# TROPICAL WEATHER BRIEFING TROPICAL STORM ERNESTO WARNING PHASE

## Advisory 7 5:00 AM AST Tuesday, August 13, 2024

### ...CENTER OF ERNESTO NEAR GUADELOUPE IN THE LEEWARD ISLANDS... ...THE SYSTEM IS EXPECTED TO REMAIN AT TROPICAL STORM STRENGTH AS IT AFFECTS THE REGION...

Disclaimer: The information contained within is time-sensitive. Do not use after 11:00 AM AST Tuesday, August 13th, 2024.





# **Situational Overview**

**Key Points** 

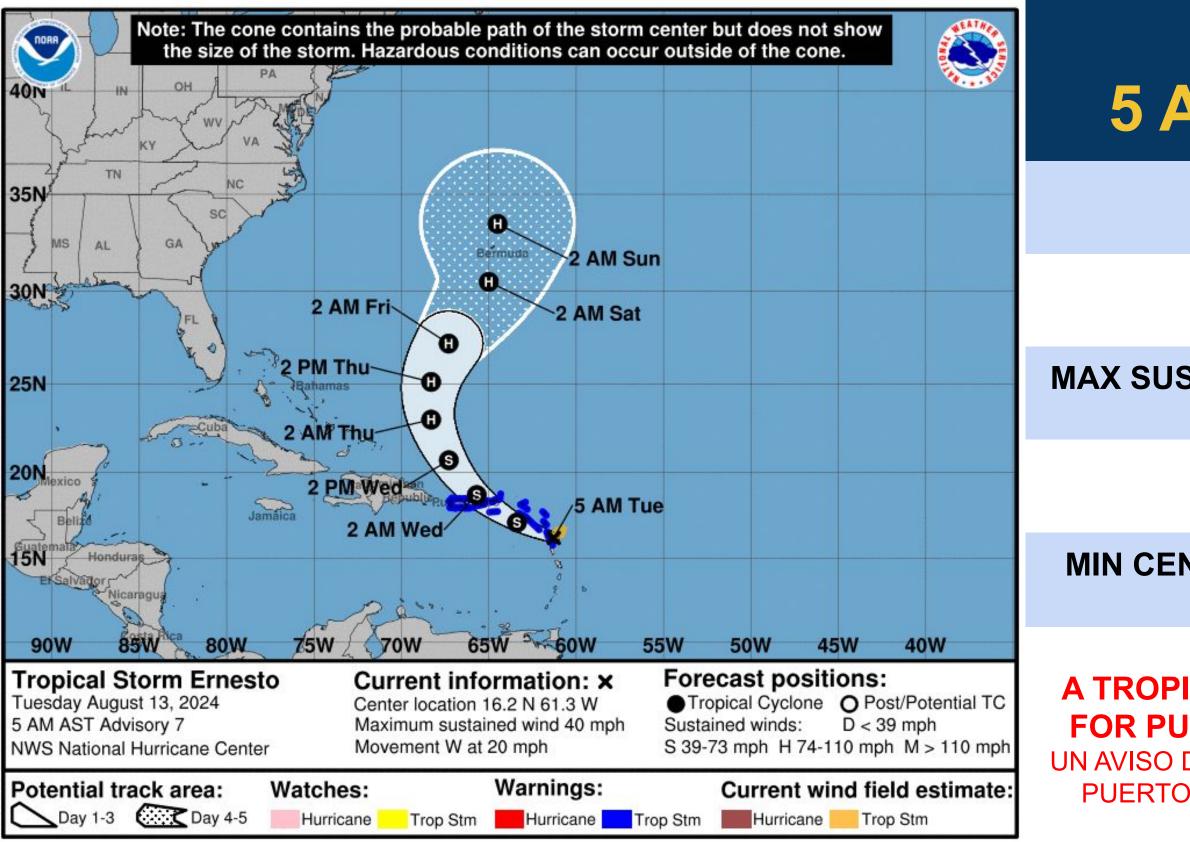
### ...A TROPICAL STORM WARNING REMAINS IN EFFECT FOR PUERTO RICO AND THE U.S. VIRGIN ISLANDS... ...A FLASH FLOOD WATCH REMAINS IN EFFECT FOR PUERTO RICO AND THE U.S. VIRGIN ISLANDS FROM TUESDAY EVENING THROUGH THURSDAY MORNING...

- **OVERALL: Tropical Storm Ernesto** is located about **350** miles of Puerto Rico and **10** miles of Guadalupe.
- INTENSITY FORECAST: This system currently has maximum sustained winds around 40 mph and is forecast to remain at tropical storm force as it affects the region.
- TRACK FORECAST: Based on the latest forecast track, this system is moving W at 20 mph and it is expected to reach the REGION by TUESDAY EVENING, moving near eastern Puerto Rico and in the vicinity of the Virgin Islands.
- PHASE MESSAGE: Given the latest forecast track and intensity, now is an opportune moment to finalize preparatory measures for a potential direct or indirect impact from this system.



# **Tropical Storm Ernesto**

#### Latest Bulletin





National Oceanic and Atmospheric Administration

U.S. Department of Commerce

### BULLETIN | BOLETÍN 5 AM AST AUG 13, 2024

**LOCATION | LOCALIZACIÓN** 350 MI ESE of San Juan Puerto Rico

COORDINATES | COORDENADAS LAT 16.2 N - LON 61.3 W

MAX SUSTAINED WINDS | VIENTOS MÁX SOSTENIDOS 40 MPH

**MOVEMENT | MOVIMIENTO** 

W or 280 degrees at 20 MPH

MIN CENTRAL PRESSURE | PRESIÓN MÍN CENTRAL 1007 MB

A TROPICAL STORM WARNING REMAINS IN EFFECT FOR PUERTO RICO AND THE U.S. VIRGIN ISLANDS. UN AVISO DE TORMENTA TROPICAL CONTINÚA EN EFECTO PARA PUERTO RICO Y LAS ISLAS VÍRGENES ESTADOUNIDENSES.



