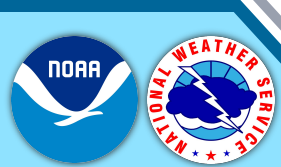


WELCOME

Florida Tropical Training Week 2026

**PRESENTED BY NATIONAL WEATHER SERVICE OFFICES
SERVING THE STATE OF FLORIDA**



TRAINING TIMELINE

DAY 1
(Monday)

**Getting
Ready**

DAY 2
(Tuesday)

**Hunker
Down**

DAY 3
(Wednesday)

**Post-Storm
Safety**

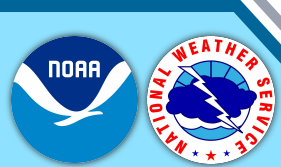
DAY 4
(Thursday)

**Lessons
Learned &
Panel
Discussion**

Training Website:

weather.gov/jax/FTTW2026



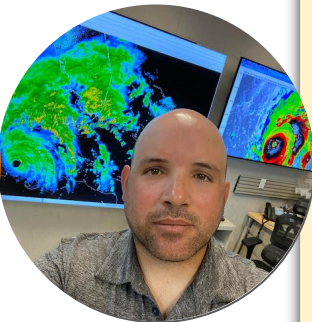


TODAY'S PRESENTERS

11 AM



Kelly Godsey
NWS
Tallahassee
Florida



Sandy Delgado
NWS
National Hurricane
Center

1 PM

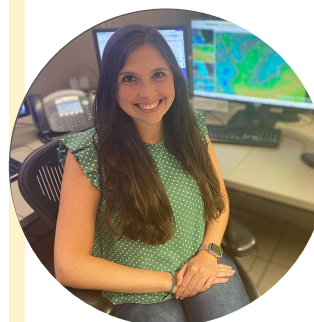


Jennifer Hubbard
NWS
Tampa Bay
Florida



Kelly Godsey
NWS
Tallahassee
Florida

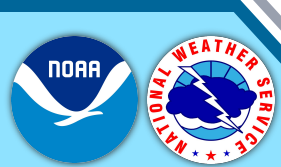
7 PM



Cassie Leahy
NWS
Melbourne
Florida



Morgan Barry
NWS
Mobile
Alabama



CHAT ASSISTANTS



Felecia Bowser
NWS
Tallahassee, FL



Matt Anderson
NWS
Tampa Bay, FL



Sammy Hadi
NWS
Miami, FL



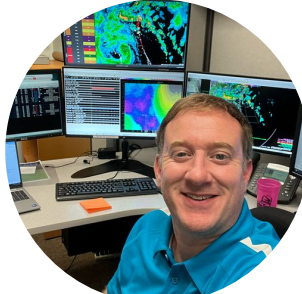
Tony Hurt
NWS
Tampa, FL



Kelly Delorme
NWS
Tampa, FL



Paige Klingler
NWS
Jacksonville, FL



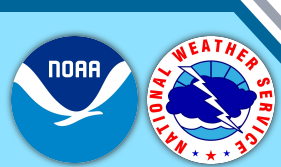
Ben Nelson
NWS
Jacksonville, FL



Michael Vuotto
NWS
Key West, FL



Kelly Godsey
NWS
Tallahassee, FL



GEARING UP

What Can You Do NOW?

**Seasonal
Readiness**

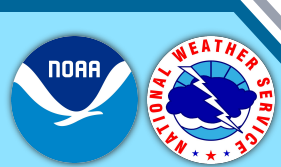
**Monitoring
the Tropics**
Days 6-7

**Gearing Up
for Impacts**
Days 3-5

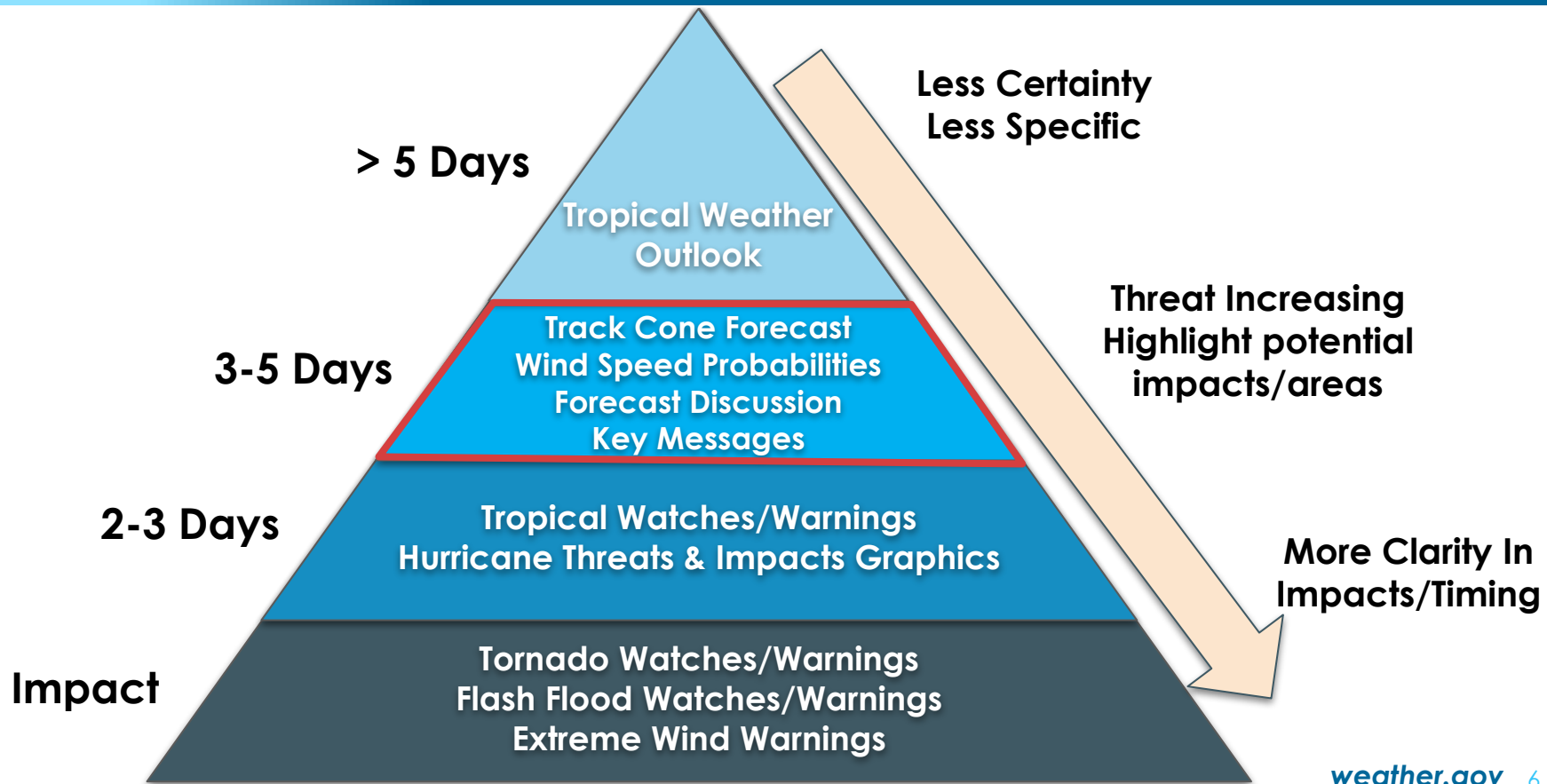
Hunker Down
<48 hrs to
Impact

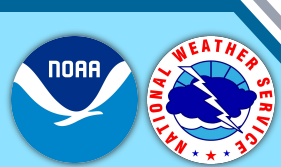
**Post-Storm
Safety**

- Interpreting Watches & Warnings
 - Sheltering Considerations
- Impacts and Hunker Down Mode

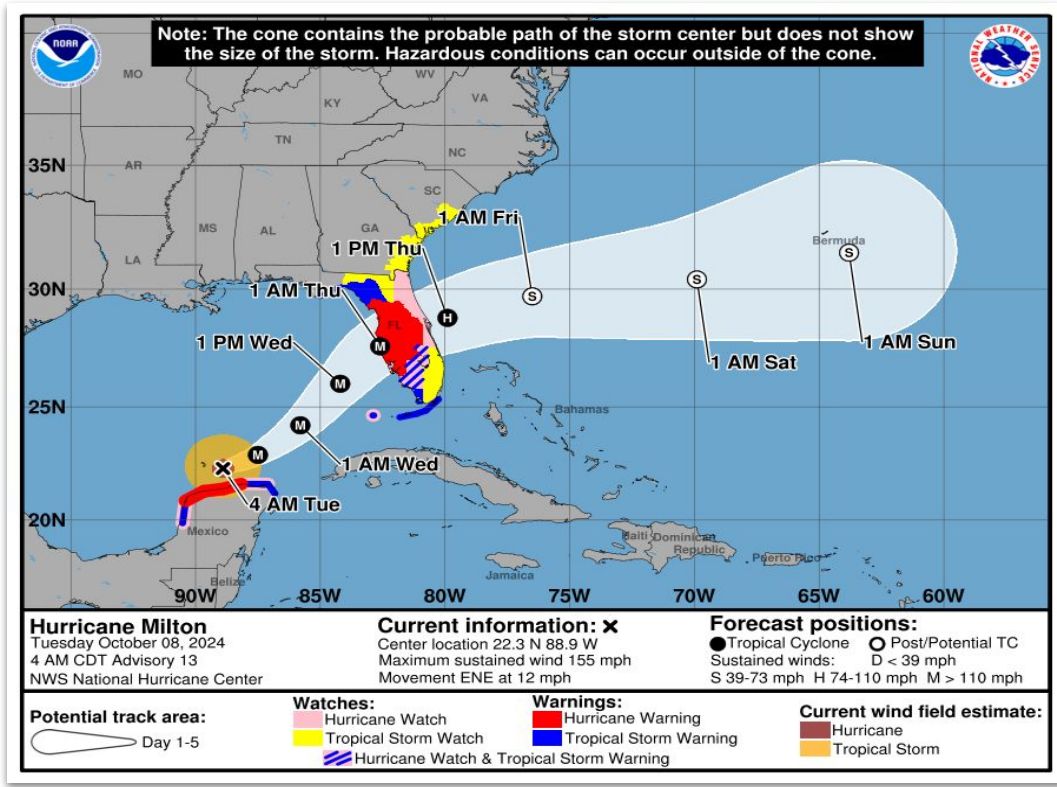


Tropical Products & Messaging Strategy





The Forecast Cone

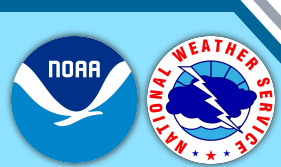


New Look For 2026!

