

### TROPICAL UPDATE



### 8:00 AM EDT

Tuesday, September 15, 2020

Hurricane Sally, Hurricane Paulette, Tropical Storm Teddy, Tropical Storm Vicky, Gulf of Mexico Low (20%), Invest 98L near Africa (70%), & Azores Low (20%)

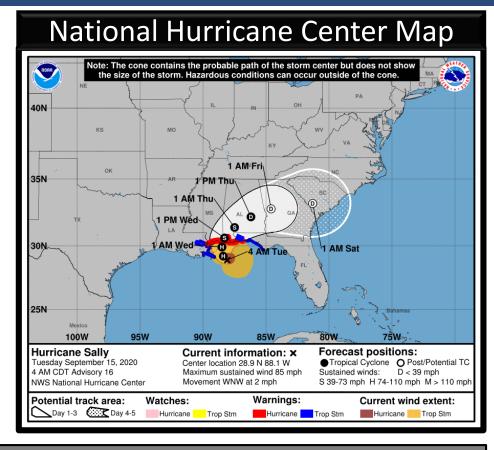
This update is intended for government and emergency response officials, and is provided for informational and situational awareness purposes only. Forecast conditions are subject to change based on a variety of environmental factors. For additional information, or for any life safety concerns with an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



# Hurricane Sally

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





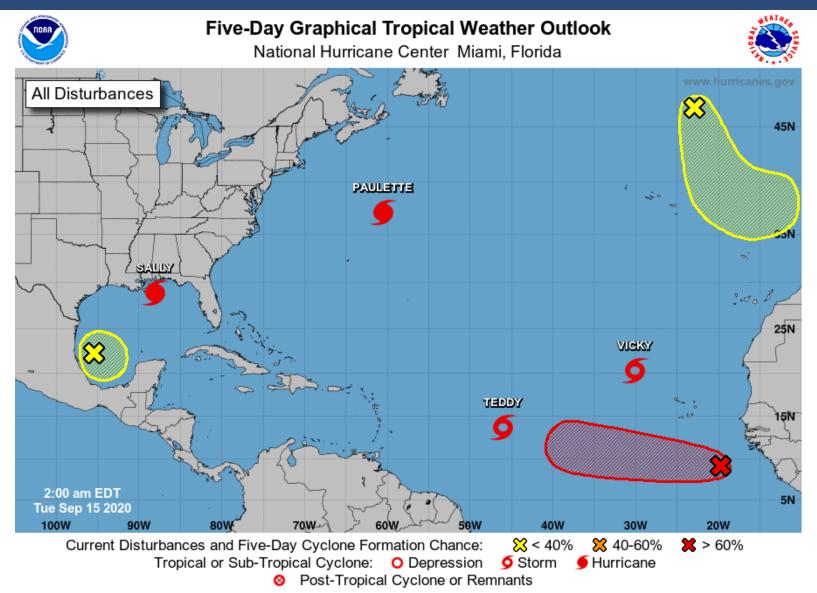
#### **Overview/Recent Changes:**

There has been an additional shift east in the track overnight, with landfall likely to occur in Alabama. This now brings the heaviest rainfall totals into the Florida Panhandle. While wind, surge, and tornadoes will certainly be impactful, \*\*A significant, potentially historic rainfall event is setting up for the Florida Panhandle.\*\* Widespread 10-20" of rain likely, locally 30" west of Panama City.

#### Atlantic Basin Satellite Image Chance of development: —— None Medium High Low Italy NEBR. Spain **United States** H OKLA. Morocco **Paulette** Algeria Vicky **Tropical Waves** Sally **Ex-Rene** Mauritania Mali Niger Guadeloupe Senegal Chad Bamako Barbados Guinea Venezuela **Teddy** Cameroon 98L:70% Colombia Equatorial

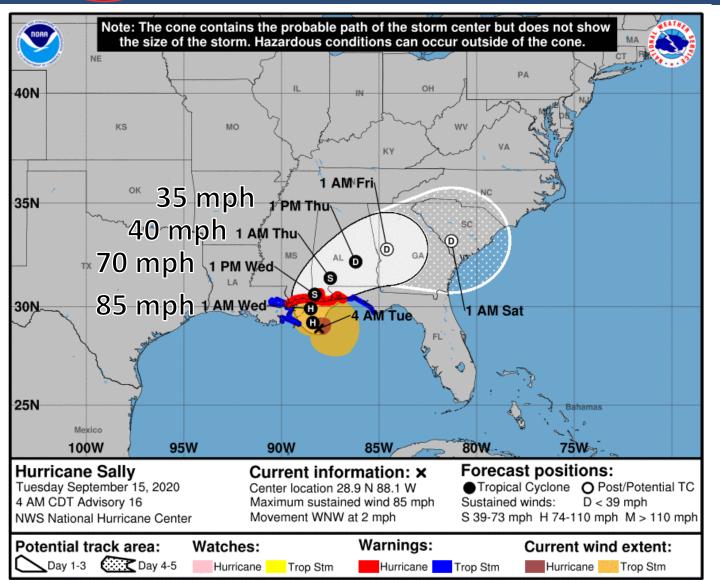


Possible Areas of Development During the Next 5 Days (LINK)





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



- The center of Tropical Storm Sally is located about 100 miles south-southwest of Pensacola, FL moving to the westnorthwest at a slow and sometimes erratic 2mph.
- The winds in Sally weakened overnight as it reorganized and additional strengthening before landfall is no longer expected. Landfall in Alabama is most likely at this time as a Category 1 hurricane with maximum sustained winds of 85.
- Sally will continue to move very slowly today and Wednesday as it turns northward and eventually northeast. When this turn occurs depends on how close the core of Sally gets to the western Panhandle and if hurricane conditions will occur.
- \*\*REGARDLESS OF THE EXACT TRACK a significant rainfall event is forecast for the Panhandle!
- Hurricane and Storm Surge Warnings continue for Escambia and Santa Rosa, with Tropical Storm Warnings to Apalachicola.