### **Current Watches, Warnings and Advisories**

#### **SUMMARY**

Hazard	Impacts	Location	Timing	Intensity
Wind	<b>Tropical Storm WARNING</b> There is the potential for tropical-storm-force winds/wind damage.	Anywhere in Puerto Rico and the U.S. Virgin Islands	From this afternoon through late Wednesday night	Tropical Storm-force gusty winds near showers are possible.
Coastal Flooding	<b>Coastal Flood ADVISORY</b> There is the potential for minor coastal flooding and beach erosion.	Eastern coast of PR (from San Juan to Guayama), Vieques, Culebra and the U.S. Virgin Islands	From this evening to 6 PM AST Wednesday	Around <b>1-3 feet above ground level</b> of coastal flooding associated with the swell from Tropical Storm Ernesto
Flooding Rain	<b>Flood Watch</b> There is the potential for significant amounts of rainfall that could lead to flash flooding.	Anywhere in Puerto Rico and the U.S. Virgin Islands	From this evening through Thursday morning	<ul> <li>PR: 3-6 inches with maximum amounts of 10 inches.</li> <li>USVI: 4-6 inches with isolated higher amounts</li> <li>Flash Flooding, mudslides, and river flooding.</li> </ul>
Marine & Coastal Hazards	High Surf ADVISORY High Rip Current Risk There is the potential for dangerous marine conditions and life-threatening rip currents .	Northern, eastern, southeastern coast of PR, Vieques, Culebra, and USVI.	High Surf: From this evening to 6 PM AST Wednesday Rip Currents: From this morning through Wednesday night	Seas 8-12 feet, occasionally up to 16 feet. Breaking waves up to 17 feet. Dangerous swimming and surfing conditions, as well as localized beach erosion. Life-threatening rip current conditions.

