



Tropical Update



12:30 PM EDT

Tuesday, September 24, 2024

Tropical Storm Helene & Florida Outlook

Hurricane and Storm Surge Watches Remain In Effect Along Portions of Florida Gulf Coast

Eastern and Central Tropical Atlantic (80%)

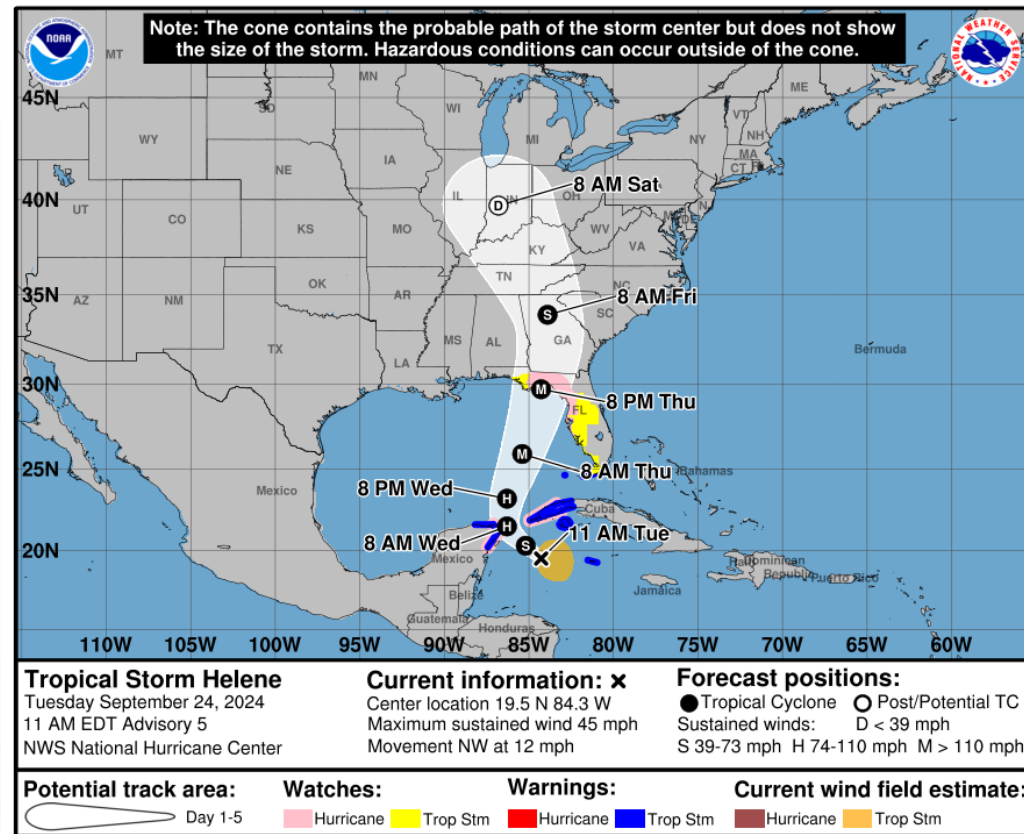
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an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

11:00 AM EDT Tuesday: Florida Threats & Changes Since Last Packet

	MINIMAL	LOW	MODERATE	HIGH	EXTREME
WINDS	Green	Yellow	Orange	Red	Grey
STORM SURGE	Green	Yellow	Orange	Red	Purple
FLASH FLOODING	Green	Yellow	Orange	Red	Grey
TORNADOES	Green	Grey	Grey	Grey	Grey
	LOW		MODERATE		HIGH
RIP CURRENTS	Yellow	Orange	Red		



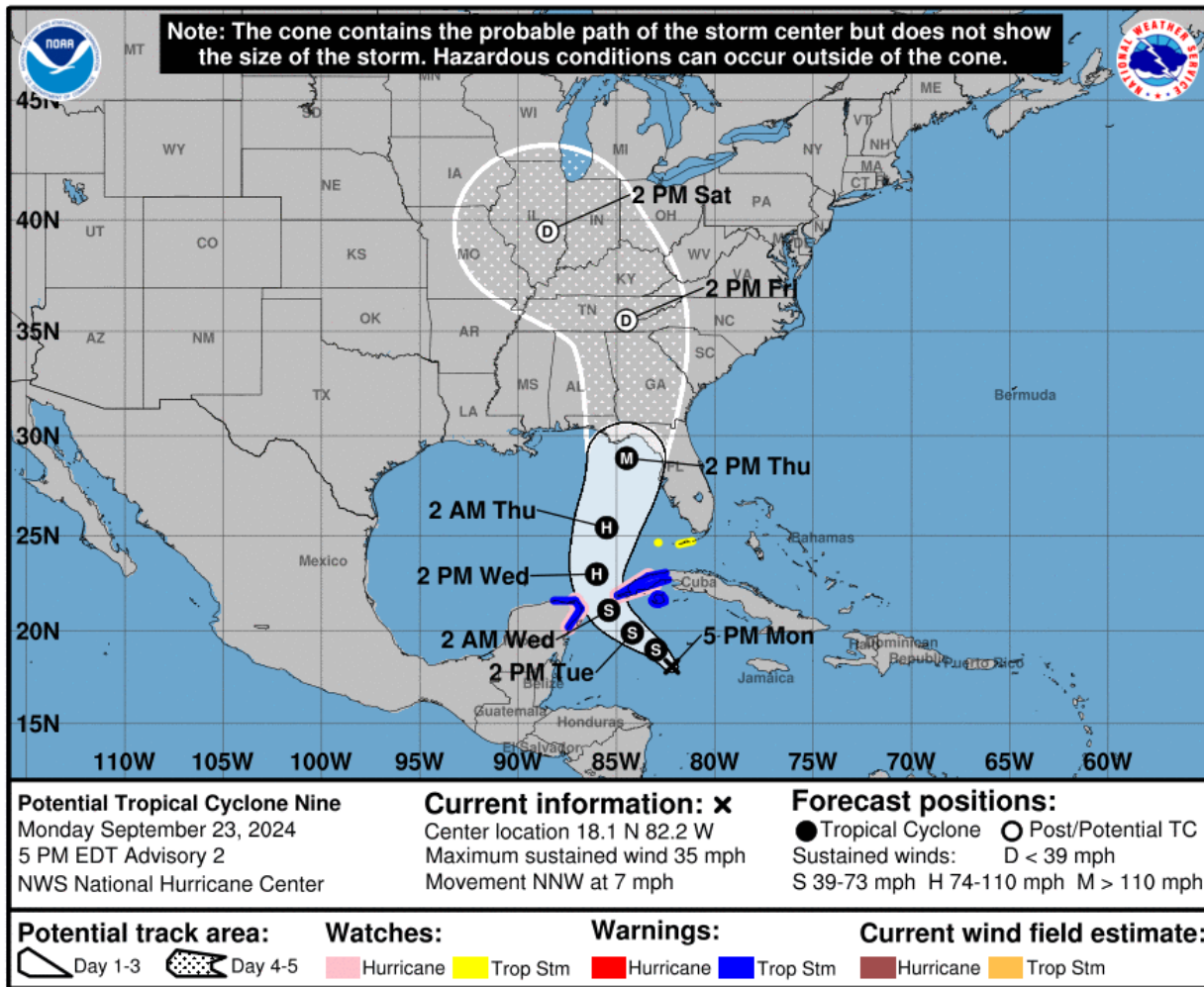
FOUO – For Government Official Use Only

Overview/Recent Changes: As of 11:00 AM EDT, Potential Tropical Cyclone Nine was upgraded to Tropical Storm Helene. Tropical Storm Helene was located about 190 miles east-southeast of Cozumel, Mexico and about 170 miles south-southeast of the western tip of Cuba and moving northwest at 12 mph. This general motion is expected to continue through early Wednesday. A northward to north-northwestward motion is expected on Wednesday and Thursday. On the forecast track, the center of Helene will move across the far northwestern Caribbean Sea through tonight, and then move across the eastern Gulf of Mexico Wednesday and Thursday, potentially reaching the Gulf coast on Florida late Thursday. Data from an Air Force Reserve Hurricane Hunter aircraft indicate that the system has acquired a well-defined center of circulation, and maximum sustained winds are near 45 mph with higher gusts. Additional strengthening is forecast, and Helene is expected to become a hurricane on Wednesday. Continued strengthening is anticipated after that time, and Helene could become a major hurricane on Thursday. Tropical Storm Warnings have been issued for the Lower Florida Keys and Dry Tortugas. Tropical Storm Watches extend along the far eastern Panhandle, as well as along West-Central Florida. Hurricane Watches are in effect throughout the Florida Big Bend, Nature Coast and the western Peninsula coast.



Tropical Storm Helene

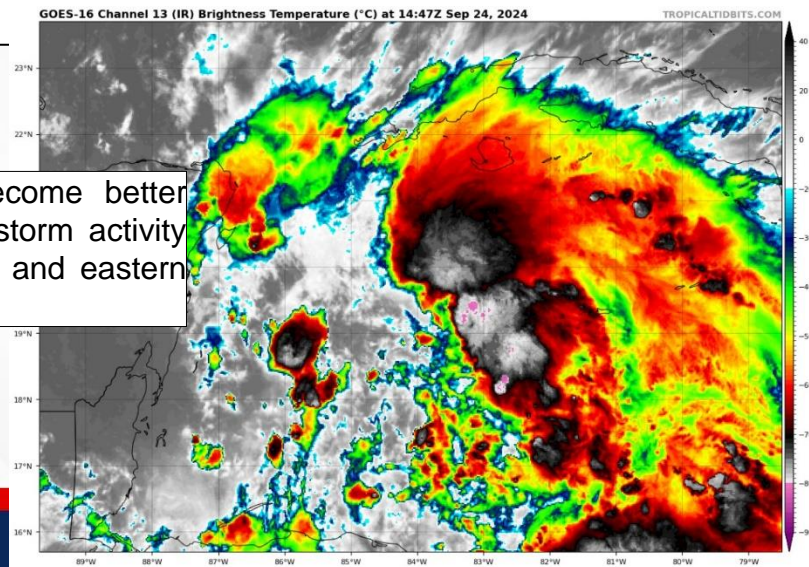
From the National Hurricane Center (NHC)



- **Location:** 180 miles ESE of Cozumel, Mexico; 170 miles SSE Western Tip of Cuba
- **Maximum Sustained Winds:** 45 mph
- **Current Movement:** NW at 12 mph
- **FL Watches & Warnings:** Tropical Storm Warning – Dry Tortugas and Lower Keys; Tropical Storm Watch - far eastern Panhandle, West-Central & Southwest Florida and Middle Keys; Hurricane Watch – Florida Big Bend, Nature Coast, Coastal West-Central Florida; Storm Surge Watch – Florida Big Bend and West Coast

The general northwest motion at 12 mph is expected to continue through early Wednesday. A northward to north-northeastward motion at a faster forward speed is expected on Wednesday and Thursday. On the forecast track, the center of Helene will move across the far northwestern Caribbean Sea through tonight, and then move across the eastern Gulf of Mexico Wednesday and Thursday, potentially reaching the Gulf coast of Florida late Thursday. Maximum sustained winds have increased to near 45 mph with higher gusts. Additional strengthening is forecast, and Helene is expected to become a hurricane on Wednesday. Continued strengthening is anticipated after that time, and Helene could become a major hurricane on Thursday.