# Key Messages

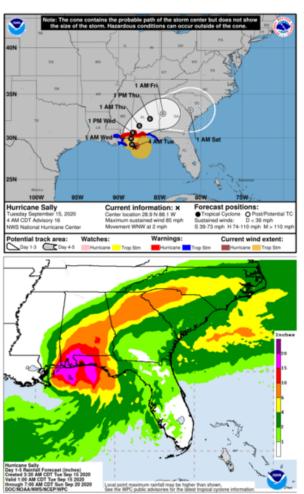
#### From the National Hurricane Center



#### Key Messages for Hurricane Sally Advisory 16: 4:00 AM CDT Tue Sep 15, 2020



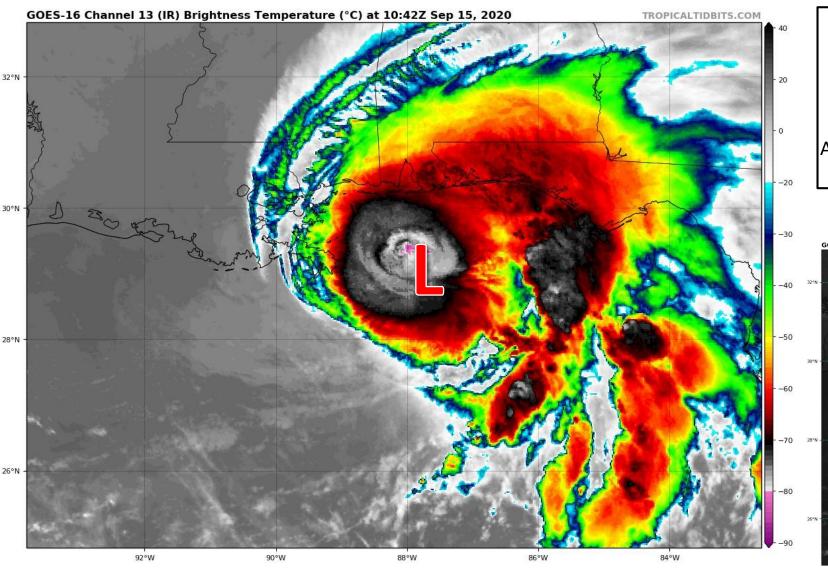
- 1. It is still too early to determine where Sally's center will move onshore given the uncertainty in the timing and location of Sally's northward turn near the central Gulf Coast. Users should not focus on the details of the official forecast track, since NHC's average forecast error at 36 hours is around 60 miles, and dangerous storm surge, rainfall, and wind hazards will extend well away from the center.
- 2. An extremely dangerous and life-threatening storm surge is expected for areas outside the southeastern Louisiana Hurricane and Storm Damage Risk Reduction System from the Mouth of the Mississippi River to the Okaloosa/Walton County Line in the Florida Panhandle, where a Storm Surge Warning is in effect. Residents in these areas should follow any advice given by local officials.
- 3. Hurricane conditions are expected today within the Hurricane Warning area along the Mississippi and Alabama coastlines and the western Florida Panhandle. Tropical storm conditions are already occurring in some of these areas.
- 4. Historic flooding is possible with extreme life-threatening flash flooding likely through Wednesday along and just inland of the central Gulf Coast from the western Florida Panhandle to far southeastern Mississippi. Widespread moderate to major flooding on area rivers is forecast along and just inland of the central Gulf Coast. Significant flash and urban flooding, as well as widespread minor to moderate river flooding is likely across inland portions of Mississippi, Alabama, northern Georgia, and the western Carolinas through the week.





# Satellite Imagery

### Gulf of Mexico – Hurricane Sally



Sally continues to produce strong thunderstorms close to the center. However, it is still lopsided, with most of the rainfall currently north and east of the center, marked by the "L".

An eye has attempted to develop but has not been able to remain visible for very long.





## Current Florida Radar

As of 7:00 AM ET / 6:00 AM CT



Steady rainfall from Sally is inland across western Big Bend and Panhandle with light, outer rain bands moving across the rest of the state.

Strong rain bands with isolated tornadoes, gusty winds, and heavy rainfall are just starting to move onshore in the western Panhandle.



## Damaging Wind Threat Overview

### **Hurricane Sally**

Sustained tropical storm force winds around 40 mph with gusts to 55 mph are possible along the immediate coast of the Panhandle where the Hurricane and Tropical Storm Warnings are in effect Today.

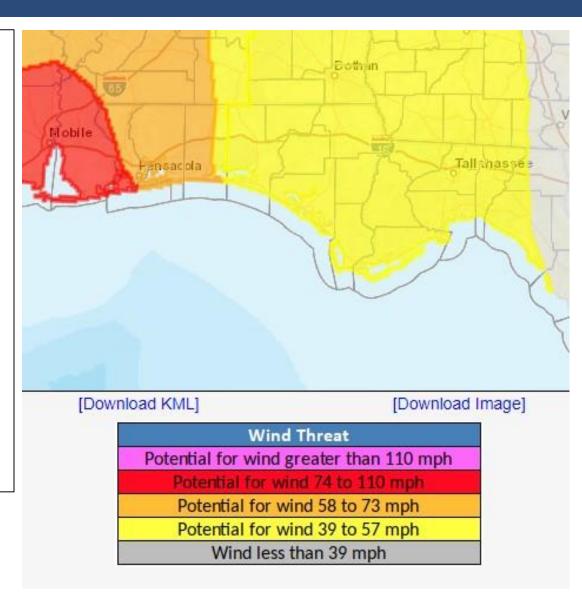
In the western Panhandle, wind gusts of 70-80 mph could occur tonight/Wednesday resulting in some areas of damage.

Across the rest of North Florida, wind gusts of 30-50mph are possible in heavier showers/thunderstorms Tuesday and possibly Wednesday.

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

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

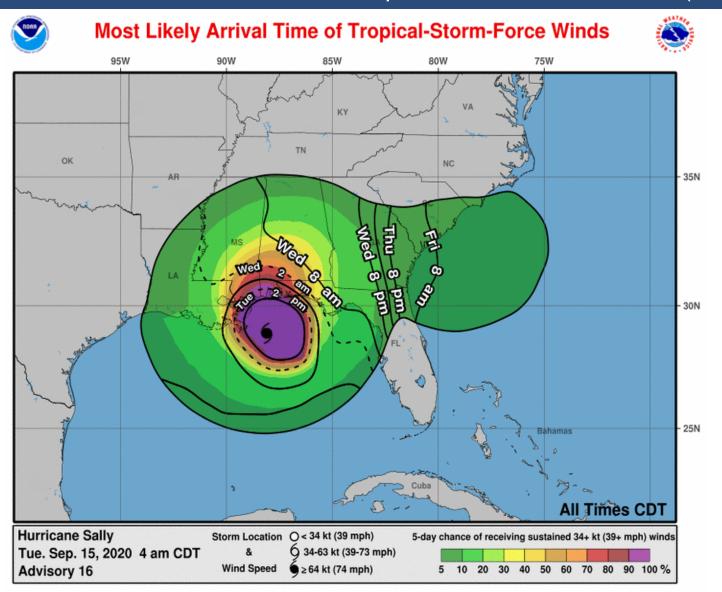
Click on "Threats and Impacts" Tab





### Time of Arrival & Wind Speed Probabilities

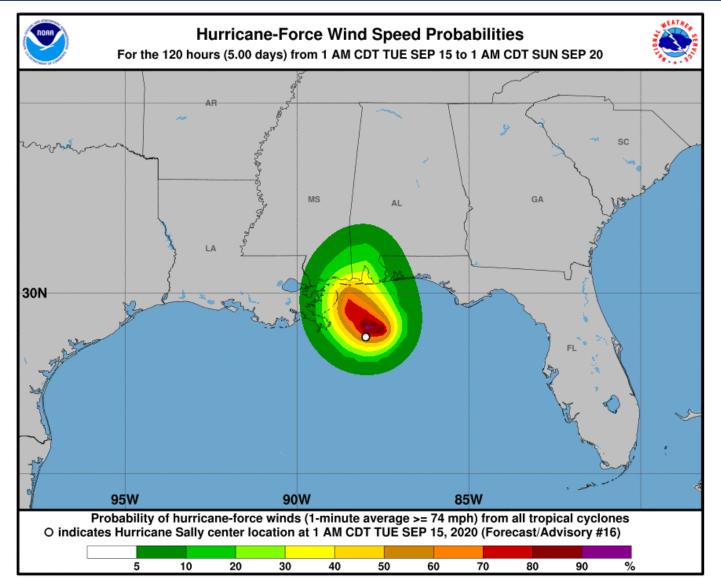
MOST LIKELY Time of Arrival of Tropical Storm Force Winds (>39 mph)





## Hurricane Wind Speed Probabilities

Probabilities of Sustained Hurricane Force Winds (>74 mph)



**Panama City: 2% (-1)** 

**Destin: 2% (-3)** 

Milton: 5% (-7)

**Pensacola: 7% (-8)** 

Pensacola NAS: 14% (-8)

The odds of hurricane force winds in the far western Panhandle are currently ~10%, or 1 in 10.



