

# TROPICAL UPDATE



5:00 PM EDT

Sunday, September 13, 2020

Tropical Storm Sally, Hurricane Paulette, Tropical Depression Rene, Tropical Depression #20, Gulf of Mexico Low (20%), Invest 97L Near Cabo Verde Islands (70%), Next Tropical Wave (30%)

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 <a href="https://www.hurricanes.gov">www.hurricanes.gov</a>.



# Tropical Storm Sally

8 AM ET Sunday: Florida Threats & Changes Since Last Packet





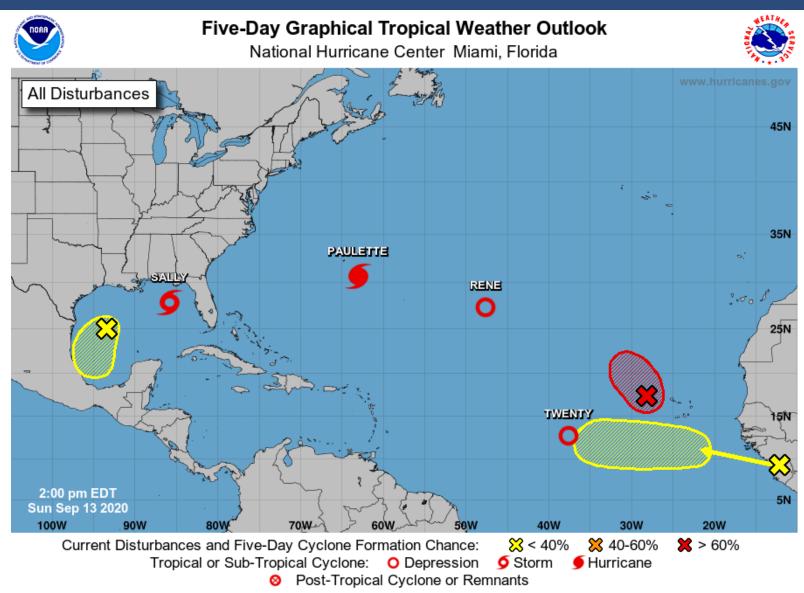
#### **Overview/Recent Changes:**

Sally has not strengthened today while moving away from Southwest Florida. There were no changes to the watches and warnings with minimal shifts in the forecast track. However, changes in track and intensity forecasts are still possible. Do NOT focus on the center of the cone as impacts will EXTEND WELL EAST of the forecast cone (i.e. heavy rainfall in the Panhandle).

### Atlantic Basin Satellite Image Chance of development: None Medium High Low MICH WYO. IOWA NEBR. United UTAH H OKLA Rene **Tropical Waves Paulette** Mexico Guadeloupe Barbados Trinidad 97L:70% Guyana Colonibia

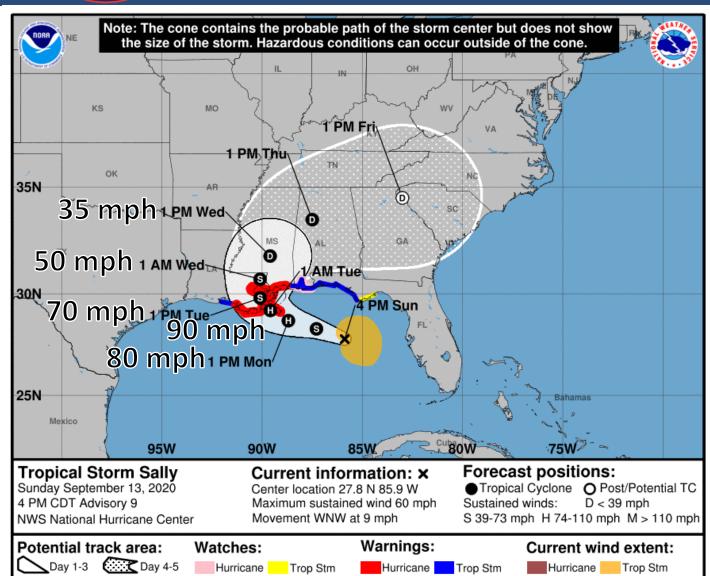


Possible Areas of Development During the Next 5 Days (LINK)





### From the National Hurricane Center: Tropical Storm Sally



- The center of Tropical Storm Sally is located about 165 miles south of Panama City, FL
- Maximum sustained winds are 60 mph and Sally is moving to the west-northwest at 9 mph.
- Sally will continue strengthening as it moves westnorthwestward over the Gulf of Mexico, and Sally should become a hurricane on Monday.
- Sally will slow down on Tuesday and Wednesday as it turns very slowly northward and eventually northeast.

Sally will bring very heavy rainfall, tropical-storm-force wind gusts, minor storm surge, and isolated tornadoes to the Panhandle.

Do NOT focus on the center of the cone! The impacts can and will extend well outside of the cone!



# Key Messages

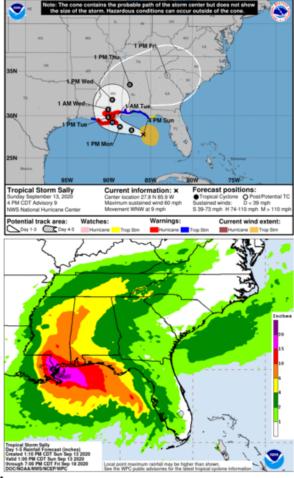
### From the National Hurricane Center



### Key Messages for Tropical Storm Sally Advisory 9: 4:00 PM CDT Sun Sep 13, 2020



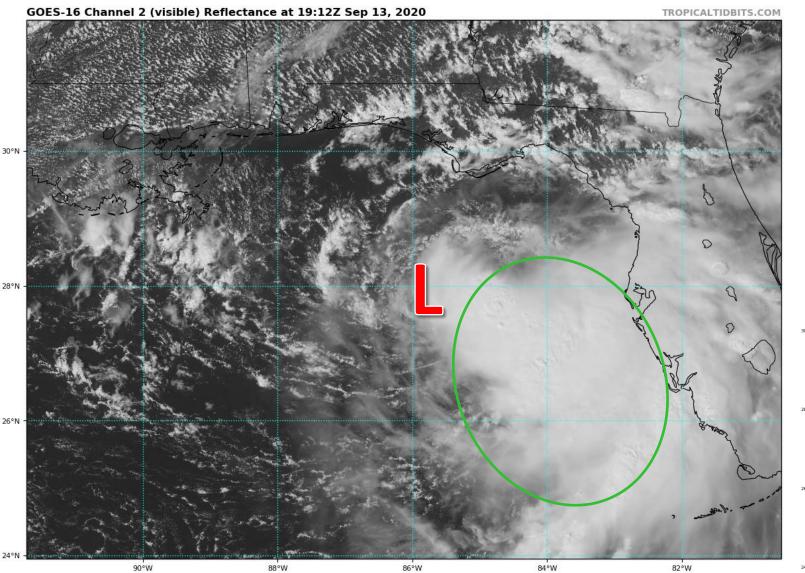
- 1. An extremely dangerous and life-threatening storm surge is expected for areas outside the southeastern Louisiana Hurricane and Storm Damage Risk Reduction System from Port Fourchon, Louisiana, to the Mississippi/Alabama border, where a Storm Surge Warning is in effect. Residents in these areas should follow any advice given by local officials.
- 2. Hurricane conditions are expected by late Monday within portions of the Hurricane Warning area from Morgan City, Louisiana, to Ocean Springs, Mississippi, including Metropolitan New Orleans, with tropical storm conditions likely to begin Monday. Preparations should be rushed to completion in those areas.
- 3. Sally could continue to produce flash flooding across central and northern Florida and prolong existing minor river flooding across west-central Florida through Monday. Widespread significant flash flooding and minor to isolated major river flooding is likely across southeastern Louisiana, Mississippi, and Alabama through the middle of the week. Flooding impacts are expected to spread farther across the Southeast U.S. through the week.