- Now includes inland tropical watches & warnings
- Still depicts the most likely track (2/3rd of the time) of the center of the storm
- Does NOT convey impacts



Information about
the NHC cone and
reminders



RISKS OUTSIDE OF CONE

> 5 Days



3-5 Days



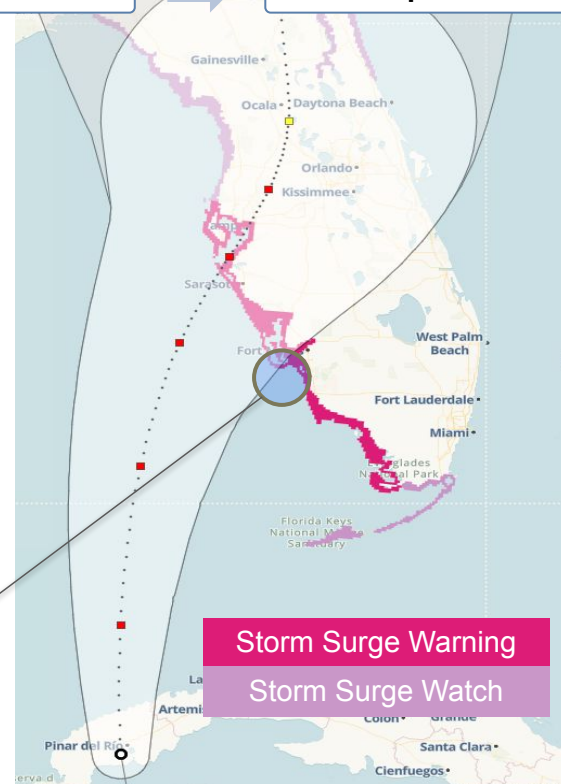
< 48 hrs

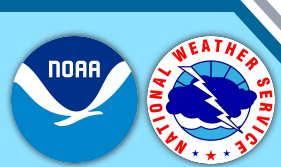


Impacts

Deadly tropical cyclone hazards occur outside of the forecast cone - **DO NOT** assume you are safe if your location is not within the cone

Note that the entire west coast of FL is under threat of deadly storm surge



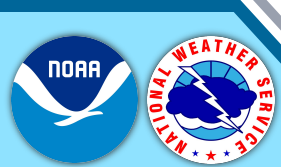


POLL QUESTION

Your location is in the forecast cone with a projected landfall in 3 to 5 days? What are some actions you still have time to take?

- A. Purchase additional supplies and obtain necessary prescription
- B. Preparation actions can still be completed for home & business
- C. Coordinate sheltering location if in an evacuation zone
- D. All of the above





TRACK ADJUSTMENTS

> 5 Days



3-5 Days



< 48 hrs

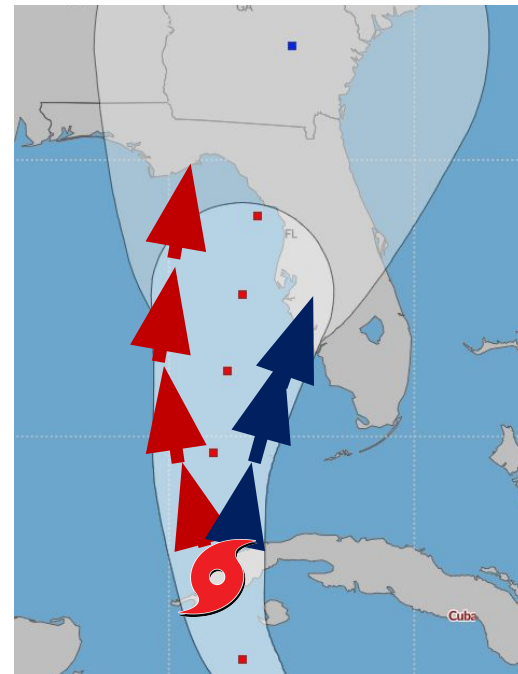


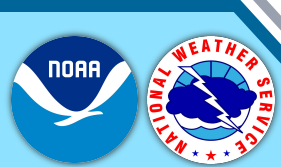
Impacts

Storm track adjustments by just a few degrees ultimately influences landfall location & time, as well as the severity of impacts for specific locations

Constantly monitor the forecast!

	Track adjustment from north (360°) to north-northwest (350°)	Potential landfall somewhere FL panhandle – in a few days
	Track adjustment from north (360°) to north-northeast (10°)	Potential landfall somewhere along the SW FL peninsula – in a shorter amount of time





KEY MESSAGES

> 5 Days



3-5 Days



< 48 hrs



Impacts

Give a general overview & head's up

Too early for details on wind, surge, rain amounts/values at this time

Focus on

PREPARATION & MONITORING

Available from the National Hurricane Center



www.hurricanes.gov



Key Messages for Tropical Depression Nine

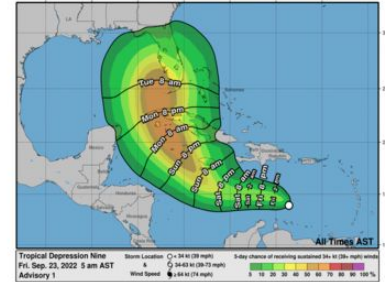
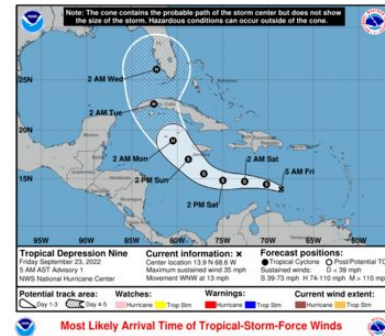
Advisory 1: 5:00 AM AST Fri Sep 23, 2022



1. Tropical Depression Nine is expected to produce heavy rainfall and instances of flash flooding and possible mudslides in areas of higher terrain in Aruba, Bonaire, and Curacao. Heavy rains are also likely to spread into Jamaica and the Cayman Islands in the coming days.

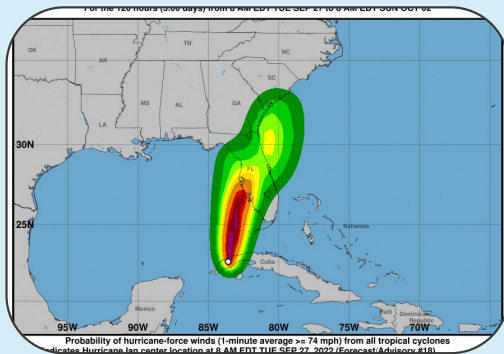
2. The depression is expected to approach Jamaica and the Cayman islands as an intensifying tropical storm. Watches and warnings for these locations may be required in subsequent forecast cycles.

3. This system is forecast to approach western Cuba and enter the southeastern Gulf of Mexico by the end of the forecast period. Interests in Cuba and those along the Eastern Gulf Coast of the United States should closely monitor this system, though at this juncture forecast uncertainty remains fairly high.

