



Tropical Update



12:30 PM EDT

Saturday, August 3, 2024

Hurricane Watches Issued for the Florida Big Bend; Tropical Depression Four Expected to Become a Tropical Storm Later Today or Tonight Over the Southeastern Gulf of Mexico

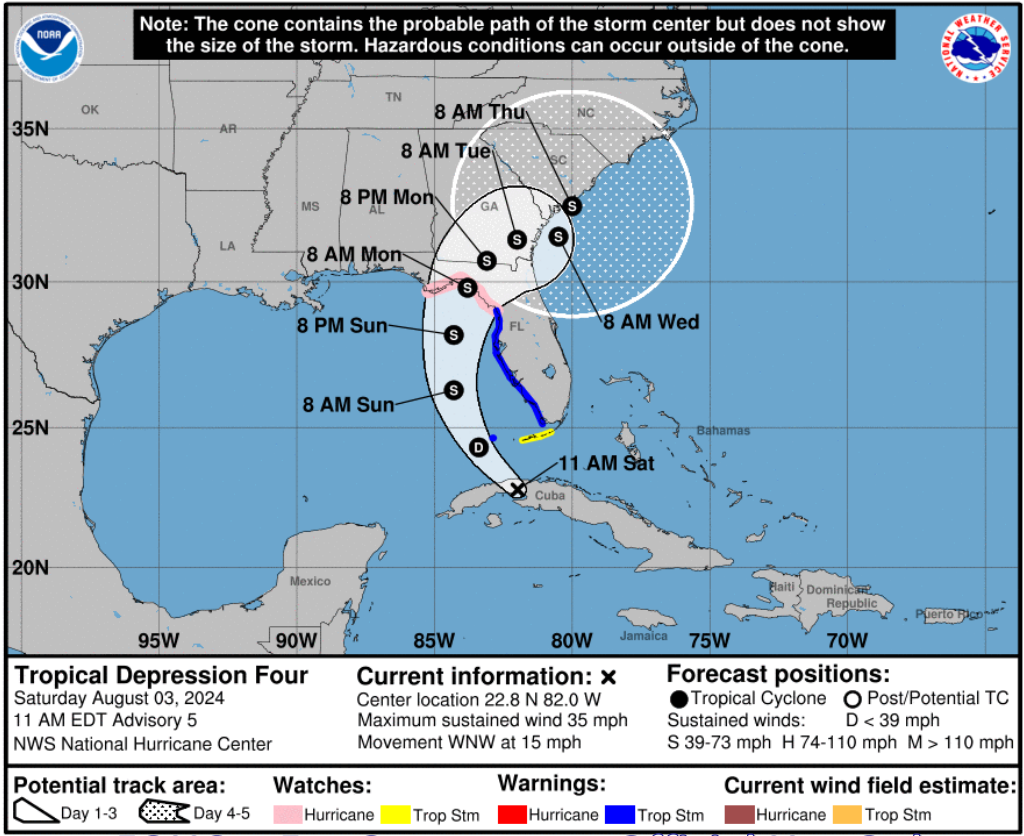
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an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