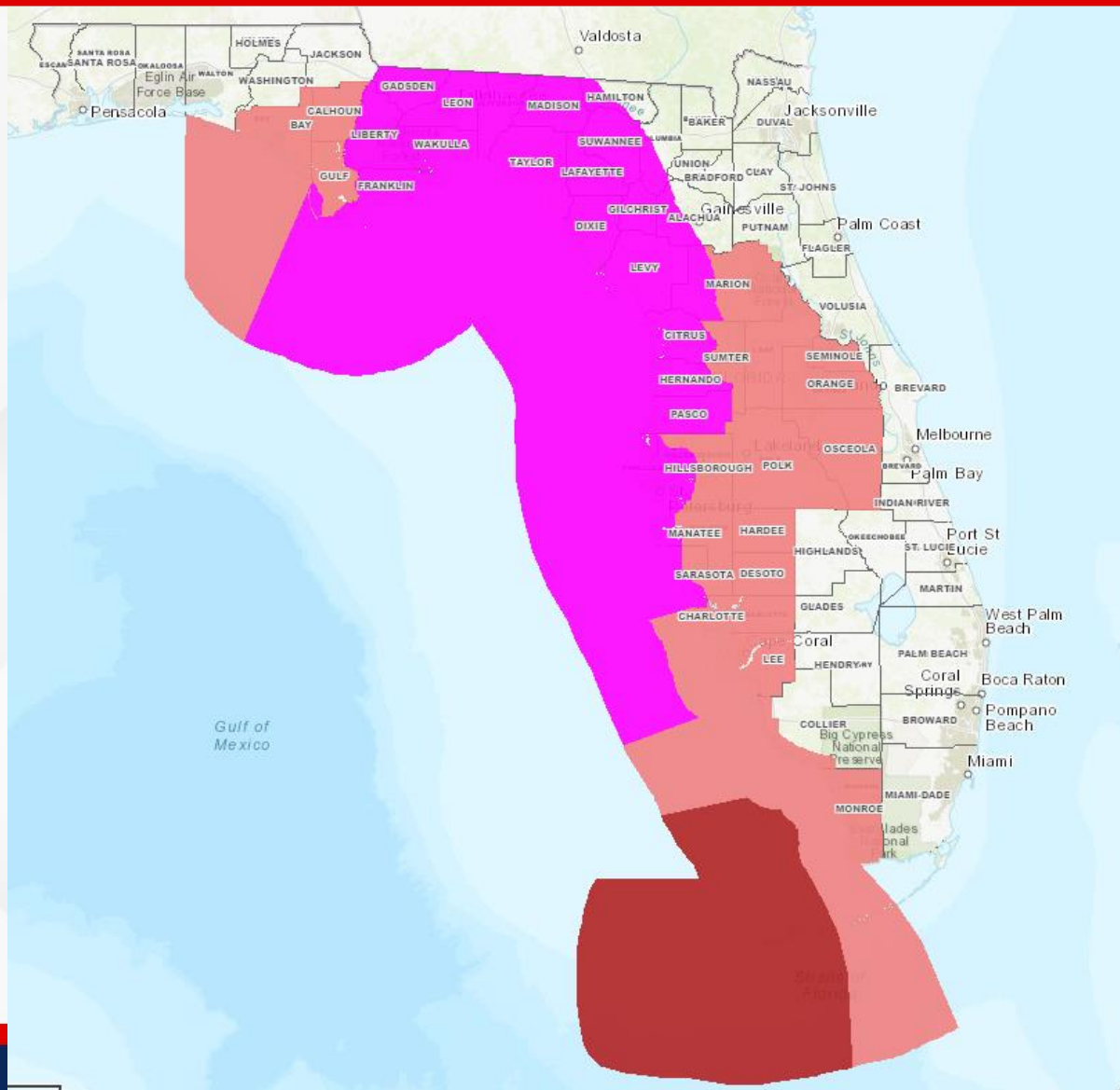
While Helene continues to become better organized, shower and thunderstorm activity remains along the northeastern and eastern side of the system.





Current Tropical Wind Watches/Warnings

As of 11:00 AM EDT Tuesday



- **Tropical Storm Warning:**

Lower Florida Keys & Dry Tortugas (Monroe County)

- **Tropical Storm Watches:**

Bay, Calhoun, Gulf, eastern Marion, Sumter, Lake, Seminole, Orange, Osceola, Polk, inland Hillsborough, inland Manatee, Hardee, DeSoto, inland Sarasota, Charlotte, Lee, Coastal Collier, Mainland Monroe and Middle Keys (Monroe County)

- **Hurricane Watches:**

Gadsden, Liberty, Franklin, Leon, Wakulla, Jefferson, Taylor, Suwannee, eastern Columbia, Gilchrist, Dixie, Levy, western Marion, Citrus, Hernando, Pasco, Pinellas, Coastal Hillsborough, Coastal Manatee, Coastal Sarasota



Model Forecasts – Next 5 Days

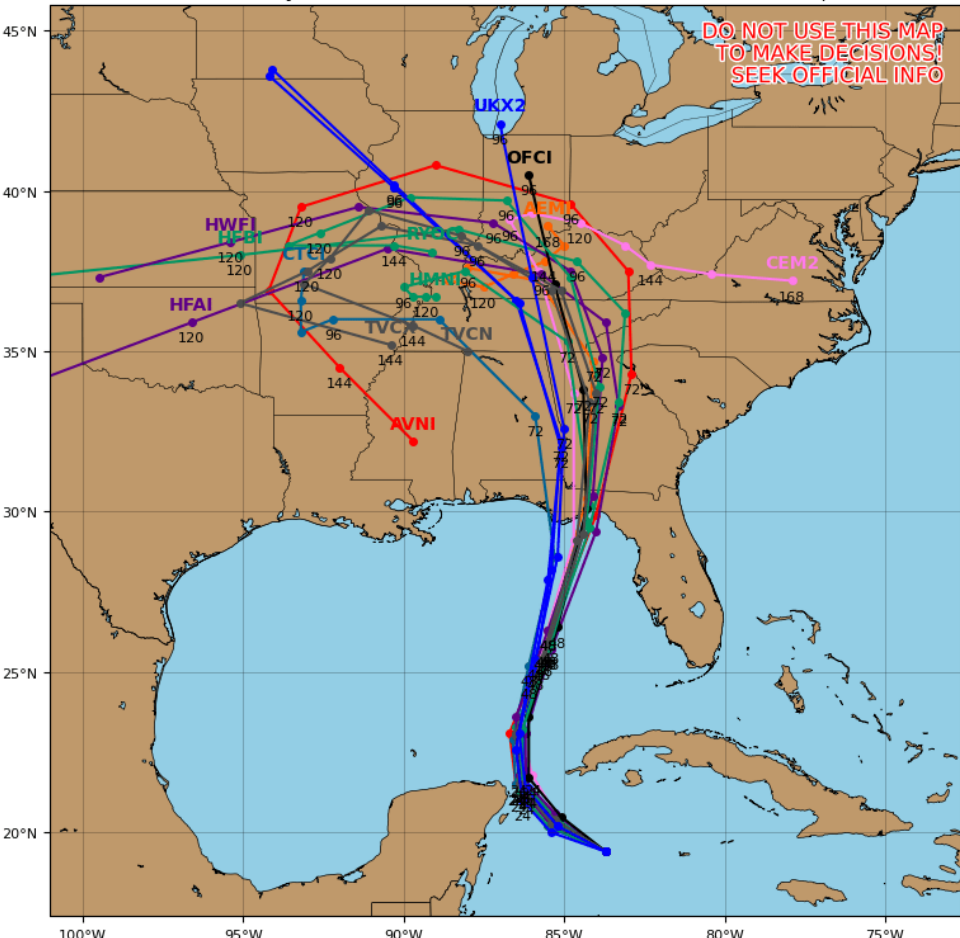
Tropical Storm Helene

Potential Tropical Cyclone NINE Model Track Guidance

Initialized at 12z Sep 24 2024

Levi Cowan - tropicaltidbits.com

DO NOT USE THIS MAP TO MAKE DECISIONS! SEEK OFFICIAL INFO



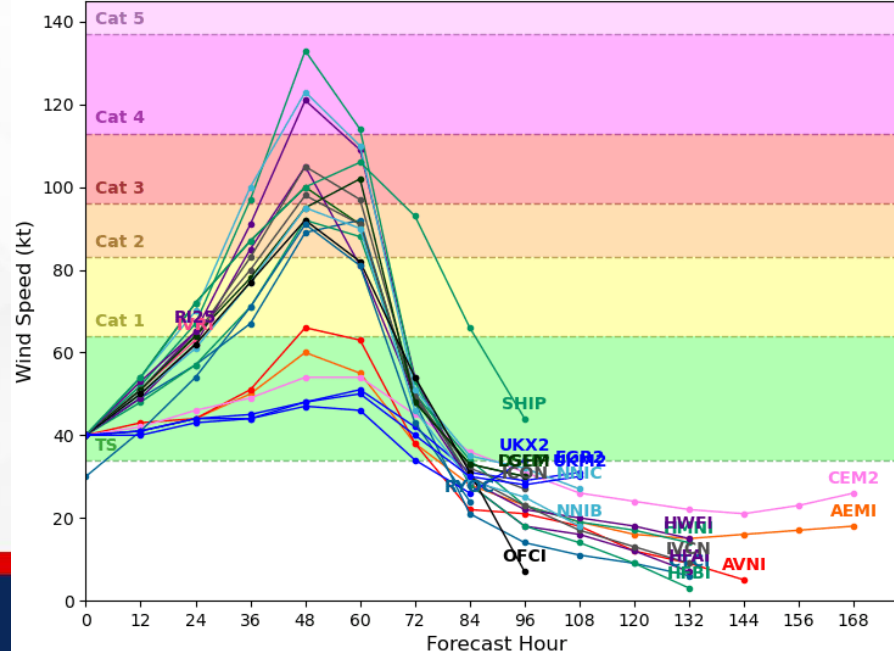
This general motion is expected today while Tropical Storm Helene moves around an area of high pressure over the southeastern U.S. Computer forecast model guidance continues to trend into better agreement that the tropical cyclone is expected to gradually shift northward on Wednesday and follow its steering currents northward to north-northeastward over the eastern Gulf of Mexico.