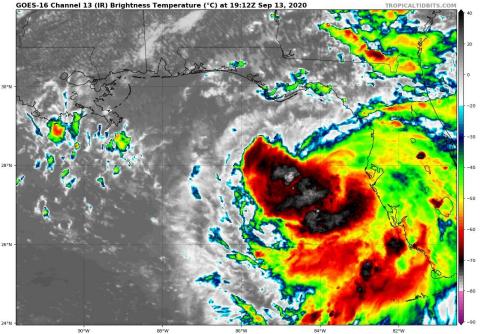


# Satellite Imagery

## Gulf of Mexico – Tropical Storm Sally



Sally has not changed strength today. Light to moderate wind shear continues to impact the system and is preventing any rapid strengthening. Most of the rainfall is currently east and southeast of the center, marked by the green circle.





# Current Florida Radar

## As of 3:30 PM ET





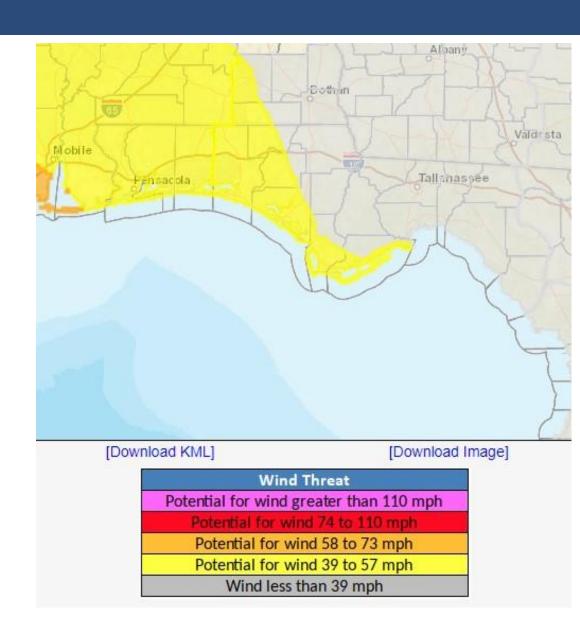
# Damaging Wind Threat Overview

## Tropical Storm Sally

Wind gusts of 30-50mph are possible across the Florida Panhandle in heavier shower/thunderstorms tonight, Monday, and Tuesday.

Sustained tropical storm force winds around 40 mph with gusts to 55 mph are possible along the immediate coast of the Panhandle where the Tropical Storm Warnings are in effect. Winds are most likely to begin Monday afternoon in the eastern Panhandle, then spreading into the rest of the Panhandle Monday night into Tuesday.

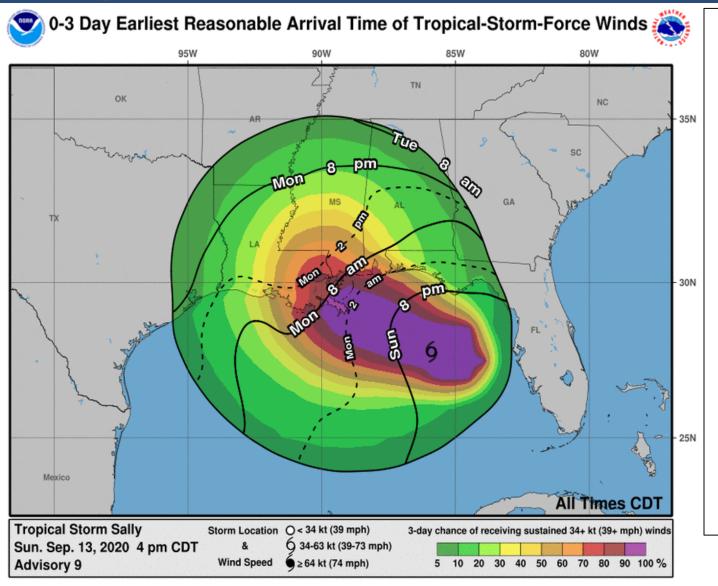
These risks may increase or decrease in the western Panhandle depending on the track and intensity of Sally.





## Time of Arrival & Wind Speed Probabilities

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



**Tallahassee: 11% (+1)** 

Apalachicola: 31% (+11)

Panama City: 41% (+14)

**Destin: 29% (+6)** 

Milton: 35% (+6)

**Pensacola: 41% (+9)** 

With the tropical storm force wind gusts being recorded well east of the center today, probabilities have increased slightly.

Tropical storm force wind gusts are possible along the Gulf Coast tonight. Sustained tropical storm force winds could begin in the eastern Panhandle as early as late tonight, but most likely Monday evening.



# Wind Watches and Warnings

### In Effect Until Further Notice

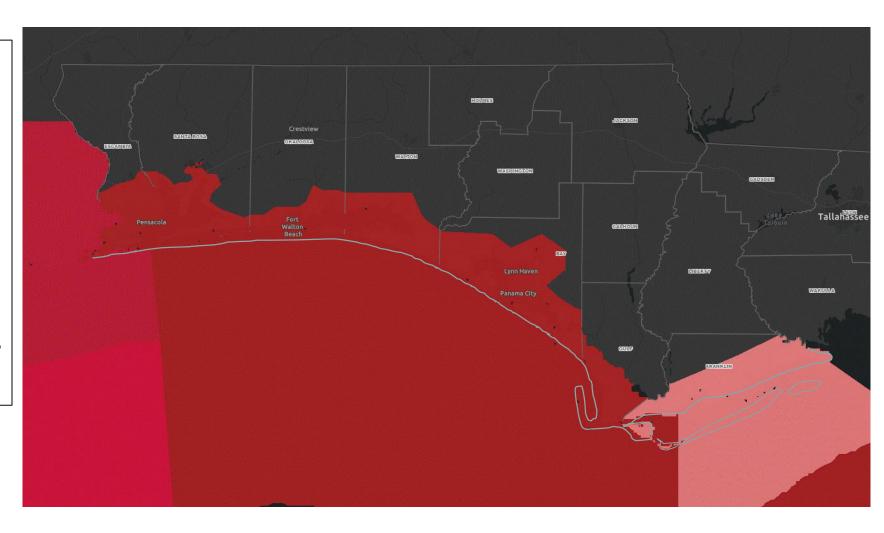
### **Tropical Storm Warnings:**

coastal Escambia, coastal Santa Rosa, coastal Okaloosa, south Walton, coastal Bay, and coastal Gulf.

