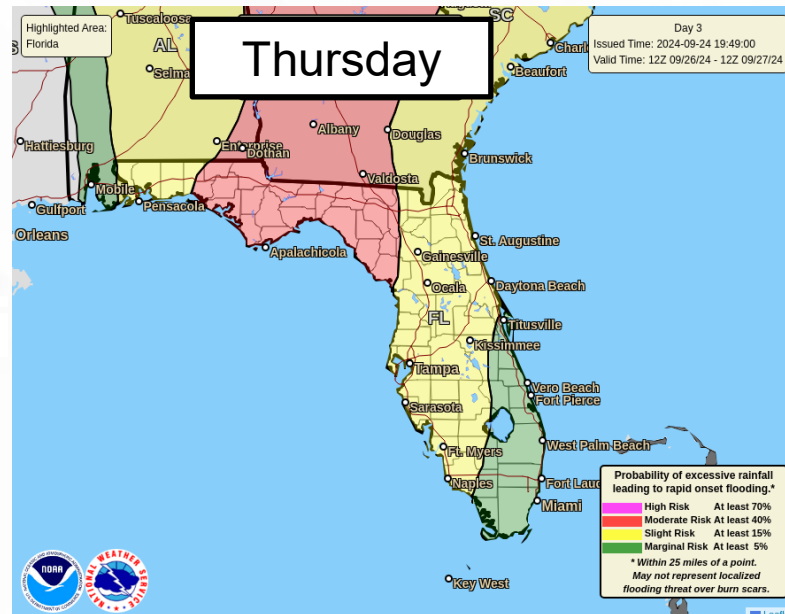
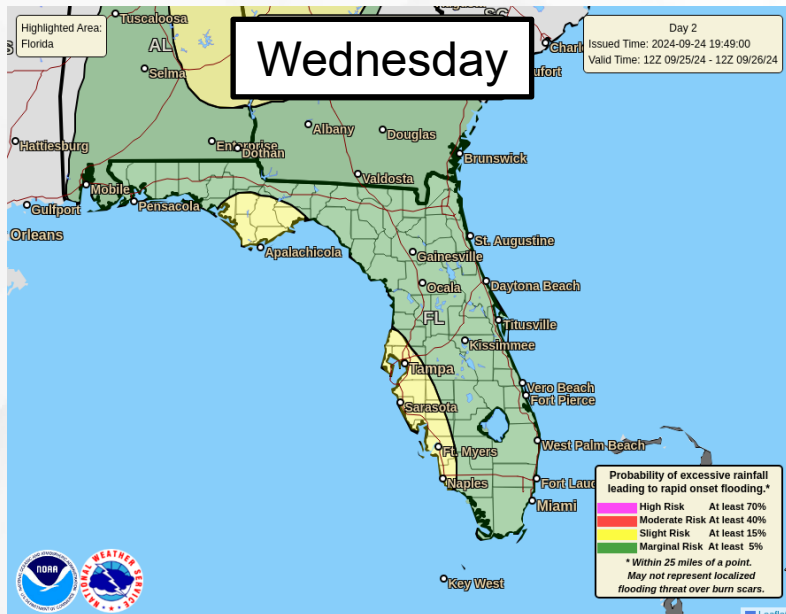


- Along the coastal Panhandle and Big Bend and into the interior Suwannee Valley, it would take 3-4" within an hours or 4-6" within 6 hours to cause flash flooding with some of the already saturated grounds and soils.
- Similarly, along the western Peninsula and, it would take about 3-4" within an hour or 4-6" within 6 hours.