11:00 AM EDT Saturday: 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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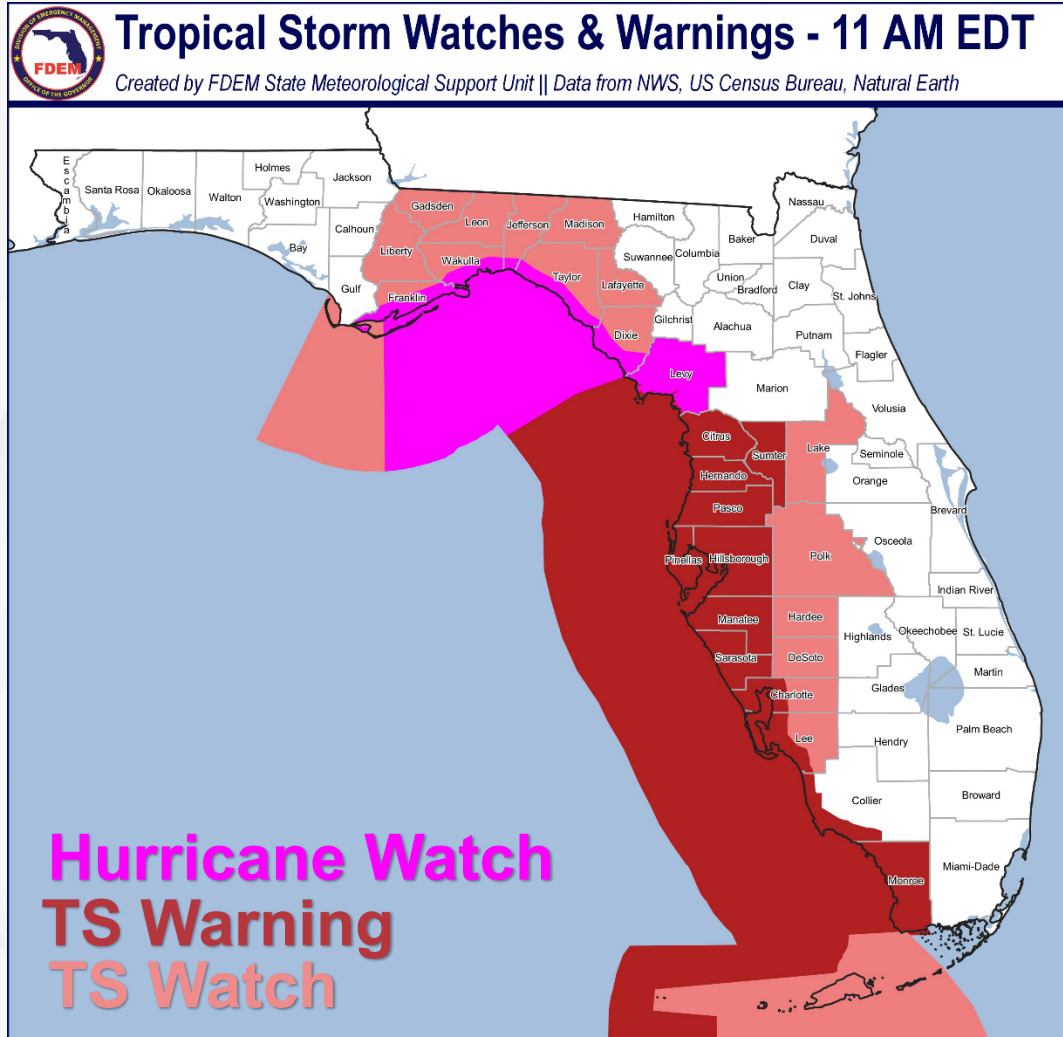
Overview/Recent Changes:

As of 11:00 AM EDT, Tropical Depression Four is located about 40 miles south of Key West, Florida and is moving west-northwest at 15 mph. A turn toward the northwest is forecast today, followed by a northward motion on Sunday and then a slower northeastward motion Sunday night and Monday. On the forecast track, the center of the depression will move across western Cuba this morning, and then move over the eastern Gulf of Mexico later today and Sunday, reaching the Florida Gulf coast late Sunday or Monday. Maximum sustained winds are near 35 mph with higher gusts, and slow strengthening is expected today and tonight. The Depression is expected to become a tropical storm tonight. A faster rate of strengthening is expected Sunday through Monday, and the system could be near hurricane strength when it reaches the Florida Gulf Coast. Hurricane Watches have been extended westward along the coastal Florida Big Bend to Indian Pass, with Tropical Storm Warnings extending across the inland Big Bend region. Storm Surge Watches have been upgraded to a Storm Surge Warning along the Northeastern Florida Gulf Coast, stretching from Aripeka (Hernando County) to the mouth of the Aucilla River (Taylor County). Storm Surge Watches have been extended from the Aucilla River to Indian Pass (Franklin County).



Current Tropical Wind Watches/Warnings

As of 5:00 AM EDT Saturday



- **Hurricane Watches:**

- *Coastal Taylor, Coastal Dixie, Coastal Franklin, Coastal Wakulla, Coastal Jefferson, and Levy Counties.*

- **Tropical Storm Warnings:**

- *Mainland Monroe, Coastal Collier, Coastal Lee, Coastal Charlotte, Sarasota, Manatee, Hillsborough, Pasco, Pinellas, Hernando, Citrus, and Sumter Counties.*

- **Tropical Storm Watches:**

- *Florida Keys including the Dry Tortugas (Coastal Monroe), Inland Lee, Inland Charlotte, DeSoto, Hardee, Polk, Lake, Inland Dixie, Inland Taylor, Inland Jefferson, Inland Wakulla, Inland Franklin, Liberty, Gadsden, Leon, Madison, and Lafayette Counties.*



