



TROPICAL READINESS WEEK 2024

PRESENTED BY NATIONAL WEATHER SERVICE OFFICES
SERVING THE STATE OF FLORIDA





TRAINING GOALS

1. Showcase tools to help you **assess your vulnerability.**
2. Identify & interpret **credible forecast resources.**
3. Answer the question...

“What should I be doing *now*?”

TODAY'S TEAM



Robert Garcia
NWS Miami, FL



Jessica Chace
NWS Mobile, AL



Lance Franck
NWS Tallahassee, FL



Mark Wool
NWS Tallahassee



Morgan Barry
NWS Mobile, AL



Cameron Young
NWS Tallahassee, FL



Jen Hubbard
NWS Tampa Bay, FL



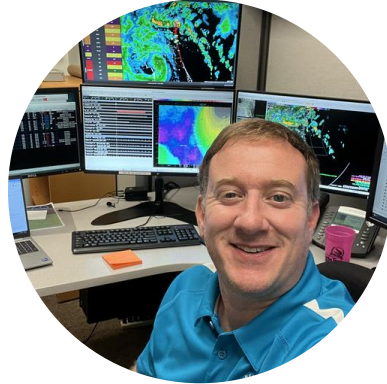
Jessie Schaper
NWS Melbourne, FL

TODAY'S CHATTERS

HUNKER DOWN



Morgan Barry
NWS Mobile, AL



Ben Nelson
NWS Jacksonville, FL



Kennedy Tartt
FL Dept of Emergency
Management



Jessie Schaper
NWS Melbourne, FL



Robert Garcia
NWS Miami, FL



Brendan Schaper
NWS Melbourne, FL



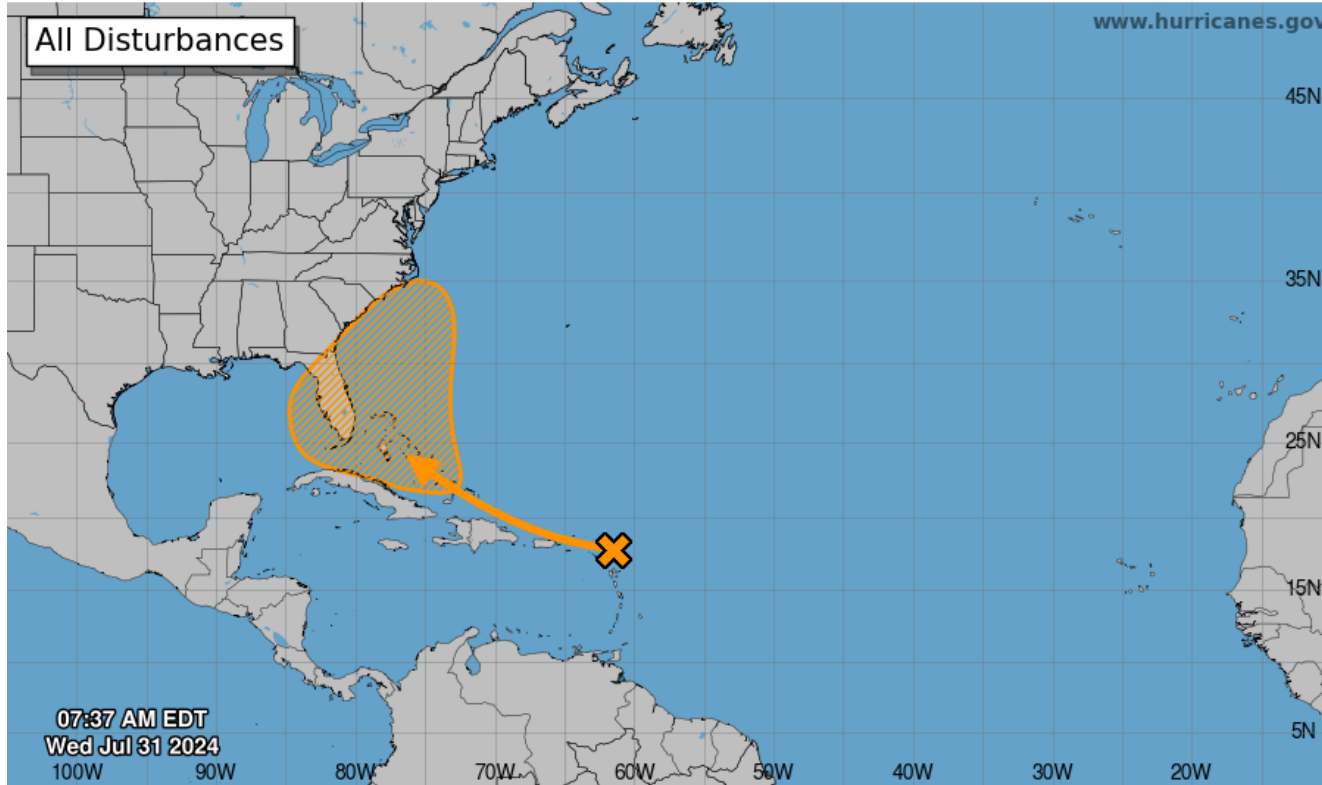
Tony Hurt
NWS Tampa Bay, FL

TROPICAL WEATHER OUTLOOK



Seven-Day Graphical Tropical Weather Outlook

National Hurricane Center Miami, Florida



Current Disturbances and Seven-Day Cyclone Formation Chance: < 40% 40-60% > 60%
Tropical or Sub-Tropical Cyclone: Depression Storm Hurricane
 Post-Tropical Cyclone or Remnants

There is a 60% chance of tropical cyclone formation somewhere in the orange shaded area in the next 7 days

What to do now:

- Stock Supply Kits
- Review Hurricane Plans
- Know your Evacuation Zone
- Monitor here: www.hurricanes.gov





Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.

Sheltering & Hunker Down

What do you do & when?

