

Tropical Update



5:00 AM EST Wednesday, November 9, 2022 Tropical Storm Nicole

<u>This update is intended for government and emergency response officials</u>, 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 Nicole

4 AM EST Wednesday: Florida Threats & Changes Since Last Packet



Overview/Recent Changes: Tropical Storm Warnings have been issued for the West Coast of Florida, north of Bonita Beach to Indian Pass. Coastal flood impacts from Nicole will continue to deteriorate today, and damaging winds are expected to expand across much of the Florida Peninsula from east to west today. There is a risk of life-threatening storm surge, significant coastal erosion, damaging winds, and flooding with this system. As Nicole's outer rain bands continue to push over the East Coast of Florida and Peninsula today, isolated tornadoes will be possible within the more organized bands of shower and thunderstorm activity. The Storm Prediction Center has introduced a Slight Risk (level 2 of 5) across the East Coast and Northeast Florida through Friday morning.



Forecast Cone

Tropical Storm Nicole



Location: 270 miles east of Boynton Beach, FL Maximum Winds: 70 mph Movement: WSW at 13 mph

On the forecast track, the center of Nicole will approach the northwestern Bahamas this morning, move near or over those islands by midday, and approach the East Coast of Florida within the hurricane warning area tonight. Nicole's center is then forecast to turn northwestward and move across Central and North Florida Thursday and Thursday night. Maximum sustained winds have increased since the last briefing packet, and some additional strengthening is forecast today. Nicole is forecast to become a hurricane today and remain a hurricane when is reaches the East Coast of Florida tonight. Nicole is a large tropical storm, with tropical storm-force winds extending outward up to 460 miles from the center (especially to the north). Nicole's broad cloud and wind field is starting to move onshore the Florida Peninsula this morning, and deteriorating conditions will continue to overspread from east to west today.

Source Active Tropical Watches/Warnings FOUO – For Government Official Use Only



Hurricane Warning

 Counties: Coastal Palm Beach, Martin, St. Lucie, Indian River, Brevard, Coastal Volusia

Hurricane Watch

- Counties: inland Palm Beach and Broward

Tropical Storm Warning

 Counties: Gadsden, Liberty, Franklin, Leon, Wakulla, Taylor, Madison, Taylor, Lafayette, Dixie, Gilchrist, Levy, Alachua, Bradford, Clay, Putnam, Nassau, Duval, St. Johns, Flagler, Marion, inland Volusia, Lake, Sumter, Citrus, Hernando, Pasco, Polk, Hillsborough, Pinellas, Manatee, Sarasota, Charlotte, Lee, Hendry, Glades, Highlands, Hardee, Desoto, Broward, inland Palm Beach, Okeechobee, Osceola, Orange, and Seminole

Tropical Storm Watch

 Counties: Hamilton, Suwanee, Columbia, Union, Baker, and metro Miami-Dade

Tropical Storm-Force Wind Probabilities

Tropical Storm Nicole



Jacksonville – 31% (-19) Orlando – 95% (+15) Cocoa Beach – 85% (+1) Ft. Pierce – 94% (+8) West Palm Beach – 75% (+/- 0) Miami – 30% (+1) Key West – 8% (+/- 0) Ft. Myers – 31% (+2) Tampa – 59% (-1) Cedar Key – 57% (-9) Tallahassee – 39% (+/- 0) Apalachicola – 19% (-10)

Numbers in parenthesis show the change in probability since the last briefing packet.

Note: A reduction in percentages does not necessarily mean a lower threat. These probabilities are dependent on the track, wind radii and intensity and may fluctuate up and down.

Tropical storm-force winds are beginning along the extreme coastal portions of the eastern Peninsula this morning and looks to spread through the remainder of the Peninsula during the day. Tropical storm conditions could arrive in the Florida Big Bend as early as tonight.

Damaging Wind Threat Overview Tropical Storm Nicole



The greatest damaging wind threat is mainly along the Space and Treasure Coasts. The overall wind threat has increased across the northern and central Florida Peninsula and has expanded northwestward to the eastern Florida Big Bend.

https://www.weather.gov/srh/tropical?office=mfl Click on "Threats and Impacts" Tab



Surge Watches and Warnings In Effect Until Further Notice



Wednesday, Thursday, & Friday



An ocean swell along the east coast will continue to grow, resulting in an increase in wave heights. The highest values are forecast to occur today and Thursday as near shore waves of 12-22' are forecast today along much of the Florida East Coast and 10' Thursday along Northeast and East-Central Coast. This may result in moderate to severe coastal erosion at times of high tide and a high risk of rip currents. Wave heights will also increase along portions of the Florida Gulf Coast on Thursday due to westerly winds on the southern side of Nicole.