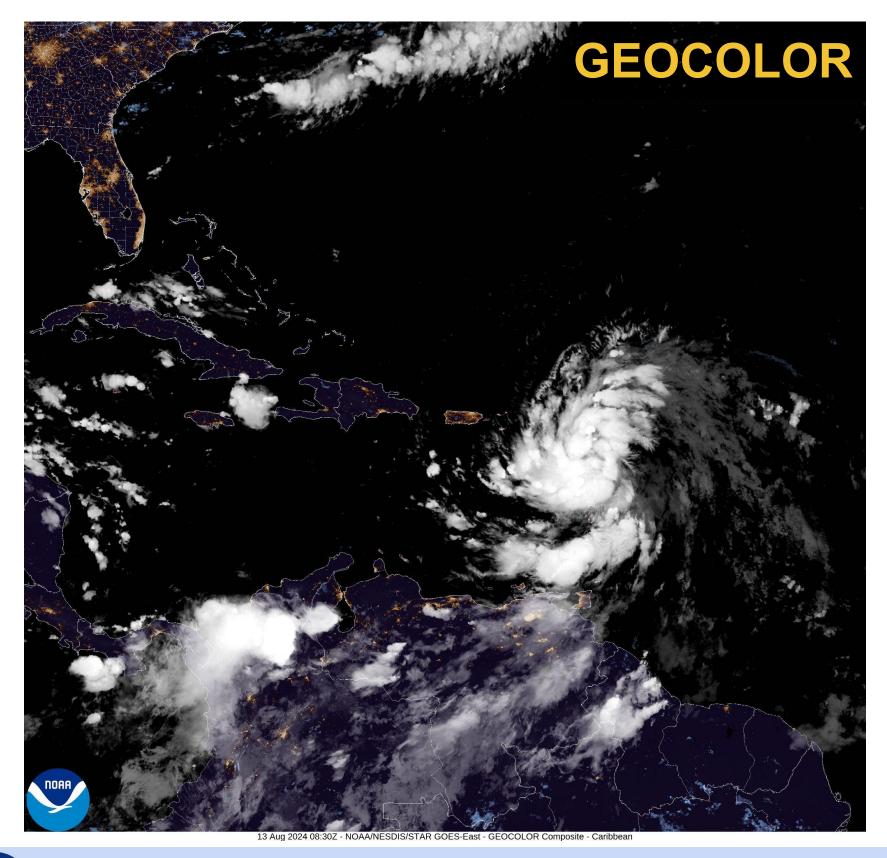


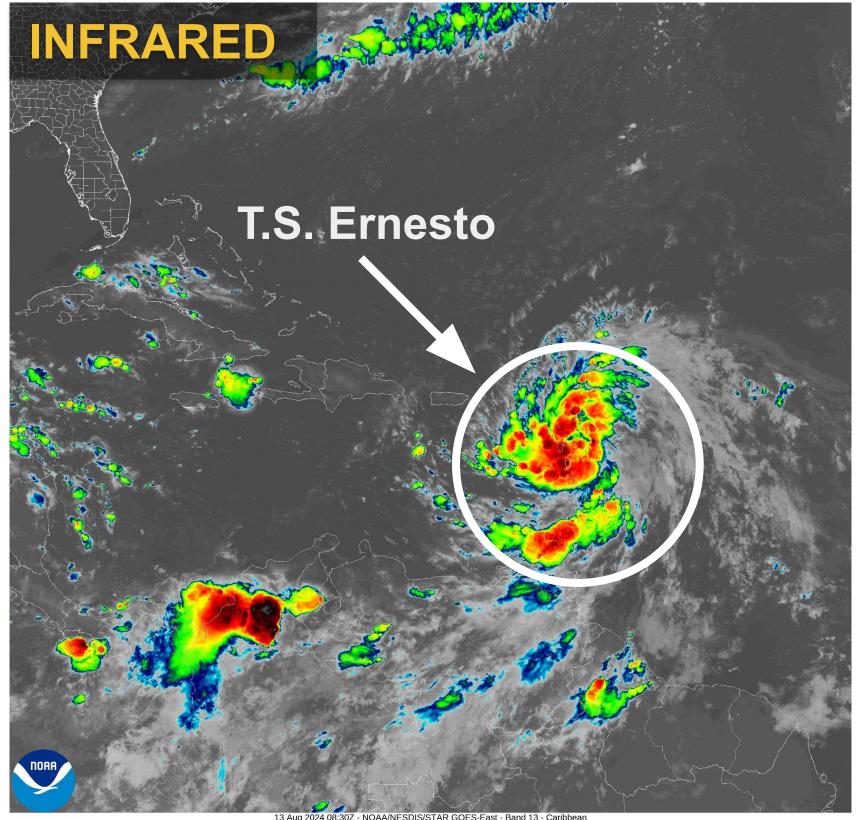




# Satellite - Caribbean

#### **NESDIS/STAR GOES-East**





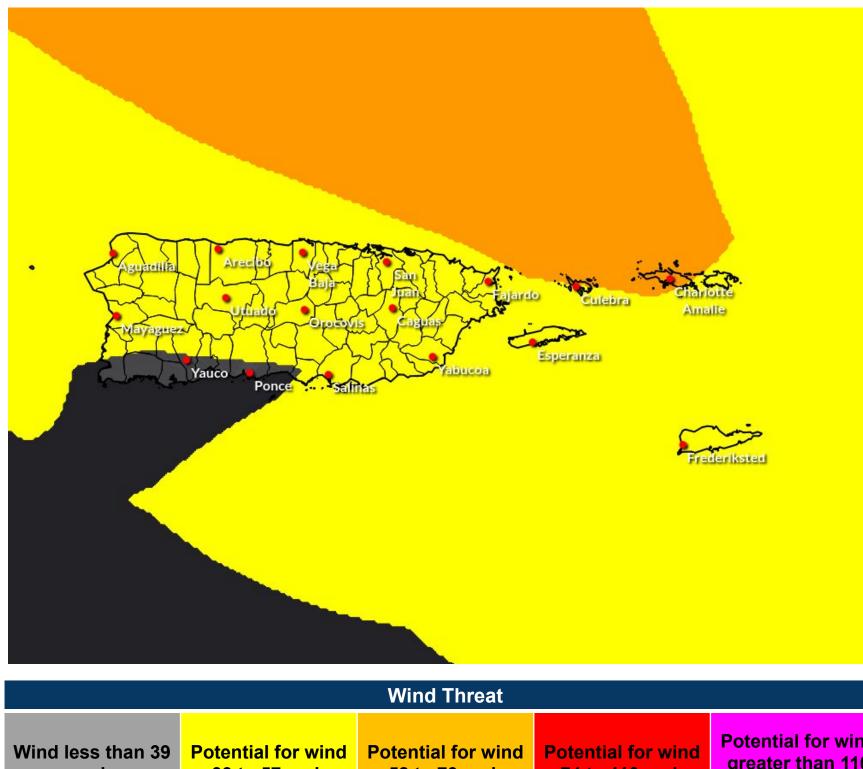
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#### August 13, 2024 5:00 AM



#### **Potential Wind Threats and Impacts**



### **TROPICAL STORM WARNING IN EFFECT**

• Puerto Rico: • Potential for sustained wind speeds of **39 to 57** mph, with higher gusts.

### • US Virgin Islands:

• Potential for sustained wind speeds of **39 to 73 mph**, with higher gusts in St. Thomas. • Potential for sustained wind speeds of **39 to 57 mph**, with higher gusts in St. Croix.

Potential for wind greater than 110 39 to 57 mph 58 to 73 mph 74 to 110 mph mph mph

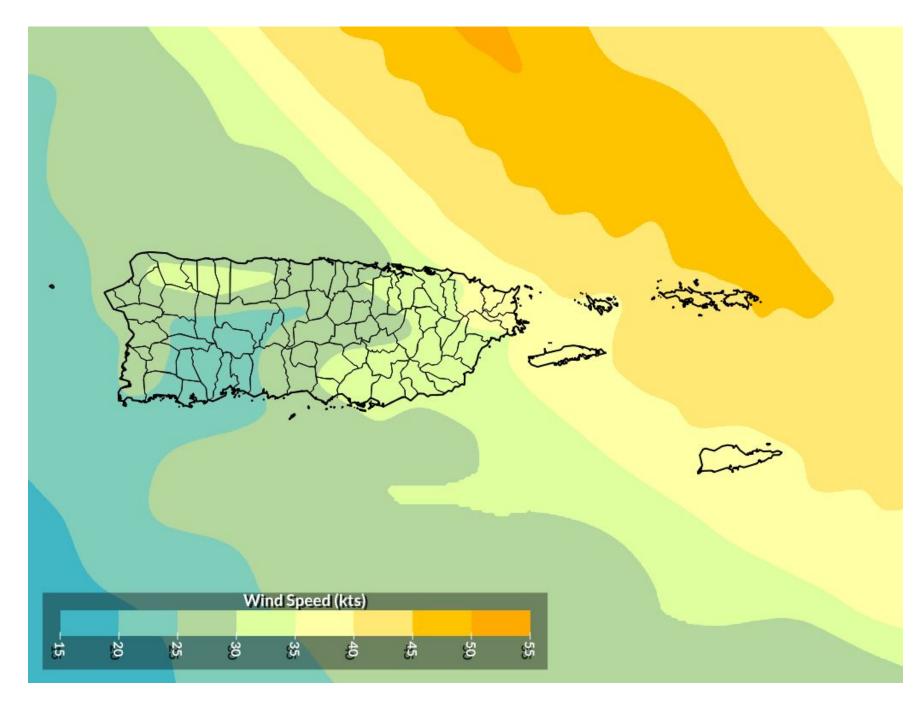


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### TIMING OF IMPACTS From Tuesday evening through Thursday morning.