## Wind Watches and Warnings

### In Effect Until Further Notice

**Hurricane Warnings: Escambia &** 

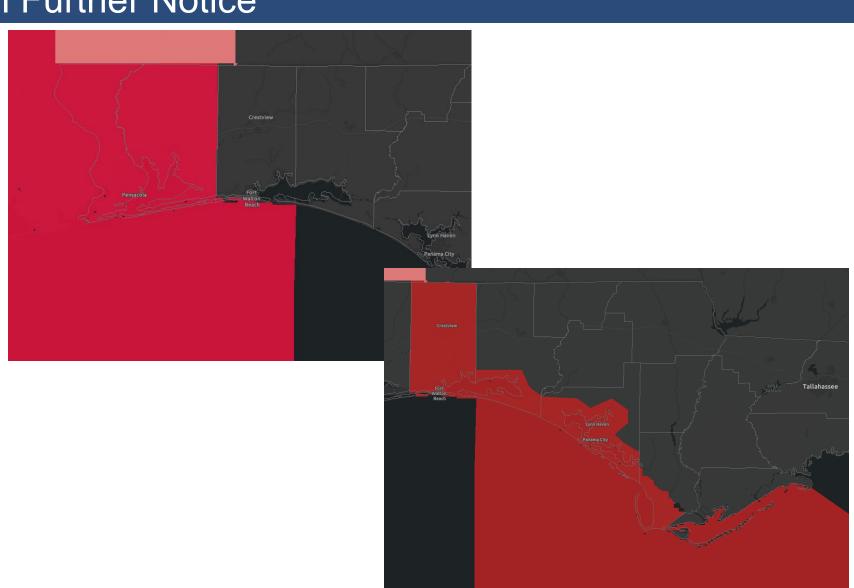
**Santa Rosa** 

#### **Tropical Storm Warnings:**

Okaloosa, south Walton, coastal Bay, and coastal Gulf.

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

Power outages made be more widespread in the hurricane warning areas.



# 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







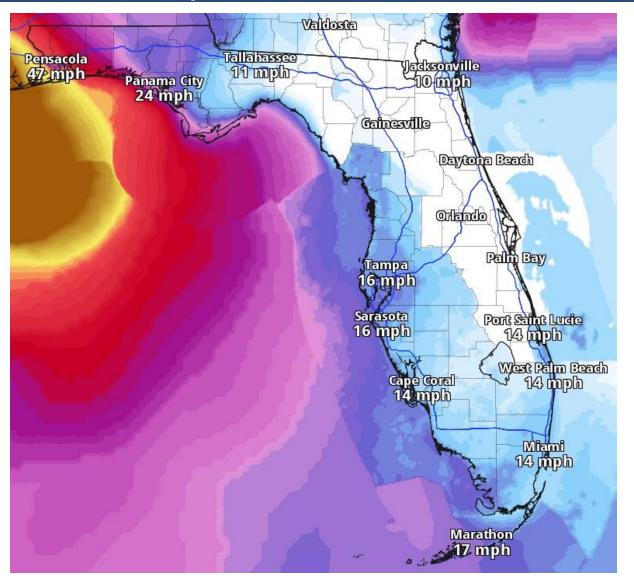
# Forecast Wind Speeds Today

### Next 12 Hours – Higher Gusts in Squalls

Wind speeds of 20-40 mph are expected in the Panhandle today.

Higher gusts are likely in squalls!

The highest winds will likely occur Tuesday night through Wednesday morning.





### Flood Threat Overview

### Hurricane Sally

The greatest flood threat is across the Panhandle and western Big Bend starting later today and continuing through the day on Wednesday.

#### 3 Day Rainfall Totals:

- Northeast Florida & Peninsula: 1-2", Locally 4"
- Big Bend: 2-4", locally 6"
- Eastern Panhandle: 8-12", locally 15"
- Western Panhandle: 12-20", locally 30"

Flash Flood Watches are in effect for the Panhandle until Thursday morning!

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

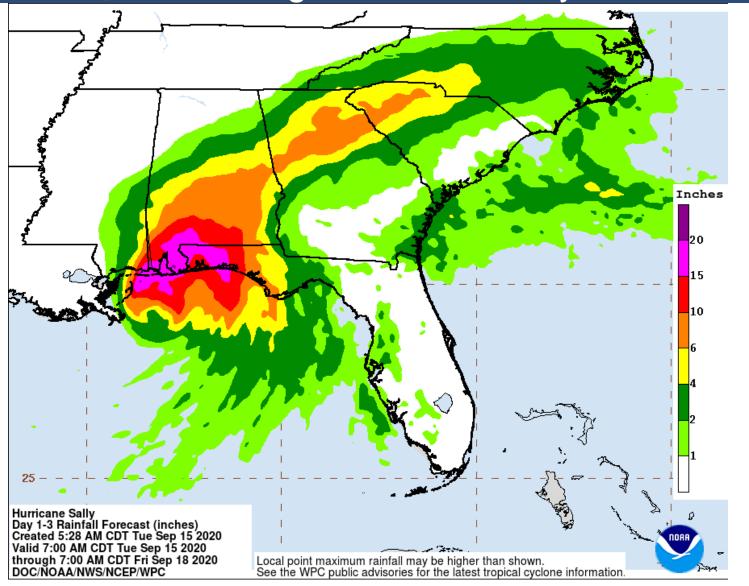
Click on "Threats and Impacts" Tab





## Rainfall Totals Next 3 Days

### Ending 8 AM ET Friday 9/18 – Hurricane Sally



#### 3 Day Rainfall Totals:

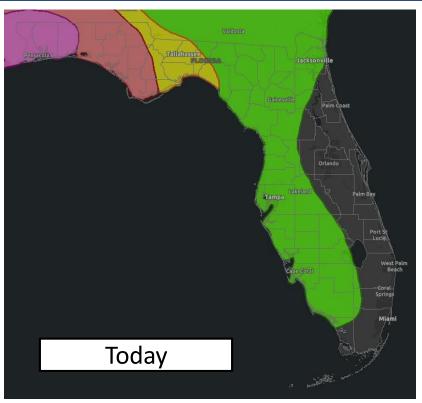
- Northeast Florida & Peninsula: 1-2", Locally 4"
- **Big Bend:** 2-4", locally 6"
- Eastern Panhandle: 8-12", locally 15"
- Western Panhandle: 12-20", locally 30"

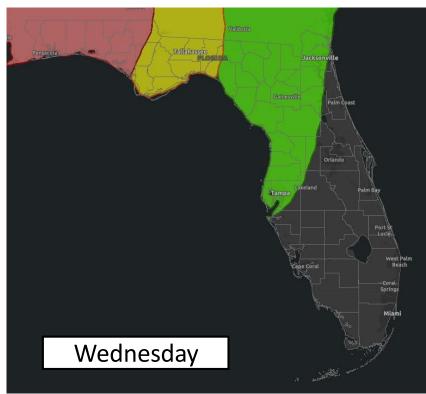
\*\*\*Rainfall impacts will extend well east from the center.\*\*\*

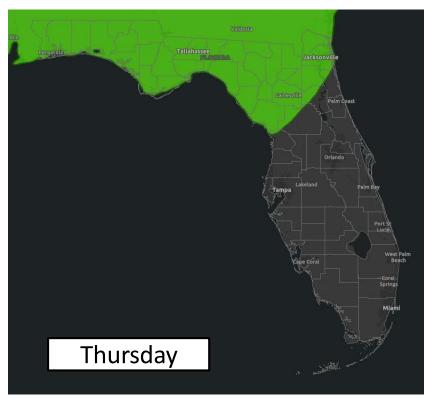


### Flash Flood Outlooks

#### 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%

A significant flash flood risk exists in the western Panhandle through Wednesday afternoon, particularly tonight. \*\*HIGH RISK\*\*

An isolated flash flood is possible across the Peninsula.



