





10:30 AM EDT Thursday, August 8, 2024 Post-Debby Florida Outlook & Hydrology

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 <u>www.hurricanes.gov</u>.

Tropical Storm Debby From the National Hurricane Center (NHC)



- Location: 90 miles north of Charleston, South Carolina
- Maximum Sustained Winds: 45 mph
- Current Movement: NW at 7 mph
- FL Watches & Warnings: None

The storm is expected to accelerate toward the northnorthwest and north across eastern South Carolina and central North Carolina through tonight. Debby is then expected to move faster toward the northeast across the U.S. Mid-Atlantic and Northeast on Friday and Atlantic Canada on Saturday. Continued weakening is forecast during the next day or so, and Debby is likely to become a tropical depression this afternoon or evening. Debby should then merge with a front and become extratropical Friday.

Tropical Weather Outlook Disturbance 1 – Near the Lesser and Greater Antilles (LINK)



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An area of low pressure could form in the central or western tropical Atlantic Ocean early next week. Some development of this system is possible while it approaches the Lesser Antilles during the early to middle part of next week and moves generally west-northwestward toward the Greater Antilles thereafter.

This system poses no direct threat to Florida during the next 7-10 days, but this system will continue to be monitored as it develops early next week.

* Formation chance through 48 hours...low...near 0%.
* Formation chance through 7 days...low...30%.

Rain Chances, High Temperature & Feels-Like Temperature







Rain Chances, High Temperature & Feels-Like Temperature







Rain Chances, High Temperature & Feels-Like Temperature







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



Rainfall continues to deposit into the rivers, creeks and waterways across the Florida Big Bend, Northeast Florida and West-Central Florida following Debby. Numerous River Flood Warnings remain in effect due expected riverine flooding. Moderate to major flooding is ongoing or forecast for portions of the Myakka, Little Manatee, Alafia, Santa Fe, St. Mary's, upper Suwannee, and Santa Fe River Basins. Minor to moderate flooding is occurring or forecast along the lower Suwannee, Cypress Creek, Hillsborough, Anclote, Aucilla, Horse Creek, and Manatee Rivers. Additional River Flood Warnings may be issued in the coming days depending on any additional rainfall and rises in water levels. Water will continue to flow downstream through the basins.