#### **PREPARE FOR** life-threatening wind having possible **SIGNIFICANT** impacts.



### **Potential impacts in the area include:**

- Ο projectiles.
- Ο
- Ο



Some damage to roofing and siding materials, along with damage to porches, awnings, carports, and sheds. A few buildings experiencing window, door, and garage door failures. Mobile homes damaged, especially if unanchored. Unsecured lightweight objects become dangerous

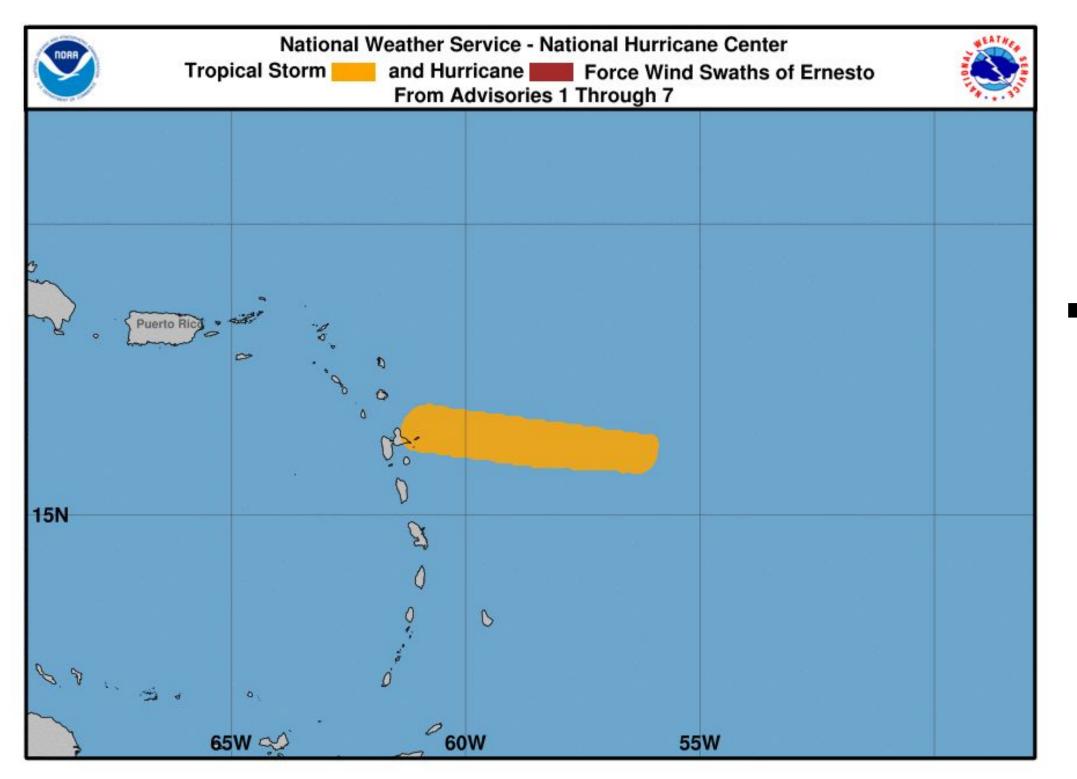
Several large trees snapped or uprooted, but with greater numbers in places where trees are shallow rooted. Several fences and roadway signs blown over.

Some roads impassable from large debris, and more within urban or heavily wooded places. A few bridges, causeways, and access routes impassable.

Scattered power and communications outages, but more prevalent in areas with above ground lines.



#### **Surface Wind Field**



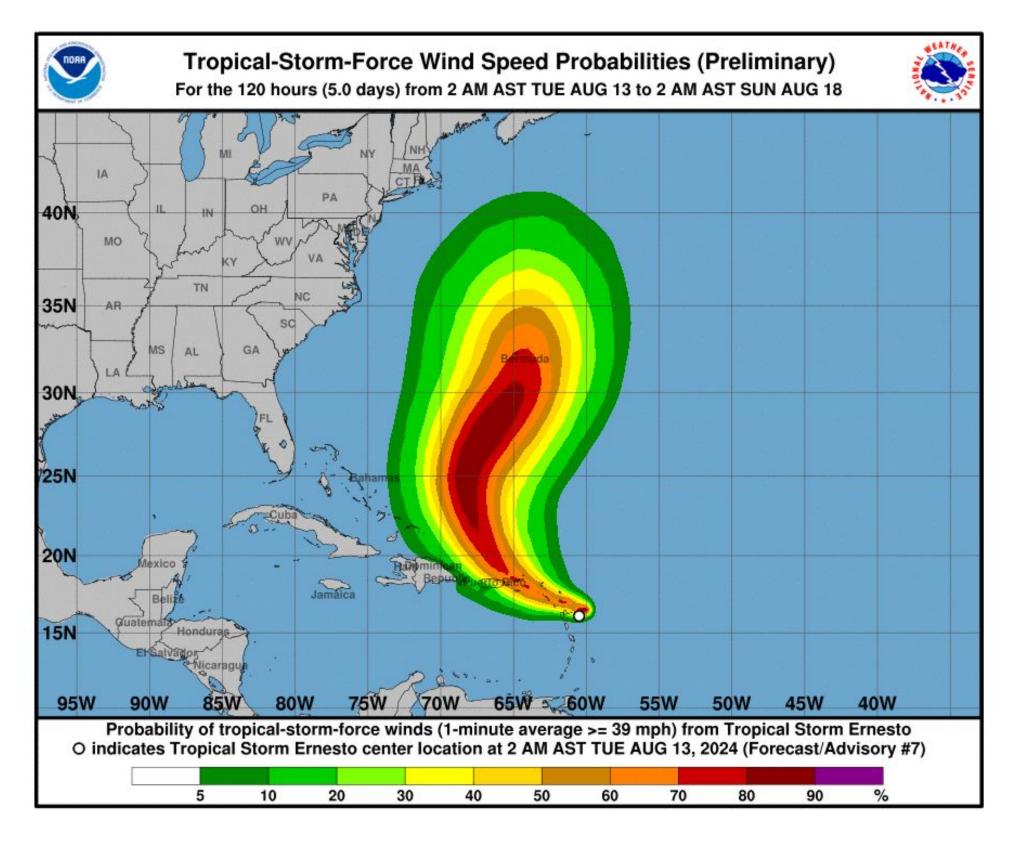
# Tropical-Storm-Force winds extend up to 70 miles from the center.