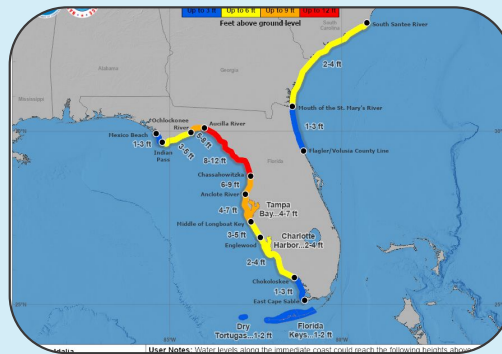


For more information go to hurricanes.gov

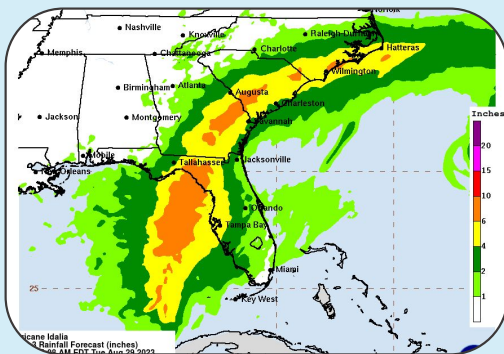
THREAT AND IMPACT ASSESSMENTS



Wind



Surge



Flooding Rain

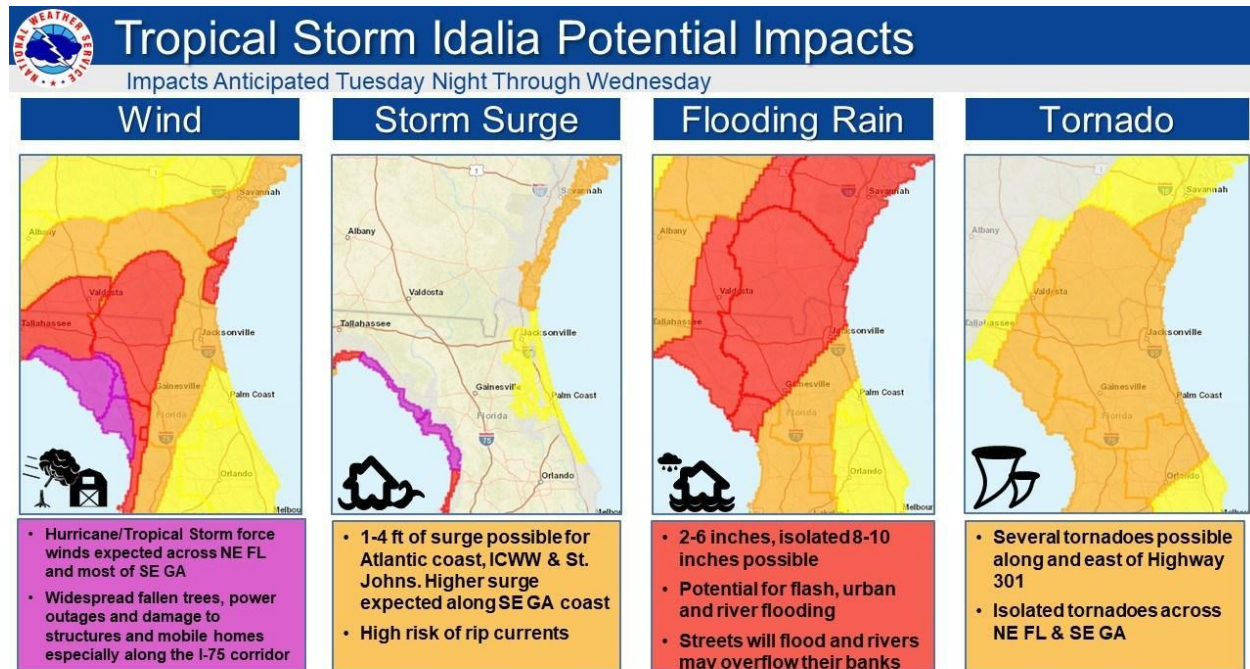


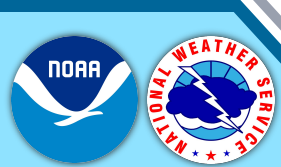
Tornadoes

Downscale NHC
Impacts for local area

Help answer what,
where, when & how
bad

**What should you be
preparing for?**



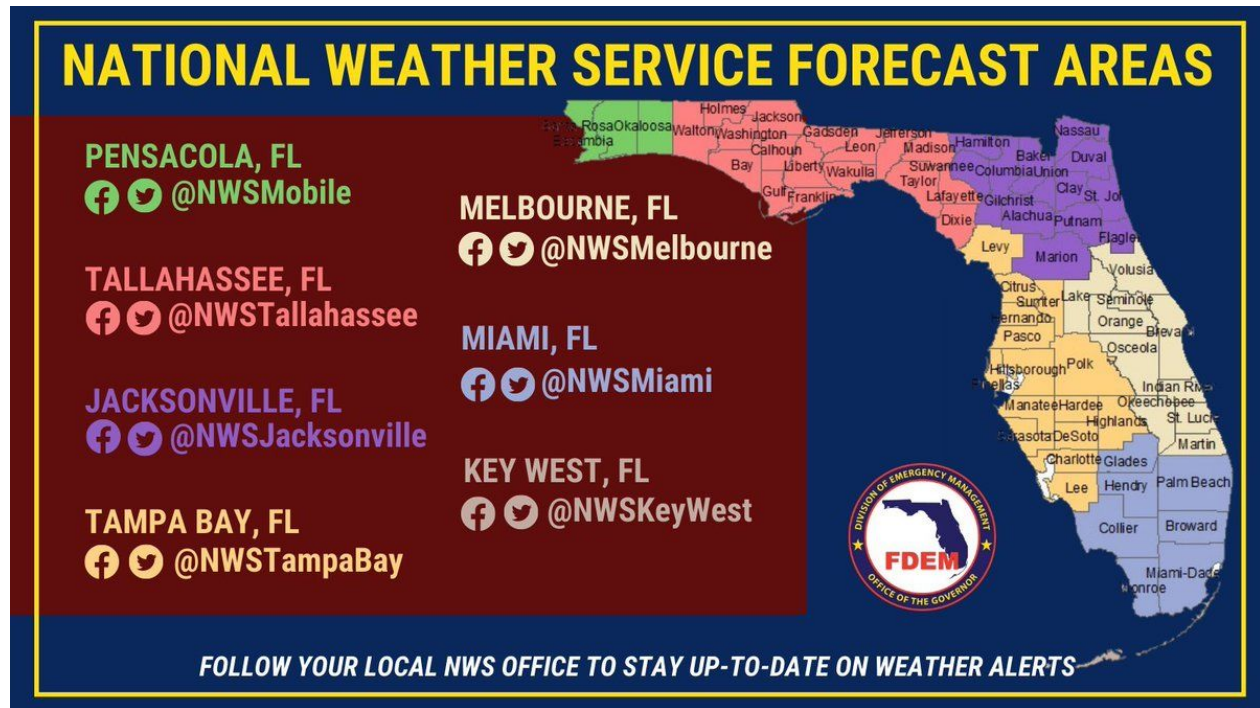


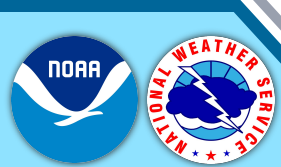
LOCAL NWS

Downscale NHC
Impacts for local area

Help answer what,
where, when & how
bad

**What should you be
preparing for?**



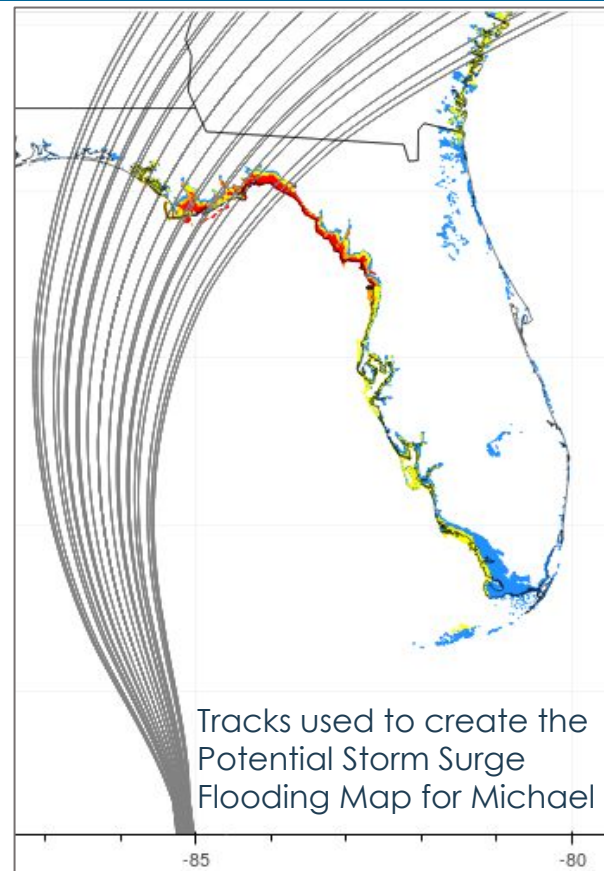


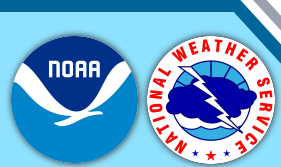
STORM SURGE RISK

The National Hurricane Center models 100s of storm scenarios for a specific tropical cyclone.

Modeling adjusts the size, intensity & forward speed of a specific cyclone – accounts for storm track wobbles

Uses model spread to account for track uncertainty



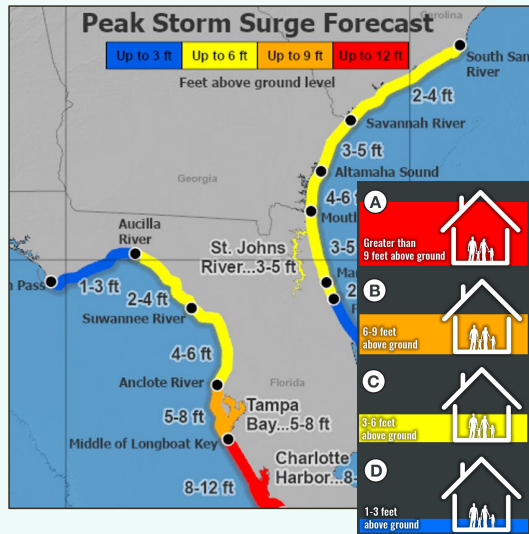


STORM SURGE RISK

NHC Peak Surge *Expected (Forecast)*

Peak values water could reach above normally dry ground

Only valid along the immediate coast - **does not depict inland extent**

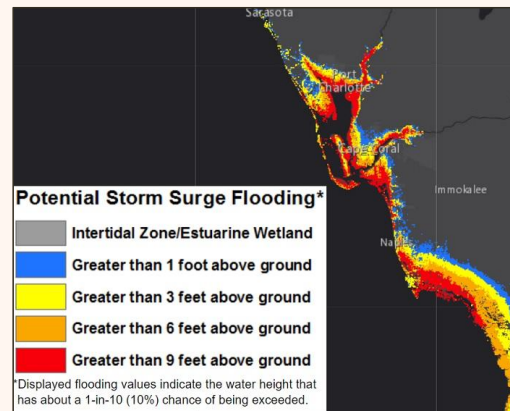


NHC Potential Storm Surge *Potential (Reasonable Worst-Case Scenario)*

How high the water could rise above normally dry ground

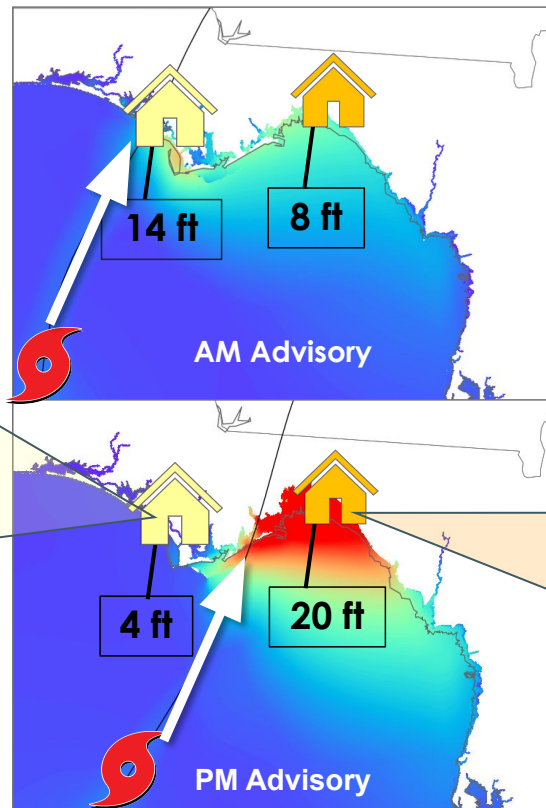
Only a 1 in 10 chance storm surge will be greater than shown