## 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%



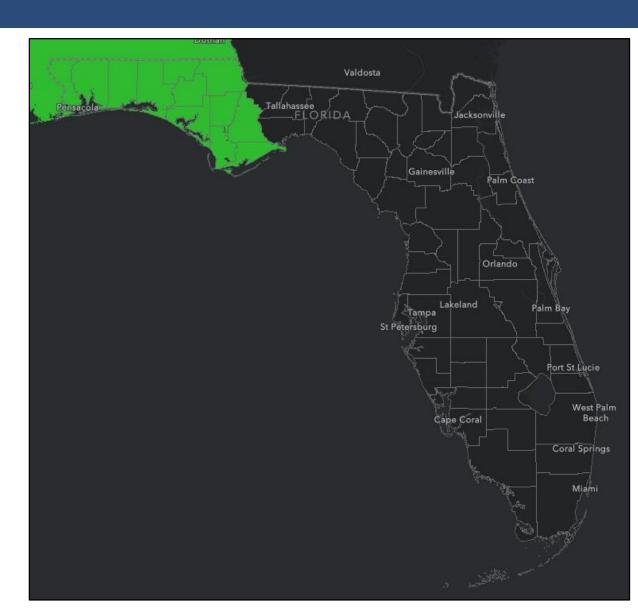
## Flood/Flash Flood Watches

NWS Links: Mobile | Tallahassee

#### Flash Flood Watches until Thursday morning:

All of Region 1 & Franklin & Liberty County

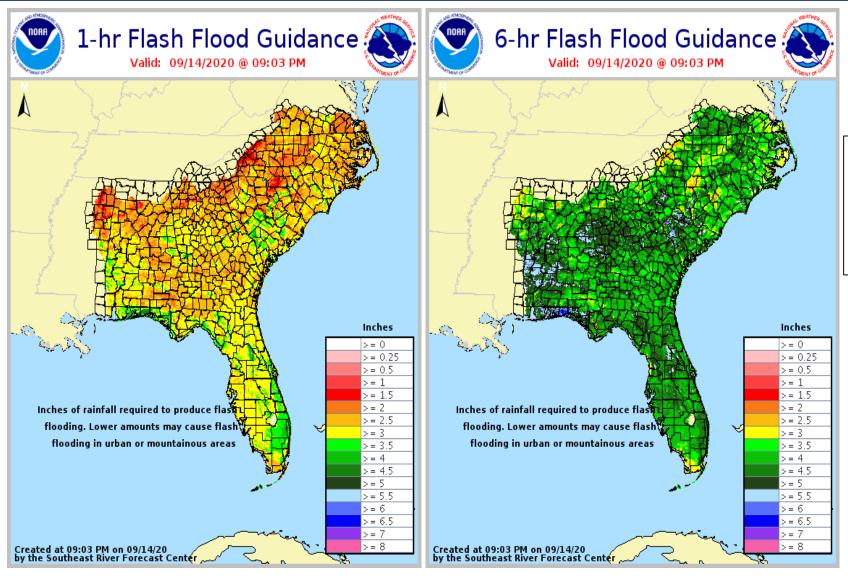
River flooding is also likely across Northwest Florida as we head later into the week. Minor river flooding continues along the West Coast.





### Flash Flood Guidance

How Much Rain is Needed to Create Flash Flooding?



In Panhandle, 2-4" of rain in an hour will create flash flooding or 4-6" of rain in 6 hours (which WILL be reached by tonight).



# Current & Forecast River Flooding

Central Florida – Southeast River Forecast Center

# Rivers Currently in or Forecast to Reach Flood Stage:

- <u>Peace River at Bartow</u> RISING / MINOR
- <u>Peace River at Arcadia</u> RISING / MINOR
- Myakka River at Myakka River State Park RISING / MINOR
- Ocklawaha River at Rodman Dam STEADY / MINOR
- Cypress Creek at Worthington Gardens RISING / MINOR

**Central Florida** Valid: 09/15/2020 @ 06:39 AM Dunnellon Holder Delan Sanford Lake Harney Croom Trilby Cocoa Elfers, Worthington Zephyrhills Morris Bridge Riverview Bartow Wimauma Rye Bridge Myakka Hea Zolfo Springs Manatee Dam Arcadia (Peace R) (Sarasota) Arcadia (Horse Cr) Palmdale

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



# Current & Forecast River Flooding

Panhandle – Southeast River Forecast Center

# Rivers Currently in or Forecast to Reach Flood Stage:

- Perdido River near Barrineau Park MODERATE
- Shoal River at Crestview MINOR
- Blackwater River near Baker MODERATE
- Big Coldwater Creek near Milton MODERATE
- Escambia River near Century MINOR

With heavy rainfall expected in Northwest Florida, additional rivers are likely to reach flood stage later this week. **Details to come.** 

These river rises are based on forecast rain that has yet to fall.

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





## Possible River Flooding

Chance of River Flooding Based on Range of Forecasted Rainfall





National Weather Service Peachtree City, GA 09/14/2020 09:55 AM EDT

Follow Us:



weather.gov/serfc

Significant River Flooding impacts include road hazards and damage to residential, commercial, and/or agricultural areas. Evacuation may be required. Flash flooding or Minor river flooding are NOT included in this outlook. Check your local weather forecast frequently for the most up-to-date information for your area.

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 could occur

Significant River Flooding Likely
Weather conditions indicate that
signficant river flood conditions can be
expected



Significant River Flooding Occurring

Significant river flooding is occurring at this time

Minor river flooding is likely throughout the Panhandle later in the week.

However, some moderate or more significant major river flooding is now seeming likely in the western Panhandle later this week.



## Storm Surge Threat Overview

### **Hurricane Sally**

2-4' of storm surge is expected across the western Panhandle, including Pensacola and Choctawhatchee Bay.

1-3' of surge is expected in the eastern Panhandle and Big Bend.

The greatest flooding will occur at the high tides over the next 36 hours.

Tides are running about 1' above normal along the West Coast of the Peninsula.

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

Click on "Threats and Impacts" Tab



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



# Surge Watches and Warnings

### In Effect Until Further Notice

https://www.nhc.noaa.gov/refresh/graphics\_at4+sh\_tml/155356.shtml?inundation#contents