7-Day Forecast Rainfall From the Weather Prediction Center

7-Day Precipitation (in) Ending Wednesday, Nov. 16, 2022 at 7 a.m. EST



While it is still too early to determine <u>where</u> the heaviest rainfall totals will occur, widespread rainfall totals of 4-6" are possible along portions of the East Coast. Rainfall totals of 2-4" are expected across the remainder of the Peninsula. Isolated higher totals near 8" are possible, and these amounts could change depending on the forecast track, intensity and structure of the storm.



From the Weather Prediction Center

Understanding WPC Excessive Rainfall Risk Categories								
No Area/Label	MARGINAL (MRGL)	SLIGHT MODERATE (SLGT) (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.				
Flash flooding near me? NO Flash Flooding	$1 \leq 1 \leq 1$	(2, 2, 2)	CENTRA A	2500				
WEATHER PREDICTION CENTER								

Forecast rain amounts could lead to a slight chance of flash flooding (level 2 of 4), particularly across East-Central and Southeast Florida. By Friday, the threat for flash flooding looks to expand across the Panhandle, Big Bend, and Northeast Florida.



Flood Watches in Effect



Flood Watch in effect through
Thursday afternoon

- Counties: coastal/metro Miami-Dade, Broward, Palm Beach, Hendry, Glades, Martin, St. Lucie, Indian River, Brevard, Okeechobee, Highlands, Hardee, Desoto, Osceola, Polk, Sumter, Lake, Orange, Seminole, Volusia, Flagler, Marion, Putnam, St. Johns, Clay, Duval, Nassau

COLOR FREEDOL WINNES

Current River Status & Forecast Hydrographs As of Wednesday Morning





West Palm

Boca Raton

Pompano Beach

Beach



Based on rainfall

modelling,

POSSIBLE river

crest levels

30%

 \bigcirc

Nicole will produce heavy rainfall today into Thursday across the Florida Peninsula. Rainfall totals, elevated tides, and persistent easterly flow may lead to renewed river rises on the St. Johns River.

https://www.weather.gov/erh/mmefs?Lat= 32.491230287947594&Lon=-83.49609375&Zoom=6&Refresh=0&Model =NAEFS

Severe Weather Outlooks From the Storm Prediction Center



Outer rain bands from Nicole will result in isolated tornadoes across the eastern Peninsula today and Thursday. The Storm Prediction Center has upgraded portions of the Space and Treasure Coasts to a Slight Risk (level 2 of 5) today and Northeast Florida Thursday.

FOUO – For Government Official Use Only

Understanding Severe Thunderstorm Risk Categories

THUNDERSTORMS	1 - MARGINAL	2 - SLIGHT	3 - ENHANCED	4 - MODERATE	5 - HIGH
(no label)	(MRGL)	(SLGT)	(ENH)	(MDT)	(HIGH)
No severe*	Isolated severe	Scattered	Numerous	Widespread	Widespread
thunderstorms	thunderstorms	severe storms	severe storms	severe storms	severe storms
expected	possible	possible	possible	likely	expected
Lightning/flooding threats exist with <u>all</u> thunderstorms	Limited in duration and/or coverage and/or intensity	Short-lived and/or not widespread, isolated intense storms possible	More persistent and/or widespread, a few intense	Long-lived, widespread and intense	

Key Messages From the National Hurricane Center

TOM

Key Messages for Tropical Storm Nicole Advisory 9: 4:00 AM EST Wed Nov 09, 2022



1. Hurricane conditions and a dangerous storm surge are expected in portions of the northwestern Bahamas today, where a Hurricane Warning is in effect.

2. Hurricane conditions are expected across portions of the coast of southeast and east-central Florida beginning this evening or tonight, where a Hurricane Warning is in effect. Tropical storm conditions have begun along the east coast of Florida in the warning areas and will spread northward to Georgia and South Carolina later today. Tropical storm conditions are expected to begin along the west coast of Florida within the warning area this evening or tonight.

3. A dangerous storm surge is expected along much of the east coast of Florida and portions of coastal Georgia where a Storm Surge Warning is in effect. The storm surge will be accompanied by large and damaging waves. Residents in the warning area should listen to advice given by local officials.