Doesn't represent a flooding footprint



Available National Hurricane Center www.hurricanes.gov

APPROPRIATE FORECAST INTERPRETATION



Coastline shape & tropical cyclone track strongly influence storm surge values at specific locations

Do not focus preparedness on specific “numbers” days in advance
(ex: storm surge of X ft, rain of X inches, winds of X mph)

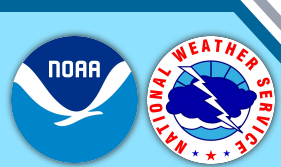
“Just this morning they said 10-14 ft of surge, now it’s 3-5 ft.

Can’t they make up their mind?”

“They don’t know what this storm’s going to do.

We were fine last time...”

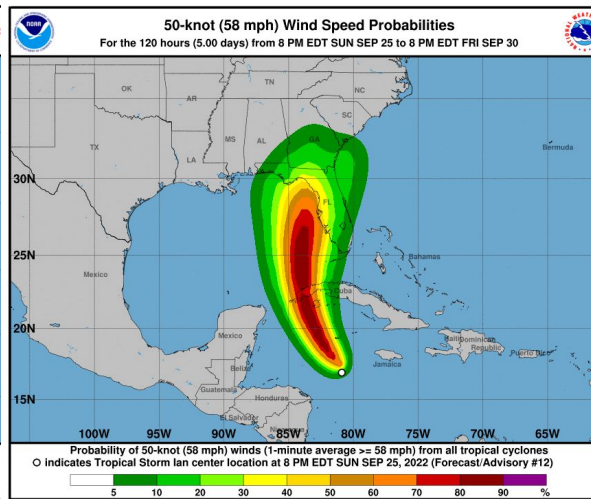
Prepare for
**THREAT & IMPACT
POTENTIAL**



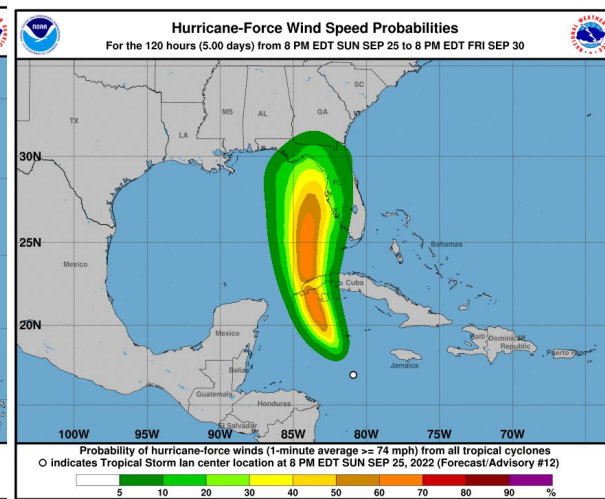
WIND RISK



**Tropical Storm Wind
Potential
(Sustained ≥ 39 mph)**



**Strong Tropical Storm Wind
Potential
(Sustained ≥ 58 mph)**



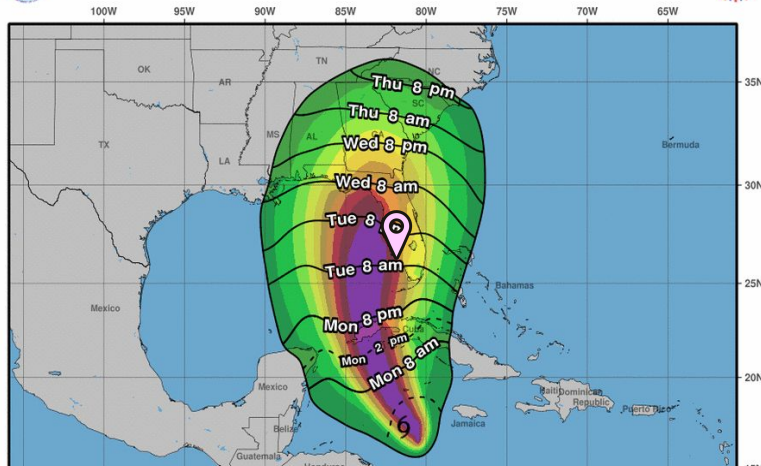
**Hurricane Wind Potential
(Sustained ≥ 74 mph)**

Available through the National Hurricane Center www.hurricanes.gov



WIND RISK TIMING

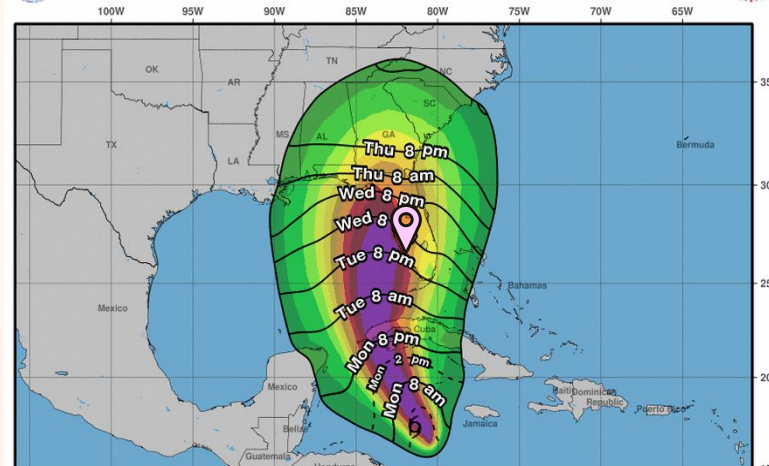
Earliest Reasonable Arrival Time of Tropical-Storm-Force Winds



- Only 1 in 10 chance of tropical storm force winds arriving earlier than noted time
- Best for users with low risk tolerance (i.e. those that need more time to prepare)

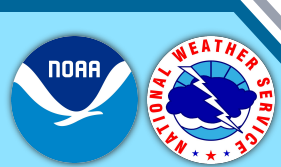
"Tropical storm force winds could arrive as early as Tuesday..."

Most Likely Arrival Time of Tropical-Storm-Force Winds



- Equal chances of tropical storm force winds arriving before or after the time listed
- Preparations should be completed by this time at the latest

"Tropical storm force winds will likely arrive Tuesday..."



FLOODING RAIN

> 5 Days



3-5 Days



< 48 hrs



Impacts

What is it?

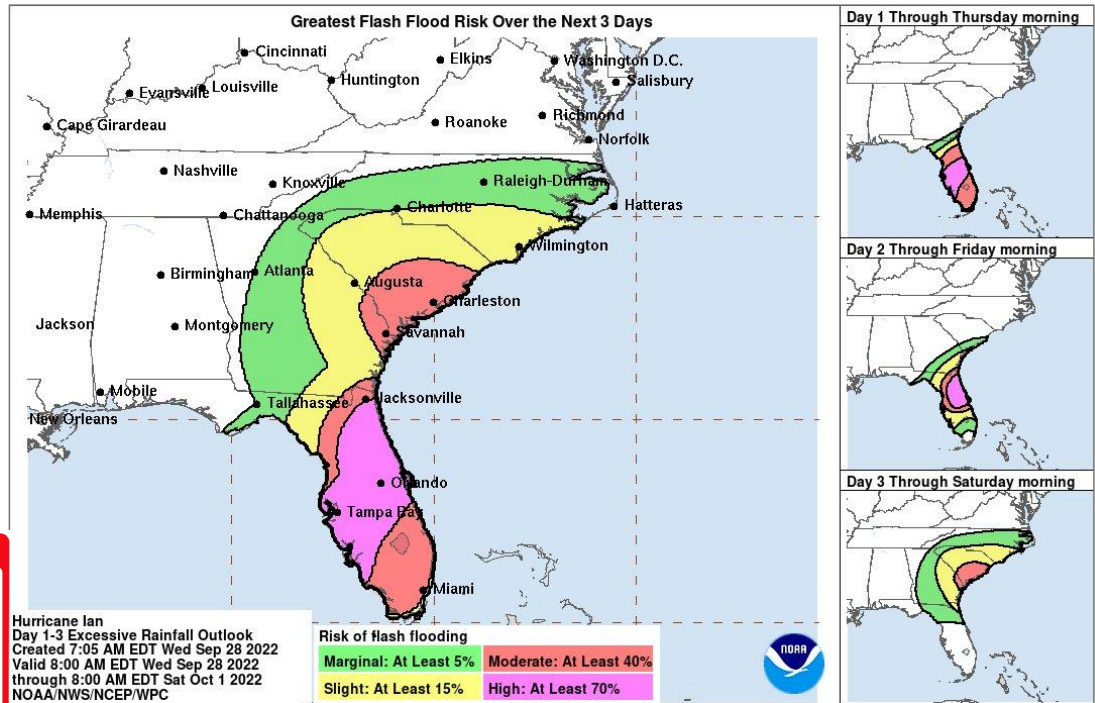
Excessive Rainfall Outlooks (EROs) identify where & when the threat of flash flooding is greatest.