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#### **Tropical-Storm-Force Wind Speed Probabilities**



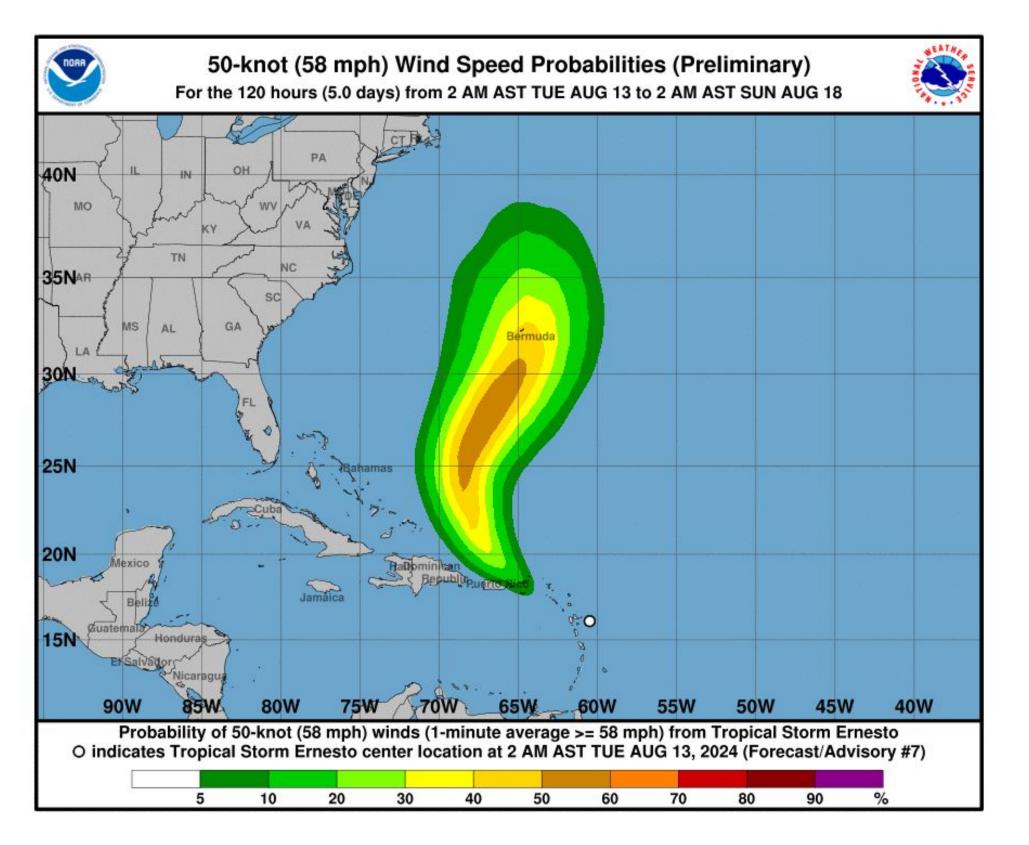


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### Tropical-storm-force wind speeds propabilities: • Puerto Rico: Up to 70% • U.S. Virgin Islands: ~70-80% • Local waters: Up to 80%



50-knot (58 mph) Wind Speed Probabilities

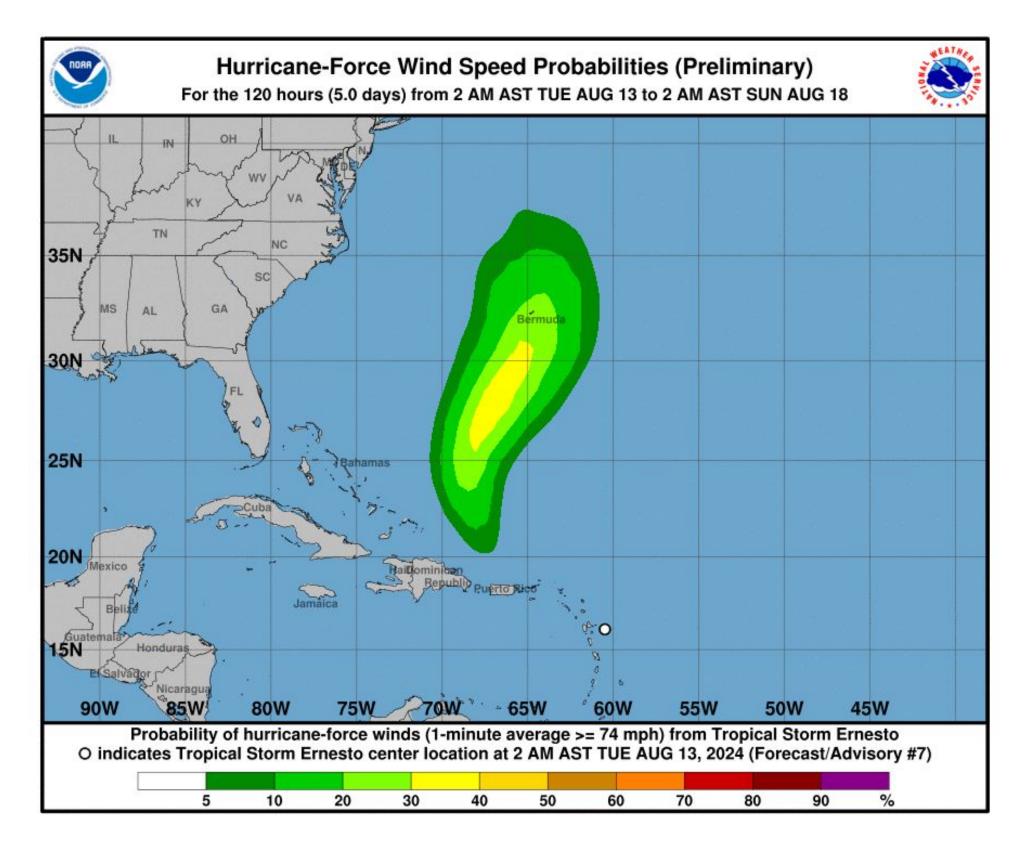


50-knot-force wind speed
probabilities:
Puerto Rico: ~5-10%
U.S. Virgin Islands: ~10-20%
Local waters: Up to 30%