While the system is still working to develop a more concentrated center of circulation, upper-level winds look like they will weaken over the northwestern Caribbean Sea and southeastern Gulf of Mexico. Computer models continue to indicate that Tropical Storm Helene could significantly to rapidly intensify over the eastern Gulf of Mexico waters. This system will become quite large and powerful before landfall.

Potential Tropical Cyclone NINE Model Intensity Guidance

Initialized at 12z Sep 24 2024

Levi Cowan - tropicaltidbits.com





Key Messages

From the National Hurricane Center (NHC)



Key Messages for Tropical Storm Helene Advisory 5: 11:00 AM EDT Tue Sep 24, 2024



1. Helene is forecast to intensify and be near hurricane strength when it reaches the far northwestern Caribbean early Wednesday. Tropical storm conditions are expected over portions of western Cuba and the northeastern coast of the Yucatan Peninsula with hurricane conditions possible.

2. Helene is expected to rapidly intensify over the eastern Gulf of Mexico and be a major hurricane when it approaches the northeastern Gulf Coast on Thursday. The risk of impacts from life-threatening storm surge and damaging hurricane-force winds continues to increase along the coast of the Florida Panhandle and the Florida west coast. Hurricane and Storm Surge Watches are in effect for much of that area and residents in those areas should follow advice given by local officials.

3. Helene will bring heavy rain to portions of the western Caribbean, which will cause considerable flooding and mudslides across western Cuba. Heavy rainfall will likely result in locally considerable flash and urban flooding across portions of Florida, with isolated flash and urban flooding possible across the Southeast, Southern Appalachians, and the Tennessee Valley Wednesday through Friday. Minor to isolated moderate river flooding will be possible.



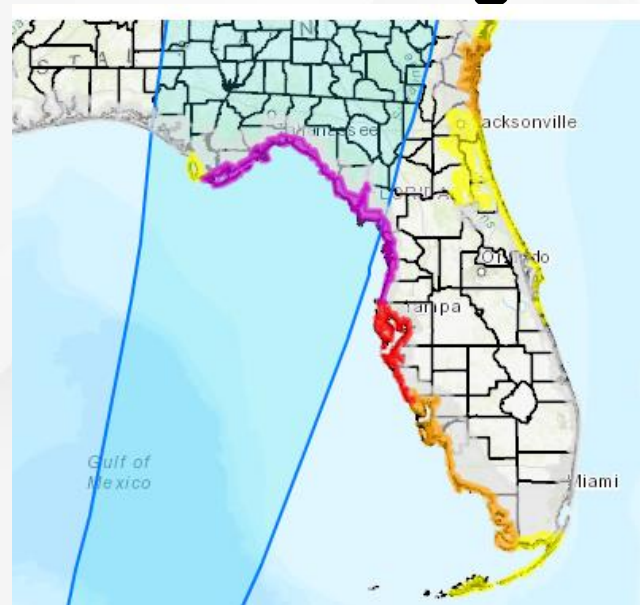
For more information go to hurricanes.gov



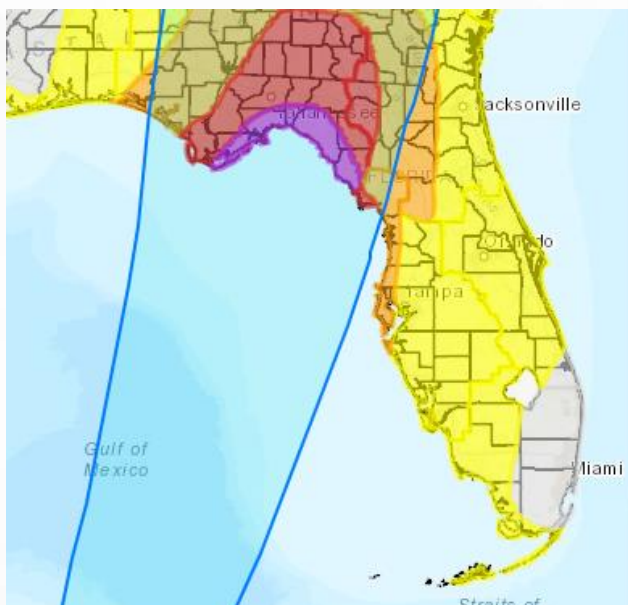
Threats & Impacts

From the National Weather Service

Storm Surge



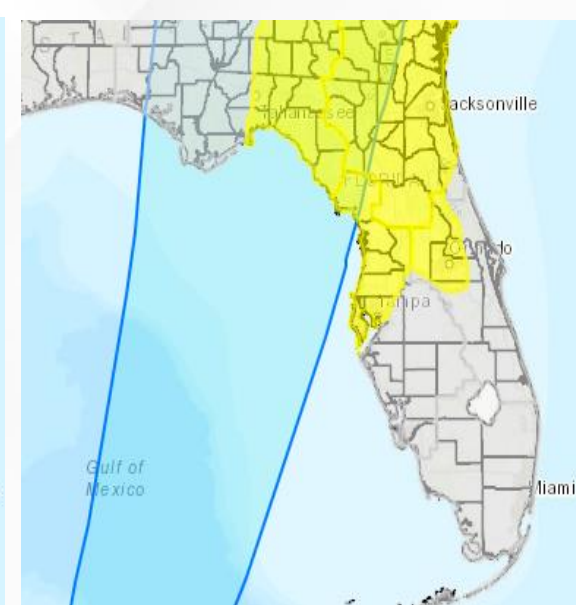
Wind



Flooding



Tornadoes



- Areas of inundation with storm surge flooding accentuated by waves. Damage to several buildings, mainly near the coast.
- Sections of near-shore escape routes and secondary roads become weakened or washed out, especially in usually vulnerable low spots. - Major beach erosion with heavy surf breaching dunes. Strong and numerous rip currents.
- Moderate damage to marinas, docks, boardwalks, and piers. Several small craft broken away from moorings, especially in unprotected anchorages.

- Some damage to roofing and siding materials, along with damage to porches, awnings, carports, and sheds. A few buildings experiencing window, door, and garage door failures. Mobile homes damaged, especially if unanchored. Unsecured lightweight objects become dangerous projectiles.
- Several large trees snapped or uprooted, but with greater numbers in places where trees are shallow rooted. Several fences and roadway signs blown over.
- Some roads impassable from large debris, and more within urban or heavily wooded places. A few bridges, causeways, and access routes impassable.
- Scattered power and communications outages, but more prevalent in areas with above ground lines.

- Moderate rainfall flooding may prompt several evacuations and rescues.
- Rivers and tributaries may quickly become swollen with swifter currents and overspill their banks in a few places, especially in usually vulnerable spots. Small streams, creeks, and ditches overflow.
- Flood waters can enter some structures or weaken foundations. Several places may experience expanded areas of rapid inundation at underpasses, low-lying spots, and poor drainage areas. Some streets and parking lots take on moving water as storm drains and retention ponds overflow.
- Driving conditions become hazardous. Some road and bridge closures.

- The occurrence of isolated tornadoes can hinder the execution of emergency plans during tropical events.
- A few places may experience tornado damage, along with power and communications disruptions.
- Locations could realize roofs peeled off buildings, chimneys toppled, mobile homes pushed off foundations or overturned, large tree tops and branches snapped off, shallow-rooted trees knocked over, moving vehicles blown off roads, and small boats pulled from moorings.



Tropical Storm-Force Wind Probabilities

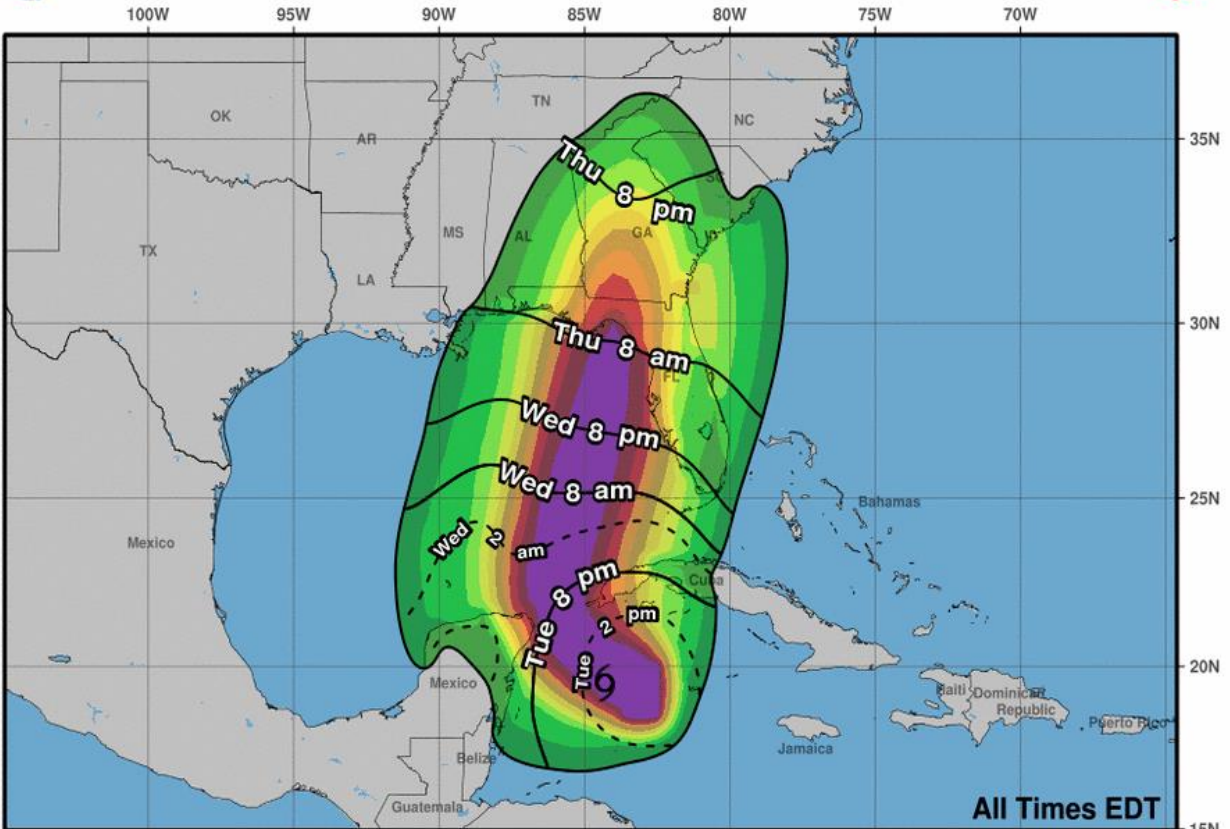
Tropical Storm Helene

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 the early morning hours on Wednesday for the Lower Keys and Wednesday morning and into midday 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 the late evening and overnight hours on Wednesday along the West Coast, then reach the Nature Coast and Florida Big Bend during the early to mid-morning hours on Thursday.