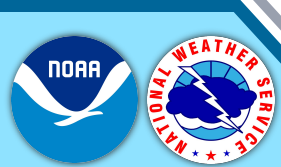
How do you use it?

Watch the trends & timing – increasing probabilities mean your location is at greater flood risk.

Threat regardless of Storm Category

Slower storm, high flooding rain threat





TORNADOES

> 5 Days



3-5 Days



< 48 hrs



Impacts

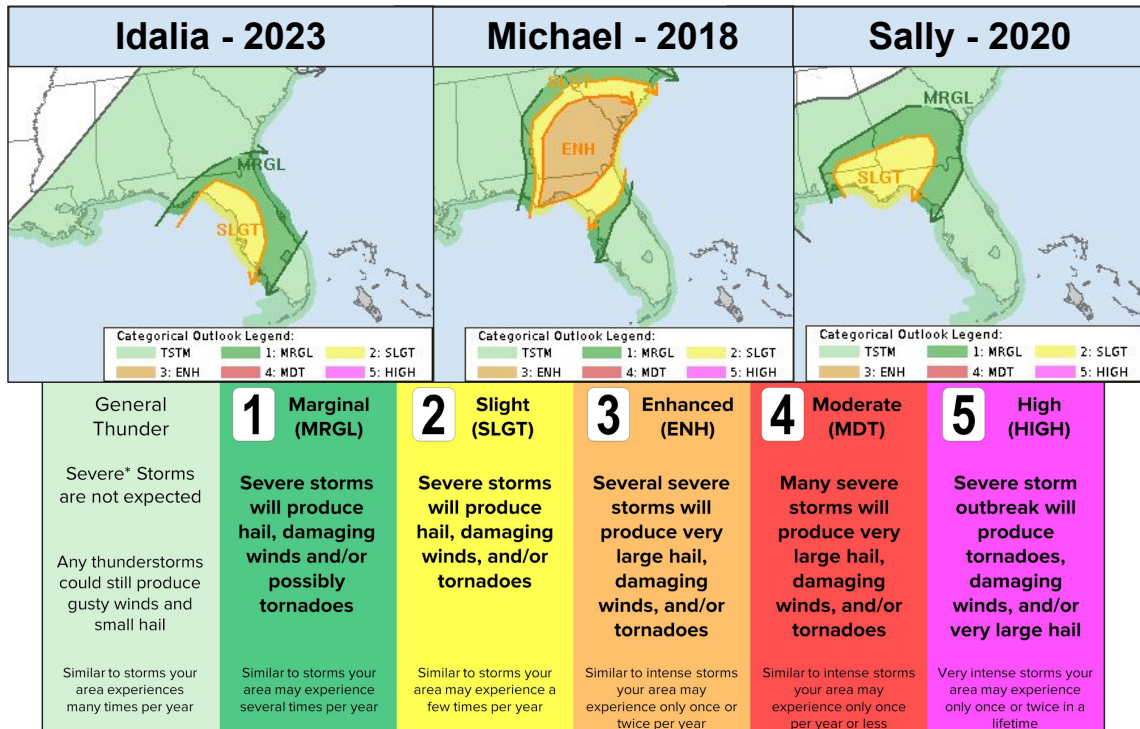
What is it?

Convective Outlooks identify where & when the threat of severe storms capable of producing tornadoes are located.

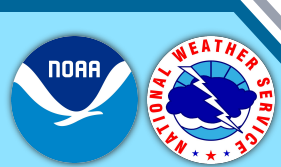
How do you use it?

Watch the trends & timing – increasing probabilities mean your location is at greater tornado risk.

Threat regardless of category or location of storm □ Can extend 100s of miles away from storm center, days in advance of landfall.



Available Storm Prediction Center www.spc.noaa.gov



SPC OUTLOOKS

> 5 Days



3-5 Days



< 48 hrs



Impacts

New Conditional Intensities

Highlights areas that are more likely to experience extreme events based on storm environment

What Do They Depict?

Differentiate between high coverage, lower impact vs low coverage, higher impact

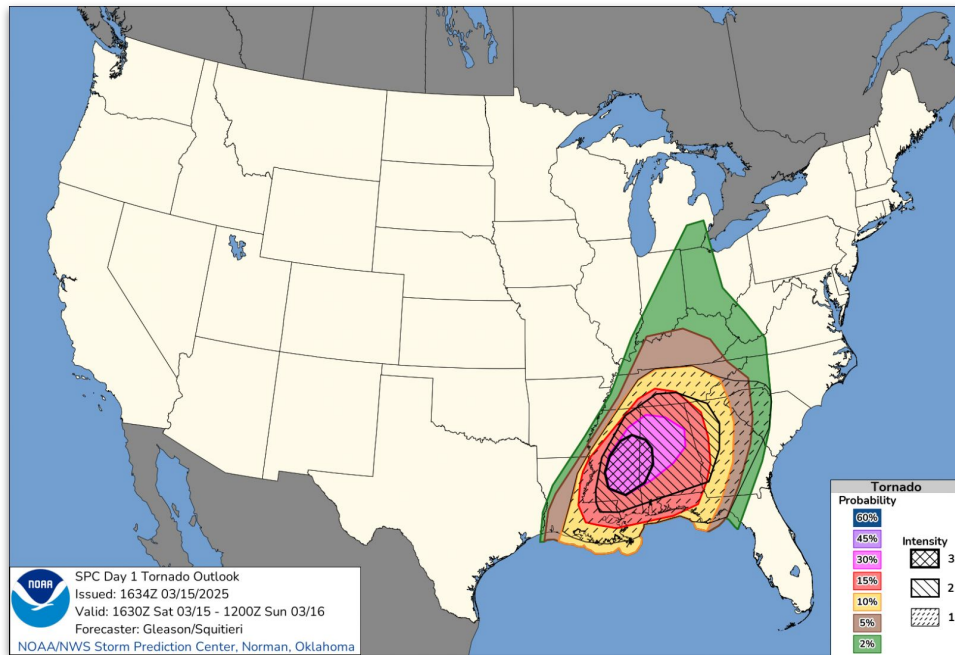


No
Intensity
(EF0-EF1)

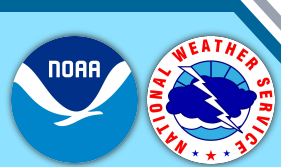
Level 1
(EF2)

Level 2
(EF3)

Level 3
(EF4)



Available Storm Prediction Center www.spc.noaa.gov

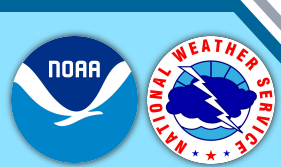


POLL QUESTION

What are the two most important factors that impact storm surge values at a specific location?

- A. Storm Category & River Runoff
- B. Coastline Shape & Storm Track
- C. Storm Speed & Storm Size
- D. Storm Strength & Wave Action





HUNKERING DOWN

What Can You Do NOW?