Threats & Impacts

From the National Weather Service

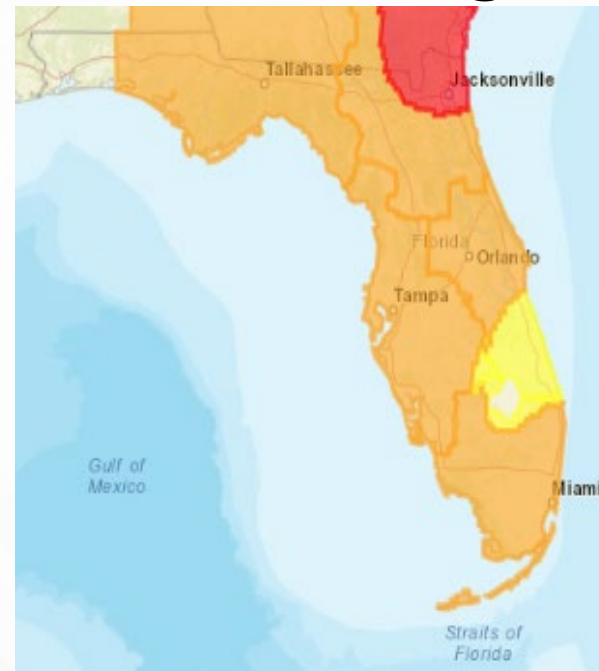
Storm Surge



Wind



Flooding



Tornadoes



- Some damage to roofing and siding materials, mobile homes damaged, especially if unanchored.
- Several large trees snapped or uprooted, but with greater numbers in places where trees are shallow rooted.
- 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.
- 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 road and bridge closures.



Current Storm Surge Watch

As of 5:00 AM EDT Saturday

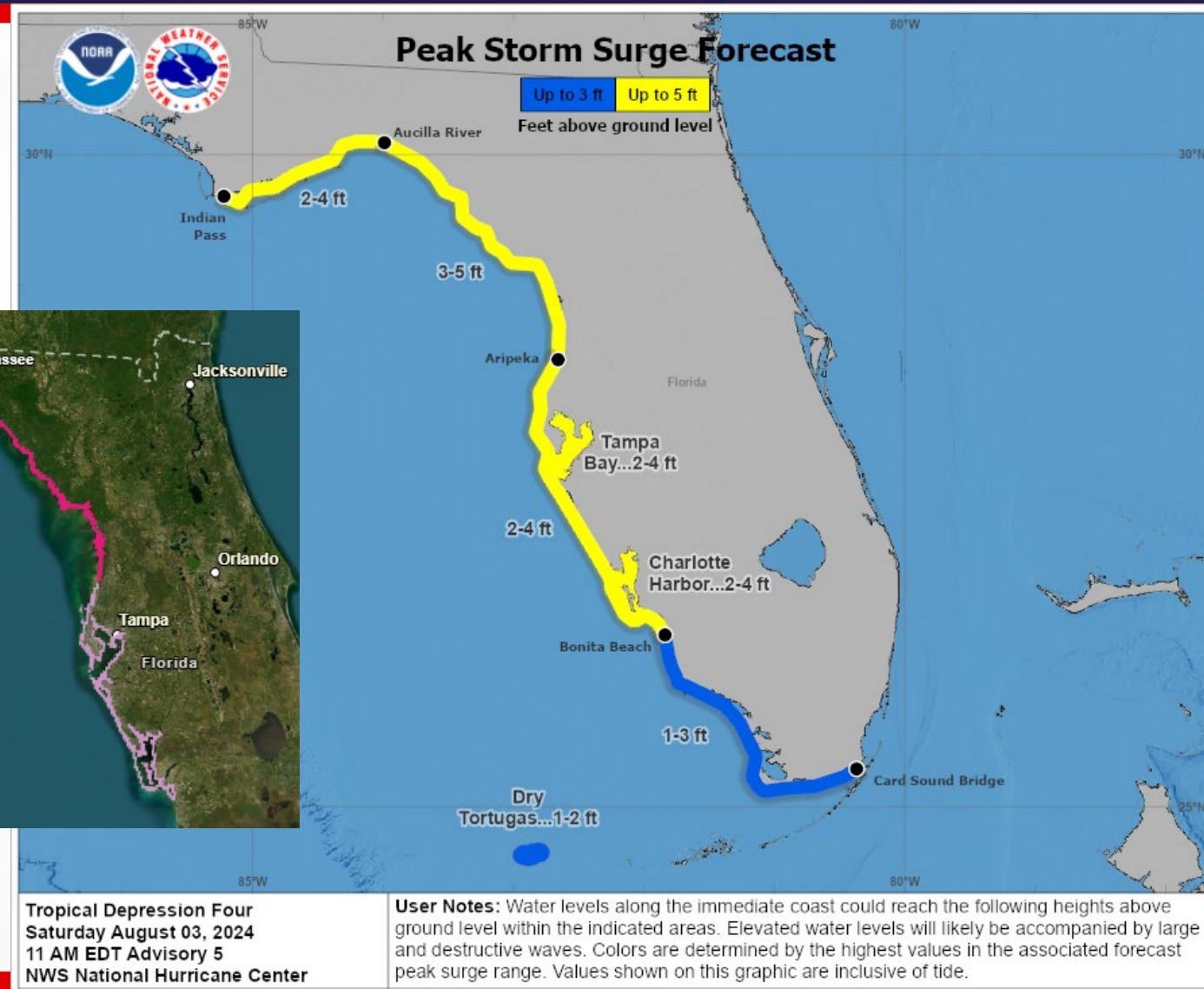
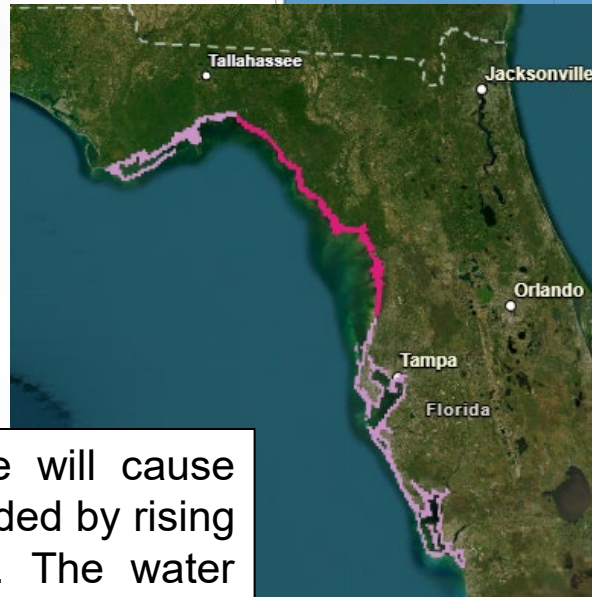
- **Storm Surge Warning:**