# Flash Flood Outlook

## From the Weather Prediction Center (WPC)



The Weather Prediction Center (WPC) is outlooking a **Slight Risk (level 2 of 4) for Flash Flooding** along the southern Apalachicola River and towards the coast, with **Marginal Risk (level 1 of 4) for Flash Flooding** today across the Florida Panhandle extending along the West Coast and through South Florida as outer rainbands from this system will begin to bring heavy rainfall as Tropical Storm Helene moves over the eastern Gulf of Mexico. As Tropical Storm Helene approaches the northeastern Gulf of Mexico and towards the Florida Big Bend on Thursday, tropical downpours can be expected nearly statewide due to the large size of this system. The Weather Prediction Center (WPC) is outlooking a **Moderate Risk (level 3 of 4) for Flash Flooding** across the Florida Big Bend and extending into the eastern Florida Panhandle on Thursday, with a **Slight Risk (level 2 of 4)** across the rest of the Panhandle and along the I-75 corridor along the West Coast. A **Marginal Risk (level 1 of 4)** extends statewide on Thursday as hazards will likely extend well away from the center. Regardless, tropical downpours and multiple rounds of rainfall may be possible that lead to **instances of flash flooding** as the system moves into the southeastern Gulf of Mexico, especially with potentially training showers and thunderstorms over the same areas and moving onshore. There is a **Marginal Risk (level 1 of 4) for Flash Flooding** on Friday as well along West-Central and Southwest Florida.

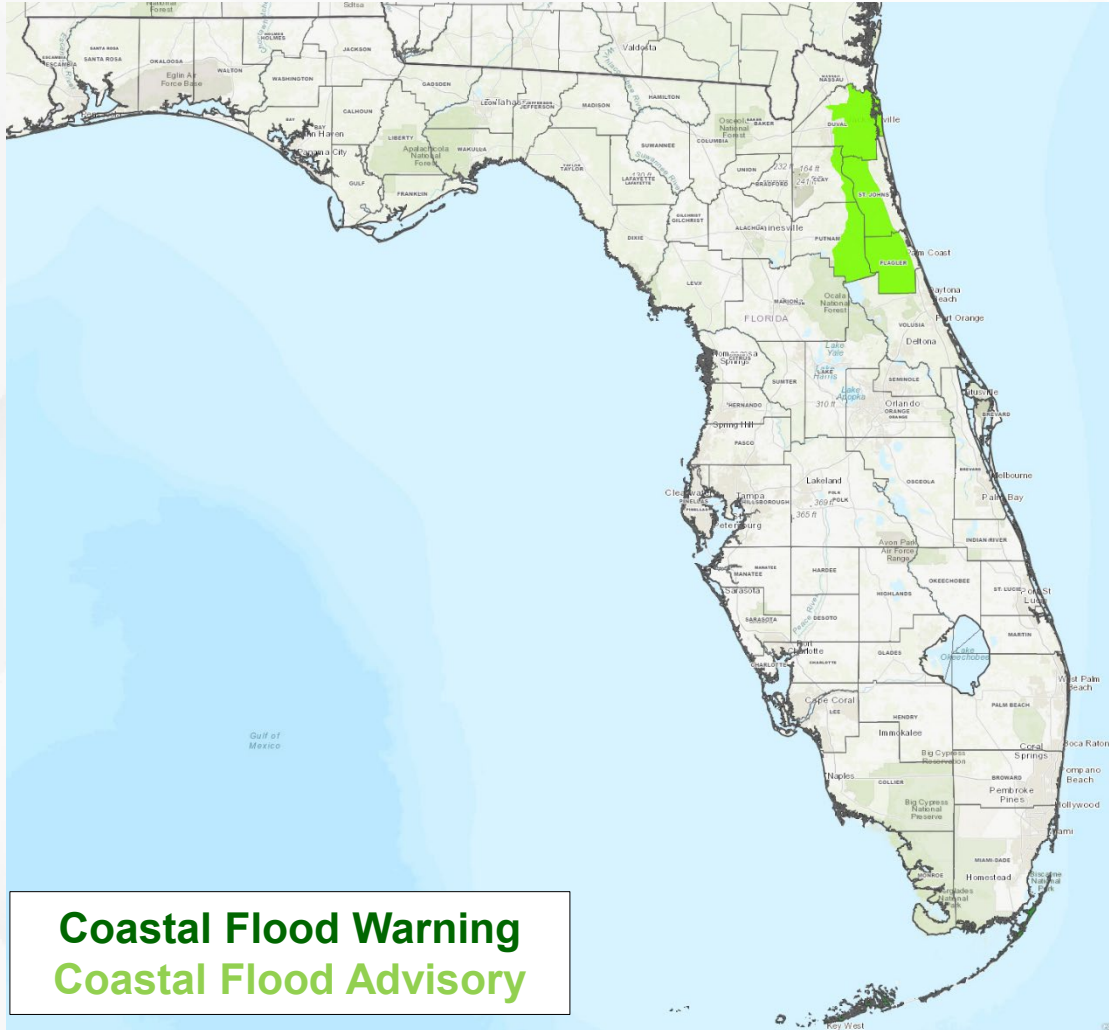
### Understanding WPC Excessive Rainfall Risk Categories