Interactive P-Surge Inundation Map

2-4' of inundation expected in the Warning area of the Florida Panhandle



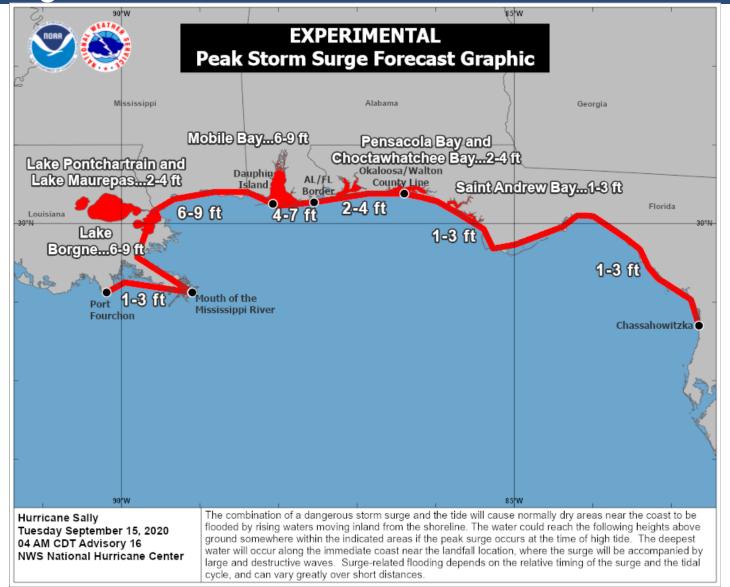


Storm Surge Watch



# Storm Surge/Coastal Flooding

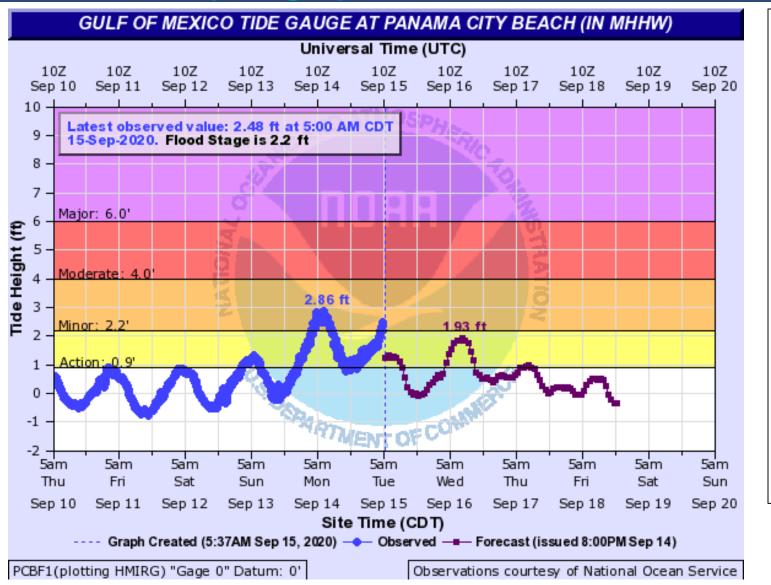
Through Mid-Week





### Gulf of Mexico at Panama City Beach

### Hydrograph Link

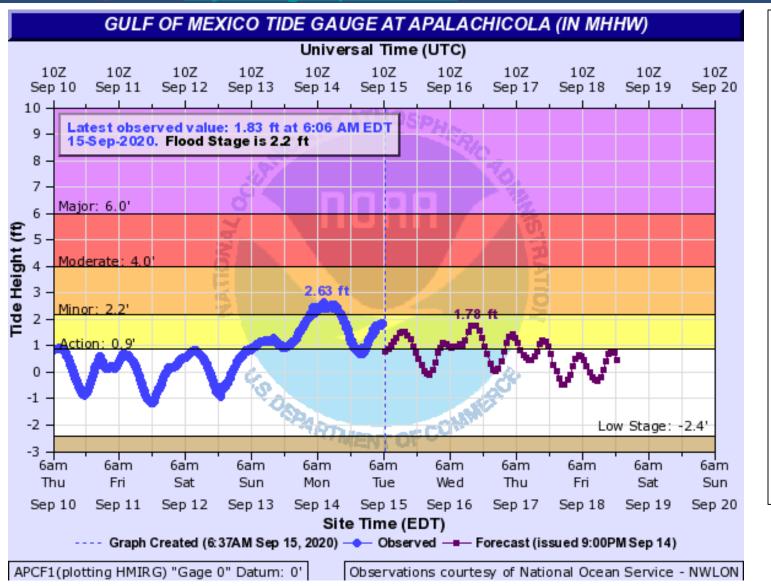


- Water begins to flood low lying areas in Camp Helen State Park and on south facing portions of Powell Lake in Bay County. Areas near beach access continue to flood. Erosion from wave action begins along the Bay County Beaches.
- 2.2 Where breaks in the dune line to beach access exist, water begins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

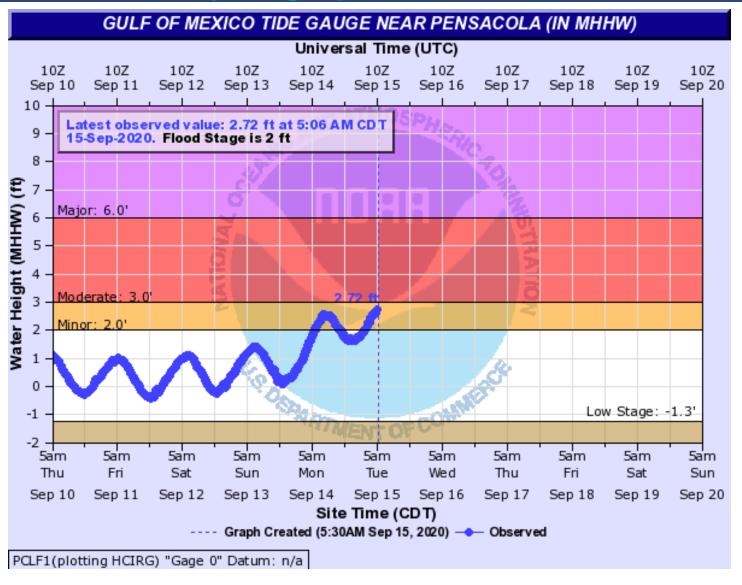


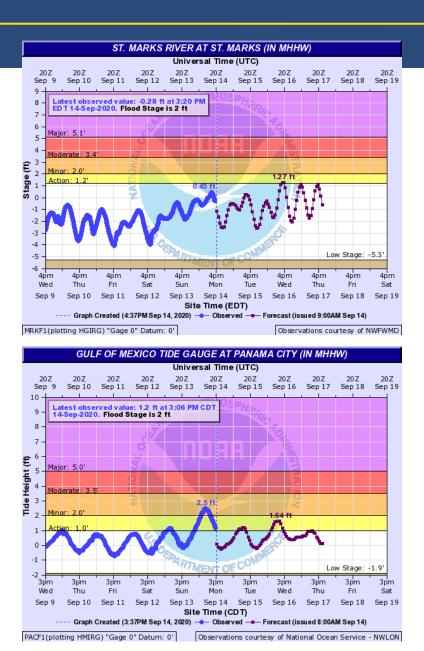
- 2.7 In Apalachicola, Water Street floods as well as the Battery Park under the John Gorrie Bridge. In Eastpoint, low lying areas near the causeway begin to flood at this level.
- 2.2 In Gulf County, water will overwash SR-30E at the Stump Hole. Backyards of residences on the north side of Indian Pass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