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**Hurricane-Force Wind Speed Probabilities** 

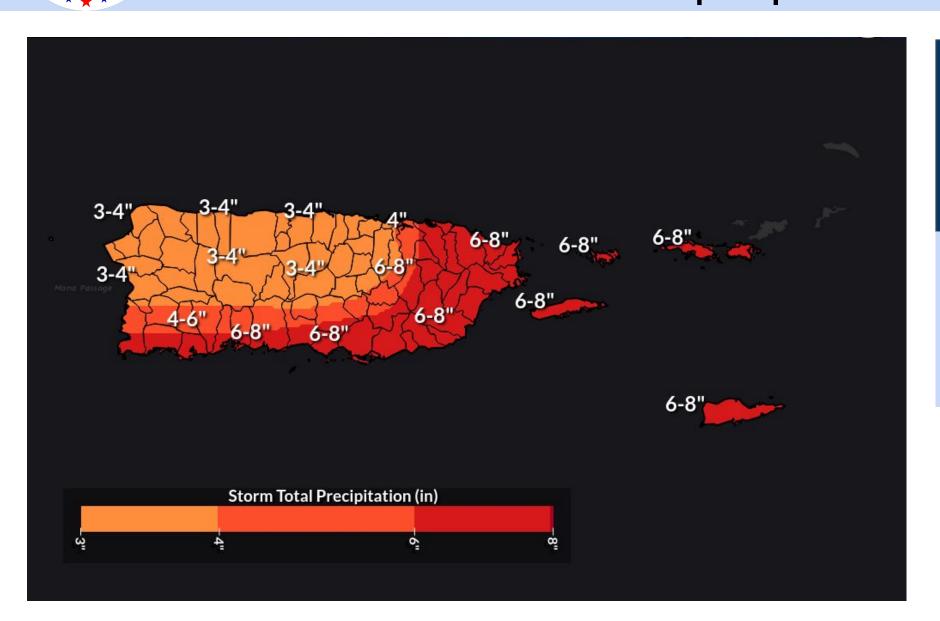




# Hurricane-force wind speed probabilities: • Local waters: None • U.S. Virgin Islands: None

• Puerto Rico: None







- Puerto Rico:
- - - amounts.





### TIMING OF IMPACTS From Tuesday evening through Thursday.

### **A FLOOD WATCH IS IN EFFECT FOR PR AND** THE USVI FROM TUESDAY EVENING THROUGH **THURSDAY MORNING**

• Potential for localized to major flooding rain. • From 3 to 6 inches of rainfall, with maximum amounts of 10 inches, is expected.

### • US Virgin Islands:

• Potential for moderate flooding rain.

• Around 4-6 inches of rain, with isolated higher



flooding rain

National Oceanic and

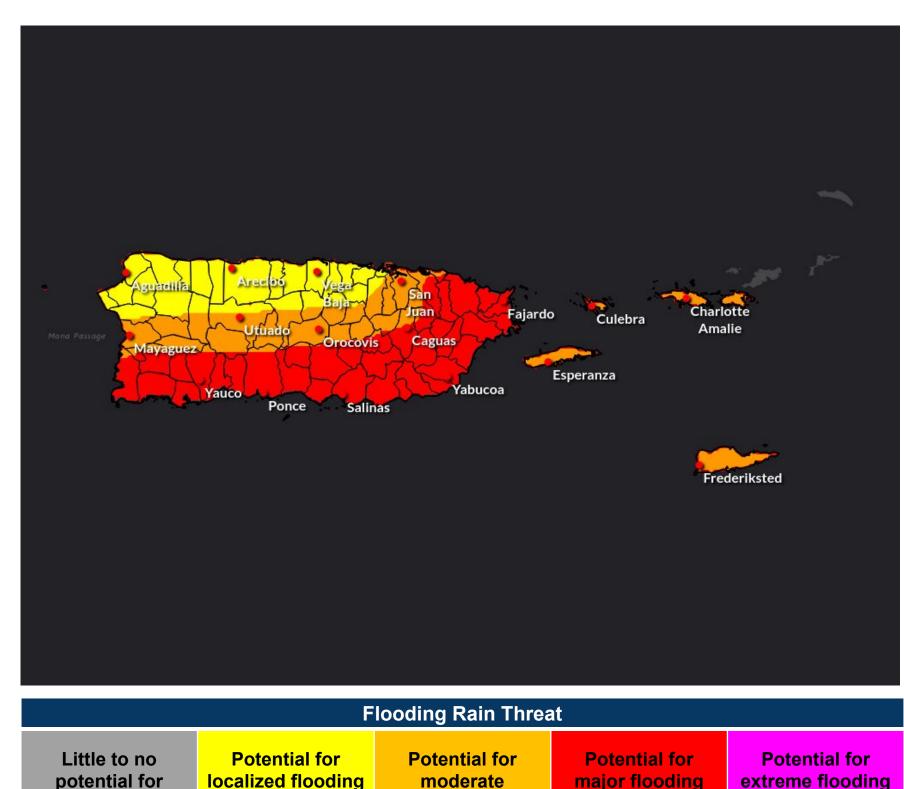
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rain

# Hazard: Flooding Rain

**PREPARE FOR** life-threatening rainfall flooding having possible **EXTENSIVE** impacts.



flooding rain

rain

rain

### **Potential impacts in the area include:**

- Ο rescues.
- may become stressed.