### **Tropical Storm Watches:**

coastal Franklin County

Impacts limited to isolated power outages and a few downed trees.



# Tropical Storm & Hurricanes Watches Versus Warnings

## WATCH

Tropical storm and/or hurricane conditions are POSSIBLE in Watch area

Issued up to 48 hours in advance of tropical storm force winds

## WARNING

Tropical storm and/or hurricane conditions are **EXPECTED** in Warning area

Issued up to 36 hours in advance of onset of tropical storm force winds

Hurricane preparedness activities become difficult once winds reach tropical storm force. Watches & Warnings are issued in advance of onset of tropical storm force winds, 39-73mph







## Flood Threat Overview

## Tropical Storm Sally

The greatest flood threat is across coastal southwest Florida, the western Big Bend, and the Panhandle. However, flooding is possible nearly anywhere in the state due to Sally today.

### 7 Day Rainfall Totals:

- Northeast Florida & Peninsula: 1-3"
- **Big Bend:** 2-4", locally 6"
- Panhandle: 6-10", locally 15-18"

Flash Flood Watches are in effect for the Panhandle.

https://www.weather.gov/srh/tropical?
office=mob

Click on "Threats and Impacts" Tab

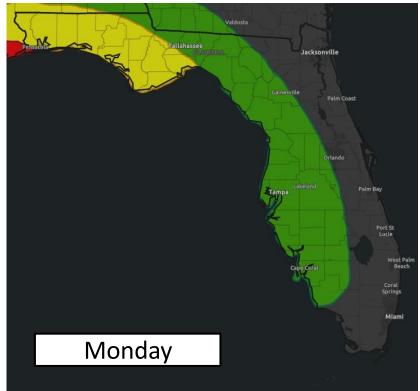


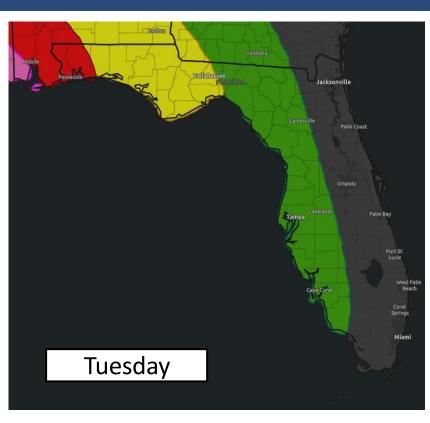


## Flash Flood Outlooks

### 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%

Heavy rainfall will lead to a threat of flash flooding across much of the state. The threat will increase in the Panhandle on Monday, with the greatest threat in the western Panhandle Monday night and Tuesday.



# Flash Flood Risk Categories

### Understanding the Weather Prediction Center Risk Scale

### **Understanding WPC Excessive Rainfall Risk Categories**

#### No Area/Label

Flash floods are generally not expected.

www.wpc.ncep.noaa.gov @NWSWPC

Flash

flooding

near me?

Flash Flooding

NO Flash Flooding



### MARGINAL (MRGL)

Isolated flash floods possible

Localized and primarily affecting places that can experience rapid runoff with heavy rainfall.

## SLIGHT (SLGT)

Scattered flash floods possible

Mainly localized. Most vulnerable are urban areas, roads, small streams and washes. Isolated significant flash floods possible.

## MODERATE (MDT)

Numerous flash floods likely

Numerous flash flooding events with significant events possible. Many streams may flood, potentially affecting larger rivers.

### HIGH (HIGH)

Widespread flash floods expected

Severe, widespread flash flooding. Areas that don't normally experience flash flooding, could. Lives and property in greater danger.

Risk of rainfall exceeding flash flood guidance within 25 miles of a point to the right of a line

HIGH: > 50%

MDT: 20%-50%

SLGT: 10%-20%

MRGL: 5%-10%



## Flood/Flash Flood Watches

NWS Links: Mobile | Tallahassee | Tampa Bay | Melbourne | Miami

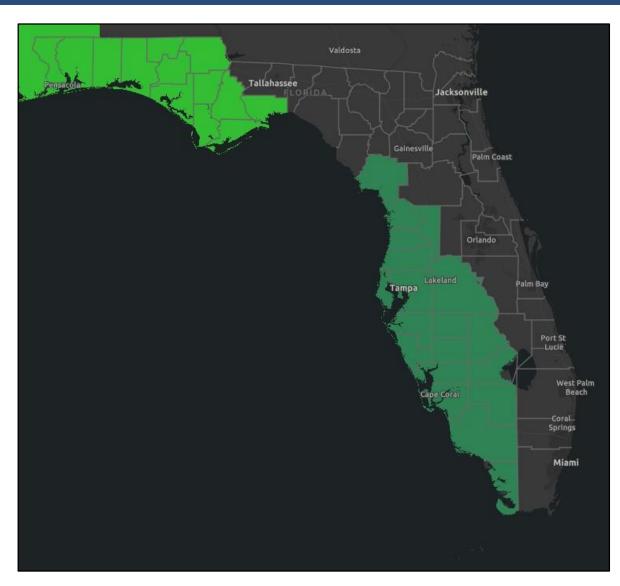
### **Flash Flood Watches until Thursday morning:**

All of Region 1 & Franklin, Liberty, and Wakulla County

### **Areal Flood Watches until this evening:**

All of Region 4, All of Region 6 (minus Okeechobee County), and Levy County
Continues for coastal Collier County through tomorrow

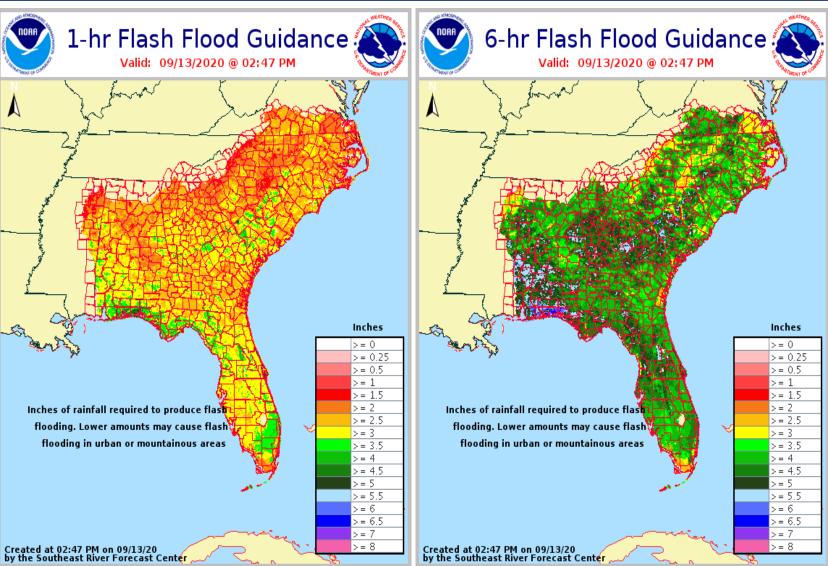
River flooding is also likely across North Florida as we head into next week. River flooding continues along the West Coast.





## Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?



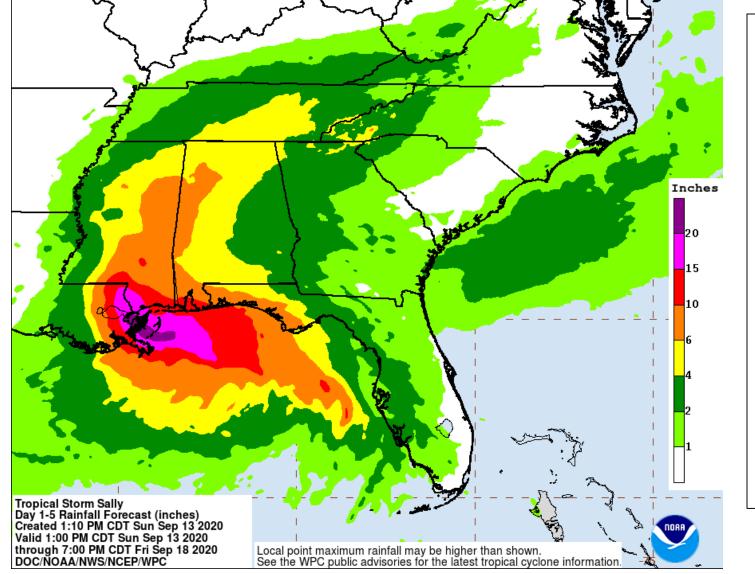
Along the West Coast, it will only take about 1.5-3" of rain within 1 hour or 3-4" within 6 hours to cause flash flooding due to recent heavy rainfall.

Elsewhere in the state, it will take about 3-4" in 1 hour or 5+" within 6 hours to cause flash flooding.



# Rainfall Totals Next 5 Days

## Ending 8 PM ET Friday 9/18 – Tropical Storm Sally



An additional 1-3" of rain is expected over the next 5 days in the Peninsula and Northeast Florida.

Rainfall totals of 3-6" are expected over the next 5 days in the Big Bend and 6-12" in the Panhandle. Localized totals of 12-18" are possible in the western Panhandle.

\*\*\*Rainfall impacts will extend well away from the center.\*\*\*

These rainfall totals may also increase in Northwest Florida if the track were to shift northward or eastward.



# Current & Forecast River Flooding

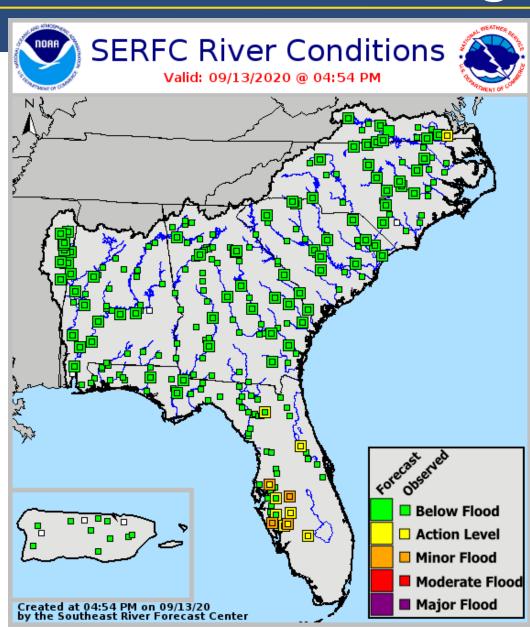
Southeast River Forecast Center

# Rivers Currently in or Forecast to Reach Minor Flood Stage:

- Peace River at Bartow STEADY
- Peace River at Arcadia RISING
- Myakka River at Myakka River State Park RISING
- Ocklawaha River at Rodman Dam STEADY
- Cypress Creek at Worthington Gardens RISING

With heavy rainfall expected in Northwest Florida, additional river rises may occur over the next several days in the Panhandle.

More details on river levels available at the Southeast River Forecast Center website.





# Storm Surge Threat Overview

## **Tropical Storm Sally**

About 1-3' of storm surge is expected across the Panhandle and Big Bend through the next few days.

Tides are already running about 1-2' above normal along the Gulf Coast at high tide, which could result in some nuisance minor flooding of normally flood-prone areas.

Minor flooding is expected at high tide through the middle of the week in the Panhandle and Big Bend.

https://www.weather.gov/srh/tropical?office=mob

Click on "Threats and Impacts" Tab



[Download KML]

[Download Image]

#### Storm Surge Threat

Potential for storm surge flooding greater than 9 ft above ground

Potential for storm surge flooding greater than 6 ft above ground

Potential for storm surge flooding greater than 3 ft above ground

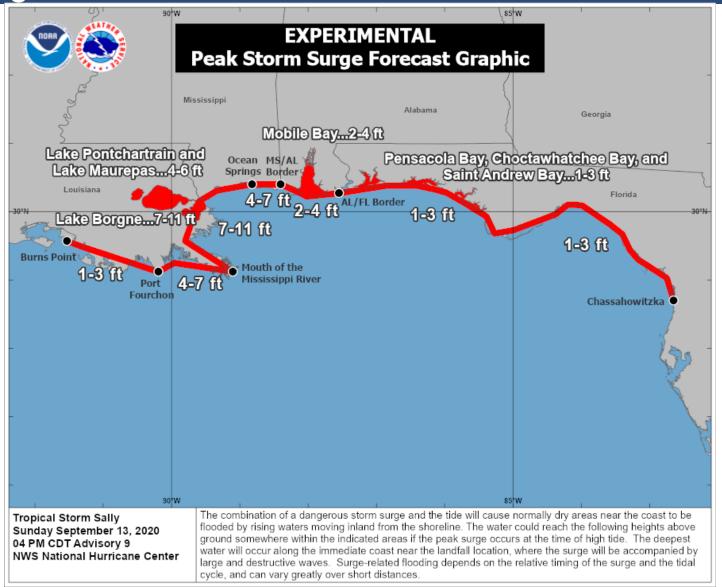
Potential for storm surge flooding greater than 1 ft above ground