No Area/Label	MARGINAL (MRGL)	SLIGHT (SLGT)	MODERATE (MDT)	HIGH (HIGH)
Flash floods are generally not expected.	Isolated flash floods possible	Scattered flash floods possible	Numerous flash floods likely	Widespread flash floods expected
<a href="http://www.wpc.ncep.noaa.gov">www.wpc.ncep.noaa.gov</a> @NWSWPC	Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.	Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.	Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.	Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.



# Coastal Flooding Continues

From the National Weather Service (NWS)



**Coastal Flood Warning**  
**Coastal Flood Advisory**

A **Coastal Flood Warning** are in effect along the Florida Keys until Thursday night as **major saltwater flooding of 1-3'** above normally dry ground is possible, especially near and during times of high tide.

Due to compounding effects of lingering runoff from recent heavy rainfall, onshore flow, and recent high astronomical tides (King tides) courtesy of the recent Full Moon, **minor coastal flooding** can be expected along the St. Johns River through the middle of the week. A **Coastal Flood Advisory** remains in effect throughout the basin and along the Intracoastal Waterway and Atlantic Coast.

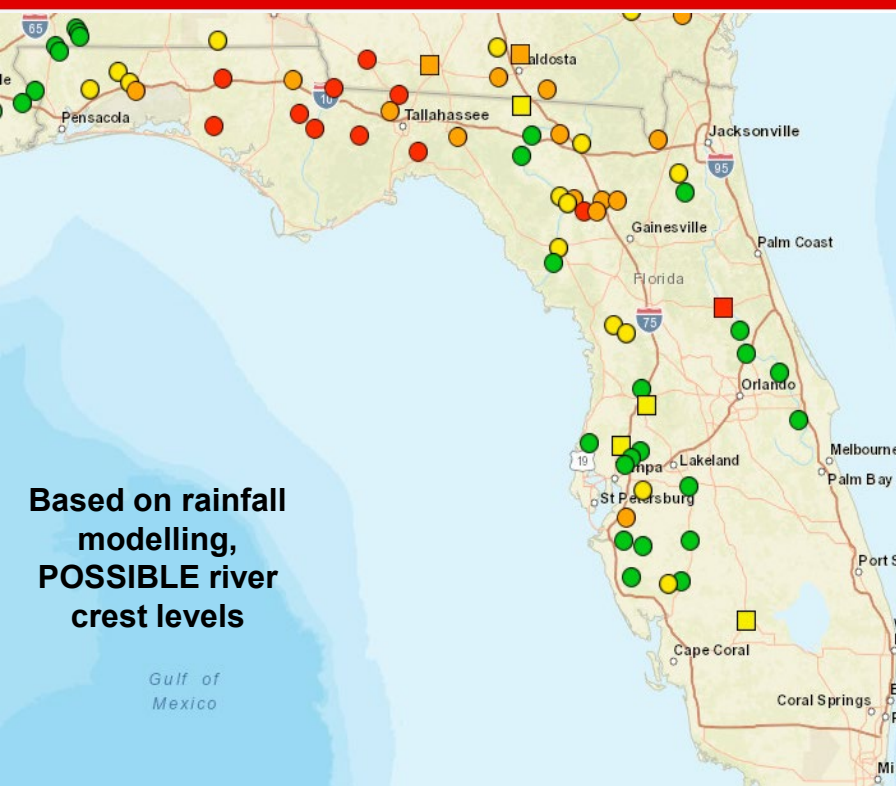
**Minor beach erosion** cannot be ruled out at times near and during times of high tide along the East Coast, especially for vulnerable beaches.