Seasonal
Readiness

Monitoring
the Tropics
Days 6-7

Gearing Up
for Impacts
Days 3-5

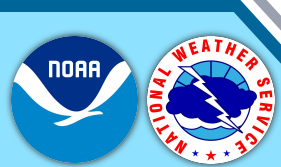
Hunker Down
<48 hrs to
Impact

Post-Storm
Safety

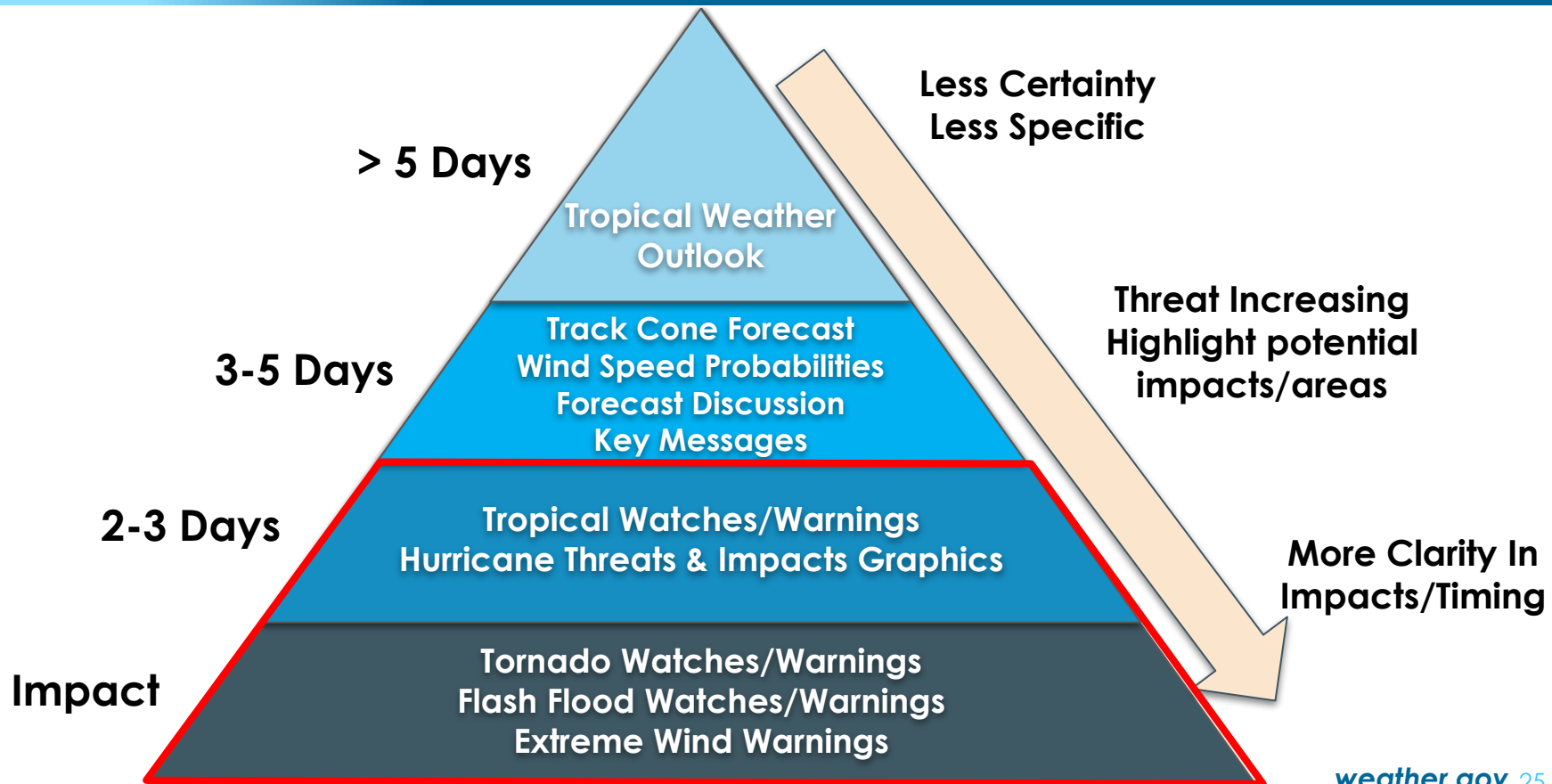
Interpreting Watches & Warnings

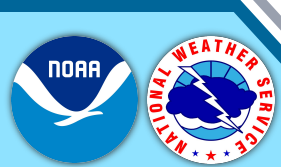
Sheltering Considerations

Impacts and Hunker Down Mode



Tropical Products & Messaging Strategy





MULTIPLE HAZARD PRODUCTS

Marine

Tropical Storm
Watches/Warnings

Hurricane
Watches/Warnings

Tornadoes

Tornado
Watches/Warnings

Winds

Tropical Storm
Watches/Warnings

Hurricane
Watches/Warnings

**Extreme
Wind
Warning**

Surge

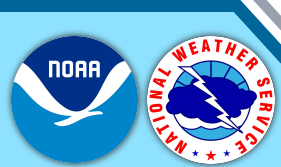
Storm Surge
Watches/Warnings

Coastal Flood
Watches/Warnings

Flooding Rain

Flood
Watches/Warnings

Flash Flood
Watches/Warnings

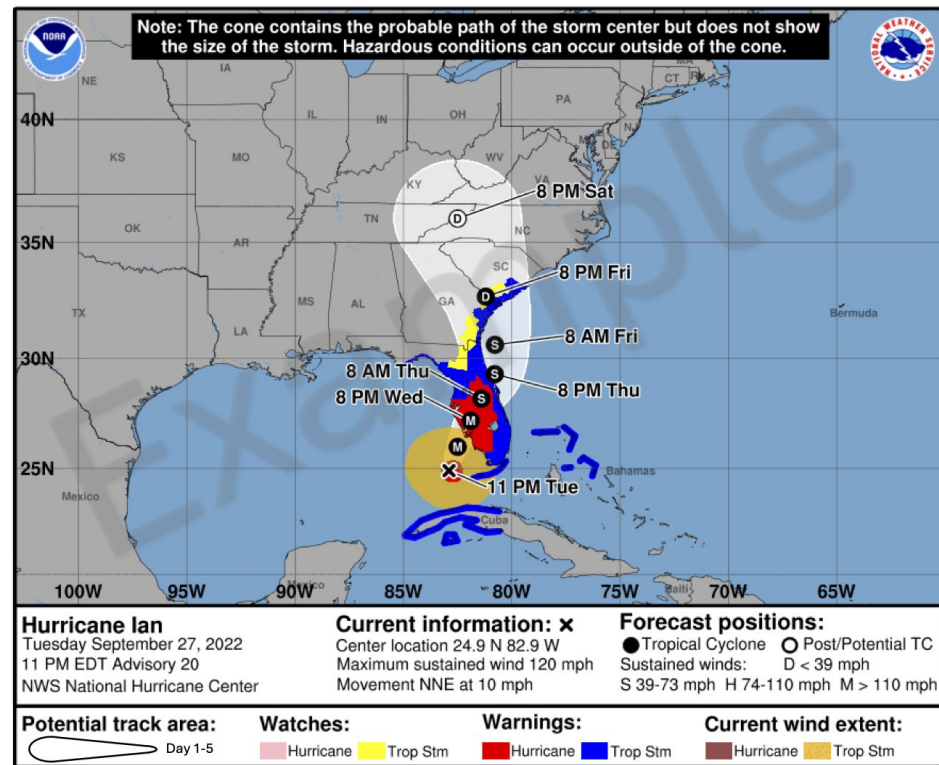


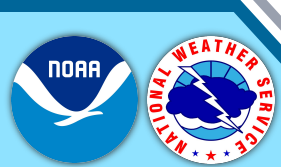
WATCHES & WARNINGS

Watches	Warnings
Conditions possible Finalize preparedness Stay aware Evacuate or be ready to evacuate	Conditions expected Plan to hunker down Stay sheltered Listen for warnings to shelter-in-place

~ 48 hours out

~ 36 hours out





STORM SURGE



Understanding Storm Surge Flooding

Storm surge is destructive, life-threatening coastal flooding. It accounts for about half of the deaths associated with tropical cyclones in the U.S. To help you determine the best way to prepare, NOAA coastal flooding **forecasts are expressed as feet of water above ground level.**

Greater
than 9 feet

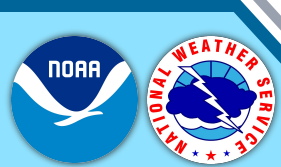
6 - 9 feet

3 - 6 feet

0 - 3 feet



weather.gov
hurricanes.gov

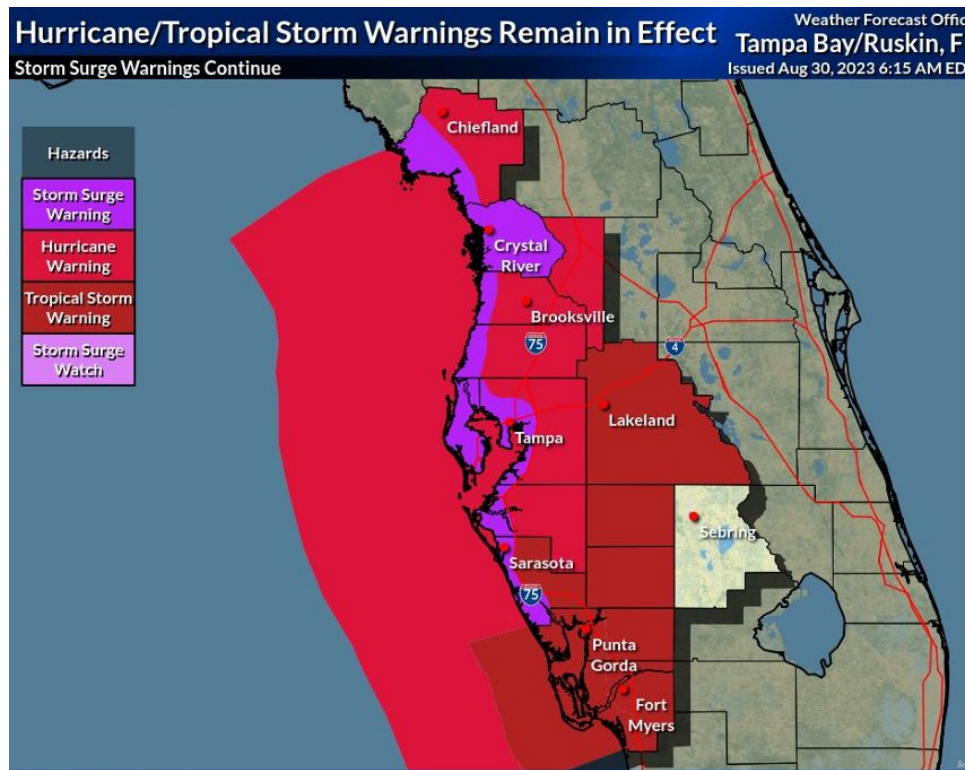


WATER & WIND THREAT AREAS

Storm surge threat area & tropical storm/hurricane wind threat areas are not identical

Issued based on life-threatening potential of each specific hazard

Keep in mind, not everywhere in the warning will receive conditions



TORNADOES

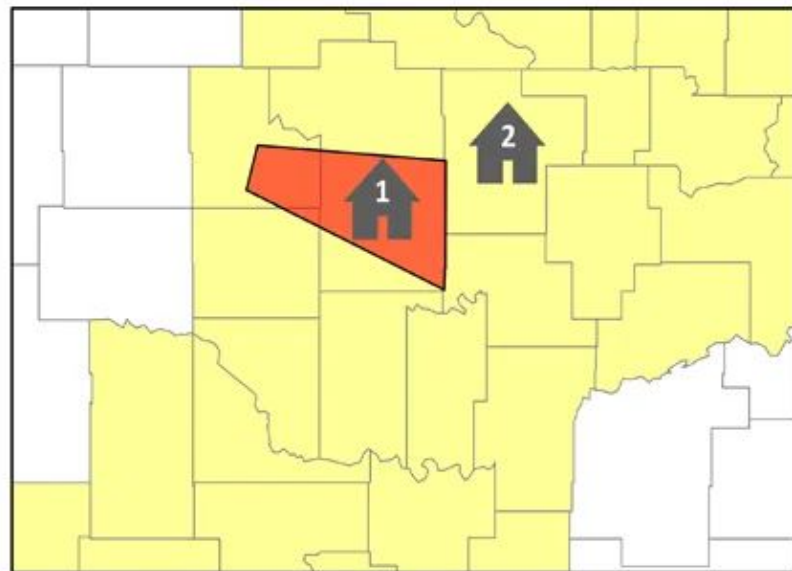
Tornado Watch

- ✓ Threat for tornadoes increasing in watch area
- ✓ Monitor for tornado warnings
- ✓ Be ready to quickly shelter



Tornado Warning

- ✓ Shelter within shelter immediately
- ✓ Tornado is imminent in the warning area



Know Where to Go

When Sheltering from a Tornado



If you have no basement,
move to an interior room
with no windows.