Little to no storm surge flooding



# Storm Surge/Coastal Flooding

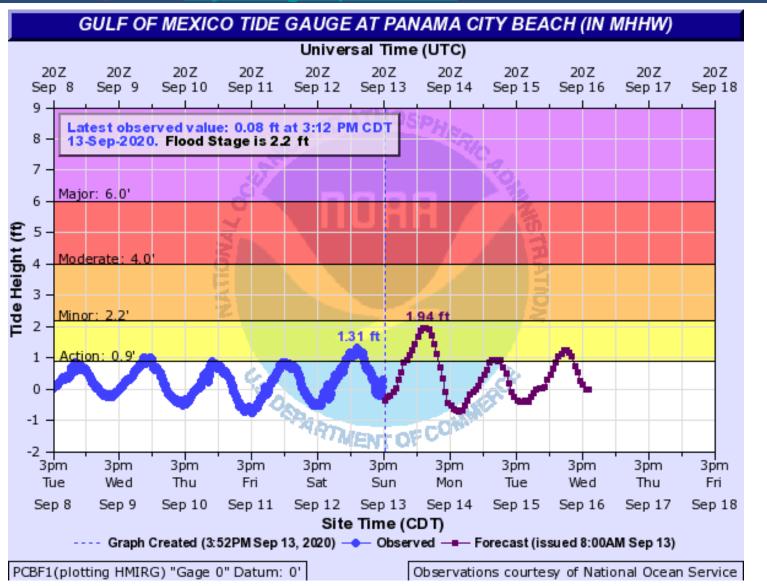
Through Mid-Week





## Gulf of Mexico at Panama City Beach

### <u>Hydrograph Link</u>

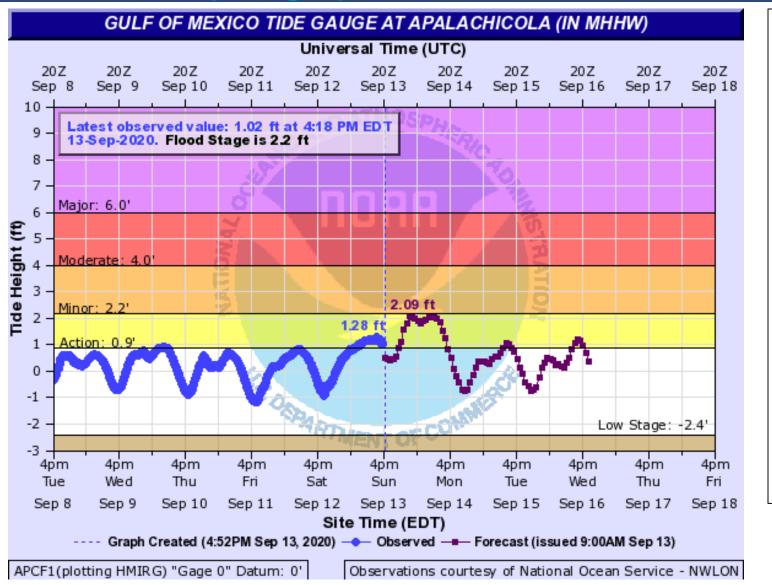


- Water begins to flood low lying areas in Camp Helen State Park and on south facing portions of Powell Lake in Bay County. Areas near beach access continue to flood. Erosion from wave action begins along the Bay County Beaches.
- 2.2 Where breaks in the dune line to beach access exist, water begins to flood access areas from Inlet Beach to St Andrews State Park in Panama City Beach.
- 1.7 Water reaches the dune line in several places along the Bay County Beaches.



## Gulf of Mexico at Apalachicola

### Hydrograph Link

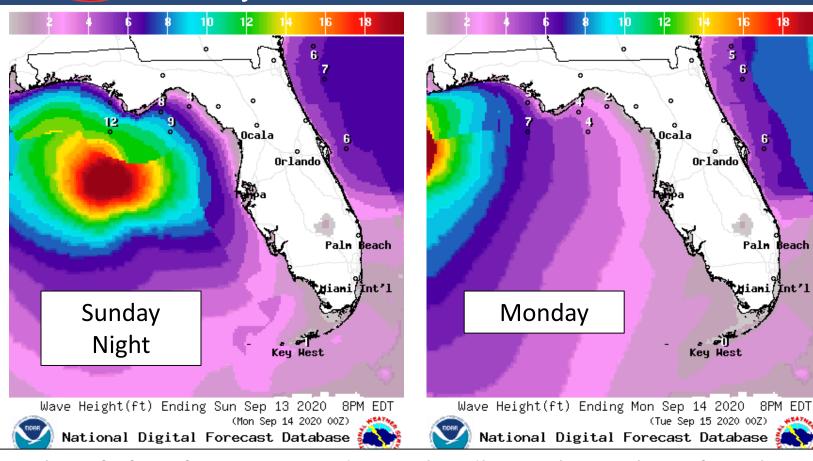


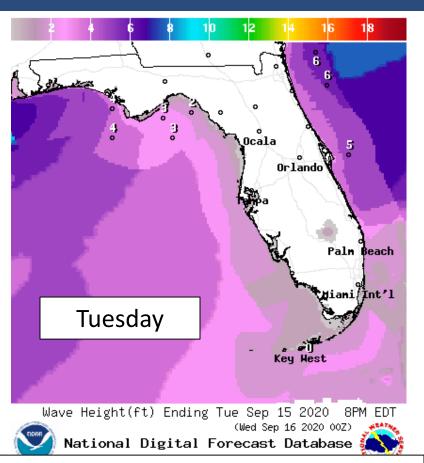
- 2.7 In Apalachicola, Water Street floods as well as the Battery Park under the John Gorrie Bridge. In Eastpoint, low lying areas near the causeway begin to flood at this level.
- 2.2 In Gulf County, water will overwash SR-30E at the Stump Hole. Backyards of residences on the north side of Indian Pass Lagoon will begin to flood. Water approaches Indian Pass Road on the west side of the Lagoon.
- 1.9 The boat ramp at the city docks in Apalachicola will flood.



# Forecast Wave Heights

## Early This Week





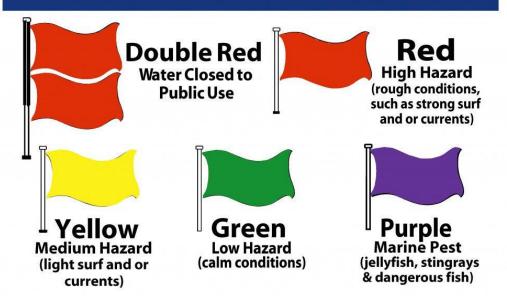
High surf of 5-7 feet is expected at Panhandle Beaches with 3-5 feet along the rest of the Gulf Coast. Wave heights will begin to decrease in the Gulf on Tuesday. In the Atlantic, swells from distance Hurricane Paulette will continue wave heights 3-5' even after Sally moves inland. Minor beach erosion is also likely with a few spots of more significant erosion possible in the western Panhandle.