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

Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



Tropical Storm Helene
 Tue. Sep. 24, 2024 11 am EDT
 Advisory 5

Storm Location & Wind Speed

- < 34 kt (39 mph)
- 34-63 kt (39-73 mph)
- ≥ 64 kt (74 mph)

5-day chance of receiving sustained 34+ kt (39+ mph) winds

5 10 20 30 40 50 60 70 80 90 100 %

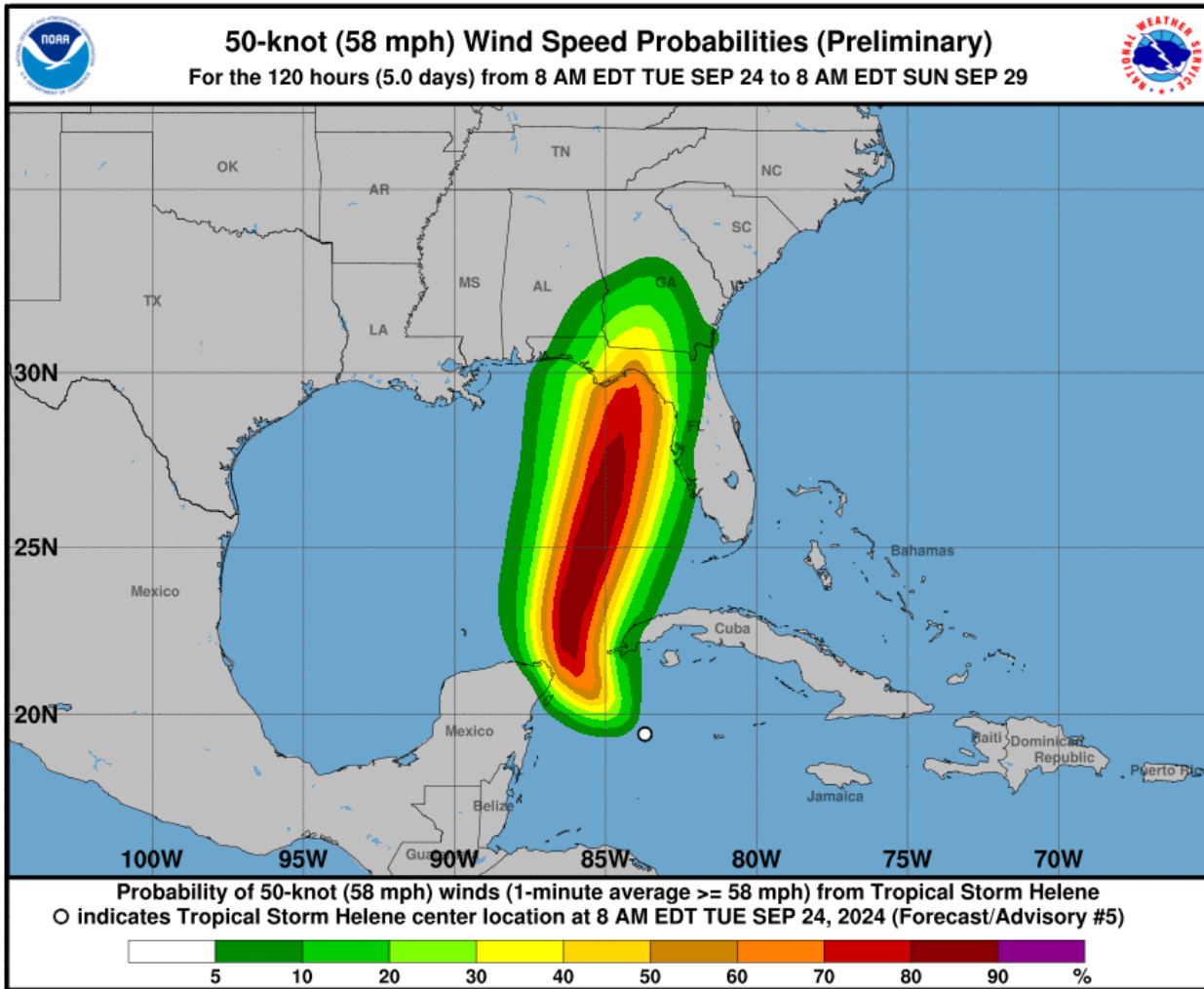
All Times EDT

City	Tropical Storm-Force Wind Probability
Key West	27% (+/- 0)
Naples	41% (+4%)
Miami	6% (+/- 0)
Fort Myers	23% (+3%)
Tampa	70% (+12%)
Cedar Key	79% (+12%)
Cocoa Beach	31% (+3%)
Orlando	21% (+2%)
Gainesville	46% (+6%)
Tallahassee	56% (+/- 0)
Jacksonville	33% (+7%)
Apalachicola	69% (-6%)
Panama City	54% (-10%)
Pensacola	12% (-6%)



Strong Tropical Storm-Force Wind Probabilities

Tropical Storm Helene



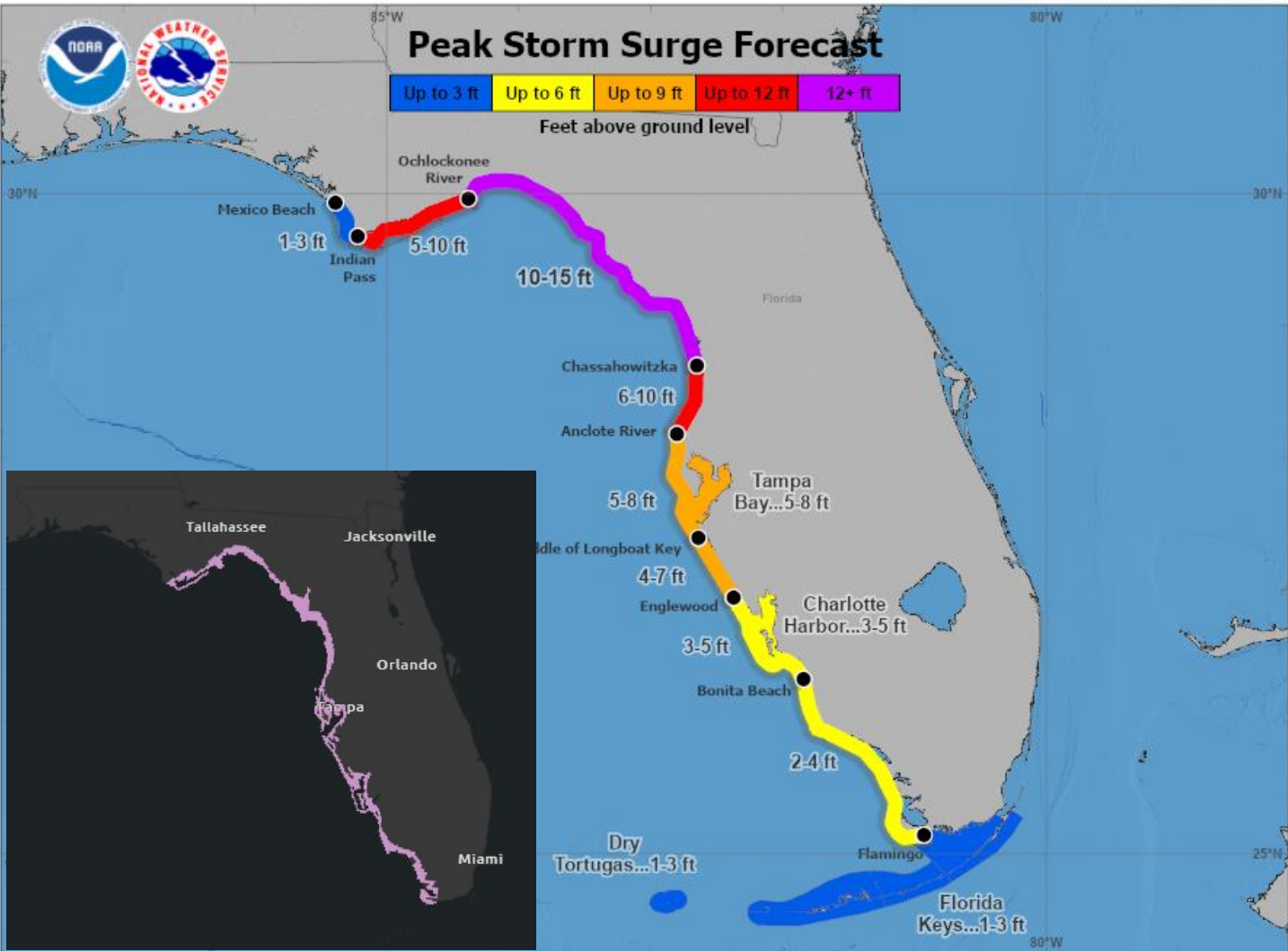
Additional strengthening of Tropical Storm Helene will also allow for strong tropical storm-force winds to extend from the Florida Panhandle, across the Big Bend and towards the I-75 corridor.

City	Strong Tropical Storm-Force Wind Probability
Key West	0% (-3%)
Naples	6% (+/- 0)
Miami	0% (+/- 0)
Fort Myers	4% (+/- 0)
Tampa	31% (+8%)
Cedar Key	46% (+12%)
Cocoa Beach	3% (+/- 0)
Orlando	3% (+3%)
Gainesville	13% (+3%)
Tallahassee	23% (+/- 0)
Jacksonville	8% (+1%)
Apalachicola	41% (-5%)
Panama City	26% (-8%)
Pensacola	3% (-3%)



Current Storm Surge Watch

As of 5:00 PM EDT Monday



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, including Tampa Bay, **storm surge of 4-8'** is possible, with 2-5' possible storm surge along the Southwest Florida Coast.