### Gulf of Mexico at Pensacola

### Hydrograph Link

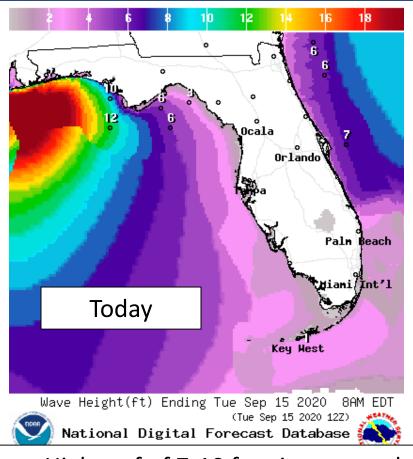


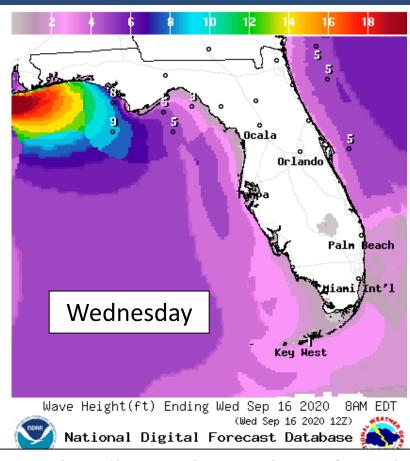


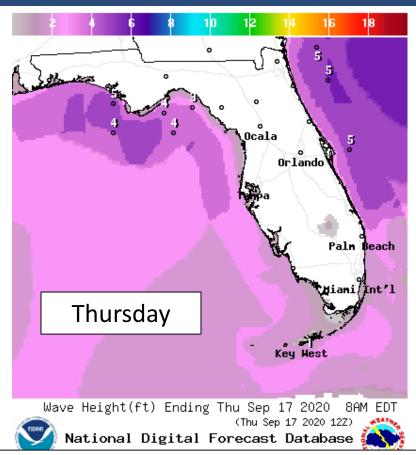


## Forecast Wave Heights

### Early This Week



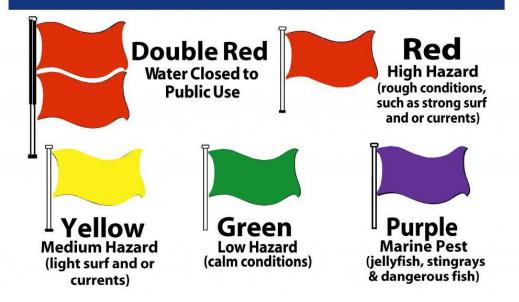




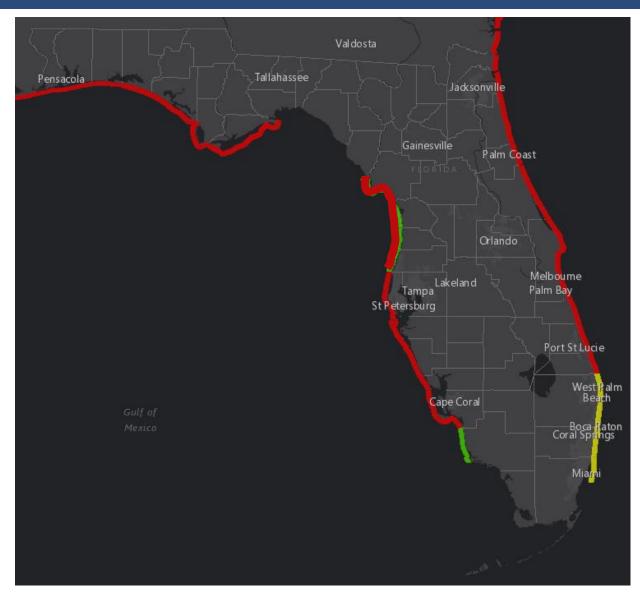
High surf of 7-10 feet is expected at Panhandle Beaches with 3-5 feet along the rest of the Gulf Coast. Wave heights will begin to decrease in the Gulf on Wednesday. In the Atlantic, swells from distance Hurricane Paulette will continue wave heights 3-5' even after Sally moves inland. Minor beach erosion is also likely with a few spots of more significant erosion possible in the western Panhandle.



#### **BEACH FLAG WARNING SYSTEM**



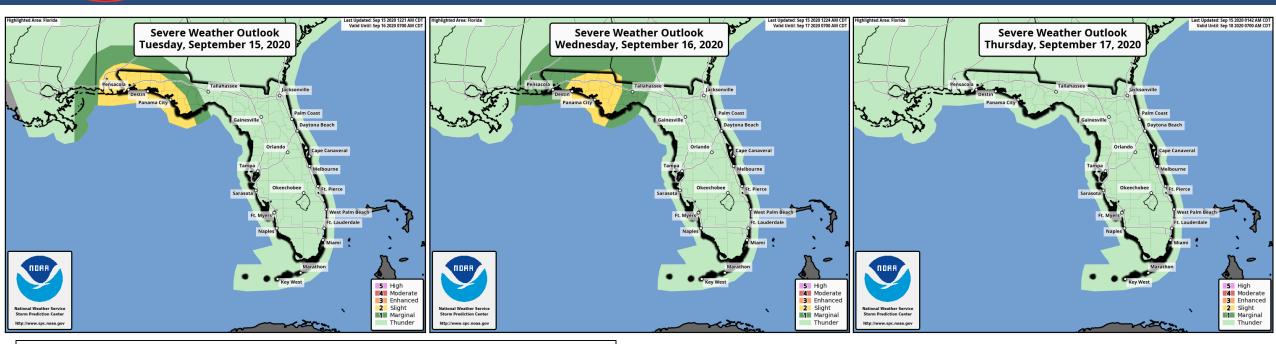
Breezy winds from Hurricane Sally and distant swells from Hurricane Paulette along the East Coast are creating a HIGH rip current risk at most Florida beaches through the middle of the week.





## Severe Weather Outlooks

#### From the Storm Prediction Center



A few tornadoes are possible in the Panhandle and western Big Bend from the outer rain bands of Sally today, tonight, and through the day on Wednesday. The greatest threat may be Tuesday afternoon.

Tornado watches could be issued.

#### **Understanding Severe Thunderstorm Risk Categories**

THUNDERSTORMS (no label)	1 - MARGINAL (MRGL)	2 - SLIGHT (SLGT)	3 - ENHANCED (ENH)	4 - MODERATE (MDT)	5 - HIGH (HIGH)
No severe* thunderstorms expected	Isolated severe thunderstorms possible	Scattered severe storms possible	Numerous severe storms possible	Widespread severe storms likely	Widespread severe storms 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	Long-lived, very widespread and particularly intense