Hernando, Citrus, Levy, Dixie, and Taylor

- **Storm Surge Watch:**

Lee, Charlotte (including Charlotte Harbor), Sarasota, Manatee, Hillsborough (including Tampa Bay), Pinellas, and Pasco

The combination of storm surge and tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the 3-5' along the Florida Big Bend, with 2-4' possible along the Florida West Coast and near Apalachicola. Water levels at or near times of high tide will need to be closely monitored given the new moon cycle.



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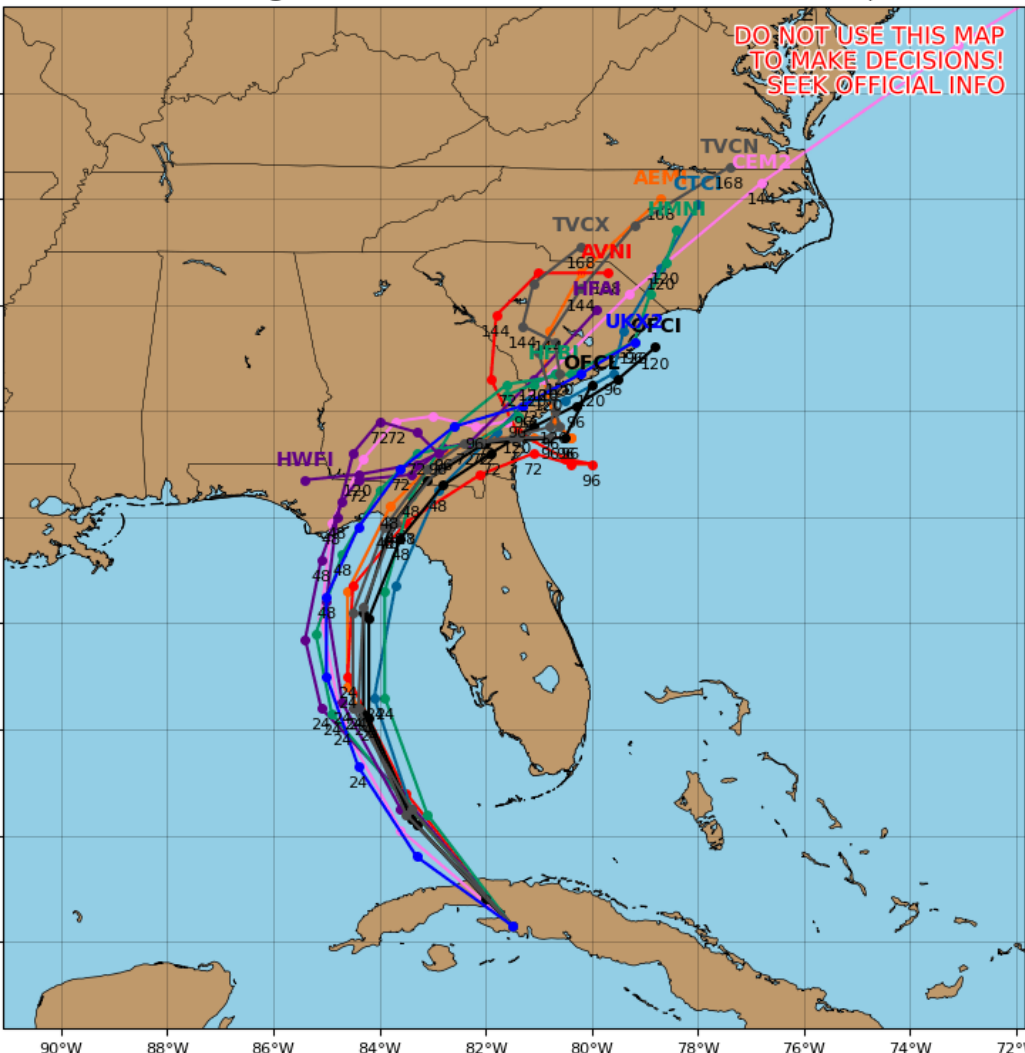
Model Forecasts – Next 5 Days