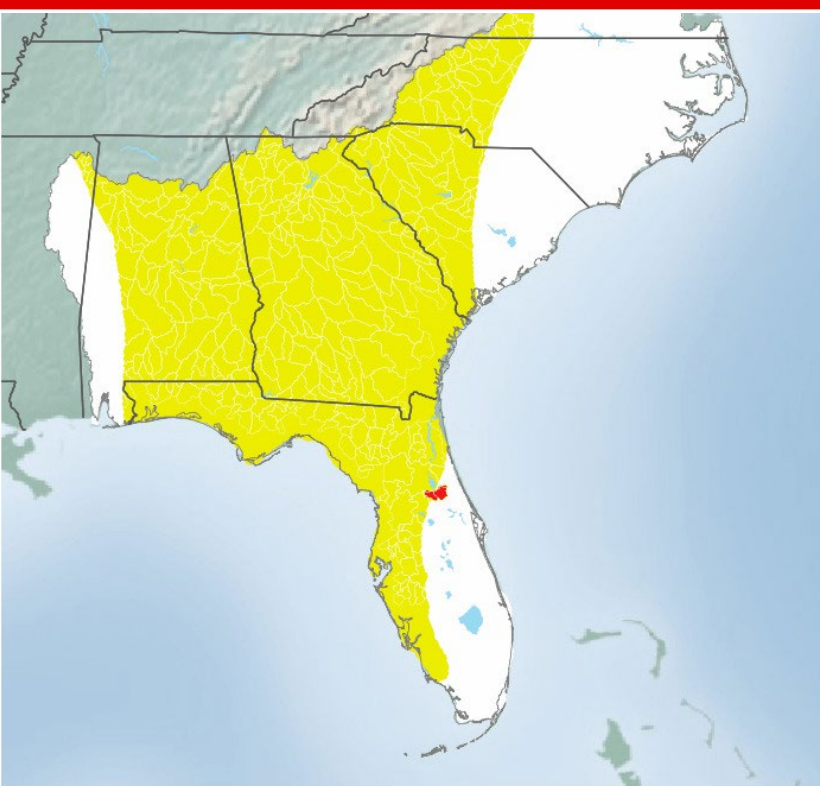


# Riverine Flooding

## Chance of River Flooding Based on Range of Forecast Rainfall



Based on rainfall modelling, **POSSIBLE** river crest levels



Rivers, creeks/streams, and waterways across North Florida are already running above normal for this time of year. Computer forecast models are indicating the potential for **minor to moderate flooding** along several mainstems and branches including the Apalachicola, Ochlockonee, Santa Fe, Myakka, Manatee, and Alafia by next week.

Riverine flooding will be closely tied to which basin receives the greatest swath of rainfall. Trends will continue to be monitored.

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

**National Weather Service**  
Peachtree City, GA  
09/24/2024 11:43 AM EDT

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**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



# River Flood Warnings

From the National Weather Service

River Guage	County(ies) Affected	Current Level	Crest Level	Record Level	Status	Crest Date	Warning Expires
<a href="#">Alafia River at Riverview near US 301</a>	Hillsborough	Below: 2.58 ft	Major: 7.00 ft	6.60 ft	Rising	26-Sep	0948 EDT 27-Sep
<a href="#">St. Johns River at Astor</a>	Volusia, Lake	Minor: 2.96 ft	Moderate: 3.10 ft	4.70 ft	Steady	26-Sep	Until Further Notice
<a href="#">St. Mary's River near Macclenny</a>	Baker, Nassau	Below: 5.30 ft	Minor: 12.50 ft	24.40 ft	Falling	27-Sep	0000 EDT 28-Sep