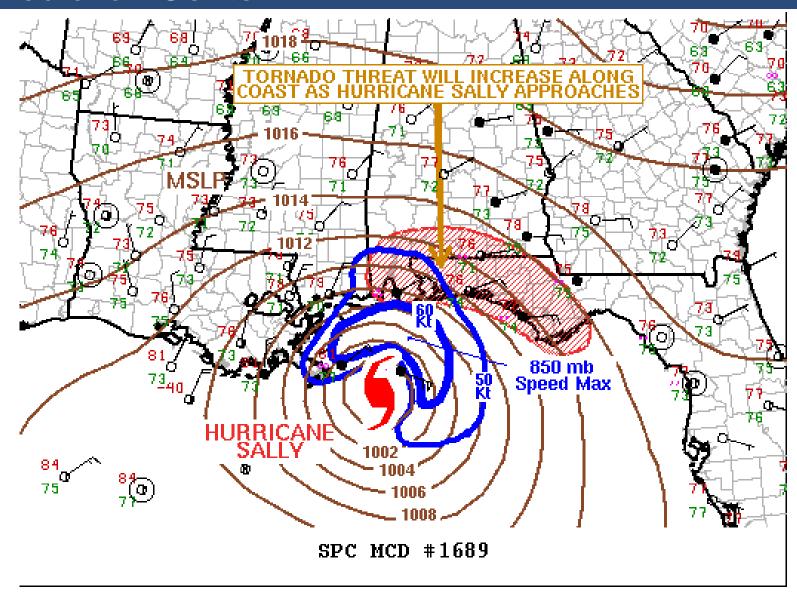


## Tornado Watch Likely for R1

### From the Storm Prediction Center

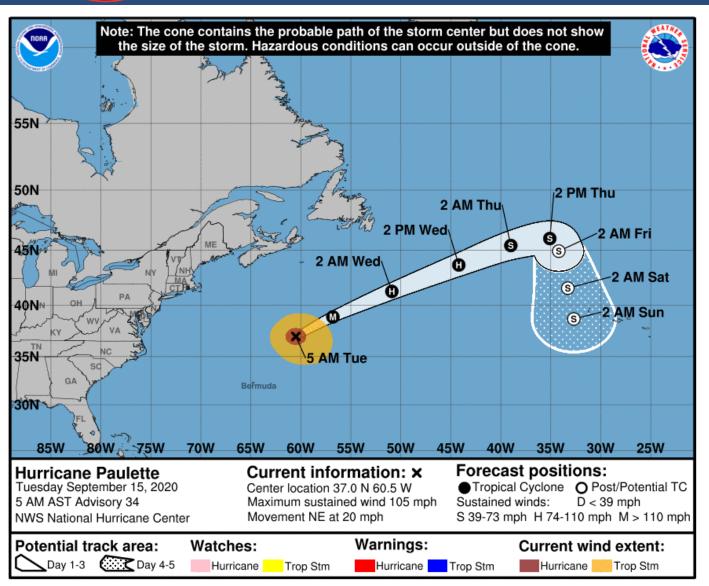
The Storm Prediction Center is very likely to issue a Tornado Watch later this morning for the entire Florida Panhandle.

Outer rain bands are rotating and will be moving onshore throughout the day.





#### From the National Hurricane Center – Hurricane Paulette

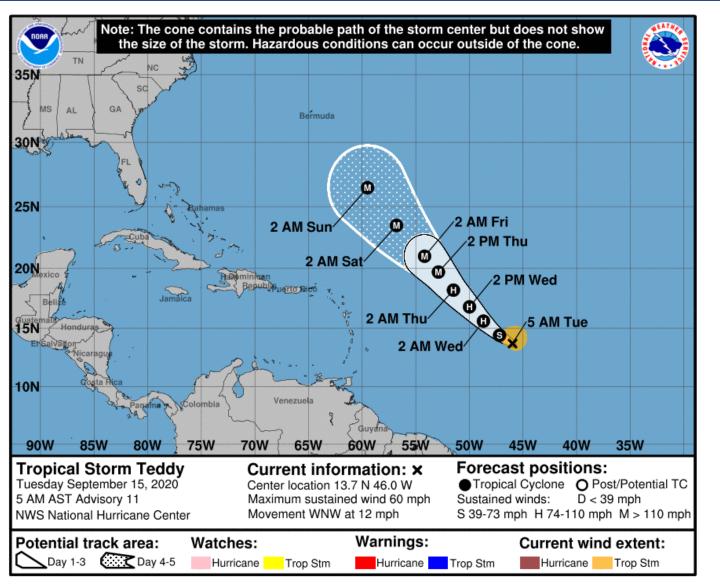


- Paulette is moving out to sea
- Strengthening is forecast to continue as Paulette could become a major hurricane as it turns northeastward later today or Wednesday.

Paulette poses no direct threat to Florida, but swells will impact the East Coast this week, increasing the risk for rip currents.



### From the National Hurricane Center – Tropical Storm Teddy

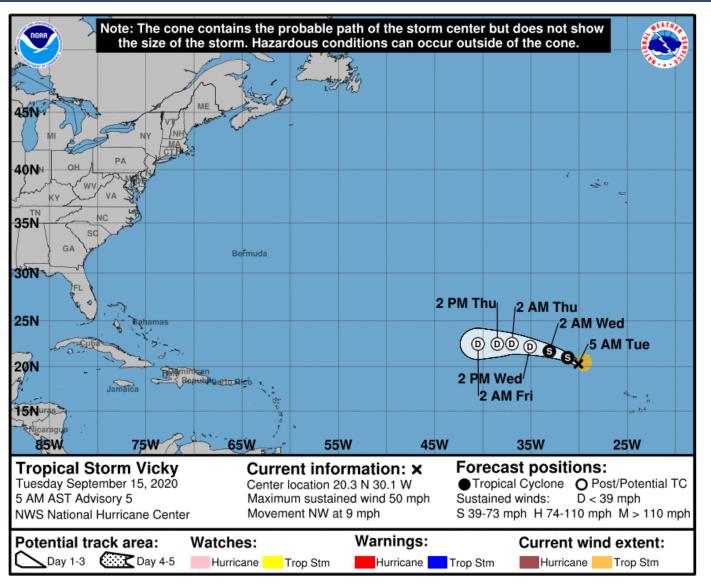


- The center of Tropical Storm Teddy is located about 1,000 miles east of the Lesser Antilles.
- Maximum sustained winds are near 60 mph, and the system is moving to the westnorthwest at 12 mph.
- Teddy is likely to become a hurricane today and a major hurricane by Friday.
- A gradual turn towards the northwest is expected, keeping the system out of the Caribbean.

This system does not need to be monitored at this time and is likely to recurve out to sea.



### From the National Hurricane Center – Tropical Storm Vicky

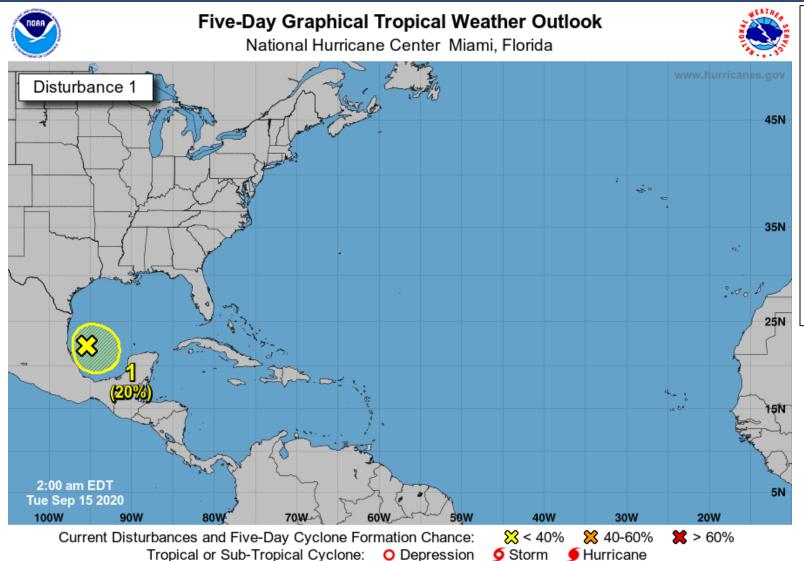


- A short-lived tropical system has developed near the Cabo Verde Islands. It will not be a threat to land.
- It already appears to be weakening as it moves into a hostile environment with strong upper-level winds and cooler waters.

This system poses no threat to land.



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



Post-Tropical Cyclone or Remnants

A broad area of low pressure over the southwestern Gulf of Mexico is producing limited shower or thunderstorm activity.