Tropical Depression Four

Tropical Depression 04L Model Track Guidance

Initialized at 12z Aug 03 2024

Levi Cowan - tropicaltidbits.com



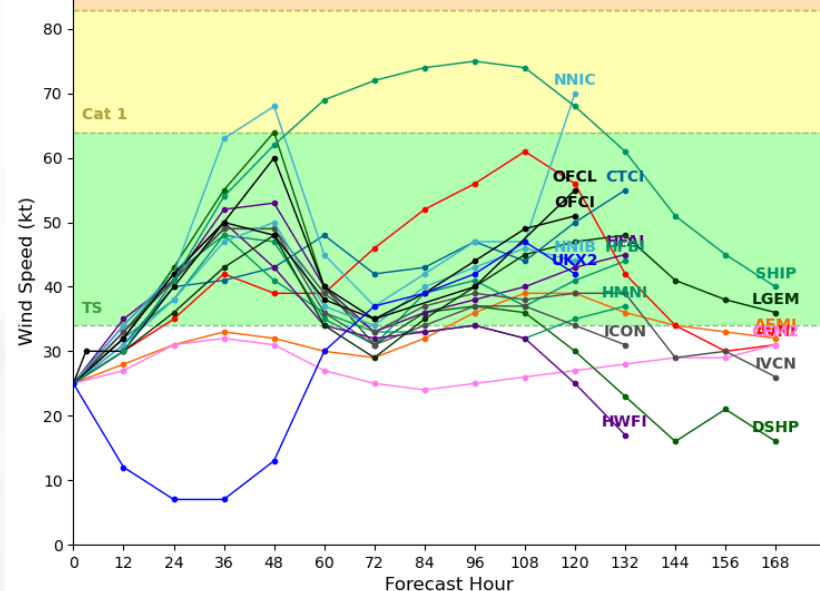
Computer forecast models continue to work toward agreement this morning as Tropical Depression Four continues to advance west-northwestward. There is decent model agreement that a turn toward to the northwest and north during the next 24 to 48 hours can be expected; however, there are still computer forecast models that maintain a more westward solution toward the Forgotten Coast. Tropical Depression Four will be approaching the eastern Florida Panhandle and Florida Big Bend, moving onshore Sunday night into Monday.

Oceanic and atmospheric conditions are favorable for additional organization and intensification through landfall. Tropical Depression Four will likely become a tropical storm within the next 24 hours over the southeastern Gulf of Mexico, and will work to attain strong tropical storm-status in the next 48 hours. This system could become a hurricane before landfall.