Top floor rooms
DO NOT protect you.

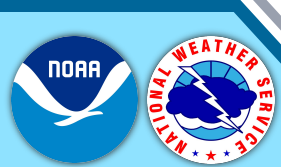
Exterior rooms and rooms with
windows DO NOT protect you.

NO PLACE OUTSIDE
is safe from a tornado.

Quickly move to your
basement and bring your
emergency supply kit.



weather.gov/tornado



FLOOD WATCHES & WARNINGS



Even if your shelter is not flood prone, consider roads to access your location that could flood

You may be isolated for an extended period during & after the storm due to flooding

Do not wait until flooding begins - many flood deaths occur in vehicles!



Flash Flood EMERGENCY

ISSUED FOR...

*Exceedingly rare situations when a severe threat to human life and **catastrophic damage** from a flash flood is happening or will happen soon.*



This is a life-threatening situation! Do not attempt to travel unless you are fleeing an area subject to flooding or under an evacuation order.

Flash Flood WARNING

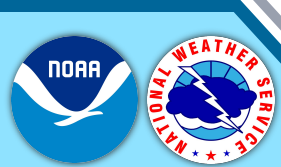
ISSUED WHEN...

Dangerous flash flooding is happening or will happen soon. Some roads will be flooded. Homes and businesses may flood.



Move to higher ground.
Never drive through flooded roads.





MULTIPLE THREATS

Know Where To Go

When a **Tornado Warning & a Flash Flood Warning** are ongoing **at the same time** for your location

It's best to seek shelter in an **interior room with no windows on the lowest floor safely possible.** Ideally, with quick access to move to higher ground if needed to flee rising water.

Top floor rooms DO NOT protect you from a tornado- these will be an absolute last resort if the water is forcing you to shelter this high.

Exterior rooms and rooms with windows DO NOT protect you from tornadoes.

NO PLACE OUTSIDE is safe from a tornado. Particularly, when flooding is ongoing and ditches are full of water and unable to be used to attempt to shelter.



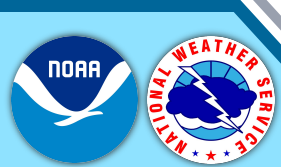
When the National Weather Service issues an
Extreme Wind Warning

Extreme hurricane winds are imminent or happening NOW.

Sustained winds of 115 mph or greater are expected.

Take immediate shelter in an interior portion of a well-built structure.





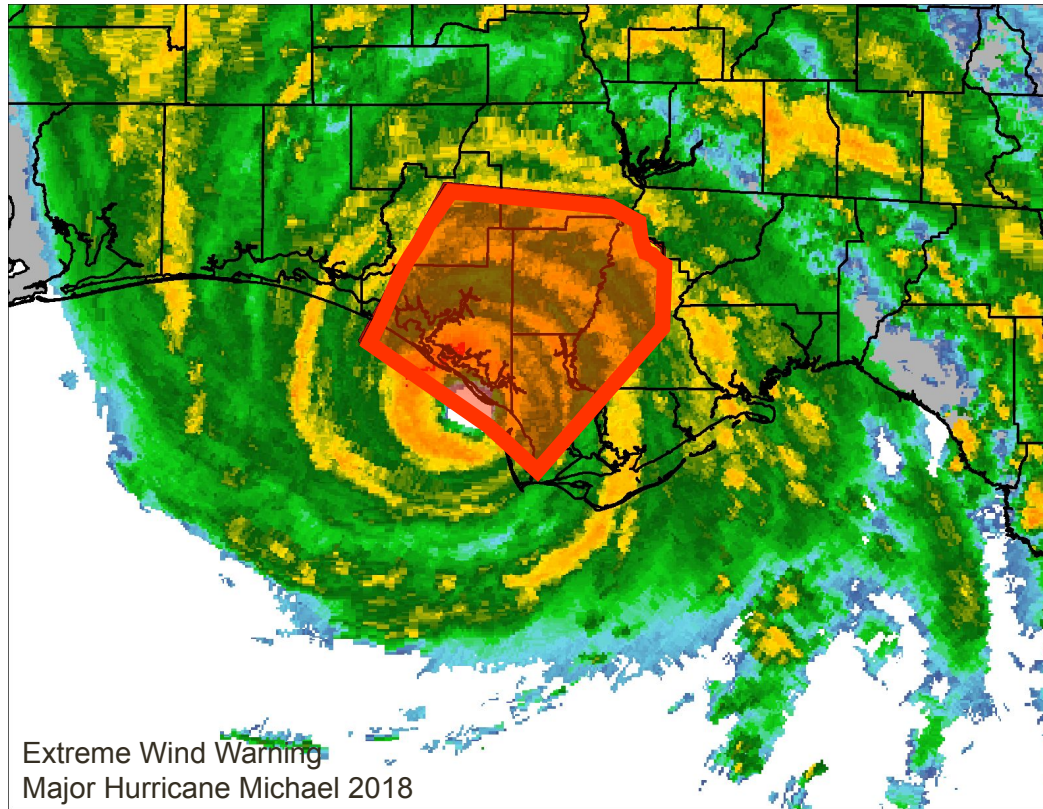
EXTREME WIND WARNING

Shelter-within-Shelter

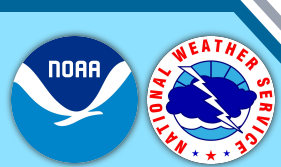
Go to your interior safe room

Put as many walls between you and the outside as possible

Wireless Emergency Alert (WEA) on your cell phone



Extreme Wind Warning
Major Hurricane Michael 2018



SHELTER WITHIN SHELTER

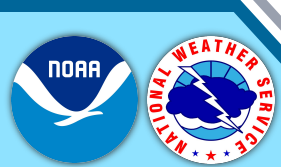
“Hide” from the wind

An enclosed space within your shelter, away from doors and windows on the lowest floor

Examples: bathroom, closet, interior bedroom

Bring everyone! Children, pets, supplies & communication devices



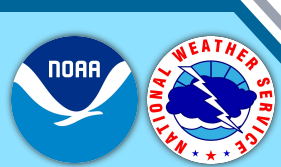


POLL QUESTION

What's your **biggest** concern for your pets or children while waiting out the storm? 🤔

- A. Keeping them calm
- B. Having enough food / water
- C. Keeping them entertained / distracted
- D. Ensuring they stay safe if conditions worsen
- E. I don't have pets or children





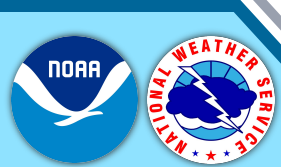
WATCH & WARNING NOTIFICATION

Have redundancy – if one method fails, you need a back up

Many communities offer free text & phone call alerts when warnings are issued

Visit your county and state Emergency Management website





Wireless Emergency Alerts

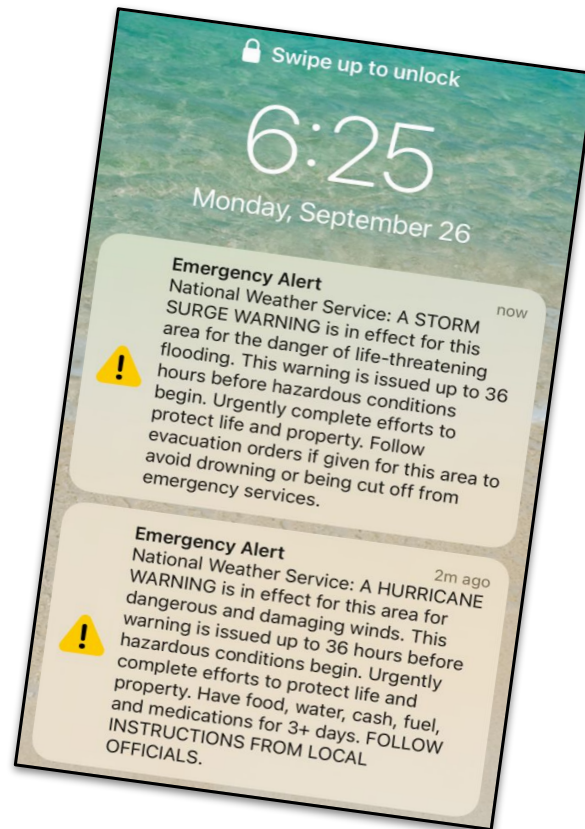
US alerting network to disseminate emergency alerts to mobile devices

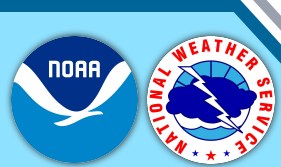
Triggered by the NWS for:

- Hurricane Warnings
- Storm Surge Warnings
- Extreme Wind Warnings
- Tornado Warnings
- Flash Flood Warnings