Orlando

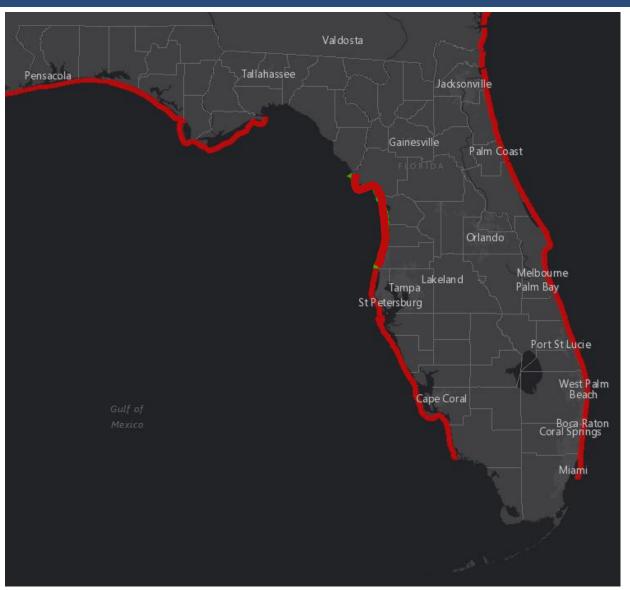
Palm Beach



### **BEACH FLAG WARNING SYSTEM**



Breezy winds from Tropical Storm Sally and distant swells from Hurricane Paulette along the East Coast are creating a HIGH rip current risk at ALL Florida beaches.

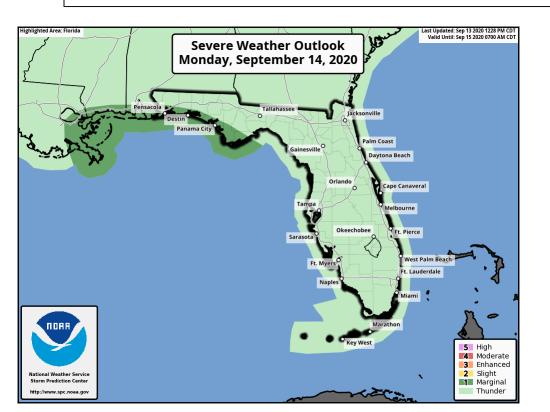


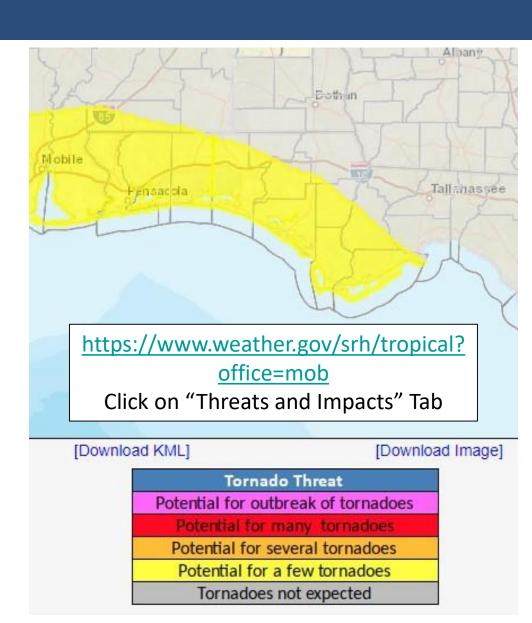


## Tornado Threat Overview

## Tropical Storm Sally

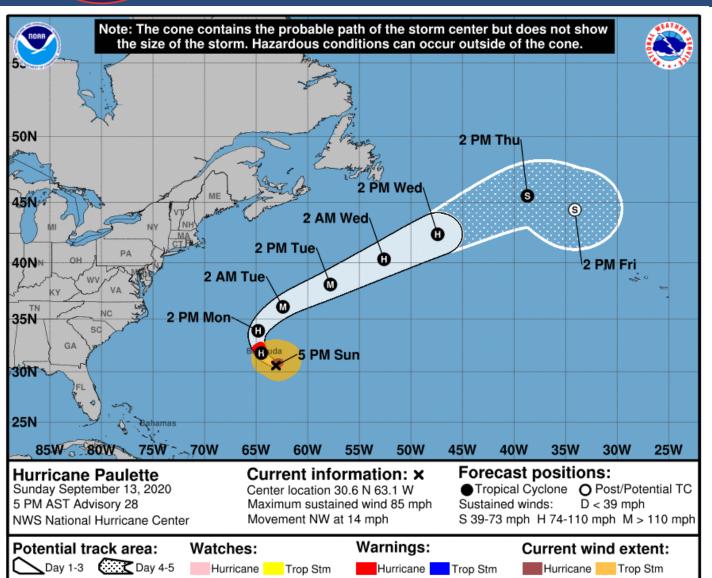
Isolated tornadoes are possible in the Panhandle and western Big Bend starting tonight in the outer rain bands from Sally, and continuing through Monday and Tuesday.







### From the National Hurricane Center – Hurricane Paulette

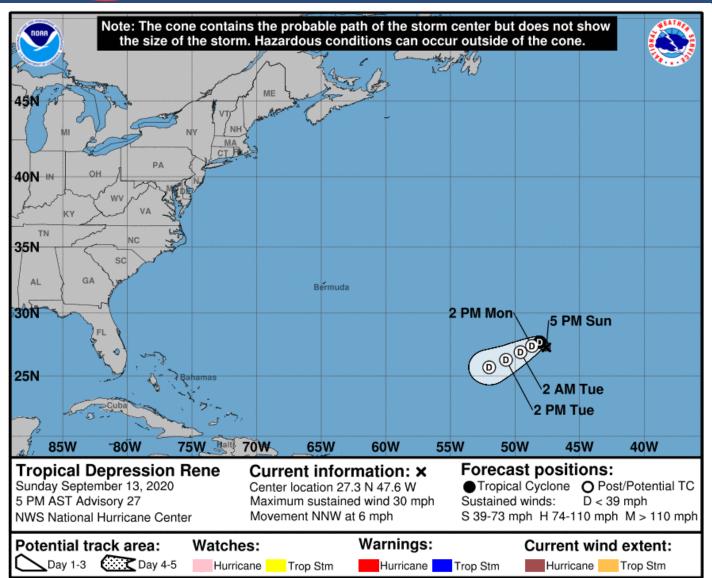


- The center of Paulette is located about 155 miles southeast of Bermuda
- Maximum sustained winds are near 85 mph and Paulette is moving to the northwest at 14 mph.
- Strengthening is forecast to continue as Paulette will move near or over Bermuda early Monday morning.
- Paulette could become a major hurricane as it turns northeastward Tuesday/Wednesday.