Major rainfall flooding may prompt many evacuations and

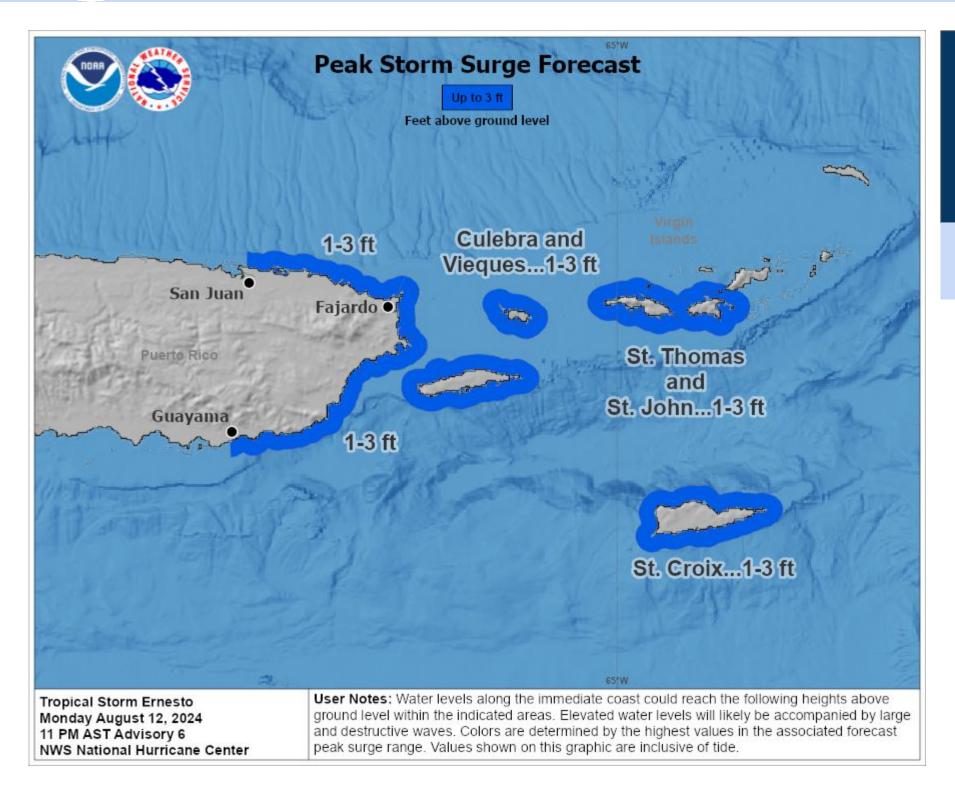
Rivers and tributaries may rapidly overflow their banks in multiple places. Small streams, creeks, canals, arroyos, and ditches may become dangerous rivers. In mountain areas, destructive runoff along steep terrain will result in many rockslides and landslides. Flood control systems and barriers

Flood waters can enter many structures within multiple communities, some structures becoming uninhabitable or washed away. Many places where flood waters may cover escape routes. Streets and parking lots become rivers of moving water with underpasses submerged. Driving conditions become dangerous. Many road and bridge closures with some weakened or washed out.



# Hazard: Storm Surge

#### **Potential Storm Surge Threats and Impacts**





### • Puerto Rico:

- feet AGL

- $\bigcirc$
- AGL



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### **TIMING OF IMPACTS** From Tuesday evening through Thursday

### **COASTAL FLOOD ADVISORY**

• East coast from San Juan to Guayama: **1-3** 

North and south coast: Up to **1 feet AGL** Vieques and Culebra: 1-3 feet AGL West coast: little to none

### • US Virgin Islands:

St. Thomas, St. John, and St. Croix: 1-3 feet



## Hazard: Marine

**Potential Marine Threat and Impacts** 



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Fron	n	Τ	ue

 Conditions will start to deteriorate as early as Tuesday morning across the USVI and eastern PR, then spread across the rest of the islands through Wednesday night or Thursday.

Flooding Rain Threat							
No Marine Hazards Risk	Small craft should exercise caution	Seas equal or greater than 7 feet. Hazardous conditions for small craft	Seas equal or greater than 10 feet. Dangerous conditions for small craft.	Seas equal or greater than 15 feet. Very dangerous conditions for small craft.			