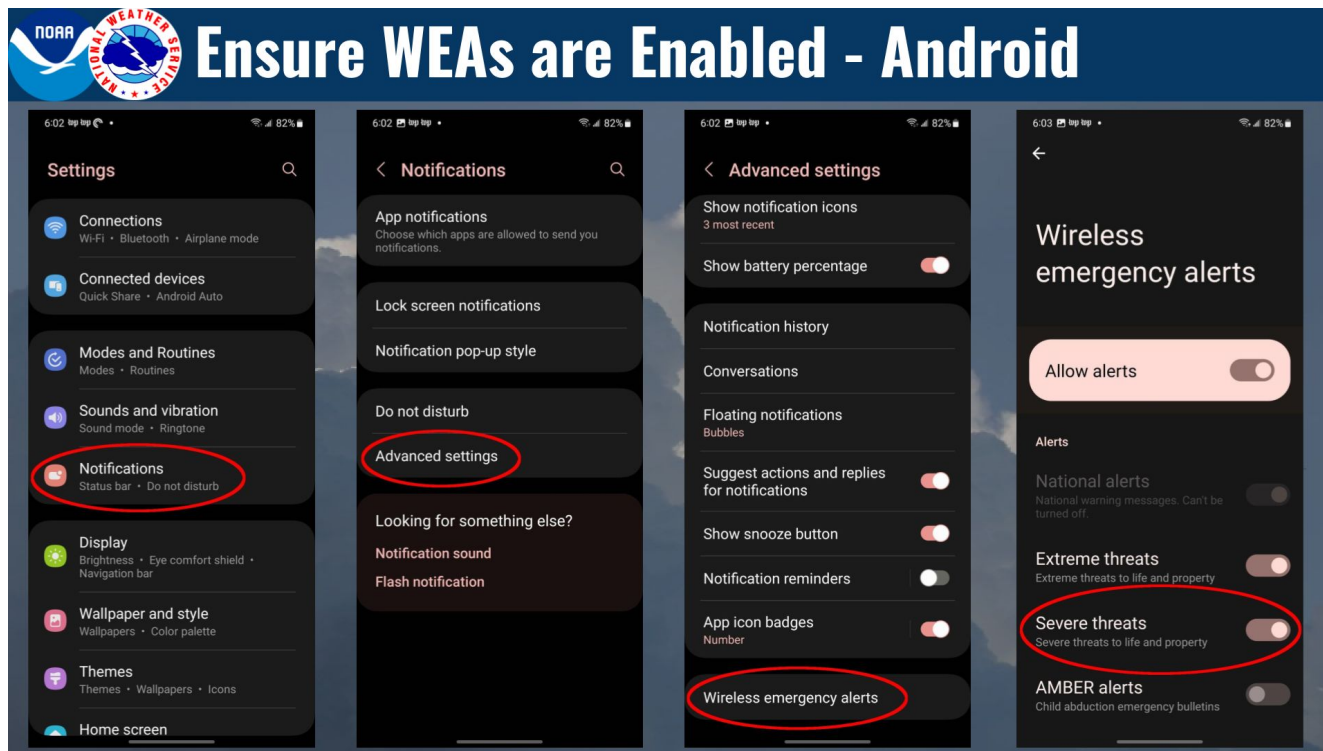
Local officials can send messages about resources too!

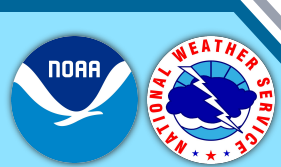
Make sure they're enabled!





W.E.A. Demonstration



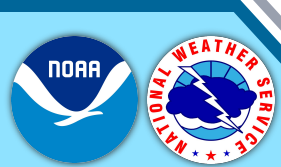


W.E.A. Demonstration

Ensure WEAs are Enabled - iPhone

The following steps are shown to ensure WEAs are enabled on an iPhone:

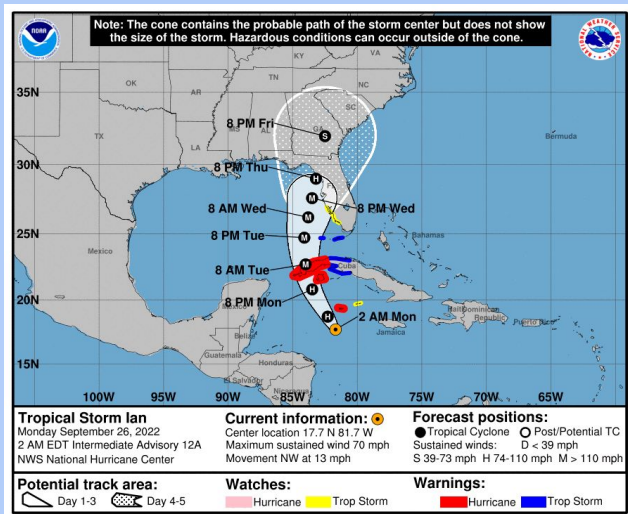
- Open the **Settings** app.
- Tap on **Notifications**.
- Scroll to the bottom of the Notifications settings.
- Under the **GOVERNMENT ALERTS** section, ensure the following are turned on:
 - AMBER Alerts** (Toggle is On)
 - Emergency Alerts** (Toggle is On)
 - Public Safety Alerts** (Toggle is On)
 - Test Alerts** (Toggle is Off)



Forecast Interface

National Hurricane Center Storm Scale & Regional Forecasts Size, Intensity & Track

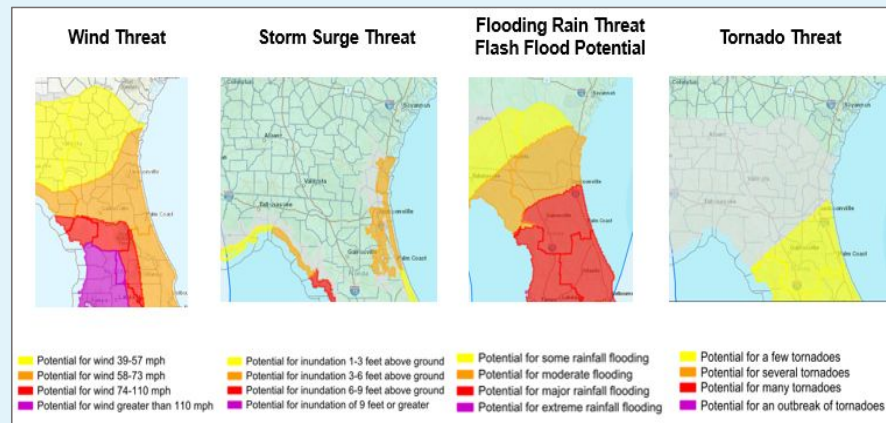
www.hurricanes.gov

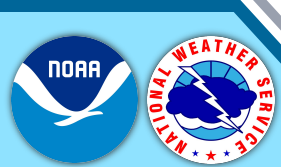


Local National Weather Service Offices Downscale NHC Forecasts to Local Area

What to prepare for, where, & when

www.weather.gov



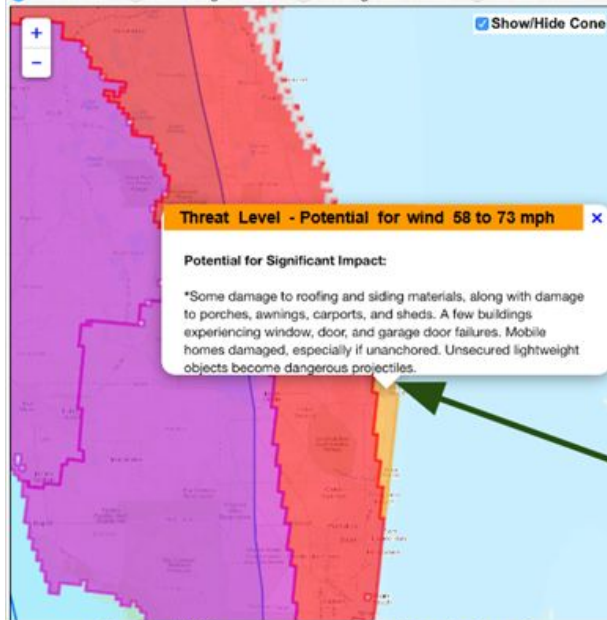


Hurricane Threats & Impacts Graphics Demo

Map of Coastal Threats and Potential Impacts - What's This?

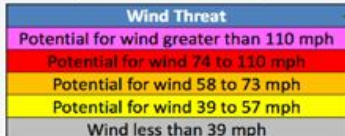
☒ Wind Threat ☐ Storm Surge Threat ☐ Flooding Rain Threat ☐ Tornado Threat

☒ Show/Hide Cone



[Download KML]

[Download Image]



Latest Forecast - What's This?

For: Coastal Palm Beach County

...HURRICANE WARNING REMAINS IN EFFECT...
...STORM SURGE WARNING REMAINS IN EFFECT...

* LOCATIONS AFFECTED

- West Palm Beach
- Boca Raton
- Juno Beach
- Jupiter

* WIND

- LATEST LOCAL FORECAST: Equivalent Tropical Storm force wind
- Peak Wind Forecast: 45-55 mph with gusts to 75 mph
- Window for Tropical Storm force winds: early Sunday morning until Monday afternoon

- EMERGENCY PLANS SHOULD INCLUDE A REASONABLE THREAT AS DEPICTED ON THE LEFT.

- * FOR MORE INFORMATION:
- <http://www.weather.gov/mfl>
 - www.co-palm-beach.fl.us
 - For storm information call 2-1-1

WHAT should I be concerned about?

WHERE will it happen?

HOW MUCH is likely to occur?

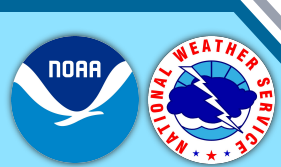
WHEN should I expect it?

WHAT should I prepare for?

Impact Statements customized for the local area (i.e., topography, land use, infrastructure, etc.)

Hazard-Based Threat Scale incorporates a "safety margin" relative to the uncertainty in the forecast

[NWS TBW HTI Link](#)



TOMORROW

Post Storm Safety

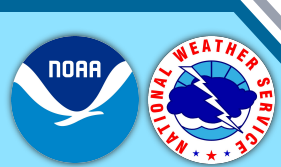
**Seasonal
Readiness**

**Monitoring
the Tropics**
Days 6-7

**Gearing Up
for Impacts**
Days 3-5

Hunker Down
<48 hrs to
Impact

**Post-Storm
Safety**



THANK YOU!

Training Website



FL Tropical Training 2026



**BE PREPARED.
STAY AWARE.**

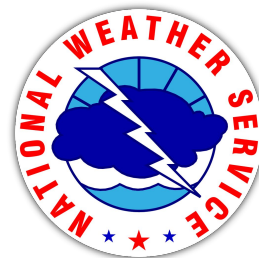
Submit questions



via Google Forms



Certificate Of Completion



**Thank you for attending Day 2 of
Florida Tropical Training Week
July 28th 2026**

PRESENTED BY THE NATIONAL WEATHER SERVICE