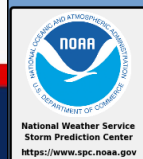
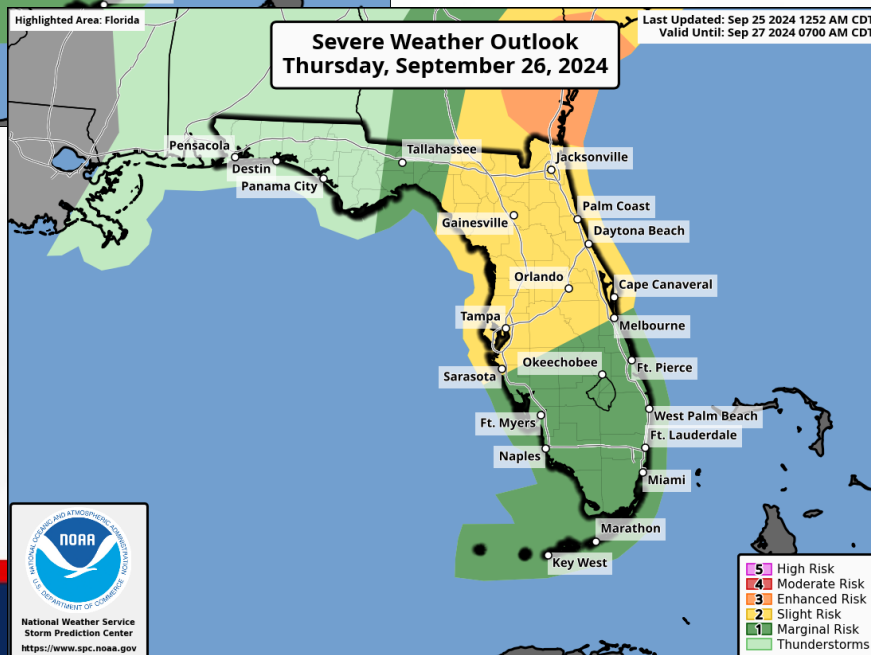
A **River Flood Warning** remain in effect in the [St. Johns River at Astor](#) as water levels are holding steady within **minor flood stage** just below the line for **moderate flood stage** due to trapped tides within the river basin. Water levels are forecast to rise back into **moderate flood stage** in the next few days in response to heavy rainfall across the basin and elevated tides and ocean swells preventing these waters from discharging. Additional forecast points along the St. Johns River are forecast to remain near or within Action Stage (bank-full) due to recent heavy rainfall over the area; however, river flooding is not anticipated at this time. Tidal portions of the lower St. Johns River could fluctuate in between Action and **minor flood stage** due to tide fluctuations. A **River Flood Warning** has been issued for the [Alafia River at Riverview near US 301](#) as **major flooding** is forecast due to tidal fluctuations and anticipated storm surge associated with Tropical Storm Helene. A **River Flood Warning** has been issued for the [St. Mary's River near Macclenny](#) as water levels are forecast to rise into **minor flood stage** later this week. Additional **River Flood Warnings** will likely be issued later this week and this weekend as heavy rainfall expected from Tropical Storm Helene is observed across the state; however, Riverine flooding will be closely tied to which basin receives the greatest swath of rainfall. Trends will continue to be monitored. For more details, please visit the [River Forecast Center](#).

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# Tropical Tornadoes

## From the Storm Prediction Center (SPC)



- The Storm Prediction Center (SPC) is outlooking a **Marginal Risk (level 1 of 5) for Severe Weather** across much of the state today.
- A **Slight Risk (level 2 of 5) for Severe Weather** is being outlooked on Thursday across the Northern Peninsula south of the I-4 corridor towards Lake Okeechobee. A **Marginal Risk (level 1 of 4)** extends from the Capital City through the Florida Keys.
- **Isolated tropical tornadoes** are possible within outer bands of Tropical Storm Helene today and Thursday as outer rainbands from Helene extend along the Peninsula and Big Bend Coast.
- The greatest tropical tornado threat will exist along and to the east of the eventual path.
- *Tornado Watches and Warnings will be issued as conditions warrant.*