River Crest Timing

Sante Fe and Lower Suwannee

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River Flood Warnings

From the National Weather Service

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River Guage 🖵	County(ies) Affecte	Current Level 💌	Crest Level 🔽	Record Leve	Status 💌	Crest Da	Warning Expires D
Alafia River at Lithia Pinecrest Road at Lithia	Hillsborough	Moderate: 17.90 ft	Major: 20.17 ft	28.50 ft	Falling	7-Aug	1817 EDT 10-Aug
Aucilla River at Lamont	Madison, Jefferson, Taylor	Action: 52.47 ft	Minor: 54.70 ft	58.80 ft	Rising	10-Aug	Until Further Notice
Cypress Creek at SR-54 Worthington Gardens	Pasco	Minor: 9.39 ft	Minor: 9.80 ft	13.80 ft	Rising	10-Aug	Until Further Notice
Hillsborough River at Morris Bridge	Hillsborough	Action: 31.74 ft	Minor: 32.20 ft	32.90 ft	Rising	9-Aug	0800 EDT 11-Aug
Hillsborough River near Zephyrhills at State <u>Park</u>	Hillsborough	Minor: 11.70 ft	Moderate: 13.54 ft	15.30 ft	Falling	6-Aug	0030 EDT 10-Aug
Horse Creek near Arcadia at SR 72	DeSoto	Minor: 13.14 ft	Minor: 13.40 ft	21.20 ft	Falling	10-Aug	Until Further Notice
Little Manatee River at Mimauma at US 301	Hillsborough	Moderate: 15.10 ft	Major: 19.47 ft	20.10 ft	Falling	6-Aug	1800 EDT 9-Aug
Manatee River near Myakka Head at SR 64	Manatee	Minor: 12.00 ft	Major: 19.16 ft	20.90 ft	Falling	5-Aug	0415 EDT 9-Aug
Myakka River at Myakka River State Park	Sarasota	Moderate: 10.03 ft	Moderate: 10.40 ft	12.80 ft	Rising	9-Aug	Until Further Notice
Santa Fe River at Fort White	Gilchrist, Columbia	Moderate: 25.01 ft	Major: 30.00	35.40 ft	Rising	11-Aug	Until Further Notice
Santa Fe River at Three Rivers Estates	Gilchrist, Suwannee, Columbia	Minor: 18.26 ft	Major: 25.70 ft	33.40 ft	Rising	18-Aug	Until Further Notice
Santa Fe River at Worthington Springs	Alachua, Union	Moderate: 63.70 ft	Moderate: 65.28 ft	71.20 ft	Falling	7-Aug	Until Further Notice
Santa Fe River near High Springs	Alachua, Columbia	Moderate: 39.12 ft	Moderate: 42.90 ft	48.50 ft	Rising	10-Aug	Until Further Notice
Santa Fe River near Hildreth	Suwannee, Gilchrist	Action: 17.69 ft	Minor: 25.40 ft	33.40 ft	Rising	18-Aug	Until Further Notice
Santa Fe River near O'Leno State Park	Alachua, Columbia	Moderate: 52.05 ft	Moderate: 52.20 ft	57.10 ft	Cresting	Tonight	Until Further Notice
St. Mary's near Macclenny	Baker, Nassau	Major: 19.14 ft	Major: 19.71 ft	24.40 ft	Falling	7-Aug	Until Further Notice
Steinhatchee Rievr near Cross City	Dixie, Taylor	Minor: 20.70 ft	N/A	N/A	Rising	N/A	Until Further Notice
Suwannee River at White Springs	Hamilton, Suwannee, Columbia	Minor: 78.69 ft	Minor: 79.00 ft	87.70 ft	Rising	10-Aug	Until Further Notice
Suwannee River near Suwannee Springs	Suwannee, Hamilton	Minor: 63.07 ft	Moderate: 67.00 ft	78.20 ft	Rising	13-Aug	Until Further Notice

For more details on the hydrographs as well as impact statements, click the links for each river gauge.

River Flooding Outlook

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River Guage 💂	County(ies) Affecte	Current Level 💌	Crest Level 🔽	Record Leve	Status 💌	Crest Da	Warning Expires D
Suwannee River at Ellaville	Hamilton, Madison, Suwannee	Below: 45.28 ft	Minor: 53.00 ft	67.40 ft	Rising	14-Aug	N/A
Suwannee River at Dowling Park	Lafayette, Madison, Suwannee	Below: 37.62 ft	Action: 45.70 ft	60.80 ft	Rising	16-Aug	N/A
Suwannee River at Luraville	Lafayette, Suwannee	Below: 30.65 ft	Minor: 37.25 ft	52.80 ft	Rising	16-Aug	N/A
Suwannee River at Branford	Lafayette, Suwannee	Below: 21.58 ft	Minor: 28.50 ft	38.10 ft	Rising	Aug 17-20	N/A
Suwannee River at Rock Bluff (Bell)	Dixie, Gilchrist, Lafayette	Action: 14.92 ft	Moderate: 21.25 ft	N/A	Rising	Aug 18-21	N/A
Suwannee River at Wilcox	Dixie, Gilchrist, Levy	Action: 7.41 ft	Moderate: 13.00 ft	21.10 ft	Rising	Aug 19-22	N/A
Suwannee River at Manatee Springs	Dixie, Levy	Action: 5.19 ft	Moderate: 10.00 ft	16.00 ft	Rising	Aug 20-22	N/A

For more details on the hydrographs as well as impact statements, click the links for each river gauge.