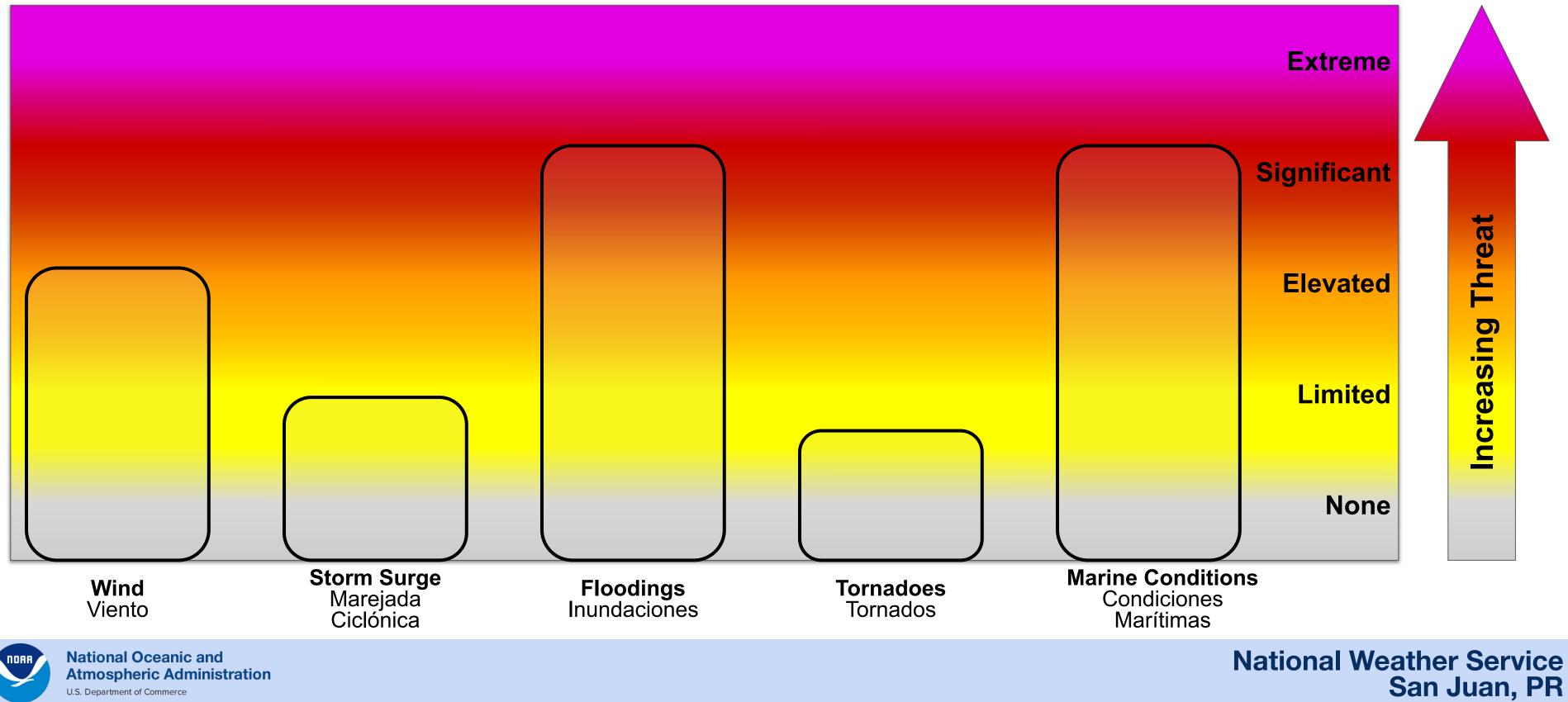
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### ING OF IMPACTS esday Morning through Thursday

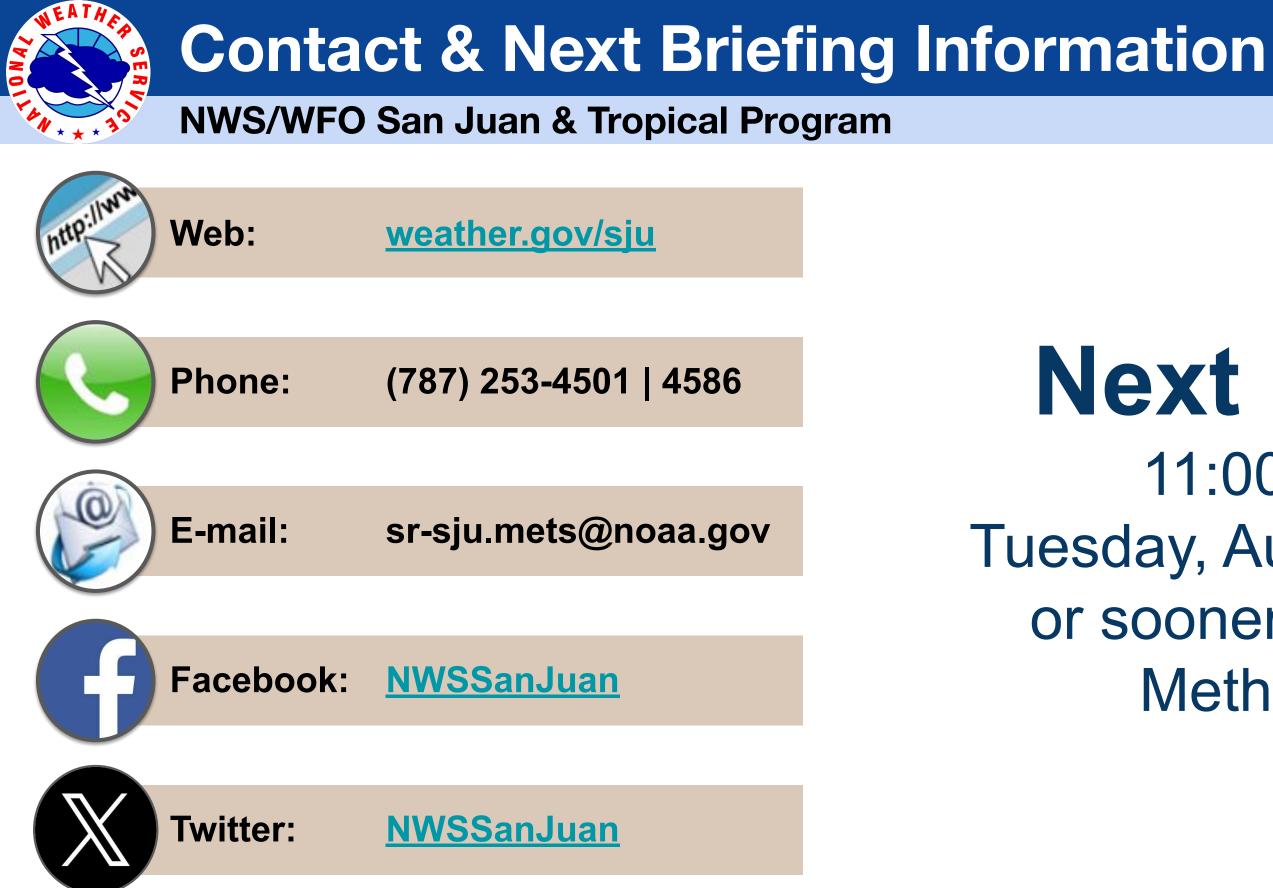


For information on specific hazards in this area, please go to: https://www.weather.gov/srh/tropical?office=sju



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### San Juan, PR



For the latest graphics and information go to: <u>www.hurricanes.gov</u> or <u>weather.gov/sju/tropical</u>



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**Next Briefing** 11:00 AM AST Tuesday, August 13<sup>th</sup>, 2024 or sooner if necessary. Method: Email