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

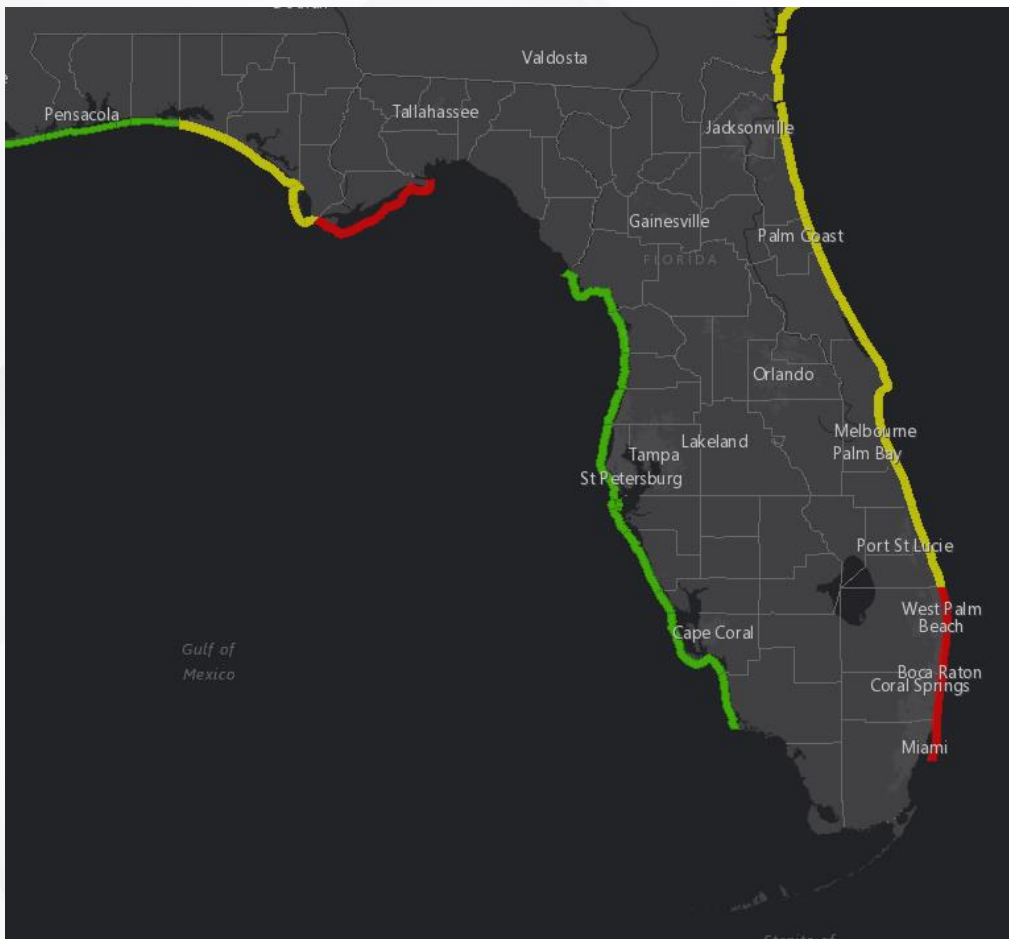
Tropical Storm Helene
 Tuesday September 24, 2024
 11 AM EDT Advisory 5
 NWS National Hurricane Center

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.



Rip Current Risk - Today

From the Weather Prediction Center (WPC)



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 midweek, 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 by middle to latter portions of the week.

FL Panhandle

	Today	Wed	Thu	Fri	Sat	Sun	Mon
Rip Current							
Marine Hazard							



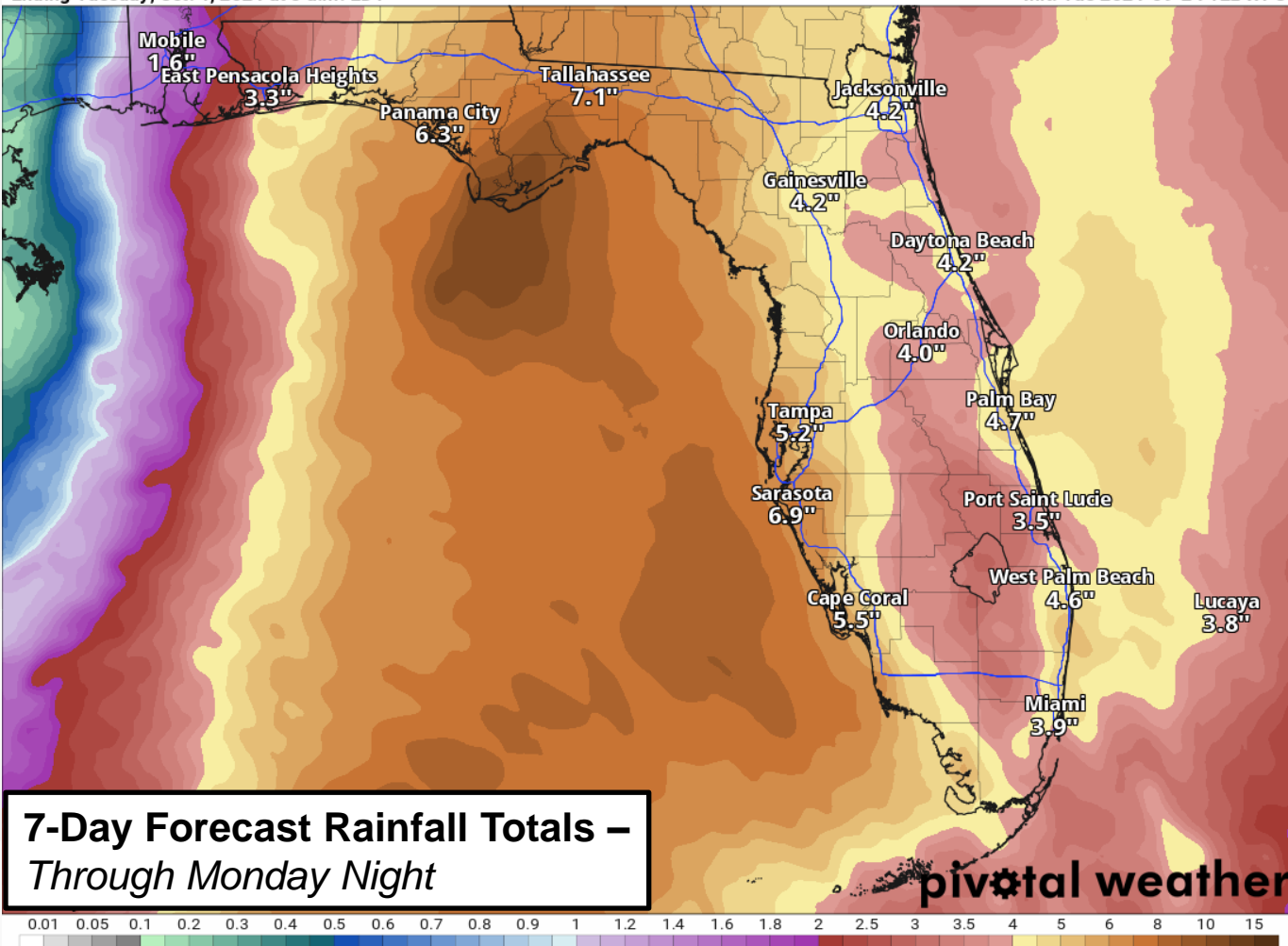
Rainfall Totals – Next 7 Days

From the Weather Prediction Center (WPC)

7-Day Precipitation (in)

Ending Tuesday, Oct. 1, 2024 at 8 a.m. EDT

Init: Tue 2024-09-24 12z WPC



**7-Day Forecast Rainfall Totals –
Through Monday Night**

- Drier conditions and high pressure shifting eastward today will continue to bring mostly dry conditions across North Florida and southward towards the I-4 corridor. Isolated to widely scattered showers and thunderstorms will develop this afternoon and evening along the sea breeze, mainly south of the I-4 corridor and throughout South Florida and the Keys.
- As Tropical Storm Helene moves through the northwestern Caribbean and towards the southern Gulf of Mexico, tropical moisture will push northward towards the Florida Keys and immediate southern Peninsula later tonight and into the morning hours on Wednesday.
- Increasing rain chances can be expected along to increase from south to north along the western 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)



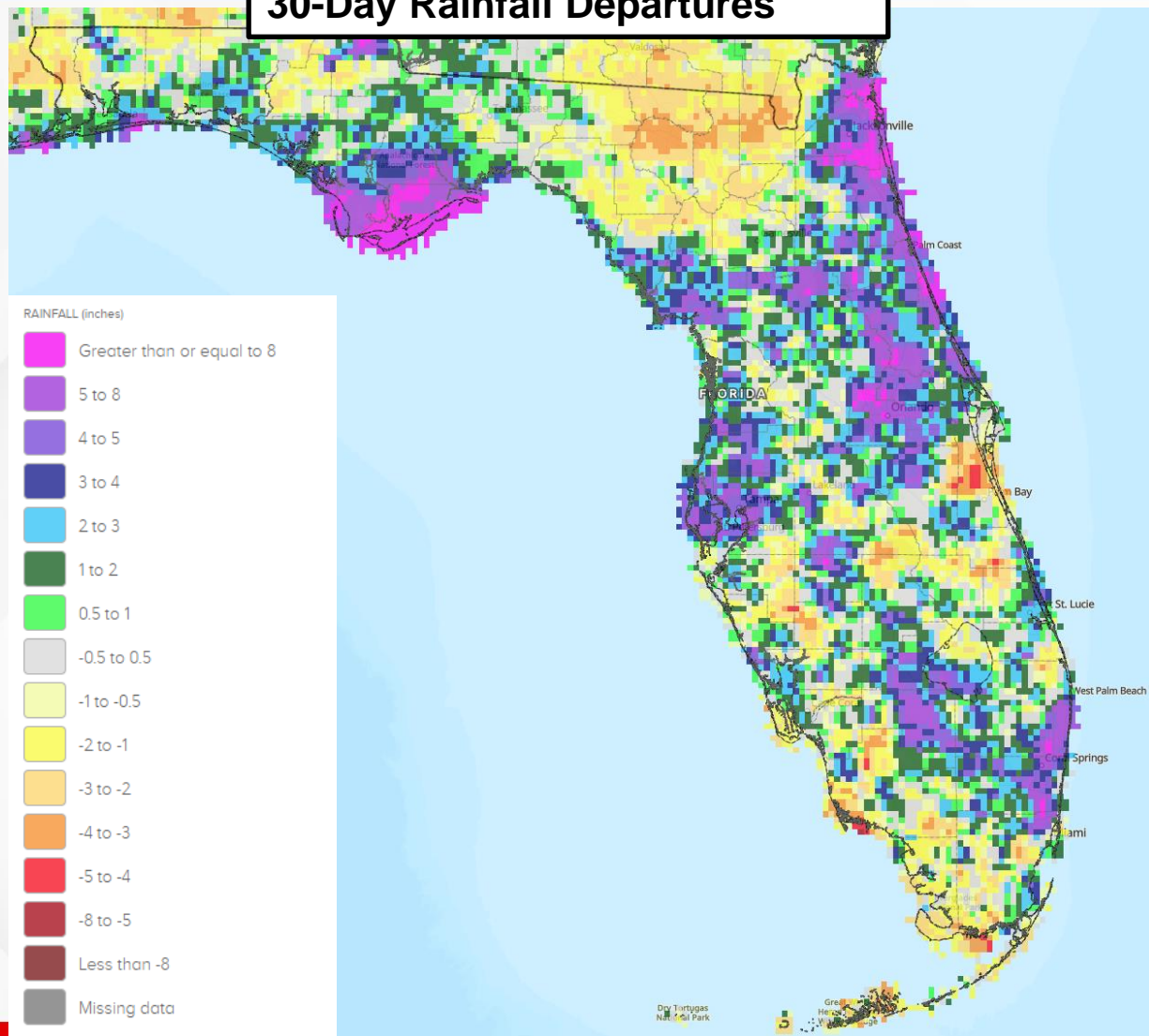
- **Flood Watches** have been issued across much of the Florida Panhandle, Big Bend and West Coast as tropical downpours associated with Tropical Storm Helene could bring instances of **localized flooding** beginning Wednesday.
- **Moderate to heavy rainfall** is expected with this system, which could 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.