Prepare

Monitor
Days 6-7

Get Ready
Days 3-5

**Hunker
Down**
< 48 hrs to Impact

Recover
After Storm

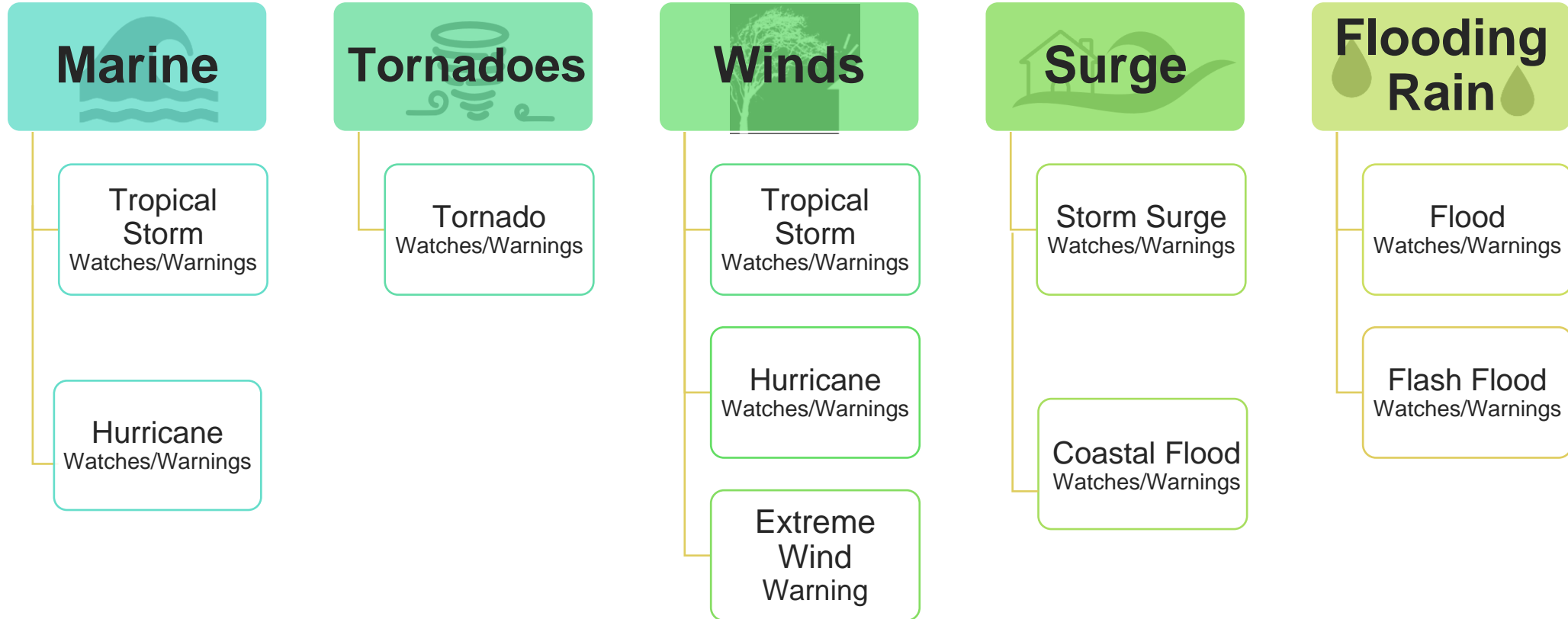
Interpreting Watches & Warnings

Sheltering Considerations