**FOUO – For Government Official Use Only**





# Summary

FOUO – For Government Official Use Only

## **Tropical Storm Helene:**

- As of 5:00 AM EDT, Tropical Storm Helene is located about 45 miles east-northeast of Cozumel, Mexico and about 120 miles southwest of the western tip of Cuba and moving northwestward at 10 mph.
- This general motion should continue through this morning, followed by a general northward motion beginning later today and continuing through Friday.
- On the forecast track, the center of Helene will pass near the northeastern coast of the Yucatan Peninsula this morning, move across the eastern Gulf of Mexico later today and Thursday, and reach the Big Bend coast of Florida late Thursday.
- Maximum sustained winds have increased to near 65 mph with higher gusts.
- Strengthening is forecast, and Helene is expected to become a hurricane later today.
- The storm is forecast to rapidly strengthen over the eastern Gulf of Mexico and become a major hurricane on Thursday.

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



# Summary

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## **Florida Outlook:**

- **Hurricane Warnings** have been issued for the following counties: Gulf, Liberty, Franklin, Wakulla, Gadsden, Leon, Jefferson, Madison, Taylor, Lafayette, Dixie, Levy, coastal Citrus, coastal Hernando, coastal Pasco, Suwannee, Hamilton, Columbia, Gilchrist, eastern Alachua, and eastern Marion.
- **Hurricane Watches** have been issued for the following counties: Hamilton, Suwannee, Columbia, Gilchrist, western Alachua, western Marion, inland Citrus, inland Hernando, inland Pasco, Pinellas, coastal Tampa, coastal Manatee, and coastal Sarasota.
- **Tropical Storm Warnings** have been issued for the following counties: Inland Citrus, inland Hernando, inland Pasco, Pinellas, coastal Hillsborough, coastal Manatee, and coastal Sarasota.
- Tropical Storm Helene will be a significant multi-hazardous event, bringing the risk for life-threatening storm surge, dangerous winds, heavy rainfall, and isolated tropical tornadoes to the Florida Gulf Coast.
- The large wind field and fast forward approach of this system will not only increase the threat of water above normally dry ground along the coastline, but also the inland extent of storm surge.
  - Storm surge values of 10-15' above normally dry ground will be possible from the Ochlockonee River through the Nature Coast, with 5-10' possible along to the central Florida Panhandle and north of Tampa Bay.
  - Even despite Helene's distance from Tampa Bay, the broad wind field will also be able to yield storm surge values of 5-8' during times of onshore flow.
  - A **Storm Surge Warning** extends along the entire Florida Big Bend and Gulf Coast from Indian Pass (Franklin/Gulf County-line) southward to Flamingo (Mainland Monroe) and including Tampa Bay and Charlotte Harbor.
- Tropical storm-force winds could arrive as early as later this morning or early this afternoon along the Florida Keys, late this evening or overnight across the southern Florida Peninsula, and overnight or early Thursday morning along the central Florida Peninsula.
  - While tropical storm-force winds are not forecast to arrive until the Thursday morning and afternoon hours along the Nature Coast and Florida Big Bend, conditions could begin to deteriorate as early as Thursday morning.
- Helene affecting the eastern Florida Panhandle, Florida Big Bend, and West Florida Coast could quickly cause trees and powerlines to become more susceptible to downing from gusty winds, especially given the vulnerability of local vegetation and infrastructure across these regions still recovering from Hurricane Debby.
- Localized areal, urban, and small stream flooding impacts are possible for portions of North and West Florida and locations that experience intense rainfall rates will likely experience rapid onset flash flooding (**Slight to Moderate Risk for Flash Flooding – level 2/3 of 4**).
  - **Flood Watches** have been raised across much of North, West-Central, and South Florida.
- As with any tropical system, isolated tornadoes will be possible even prior to landfall particularly for areas to the east of the center of circulation later in the day today and into Thursday (**Marginal to Slight Risk for Severe Weather – level 1-2 of 5**).

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# Tropical Update

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