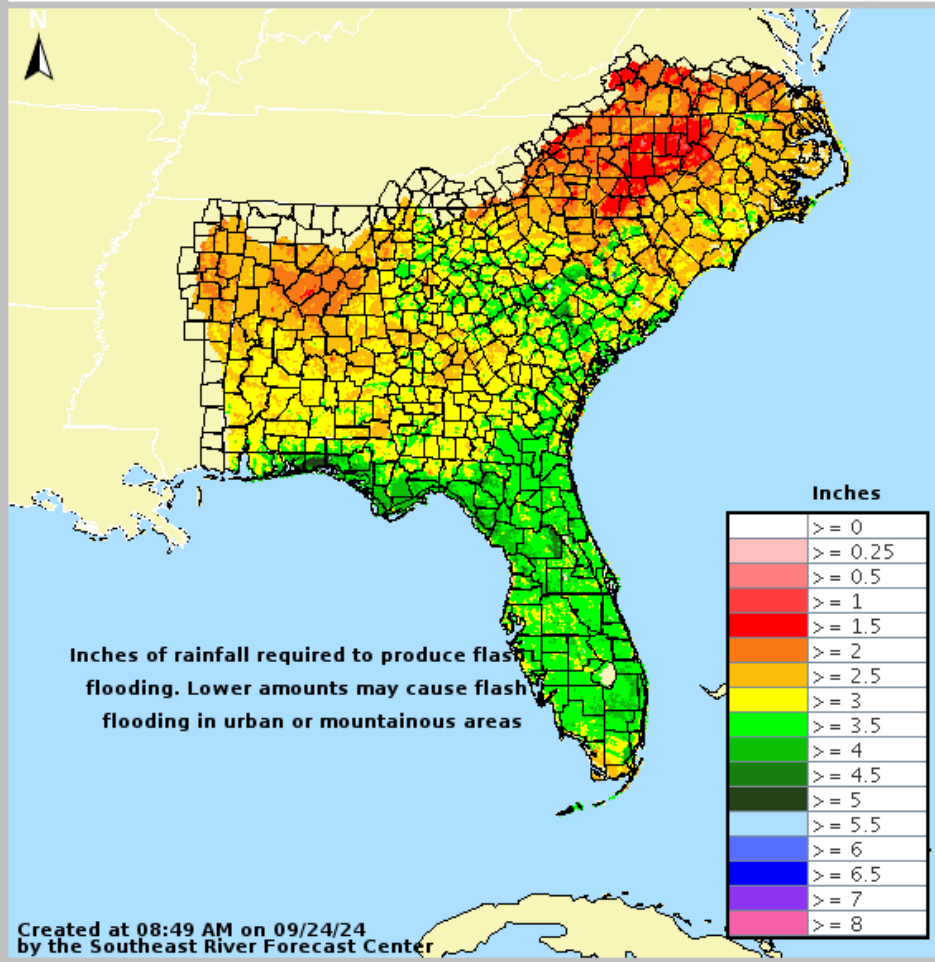


Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?

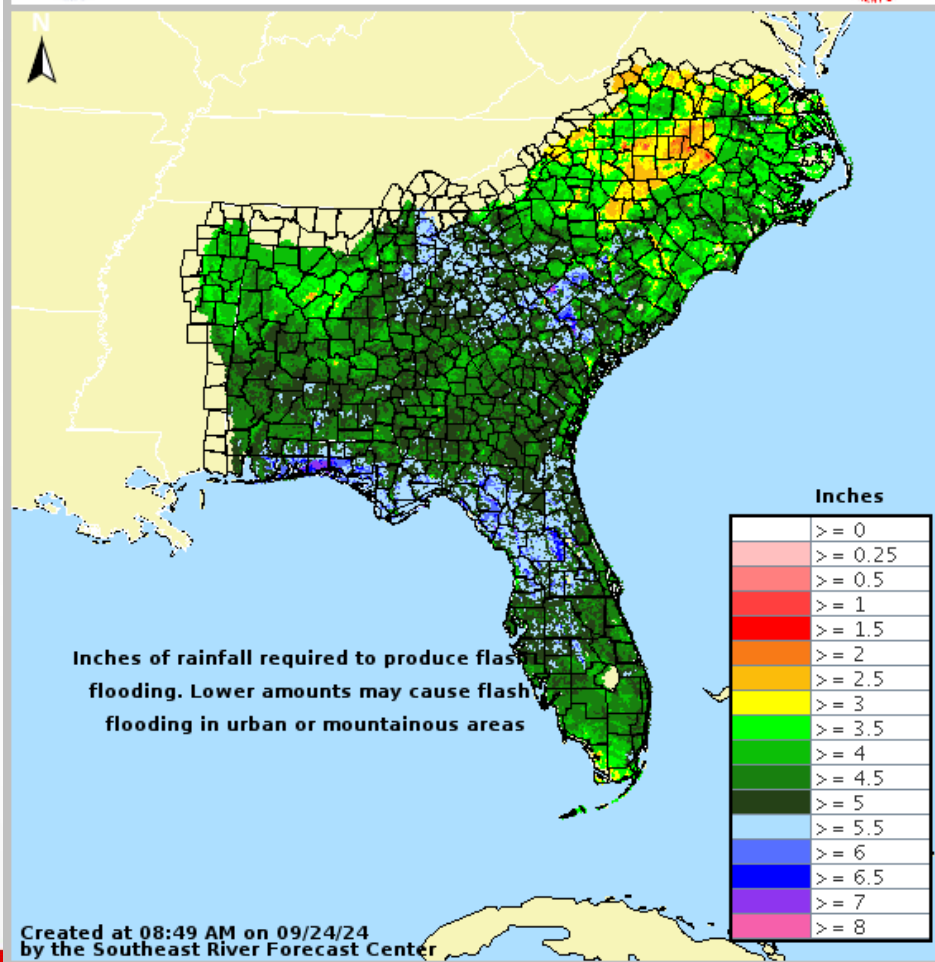
 **1-hr Flash Flood Guidance** 

Valid: 09/24/2024 @ 08:49 AM



 **6-hr Flash Flood Guidance** 

Valid: 09/24/2024 @ 08:49 AM

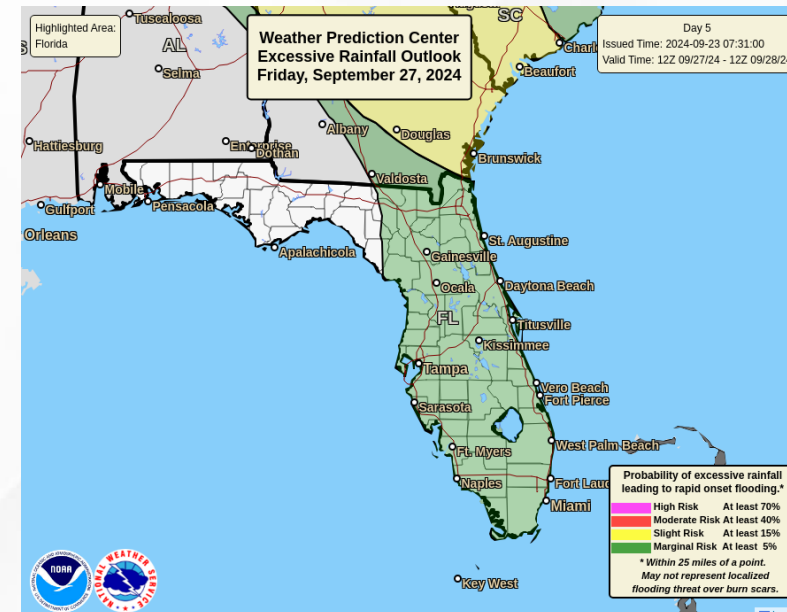
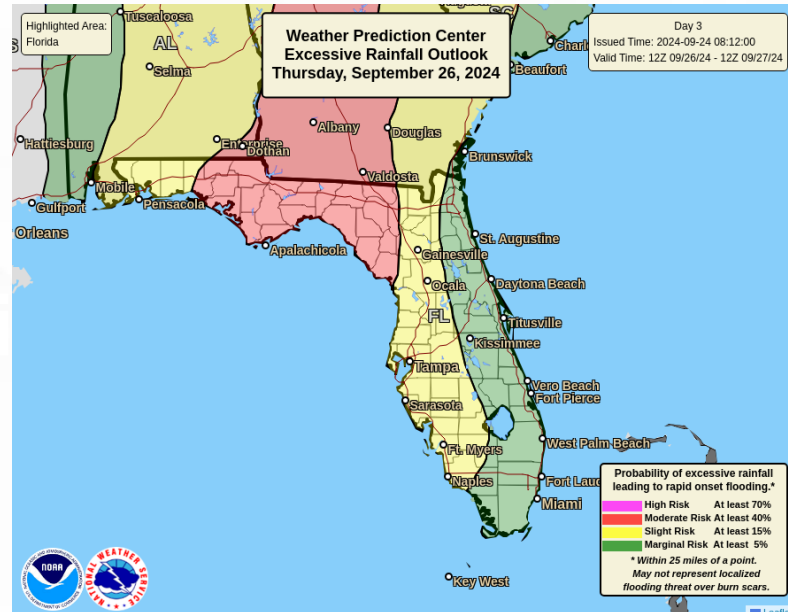
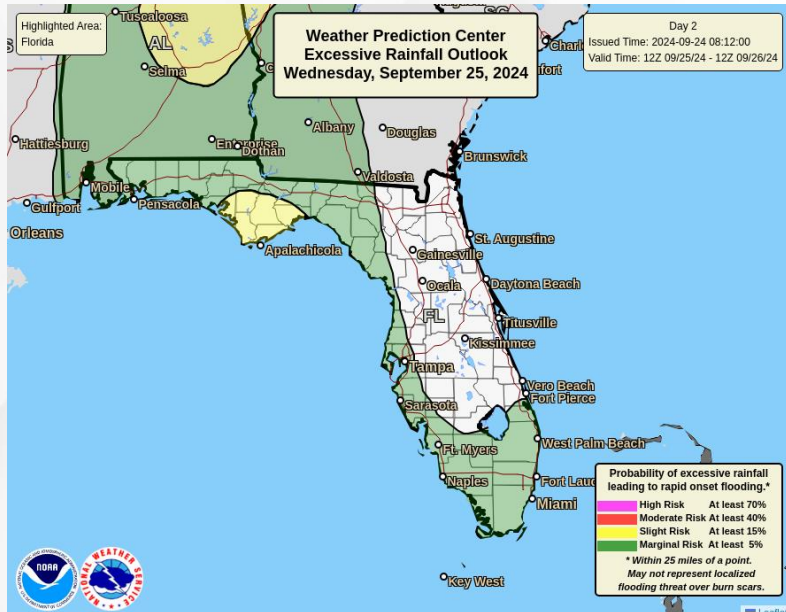