Tropical Depression 04L Model Intensity Guidance

Initialized at 12z Aug 03 2024

Levi Cowan - tropicaltidbits.com



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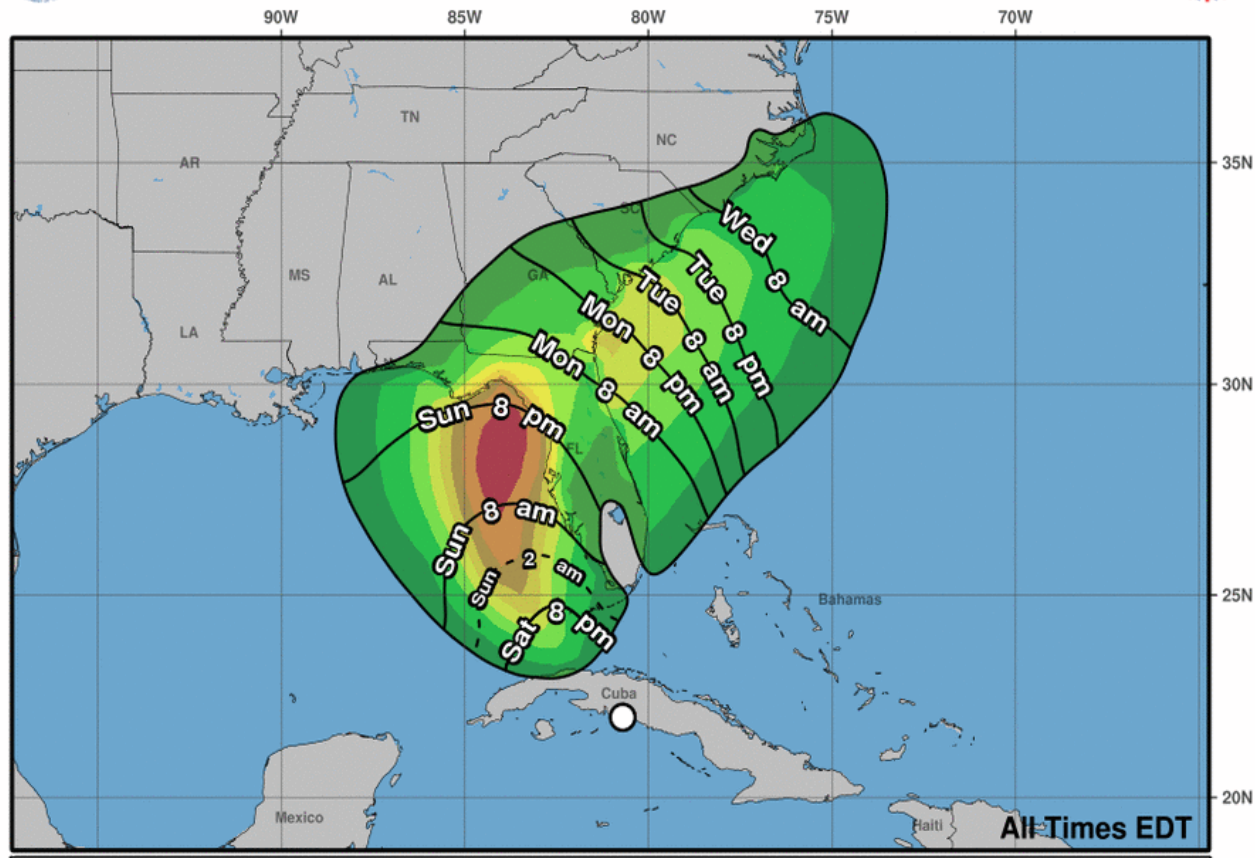


Tropical Storm-Force Wind Probabilities

Potential Tropical Cyclone Four



Most Likely Arrival Time of Tropical-Storm-Force Winds



Tropical Depression Four
Sat. Aug. 3, 2024 5 am EDT
Advisory 4

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 %

Tropical storm-force winds will most likely arrive to the Florida Keys this evening, spreading northward throughout the tonight. Tropical storm-force winds look to reach the I-4 corridor Sunday morning, and expanding through the Florida Big Bend, Suwannee River Valley, and Northeast Florida through the Sunday daytime hours.

However, tropical-storm force conditions may begin as early as this morning along the Florida Keys and southern Florida Peninsula (especially within gusty outer rainbands), tonight along the I-4 corridor, and Sunday afternoon for the Nature Coast north and eastward.

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	Percent Change from Previous Update
Key West	6%	-5%
Naples	12%	-6%
Fort Myers	3%	-2%
Tampa	39%	-7%
Cedar Key	62%	+16%
Orlando	7%	-1%
Gainesville	16%	-6%
Tallahassee	23%	+10%
Jacksonville	17%	-3%
Apalachicola	51%	0



Key Messages

From the National Hurricane Center (NHC)



Key Messages for Tropical Depression Four Advisory 5: 11:00 AM EDT Sat Aug 03, 2024

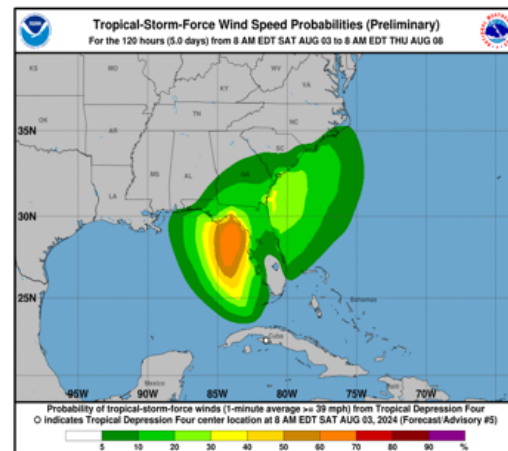
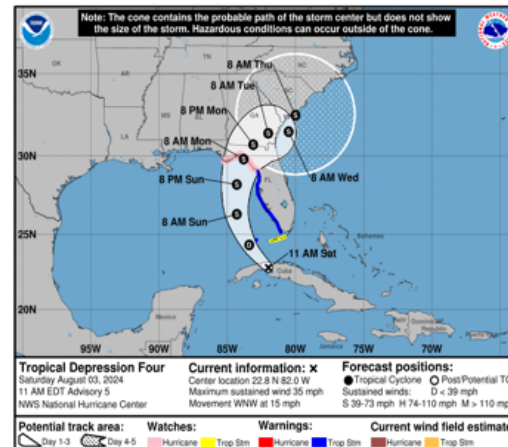


1. Heavy rainfall will likely result in locally considerable flash and urban flooding across portions of Florida and the coastal areas of the Southeast this weekend through Thursday morning. River flooding is also expected.