Direct impacts from Paulette are not expected, but swells will impact the East Coast this week, increasing the risk for rip currents.



## From the National Hurricane Center – Tropical Depression Rene

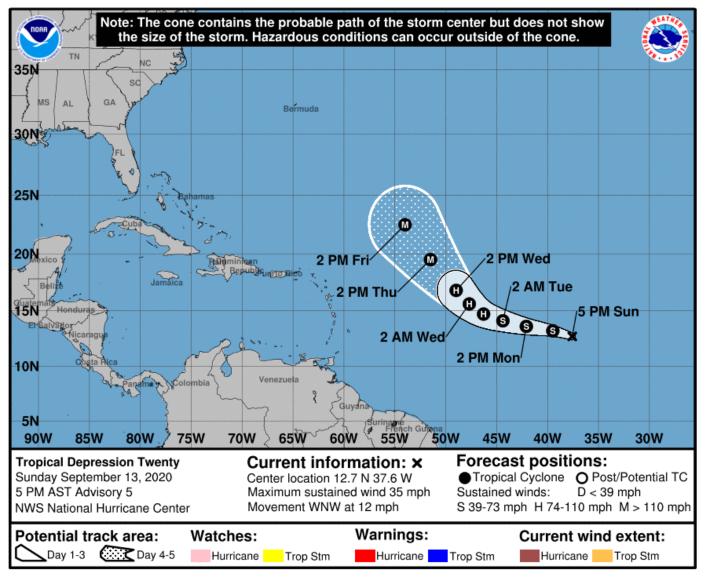


- The center of Tropical Depression Rene is located 1,145 miles northeast of the northern Leeward Islands
- Maximum sustained winds are near 30 mph and the system is moving to the northnorthwest at 6 mph.
- Rene is likely to dissipate sometime on Monday or Tuesday in the open waters of the Atlantic.

This system is not a threat to Florida, or the U.S.



## From the National Hurricane Center – Tropical Depression #20



- The center of Tropical Depression #20 is located about 1,600 miles east of the Lesser Antilles.
- Maximum sustained winds are at 35 mph, and the system is moving to the west-northwest at 12 mph.
- TD #20 will likely become a tropical storm on Monday, and it could become a major hurricane by Thursday.
- A gradual turn towards the northwest is expected mid-week, keeping the system out of the Caribbean.

This system does not need to be monitored at this time.



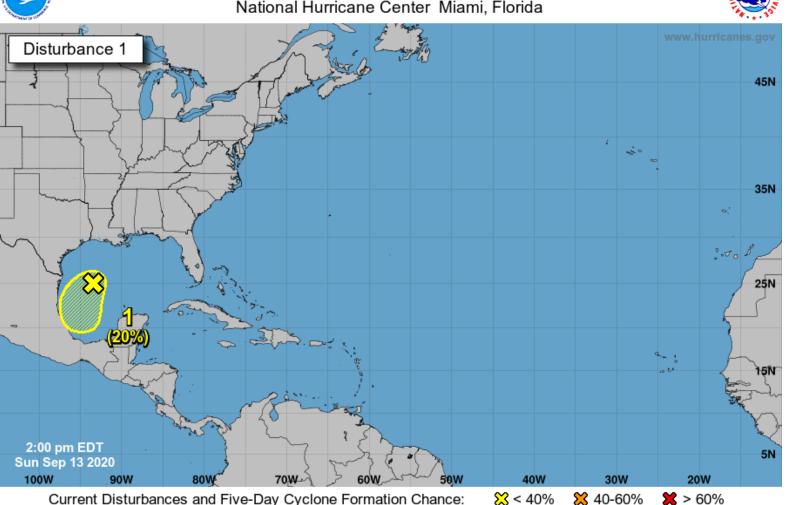
Possible Area of Development During the Next 5 Days (LINK)

• Hurricane



#### **Five-Day Graphical Tropical Weather Outlook**

National Hurricane Center Miami, Florida



Tropical or Sub-Tropical Cyclone: O Depression 5 Storm

Post-Tropical Cyclone or Remnants

A surface trough over the west-central Gulf of Mexico continues to produce limited shower activity.

While some slow development of this system is possible, strong upper-level winds associated with Tropical Storm Sally will probably limit the chances of tropical cyclone formation through Monday.

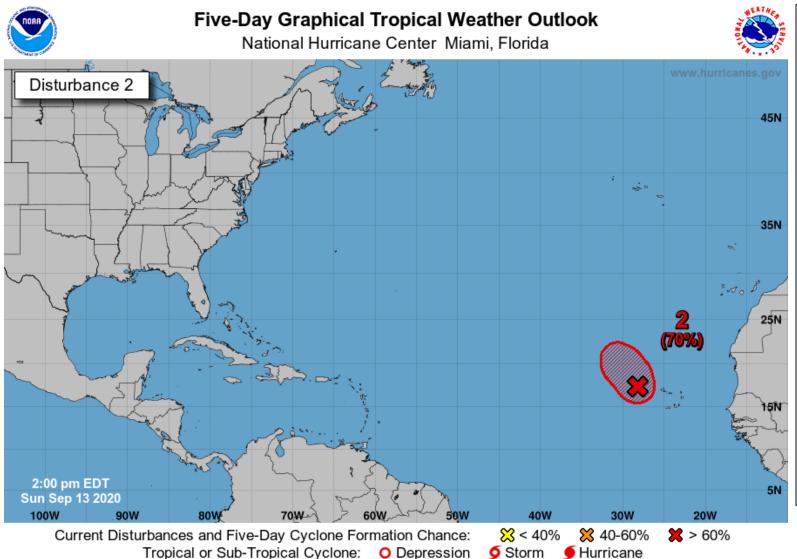
The disturbance is forecast to move southwestward and then southward over the west-central and southwestern Gulf of Mexico through the next few days.

This system poses no threat to Florida at this time.

- \*Formation chance through 48 hrs...low...10%
- \*Formation chance through 5 days...low...20%



Possible Area of Development During the Next 5 Days (LINK) – Invest 97L



Post-Tropical Cyclone or Remnants

Satellite-derived wind data from this morning indicated that the circulation associated with an area of low pressure located a couple of hundred miles west-northwest of the Cabo Verde Islands remains elongated.

However, environmental conditions are conducive for a short-lived tropical depression to form over the next day or so while the low moves northnorthwestward at 5 to 10 mph.