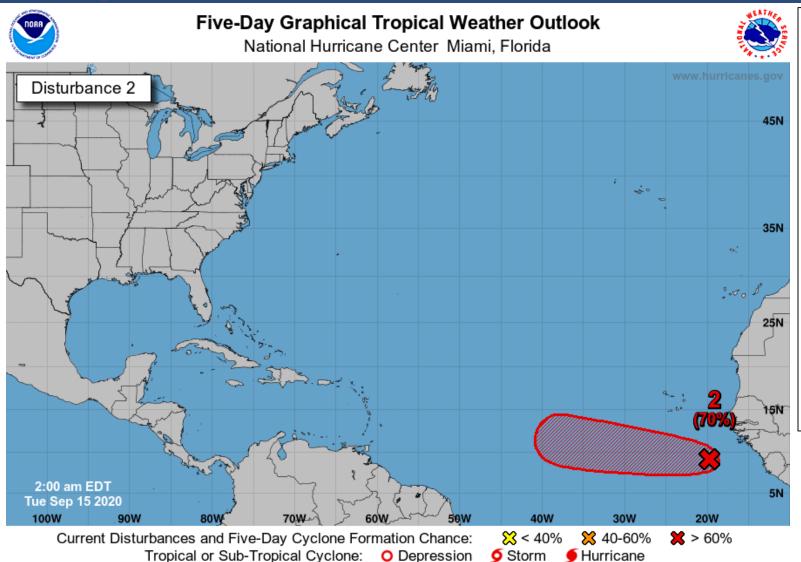
Any development of this system should be slow to occur while the low meanders over the southern Gulf of Mexico for the next several days.

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)



Post-Tropical Cyclone or Remnants

Showers and thunderstorms associated with an area of low pressure, located a few hundred miles south-southeast of the Cabo Verde Islands, gradually continue to become better organized.

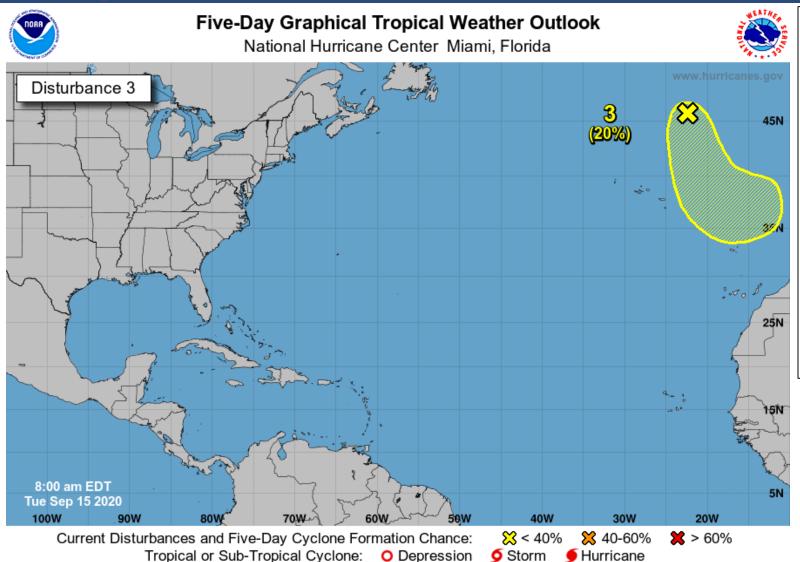
Environmental conditions are conducive for further development of this system, and a tropical depression is likely to form during the next few days while the system moves generally westward at 10 to 15 mph.

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

- \*Formation chance through 48 hrs...medium...50%
- \*Formation chance through 5 days...high...70%



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



Post-Tropical Cyclone or Remnants

A non-tropical area of low pressure is located over the far northeastern Atlantic Ocean several hundred miles northeast of the Azores.

This system is forecast to move southsoutheastward during the next few days where it will encounter warmer oceanic temperatures, which could allow the low to gradually acquire some tropical or subtropical characteristics this week.

This system poses no threat to Florida.

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



# Overall Summary

#### **Hurricane Sally**

- The winds in Sally weakened overnight as it reorganized and additional strengthening before landfall is no longer expected. Landfall in Alabama is most likely at this time as a Category 1 hurricane with maximum sustained winds of 85.
- Sally will continue to move very slowly today and Wednesday as it turns northward and eventually northeast. When this turn occurs depends on how close the core of Sally gets to the western Panhandle and if hurricane conditions will occur.
- \*\*REGARDLESS OF THE EXACT TRACK a significant rainfall event is forecast for the Panhandle!
- Hurricane and Storm Surge Warnings continue for Escambia and Santa Rosa, with Tropical Storm Warnings to Apalachicola.

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

- A trough of low pressure over the southwestern Gulf of Mexico is in a hostile environment to develop due to upper-level winds from Sally. Still, some slow development is possible later in the week as it moves slowly southwestward.
- The National Hurricane Center gives this system a 10% (low) chance of development over the next 48 hours and a 20% (low) over 5 days.

#### **Hurricane Paulette**

- Paulette is moving out to sea. It is forecast to briefly become a major hurricane before it heads to the colder waters of the North Atlantic.
- Swells will continue an elevated rip current risk at East Coast beaches this week.

#### **Tropical Storm Teddy**

- The center of Tropical Storm Teddy is located about 1,000 miles east of the Lesser Antilles.
- Maximum sustained winds are near 60 mph, and the system is moving to the west-northwest at 12 mph.
- Teddy is likely to become a hurricane today and a major hurricane by Friday.
- A gradual turn towards the northwest is expected mid-week, keeping the system out of the Caribbean and heading out to sea.



# Overall Summary

#### **Tropical Storm Vicky**

- A short-lived tropical system has developed near the Cabo Verde Islands. It will not be a threat to land.
- It already appears to be weakening as it moves into a hostile environment with strong upper-level winds and cooler waters.

#### **Invest 98L (Near Africa)**

- A tropical wave near the west coast of Africa is producing disorganized shower and thunderstorm activity.
- Environmental conditions appear to be conducive for slow development of the system this week as the wave moves westward at about 10 mph over the far eastern tropical Atlantic.
- The National Hurricane Center gives this system a 50% (medium) chance of development over the next 48 hours but a 70% (high) chance over the next 5 days.
- This system is several days from nearing the Caribbean, if it does not turn out to sea.

#### **Azores Low**

- A non-tropical area of low pressure is located over the far northeastern Atlantic Ocean several hundred miles northeast of the Azores.
- This system is forecast to move south-southeastward during the next few days where it will encounter warmer oceanic temperatures, which could allow the low to gradually acquire some tropical or subtropical characteristics this week.
- The National Hurricane Center gives this system a 10% (low) chance of development over the next 48 hours and a 20% (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 Hurricane Sally.
- A significant, potentially historic rainfall even is forecast for the Florida Panhandle.
- Hurricane Warnings: Escambia and Santa Rosa
- Tropical Storm Warnings: Okaloosa, south Walton, coastal Bay, and coastal Gulf
- Tropical storm force wind gust are occurring in rain bands along the coast of the Panhandle. Sustained tropical storm force winds are possible along the coast and in the western Panhandle later today and continuing through Wednesday morning.
- Wind gusts 70-85mph are possible in the western Panhandle later tonight and Wednesday morning.
- 10-15" of rainfall is expected in the Panhandle with localized totals of 20-30" possible.
- Significant river flooding seems increasingly likely over the next few days in the western Panhandle.
- Flash Flood Watches are in effect for the Panhandle until Thursday morning.
- Isolated tornadoes are possible in the Panhandle and Big Bend today, tonight, and Wednesday. The greatest tornado threat will be Tuesday and Wednesday afternoons with a Slight Risk of Severe Weather (level 2 of 5) in place. A tornado watch may be issued.
- Storm Surge Warnings: Escambia, Santa Rosa, and Okaloosa (2-4' of surge)
- Coastal Flood Advisories are in effect for the rest of the Panhandle/Big Bend (1-3' of surge).
- High surf (8-12'), dangerous rip currents, and beach erosion are expected at Panhandle beaches for the next few 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.

The next briefing packet will be issued later this morning with the 11AM advisory. For the latest information on the tropics, please visit the National Hurricane Center website at <a href="www.hurricanes.gov">www.hurricanes.gov</a>.



### TROPICAL UPDATE



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