

## TROPICAL UPDATE



### 10:00 AM EST Friday, November 5, 2020

### **Tropical Depression Eta**

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.



### Satellite Imagery Tropical Depression Eta – Central America



TD Eta has emerged back into the western Caribbean last night, and it is expected to slowly and steadily strengthen over the Caribbean.

Eta is a very broad system and most of the storms are displaced to the north and east of its center. This structure isn't expected to change much on its approach to Florida.



# Official Forecast Track

#### From the National Hurricane Center – Tropical Depression Eta



- The center of Eta is located about 80 miles eastnortheast of Belize City, Belize, moving northnortheast at 7 mph.
- Maximum sustained winds are near 35 mph, and Eta is forecast to become a tropical storm later today.
- Eta will be near Cuba Saturday night and Sunday, then be near or over South Florida and the Keys Sunday night or Monday.
- Tropical Storm or Hurricane Watches could be issued later today or tonight for parts of South Florida.
- Once the storm is near or over South Florida and the Keys, Eta may turn more westward into the eastern Gulf of Mexico.
- It's important to not focus too much on the cone as impacts will extend well outside of the cone.

## Key Messages

TONA

FDEI

From the National Hurricane Center

#### Key Messages for Tropical Depression Eta Advisory 24: 9:00 AM CST Fri Nov 06, 2020

1. Rainfall associated with Eta will continue to result in catastrophic, life-threatening flash flooding and river flooding across portions of Central America, along with landslides in areas of higher terrain. Significant, life-threatening flash flooding and river flooding is possible in the Cayman Islands and Cuba. Flash flooding and urban flooding is also possible for Jamaica and southeast Mexico.

2. This weekend Eta is expected to bring tropical storm conditions to portions of the Cayman Islands, where a Tropical Storm Warning is in effect. Tropical storm conditions possible in portions of western and central Cuba, where a Tropical Storm Watch is in effect.

3. There is an increasing risk of impacts from wind and flash and urban flooding due to heavy rainfall in portions of southern Florida, the Florida Keys and portions of the Bahamas this weekend and early next week. Tropical Storm or Hurricane Watches will likely be issued later today or tonight for a portion of this area.





For more information go to hurricanes.gov



### Time of Arrival & Wind Speed Probabilities

**EARLIEST RESONABLE** Time of Arrival of Tropical Storm Force Winds (>39 mph)



Key West: 34% (+4) Marathon: 40% (+13) Miami: 29% (+19) Ft. Lauderdale: 39% (+24) West Palm Beach: 32% (+21) Naples: 38% (+19) Ft. Myers: 2% (+14) Tampa: 22% (+13) Orlando: 11% Apalachicola: 11% Panama City: 10% \*The numbers in parenthesis show the change in probability since the last briefing packet.\*

Tropical Storm conditions could start as early as Sunday morning in the Keys and South Florida, but is more likely to begin Sunday Night. If the tropical storm conditions were to occur along the West Coast or coastal Big Bend, they would begin Monday or Monday night.



### Flood Watches

#### Links: NWS Miami

Valdosta Tallahassee ackson Gainesv Palm Goast Orlando A Flood Watch is in effect for coastal & Lakeland Tampa metro Palm Beach, Broward, and Miami-Dade Counties beginning tonight and Port continuing through Tuesday night. And Balling . . 5



## Rainfall Totals Next 7 Days

Ending 7 PM ET Thursday

20.00



As Eta approaches this weekend into early next week, additional heavy rainfall is likely across South Florida and the Keys, gradually spreading northward into next week.

There remains considerable uncertainty in the exact placement of the heavy rainfall. However, it appears that much of Eta's rainfall could be to the east of its center.

Combining rainfall from Eta and the stalled front, a widespread 6-12" of rain is possible across South Florida through early next week. Localized areas in South Florida and the Keys could see 15"+ of rain.



## Drought Index – Soil Moisture

#### KBDI – Full Report from the FFS

Keetch Byram Drought Index (KBDI) County Averages for November 05, 2020



4 km Resolution KBDI Statewide November 05, 2020



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# Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?



South Florida remains very wet from rainfall over the last several months. This area remains very prone to flooding.

It will take about 2-4" of rain within 1 hour or 3-5" of rain within 6 hours to cause flash flooding in these areas.



# Flash Flood Outlooks

#### From the Weather Prediction Center



Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line HIGH: > 50% SLGT: 10%-20% MDT: 20%-50% MRGL: 5%-10%

Training showers and thunderstorms could produce at least some flash flood potential across Southeast Florida over the next few days.



### Flash Flood Risk Categories

#### Understanding the Weather Prediction Center Risk Scale

#### **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.
Flash Flooding flooding near me? NO Flash Flooding	2 + 2 + 2	$\{(\lambda, \lambda, \lambda)\}$	(CERTING)	235 <u>(</u> 165)
WEATHER PREDICTION CENTER	Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line HIGH: > 50% SLGT: 10%-20% MDT: 20%-50% MRGL: 5%-10%			



# Possible River Flooding

Chance of River Flooding Based on Range of Forecasted Rainfall



Some minor flooding is possible along some North and Central Florida rivers if heavier rainfall materializes. The Santa Fe, St. Marys, and Peace Rivers have about a 1 in 3 chance of reaching minor flood. The St. Johns River at Astor remains in minor flood.



# **Overall Summary**

\*\*Note: Due to Daylight Saving Time, advisories from the National Hurricane Center are now issued one hour earlier than usual. For example, the next full advisory on Eta will be at 4pm ET/3 PM CT with an intermediate intensity advisory at 1pm ET/12pm CT.\*\*

#### **Tropical Depression Eta**

- The center of Eta is located about 80 miles east-northeast of Belize City, moving north-northeast at 7 mph.
- Maximum sustained winds are near 35 mph, and Eta should re-gain tropical storm intensity today.
- Eta will be near Cuba on Saturday night or Sunday, then be near or over South Florida and the Keys Sunday night into Monday.
- Once the storm is near the Florida Straits, Eta may move westward into the eastern Gulf of Mexico.

#### Florida Outlook:

- It is important to NOT focus on the exact track of Eta. Impacts will extend well beyond the cone away from the center.
- Heavy rainfall and flash flooding will be the primary threat from Eta across South Florida and the Keys.
- 7-day rainfall totals (including the heavy rain this week) could approach a widespread 6-10" with localized totals of 15"+.
- Tropical-storm-force winds could begin as early as Sunday morning in the Keys and South Florida, but will likely begin later Sunday afternoon.
- Tropical Storm or Hurricane Watches could be issued later today or tonight for parts of South Florida and the Keys.
- Isolated tornadoes will also be possible in any of the outer bands, possibly beginning as early as Saturday night into Sunday across South Florida and the Keys.
- Storm surge is also possible in the Keys and along parts of the East Coast, but exact details are still uncertain.
- Beach erosion and dangerous rip currents from high surf are expected along the East Coast.
- This system could impact other parts of the state farther north. However, details there become highly uncertain.

The next tropics packet will be issued this afternoon with the 4PM ET Advisory. For the latest information on the tropics, please visit the National Hurricane Center website at <u>www.hurricanes.gov</u>.



## TROPICAL UPDATE



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