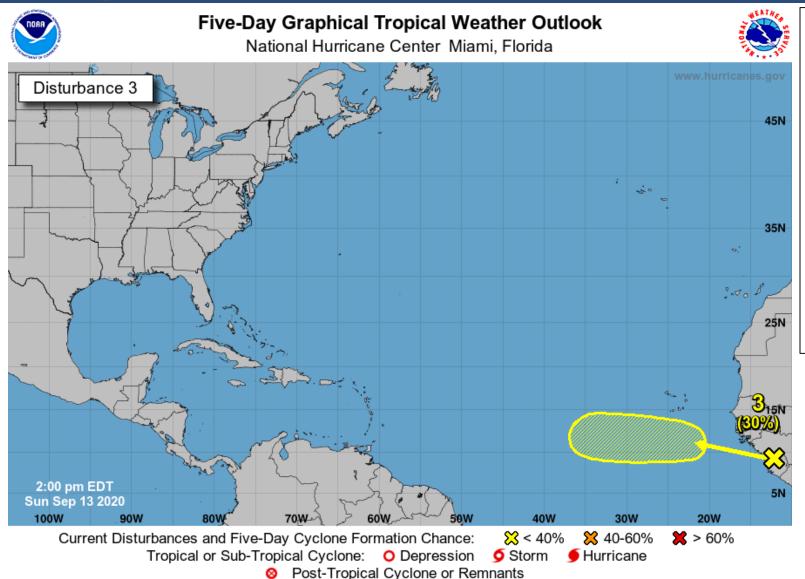
Development is not expected by Tuesday when the system is forecast to encounter strong upper-level winds and move over colder waters.

This system poses no threat to Florida, or the U.S.

- \*Formation chance through 48 hrs...high...70%
- \*Formation chance through 5 days...high...70%



Possible Area of Development During the Next 5 Days (LINK)



A tropical wave is forecast to move off the west coast of Africa on Monday.

Some gradual development of the system is possible by the middle of the week as the wave moves westward at about 10 mph over the far eastern tropical Atlantic.

This system does not need to be monitored at this time.

- \*Formation chance through 48 hrs...low...near 0%
- \*Formation chance through 5 days...low...30%



# Overall Summary

#### **Tropical Storm Sally**

- The center of Tropical Storm Sally is located about 165 miles south of Panama City, FL
- Maximum sustained winds are near 60 mph, and Sally is moving to the west-northwest at 9 mph.
- Sally will continue strengthening as it moves west-northwestward over the Gulf of Mexico, and Sally should become a hurricane on Monday.
- Sally will slow down on Monday and Tuesday as it turns very slowly northward and eventually northeastward towards Louisiana and Mississippi, eventually inland over central Alabama.
- This system will bring heavy rainfall, gusty winds, minor coastal flooding, and isolated tornadoes to parts of Florida over the next several days.

#### **Gulf of Mexico Low**

- A trough of low pressure over the northwestern Gulf of Mexico will move southwestward during the next couple of days.
- Significant development of this system is not expected due to hostile upper-level winds created by nearby Tropical Storm Sally.
- This system has a 10% (low) chance of formation during the next 48 hours and a 20% (low) chance of formation during the next 5 days.

#### **Hurricane Paulette**

- The center of Paulette is located about 155 miles southeast of Bermuda with maximum sustained winds near 85 mph.
- Paulette is moving to the northwest at 14 mph and strengthening is forecast to continue as Paulette will move near or over Bermuda Monday morning. Paulette could become a major hurricane as it turns northeastward Tuesday/Wednesday and out to sea.
- Swells from Paulette will cause dangerous rip currents along the East Coast of the United States through the end of the week.

#### **Tropical Depression Rene**

- The center of Tropical Depression Rene is located 1,145 miles northeast of the northern Leeward Islands moving to the northwest at 6mph.
- Maximum sustained winds are only 30 mph, and Rene is likely to dissipate sometimes on Monday/Tuesday in the open waters of the Atlantic.



# Overall Summary

### **Tropical Depression #20**

- The center of Tropical Depression #20 is located about 1,600 miles east of the Lesser Antilles.
- Maximum sustained winds are at 35 mph, and the system is moving to the west-northwest at 12 mph.
- TD #20 will likely become a tropical storm by Monday, and potentially become a powerful hurricane by late in the week.
- A gradual turn towards the northwest is expected mid-week, keeping the system out of the Caribbean.

#### **Invest 97L (near the Cabo Verde Islands)**

- An area of low pressure is located a little over a hundred miles west of the Cabo Verde Islands and it is moving to the north-northwest into the open waters of the eastern Atlantic.
- Environmental conditions are expected to be conducive for a development during the next day and a short-lived tropical depression may form before it moves over colder waters and into an area of strong upper-level winds by Tuesday.
- The National Hurricane Center gives this system a 70% (high) chance of development over the next 48 hours and 5 days.

### **Next Tropical Wave Over Africa**

- A tropical wave is forecast to move off the west coast of Africa on Monday.
- Some gradual development of the system will be possible during the middle of the week as the disturbance moves slowly
  westward over the far eastern tropical Atlantic.
- The National Hurricane Center gives this system a near 0% (low) chance of development over the next 48 hours but a 30% (low) chance over the next 5 days.



## Florida Outlook

#### Florida Outlook:

- Impacts will extend well outside of the cone! It is important to not focus on the center of the forecast track for Tropical Storm Sally.
- Even with a landfall to the west in Louisiana/Mississippi, a significant rainfall event is forecast for the western Panhandle.
- Tropical Storm Sally will likely produce heavy rainfall and gusty winds across much of the state, particularly near the West Coast this evening
  and the Panhandle on Monday, Tuesday, and possibly Wednesday.
- Tropical Storm Warnings: coastal Escambia, coastal Santa Rosa, coastal Okaloosa, south Walton, coastal Bay, and coastal Gulf
- Tropical Storm Watches: coastal Franklin County
- Tropical storm force winds could begin along the Panhandle as early as late tonight or Monday morning, but more likely beginning Monday evening and Monday night. Gusts to tropical storm force has already been observed at St. George Island.
- An additional 1-3" of rainfall is expected in Northeast Florida and the Peninsula over the next couple of days. Localized near 6" are possible.
- 6-10" of rainfall is expected in the Panhandle and western Big Bend with localized totals of 12-18" possible.
- Rises on rivers are expected along the West Coast and in Northwest Florida over the next several days.
- Flood Watches continue for the West Coast until this evening with Flash Flood Watches for the Panhandle until Thursday morning.
- Isolated tornadoes are possible in the Panhandle and Big Bend starting late tonight and continuing through mid-week.
- Minor coastal flooding is expected at high tides over the next several days in the Panhandle and Big Bend. 1-3' of storm surge is expected in these areas. Coastal Flood Advisories are in effect.
- High surf, dangerous rip currents, and beach erosion are expected at Panhandle beaches for the next several days.
- Paulette will generate swells that reach the Atlantic beaches, elevating the rip current risk through the end of the week.
- Direct impacts from any other systems in the tropics are not expected over the next 7 days.

The next briefing packet will be issued Monday morning with the 8AM advisory, unless there are significant changes before then. For the latest information on the tropics, please visit the National Hurricane Center website at <a href="https://www.hurricanes.gov">www.hurricanes.gov</a>.



## TROPICAL UPDATE



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State Meteorological Support Unit

Florida Division of Emergency Management

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