2. Hurricane conditions are possible late Sunday in portions of the Florida Gulf Coast and Big Bend region where a Hurricane Watch is in effect. Tropical storm conditions are expected farther south along Florida's west coast, including the Tampa Bay area, and in the Dry Tortugas where Tropical Storm Warnings are in effect.

3. There is a danger of life-threatening storm surge inundation along portions of the west coast of Florida from Aripeka to the Aucilla River. Life-threatening storm surge is possible west of Aucilla River to Indian Pass and south of Aripeka to Bonita Beach, including Tampa Bay and Charlotte Harbor.

4. Impacts from storm surge, strong winds, and heavy rains are possible elsewhere in Florida and along the southeast coast of the United States from Georgia to North Carolina through the middle of next week, and interests in those areas should continue to monitor the progress of this system. Additional watches and warnings will likely be required later today.



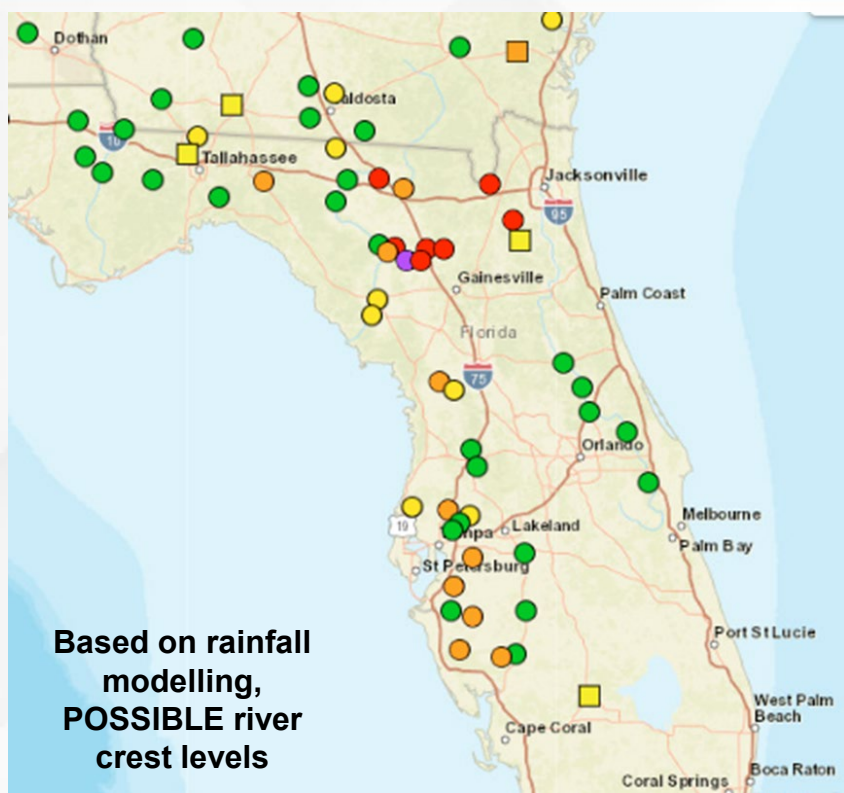
For more information go to hurricanes.gov

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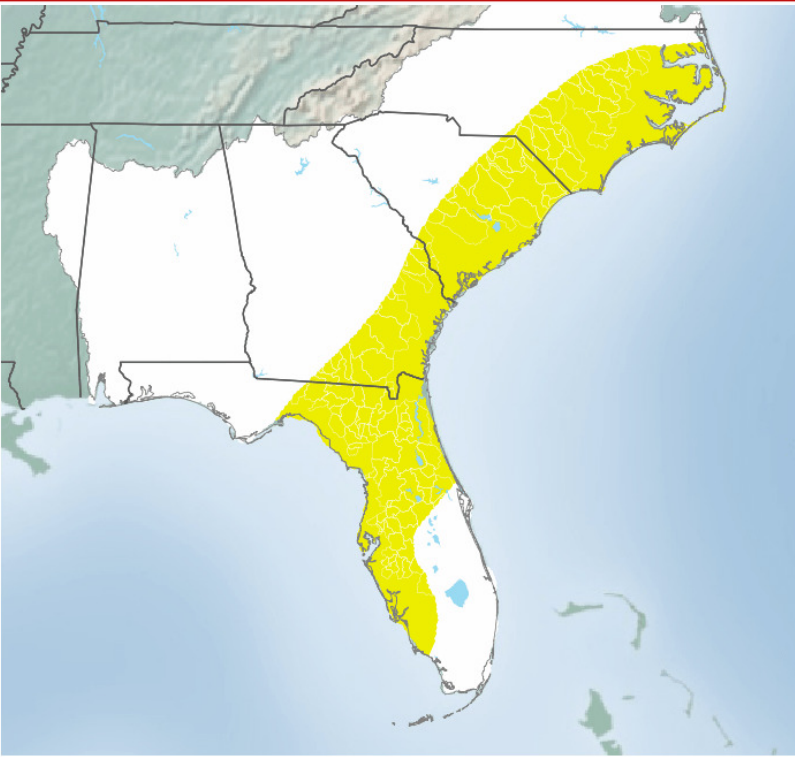
Riverine Flooding