- Along the coastal Panhandle and Big Bend and into the interior Suwannee Valley, it would take 3-4" within an hours or 4-6" within 6 hours to cause flash flooding with some of the already saturated grounds and soils.
- Similarly, along the western Peninsula and, it would take about 3-4" within an hour 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** on Wednesday 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 from the I-75 corridor and eastward and throughout the Peninsula.

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
www.wpc.ncep.noaa.gov @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 Watch
Coastal Flood Advisory
Coastal Flood Statement

A **Coastal Flood Watch** has been issued for the Florida Keys from Wednesday evening until Thursday afternoon 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.

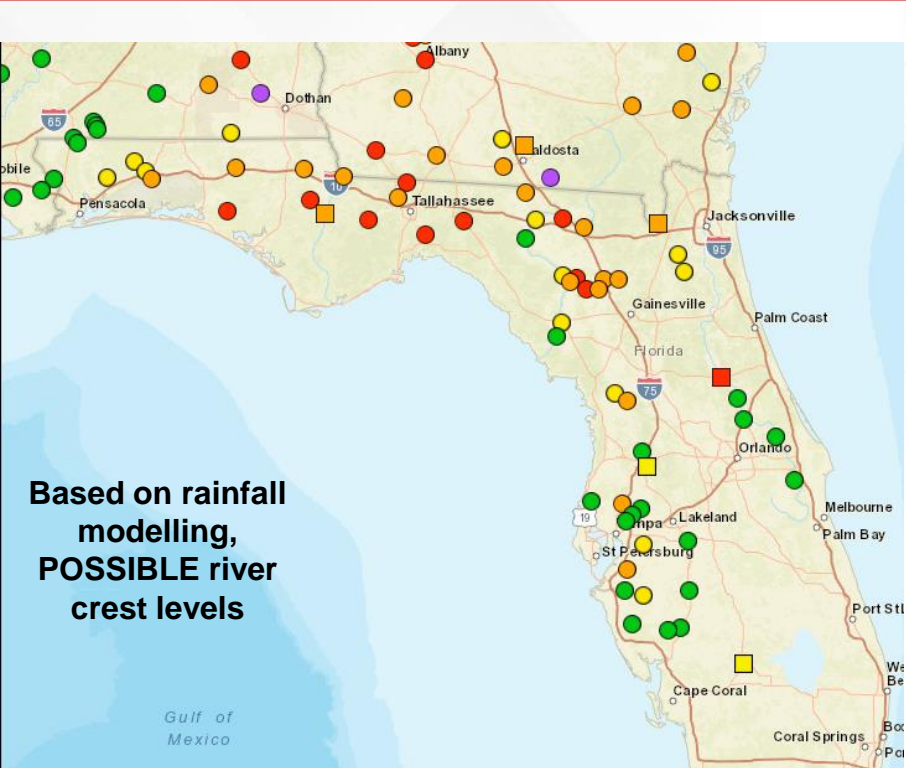
Coastal Flood Statements extend across Southeast Florida and the Middle and Lower Keys as **minor coastal flooding and saltwater flooding** is possible near and during times of high tide.

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

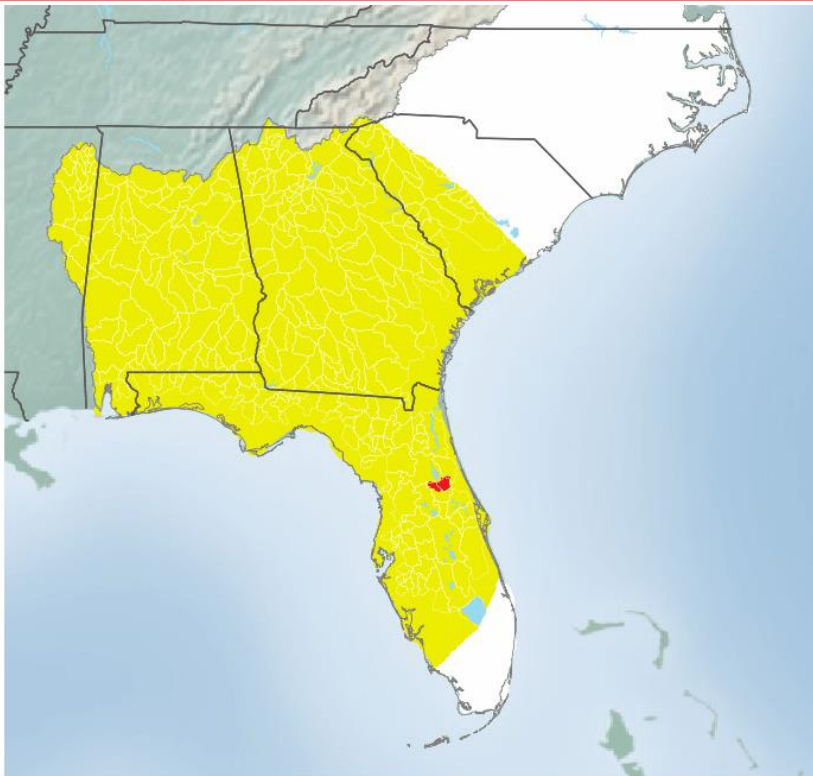


Riverine Flooding

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
09/23/2024 11:10 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

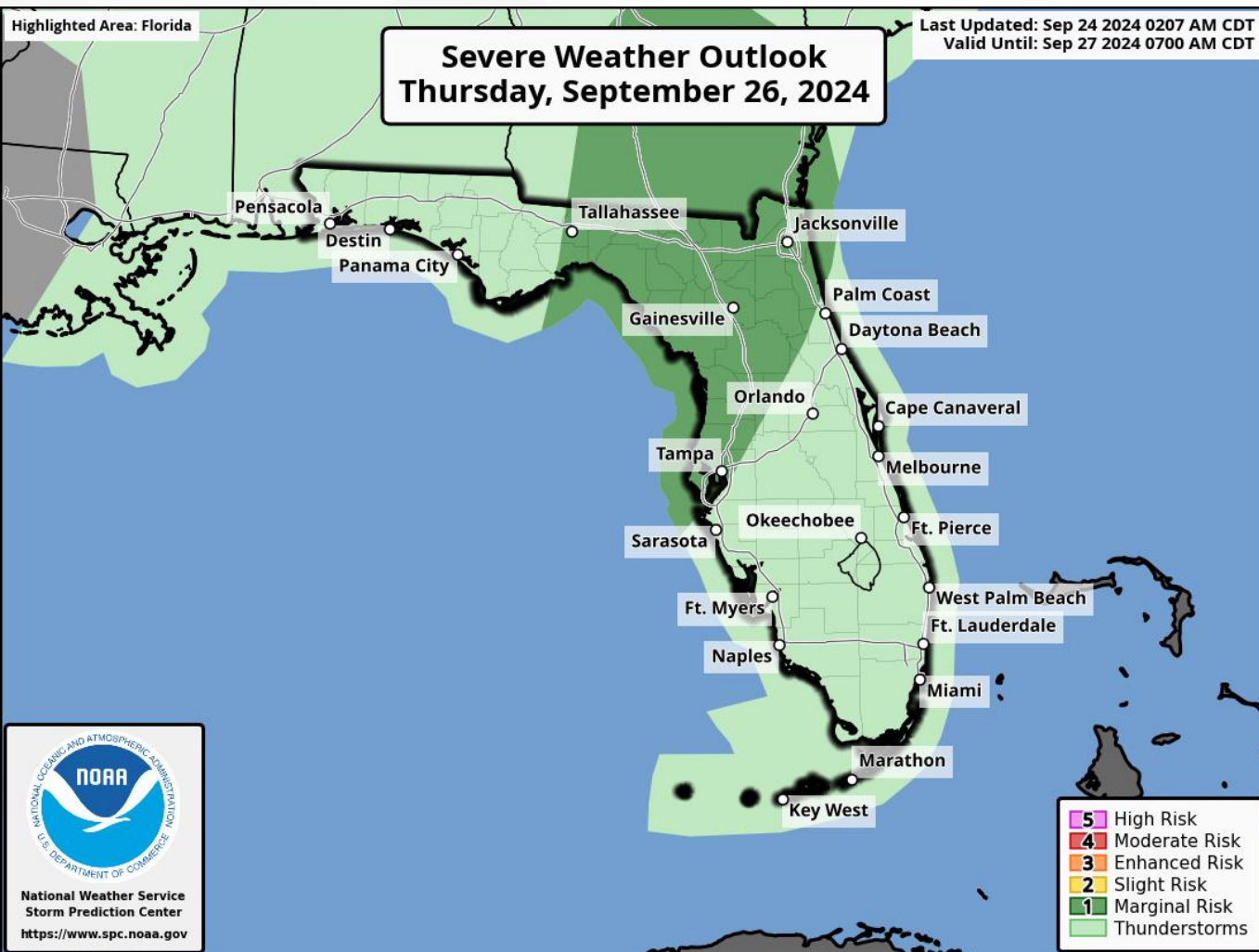
River Guage	County(ies) Affected	Current Level	Crest Level	Record Level	Status	Crest Date	Warning Expires
St. Johns River at Astor	Volusia, Lake	Moderate: 3.14 ft	Moderate: 3.14 ft	4.70 ft	Steady	Crested	Until Further Notice

A **River Flood Warning** remain in effect in the [St. Johns River at Astor](#) as water levels remain within **moderate flood stage** due to trapped tides within the river basin. 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 tide fluctuations. Additional **River Flood Warnings** will likely be issued later this week and this weekend as heavy rainfall expected from Potential Tropical Cyclone Nine 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.