4. Do not focus on the exact track of Nicole since it is expected to be a large storm with hazards extending well to the north of the center, outside of the forecast cone. These hazards are likely to affect much of the Florida peninsula and portions of the southeast United States.

5. Nicole will produce heavy rainfall today into Thursday across the Florida Peninsula. Flash and urban flooding will be likely across portions of the Florida Peninsula along with possible renewed river rises on the St. Johns River. Isolated flash, urban, and small stream flooding will also be possible on Friday in the Southeast through the southern and central Appalachians, including the Blue Ridge Mountains, and extending northward through west-central Pennsylvania into western New York by Friday night.



For more information go to hurricanes.gov

Tropical Weather Outlook

Invest 97L-Central Subtropical Low (LINK)



Shower activity remains disorganized in association with an area of low pressure, located about 800 miles westsouthwest of the westernmost Azores. Upper-level winds and sea surface temperatures are not conducive for development, and the low is expected to merge with a cold front shortly. *Invest 97L poses no threat to Florida*.



Tropical Storm Nicole:

- At 4:00 AM EST Wednesday, the center of Tropical Storm Nicole was located approximately 270 miles east of Boynton Beach, Florida, and moving west-southwest near 13 mph.
- A turn toward the west is expected today, approaching the East Coast of Florida tonight. The center of Nicole is then forecast to turn toward the northwest on Thursday as the system moves across Central and North Florida into Thursday night.
- Maximum sustained winds have increased to 70 mph, and Nicole is forecast to be a hurricane later today while it is moving near the northwestern Bahamas and approaching the East Coast of Florida. Nicole is predicted to be a hurricane upon landfall in Florida.
- Gradual weakening is expected after landfall, but Nicole is expected to remain a large tropical storm during its trek across Florida.

Florida Outlook:

- Nicole poses a risk for significant coastal flooding, strong winds, storm surge, heavy rain and isolated tornadoes along much of the Florida East Coast.
- Due to the large wind field of Nicole, strong wind gusts may be felt across the entire Florida Peninsula and Florida Big Bend on Wednesday and Thursday.
- A Hurricane Warning has been issued for 6 Florida East Coast counties, with Tropical Storm Watches and Warnings in effect for 48 additional counties across the Peninsula and Big Bend.
- Nicole is a large tropical storm, with tropical storm-force winds extending outward up to 460 miles from the center (especially to the north).
- Nicole's broad cloud and wind field is starting to move onshore the Florida Peninsula this morning, and deteriorating conditions will continue to overspread from east to west today. Tropical storm conditions could arrive in the Florida Big Bend as early as tonight.
- Elevated tides, ocean swells, and strong winds will push water upstream through the St. Johns, leading to coastal flooding along the river.
- Deteriorating beach conditions can be expected across the East Coast as a result of elevated tides and wave heights of 12-22'.
- A Storm Surge Warning is in effect along the entire Florida East Coast north of North Palm Beach, as well as from the mouth of the St. Johns River to Georgetown, Florida. Storm surge values of 3-5' are forecast, with locally surge values of 6' possible. A Storm Surge Watch is in effect south of North Palm Beach to Hallandale Beach, Florida and along the Florida Nature Coast between the Anclote River and mouth of the Ochlockonee River where surge heights could reach 2-4'.
- Rainfall amounts of 2-6" are possible across much of the Florida Peninsula, leading to a slight risk of flash flooding and rises on local rivers. A Flood Watch is in effect for 27 Peninsula Counties.
- Isolated tornadoes are possible in the outer bands of Nicole and could affect eastern portions of the Florida Peninsula on today and Thursday. The Storm Prediction Center has upgraded portions of the East Coast to a Slight Risk (level 2 of 5) through Friday morning.

The next briefing packet will be issued 11:00 AM EST Wednesday. For the latest information, please visit the National Hurricane Center website.







Created by:

Caitlyn Gillespie, Deputy State Meteorologist

Caitlyn.Gillespie@em.myflorida.com

State Meteorological Support Unit

Florida Division of Emergency Management

Users wishing to subscribe (approval pending) to this distribution list, register at: <u>https://public.govdelivery.com/accounts/FLDEM/subscriber/new?topic_id=SERT_Met_Tropics</u>. Other reports available for subscription are available at: <u>https://public.govdelivery.com/accounts/FLDEM/subscriber/new?preferences=true</u>