Chance of River Flooding Based on Range of Forecast Rainfall



Based on rainfall modelling, POSSIBLE river crest levels

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



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 Suwannee, Santa Fe, Withlacoochee, Aucilla, Myakka, and Alafia.

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

National Weather Service
Peachtree City, GA
08/02/2024 10:51 AM EDT

Follow weather

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

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



Summary

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Tropical Depression Four (TD Four):

- As of 11:00 AM EDT, Tropical Depression Four is located about 40 miles south of Key West, Florida and is moving west-northwest at 15 mph.
- A turn toward the northwest is forecast today, followed by a northward motion on Sunday and then a slower northeastward motion Sunday night and Monday.
- On the forecast track, the center of the depression will move across western Cuba this morning, and then move over the eastern Gulf of Mexico later today and Sunday, reaching the Florida Gulf coast late Sunday or Monday.
- Maximum sustained winds are near 35 mph with higher gusts, and slow strengthening is expected today and tonight. The Depression is expected to become a tropical storm tonight.
- A faster rate of strengthening is expected Sunday through Monday, and the system could be near hurricane strength when it reaches the Florida Gulf Coast.
- The next name on the list is Debby (DEH-bee).

Florida Outlook:

- **Hurricane Watches** have been issued for Coastal Taylor, Coastal Dixie, Coastal Franklin, Coastal Wakulla, Coastal Jefferson, and Levy Counties.
- **Tropical Storm Warnings** have been issued for Mainland Monroe, Coastal Collier, Coastal Lee, Coastal Charlotte, Sarasota, Manatee, Hillsborough, Pasco, Pinellas, Hernando, Citrus, and Sumter Counties.
- **Tropical Storm Watches** have been issued for the Florida Keys including the Dry Tortugas (Coastal Monroe), Inland Lee, Inland Charlotte, DeSoto, Hardee, Polk, Lake, Inland Dixie, Inland Taylor, Inland Jefferson, Inland Wakulla, Inland Franklin, Liberty, Gadsden, Leon, Madison, and Lafayette Counties.
- **Storm Surge Warnings** are in effect from Aripeka northward to the mouth of the Aucilla River (Coastal Hernando, Citrus, Levy, Dixie, and Taylor Counties).
- **Storm Surge Watches** are in effect from Bonita Beach northward to Aripeka (Coastal Lee, Charlotte (including Charlotte Harbor), Sarasota, Manatee, Hillsborough (including Tampa Bay), Pinellas, Pasco).
- A **Coastal Flood Watch** has been issued for the Florida Keys (Coastal Monroe). **Coastal Flood Advisories** are in effect along portions of the coastal Southern Peninsula and along the Florida Keys as minor coastal flooding is expected (Coastal Collier, Monroe, and Miami-Dade).
- Rainfall totals are heavily tied to the eventual track and forward speed of the tropical system, so there remains forecast uncertainty regarding where the heaviest totals will occur. Tropical Rainfall totals up to 4-8" are forecast across much of the state, but locally higher amounts exceeding 10-12" cannot be ruled out.
 - Trends within the computer forecast models will be monitored through the week. A more disorganized tropical system may produce higher rain chances and greater rainfall totals over portions of the Florida Peninsula this weekend into early next week.
 - Given already saturated soils, the Weather Prediction Center (WPC) has introduced a **Slight Risk (level 2 of 4) for Flash Flooding** across South and West-Central Florida and the Keys and across western portions of the Florida Panhandle today with a **Marginal Risk (level 1 of 4)** reaching north of the I-4 corridor and into the Big Bend. A **Marginal to Slight Risk for Flash Flooding** is outlooked nearly statewide Sunday and Monday.
 - **Flood Watches** have been issued for portions of South Florida and the Keys through 8:00 PM EDT Sunday evening; Additional Flood Watches further north will be issued as conditions warrant.
- The Storm Prediction Center (SPC) is outlooking a **Marginal Risk for Severe Weather (level 1 of 5)** for the risk of isolated tropical tornadoes across Southwest Florida and the Keys today, North and Central Florida Sunday, and along Northeast Florida Monday. Additional expansions of the tornado threat will be possible Sunday into Monday as the track forecast becomes better in focus.

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



Tropical Update

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