Flash Flood Outlooks – Today through Thursday From the Weather Prediction Center (WPC)



The Weather Prediction Center (WPC) is outlooking Marginal **Risk for Flash** а Flooding continues Northern across Peninsula and south to the I-4 corridor and into West-Central Florida today. Grounds and soils are very saturated following heavy rainfall over the last 48 hours before and after landfall, and any additional rainfall may exacerbate the potential for additional flooding. Any heavy downpours over urban and low-lying/poor drainage areas could bring instances of flash flooding.



Hot & Humid Conditions

From the National Weather Service (NWS)

Dangerous Heat & Humidity: Thursday Created by FDEM State Meteorological Support Unit || Data from NWS, US Census Bureau, Natural Earth **Excessive Heat Warnings Heat Advisory**

Dangerous heat and humidity can be expected statewide today, with heat index values rising to **105 to 115-degrees** during the peak heating hours of the day; **Excessive Heat Warnings** have been raised across the eastern Panhandle, Big Bend, and into western portions of the Suwannee Valley with Heat Advisories issued across the rest of the state this afternoon.

It should be noted that several of these counties within the Heat Advisories are ones that were impacted by Debby, which could make cleanup/response activities more difficult for those without power or AC.

Please remember to practice heat safety when outdoors including, taking breaks from direct sunlight when you can, wear loose fitting clothing and drink plenty of water.



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Tropical Storm Debby:

- As of 8:00 PM EDT, Debby was located about 90 miles north of Charleston, South Carolina and moving northwestward at 7 mph.
- The storm is expected to accelerate toward the north-northwest and north across eastern South Carolina and central North Carolina through tonight.
- Debby is then expected to move faster toward the northeast across the U.S. Mid-Atlantic and Northeast on Friday and Atlantic Canada on Saturday.
- Maximum sustained winds are near 45 mph with higher gusts and continued weakening is forecast during the next day or so, and Debby is likely to become a tropical depression this afternoon or evening.
- · Debby should then merge with a front and become extratropical Friday.

Near the Lesser and Greater Antilles:

- An area of low pressure could form in the central or western tropical Atlantic Ocean early next week.
- Some development of this system is possible while it approaches the Lesser Antilles during the early to middle part of next week and moves generally west-northwestward toward the Greater Antilles
 thereafter.
- This system poses no direct threat to Florida during the next 7-10 days, but this system will continue to be monitored as it develops early next week.
- This system has a low (near 0%) chance of formation through 48 hours and a low (30%) chance of formation through 7 days.

Florida Outlook:

- River Flood Warnings have been issued across numerous North and West Florida Rivers as they have reached or are forecast to reach moderate to major flood stage with several others forecast to reach minor flood stage.
 - Additional River Flood Warnings will be possible over the next several days as water filters through the basins into the rivers and waterways and further downstream; and updates to existing
 riverine flooding forecasts can be expected.
- Dangerous heat and humidity can be expected statewide today, with heat index values rising to 105 to 115-degrees during the peak heating hours of the day.
 - Excessive Heat Warnings have been raised across the eastern Panhandle, Big Bend, and into western portions of the Suwannee Valley with Heat Advisories issued across the rest of the state this afternoon.
 - When outdoors and helping with response efforts, please make sure to practice heat safety. Be sure to take breaks from direct sunlight, wear loose fitting clothing and drink plenty of water.
- The Weather Prediction Center (WPC) is outlooking a Marginal Risk (level 1 of 4) for Flash Flooding across the Northern Peninsula south to the I-4 corridor and into West-Central Florida where scattered showers and thunderstorms developing throughout the afternoon and evening could bring additional rainfall over recently saturated grounds and soils post-Debby could bring additional flooding.
 - Grounds and soils are very saturated following heavy rainfall before and after landfall, and any additional rainfall may exacerbate the potential for additional flooding.
 - · Any heavy downpours over urban and low-lying/poor drainage areas could bring instances of flash flooding.
- Locally strong to severe thunderstorms producing frequent lightning, gusty winds (40-50 mph), and heavy downpours cannot be ruled out during peak heating hours of the day.

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



Tropical Update



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