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 the Florida Big Bend, Nature Coast and inland to Northeast Florida.
- Isolated tropical tornadoes are possible within outer bands of Tropical Storm Helene on Thursday as it approaches the northeastern Gulf of Mexico and the Florida Big Bend.
- 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.*



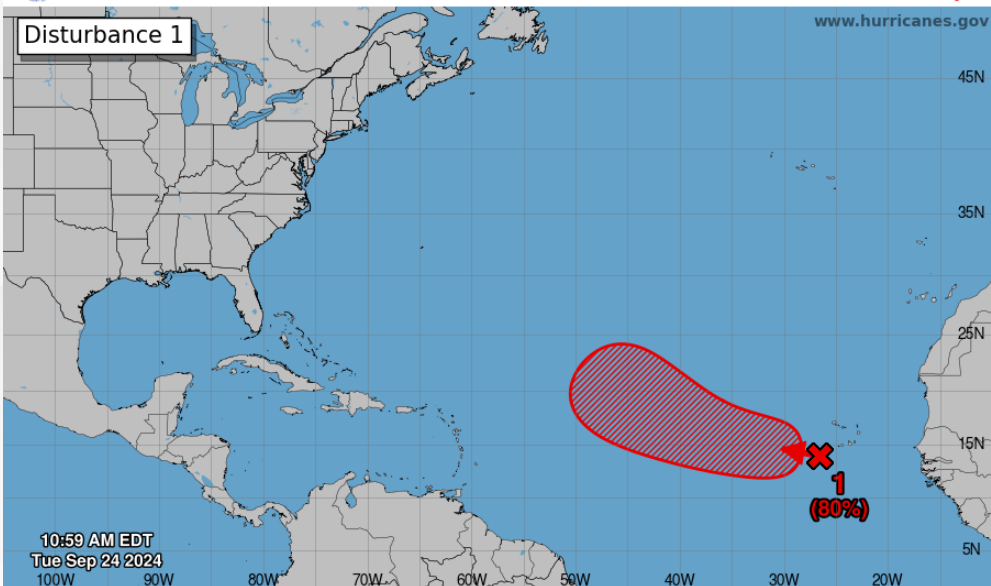
Tropical Weather Outlook

Disturbance 2 – Eastern & Central Tropical Atlantic

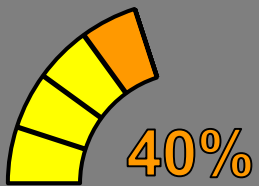


Seven-Day Graphical Tropical Weather Outlook

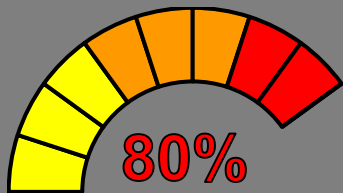
National Hurricane Center Miami, Florida



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



48 Hour Formation



7 Day Formation

Shower and thunderstorm activity continues to show signs of organization in associated with a tropical wave located near the Cabo Verde Islands. Environmental conditions appear favorable for gradual development of this system, and a tropical depression is likely to form in a few days while it moves westward to west-northwestward across the eastern and central tropical Atlantic.

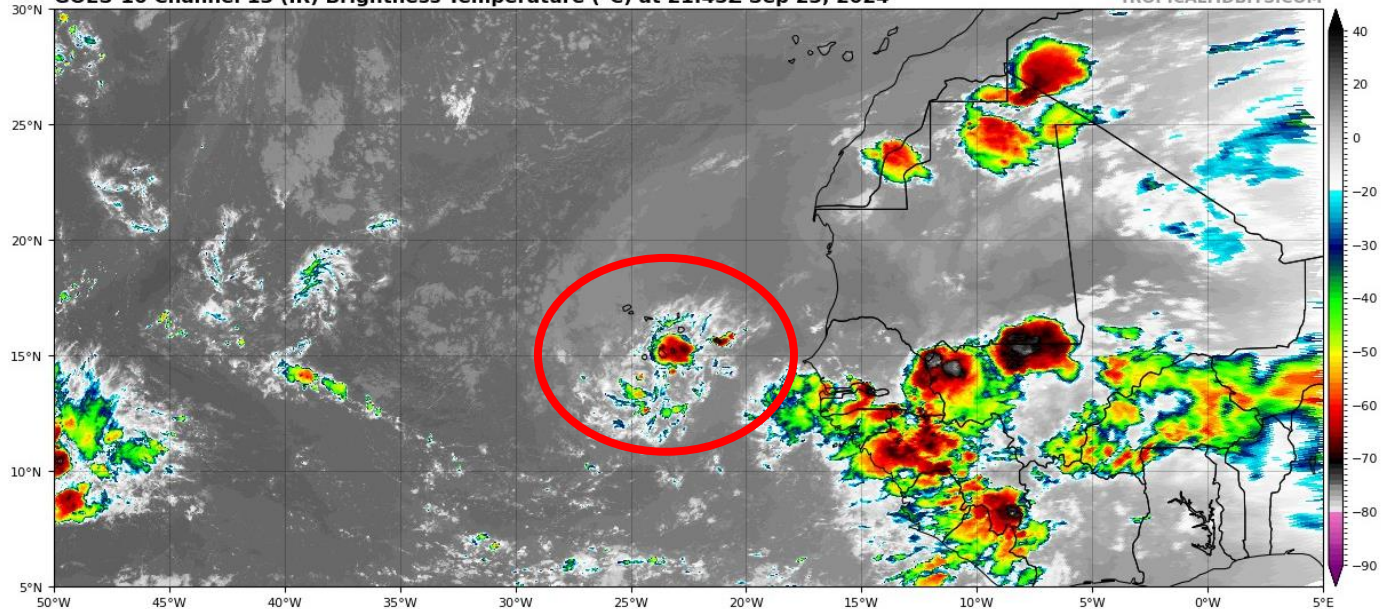
This system does not pose a threat to Florida through the next 7-10 days, at least.

Chance of development through 48 hours... **medium...40%.**

Chance of development through 7 days... **high...80%.**

GOES-16 Channel 13 (IR) Brightness Temperature (°C) at 21:45Z Sep 23, 2024

TROPICALTIDBITS.COM





Summary

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Tropical Storm Helene:

- As of 11:00 AM EDT, Potential Tropical Cyclone Nine become organized into Tropical Storm Helene, located about 380 miles southwest of Key West, Florida, and is moving northwestward at 12 mph.
- A northward to north-northeastward motion at a faster forward speed is expected on Wednesday and Thursday.
- On the forecast track, the center of Helene will move across the far northwestern Caribbean Sea through tonight, and then move across the eastern Gulf of Mexico Wednesday and Thursday, potentially reaching the Gulf Coast of Florida late Thursday.
- Maximum sustained winds have increased to near 45 mph, and Helene is expected to become a hurricane on Wednesday.
- Continued strengthening is anticipated after that time, and Helen could become a major hurricane on Thursday.

Eastern and Central Tropical Atlantic:

- Shower and thunderstorm activity continues to show signs of organization in association with a tropical wave located near the Cabo Verde Islands.
- Environmental conditions appear favorable for gradual development of this system.
- A tropical depression is likely to form in a few days while it moves westward to west-northwestward across the eastern and central tropical Atlantic.
- *This system poses no direct threat to Florida over the next 7-10 days at least but will continue to be monitored.*
- The National Hurricane Center (NHC) is outlooking a **medium (40%) chance of development** over the next 48 hours and a **high (80%) chance of development** 7 days.
- *The next name on the list is Isaac (EYE-zik).*

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



Summary

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Florida Outlook:

- **Hurricane Watches** have been issued for the Florida Big Bend and Florida West Coast including the following counties: Gadsden, Liberty, Franklin, Wakulla, Leon, Jefferson, Madison, Taylor, Madison, western Hamilton, Suwannee, western Columbia, Lafayette, Dixie, Gilchrist, western Alachua, Levy, western Marion, Citrus, Hernando, Pasco, Pinellas, coastal Hillsborough, coastal Manatee, and coastal Sarasota.
- **Tropical Storm Warnings** have now been raised for the Lower Florida Keys and Dry Tortugas.
- **Tropical Storm Watches** extend inland into the Florida Peninsula and western Florida Panhandle including: Bay, Calhoun, Gulf, eastern Marion, Sumter, Lake, Seminole, Orange, Osceola, Polk, inland Hillsborough, Hardee, inland Manatee, DeSoto, Charlotte, Lee, coastal Collier, Monroe (Middle Keys).
- **Storm Surge Watches** extend along the entire Florida Gulf Coast from Mainland Monroe to the Franklin/Gulf County-line, including Tampa Bay.
- 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.
- Tropical storm-force winds could arrive as early as Wednesday morning along the Florida Keys, Wednesday afternoon and evening across the southern Florida Peninsula, and Wednesday night along the central Florida Peninsula.
 - While tropical storm-force winds are not forecast to arrive until the later Thursday morning and early Thursday 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 for the eastern Florida Panhandle, Florida Big Bend, and along the Florida West Coast.
- 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 Thursday (**Marginal Risk for Severe Weather – level 1 of 5**).

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



Tropical Update

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Created by:

Caitlyn Gillespie, Deputy State Meteorologist

Caitlyn.Gillespie@em.myflorida.com

Kennedy Tartt, Assistant State Meteorologist

Kennedy.Tartt@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

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