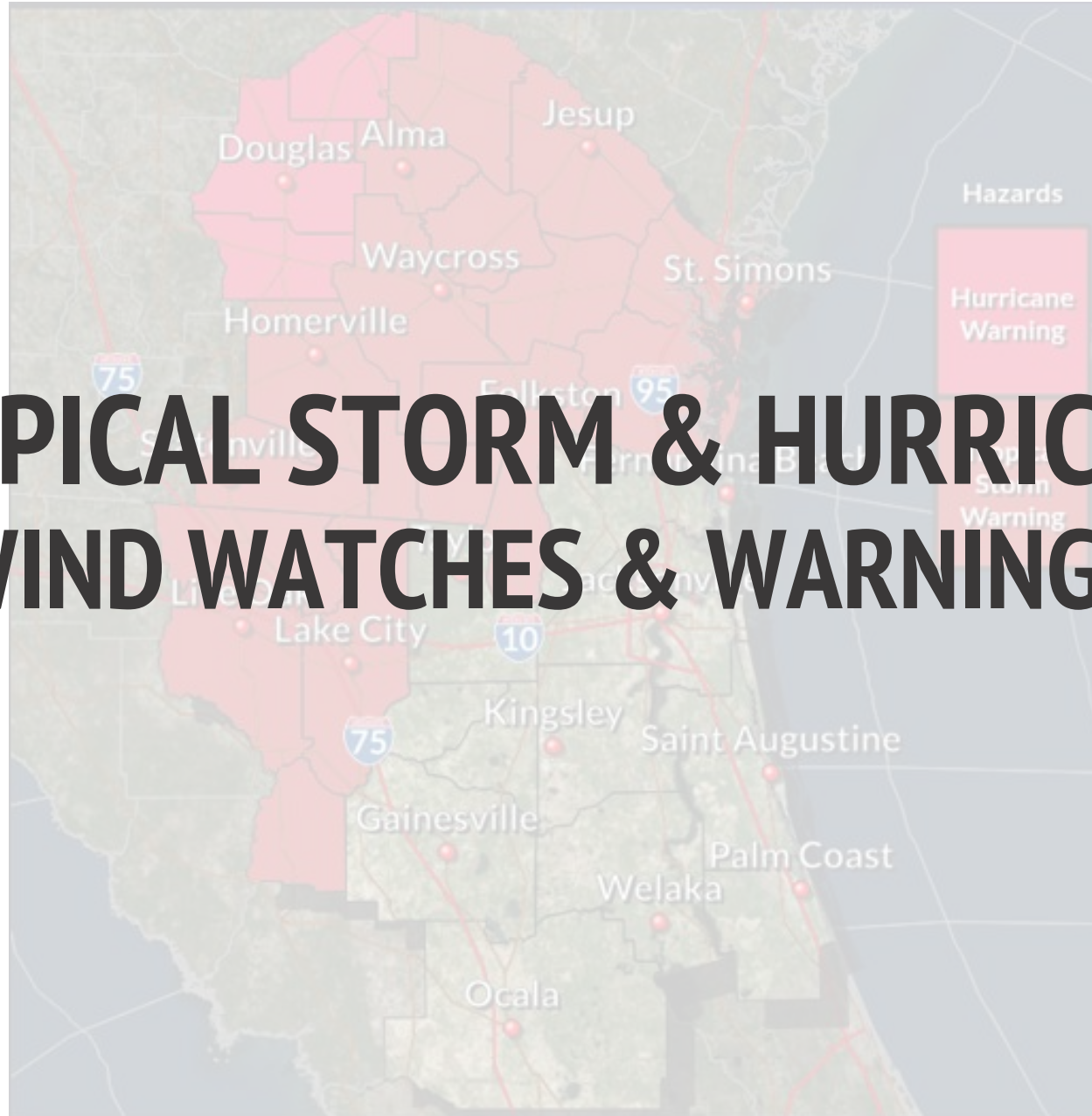
Impacts & Hunker Down Mode

WATCHES & WARNINGS

MULTIPLE HAZARD PRODUCT NOTIFICATIONS



TROPICAL STORM & HURRICANE WIND WATCHES & WARNINGS



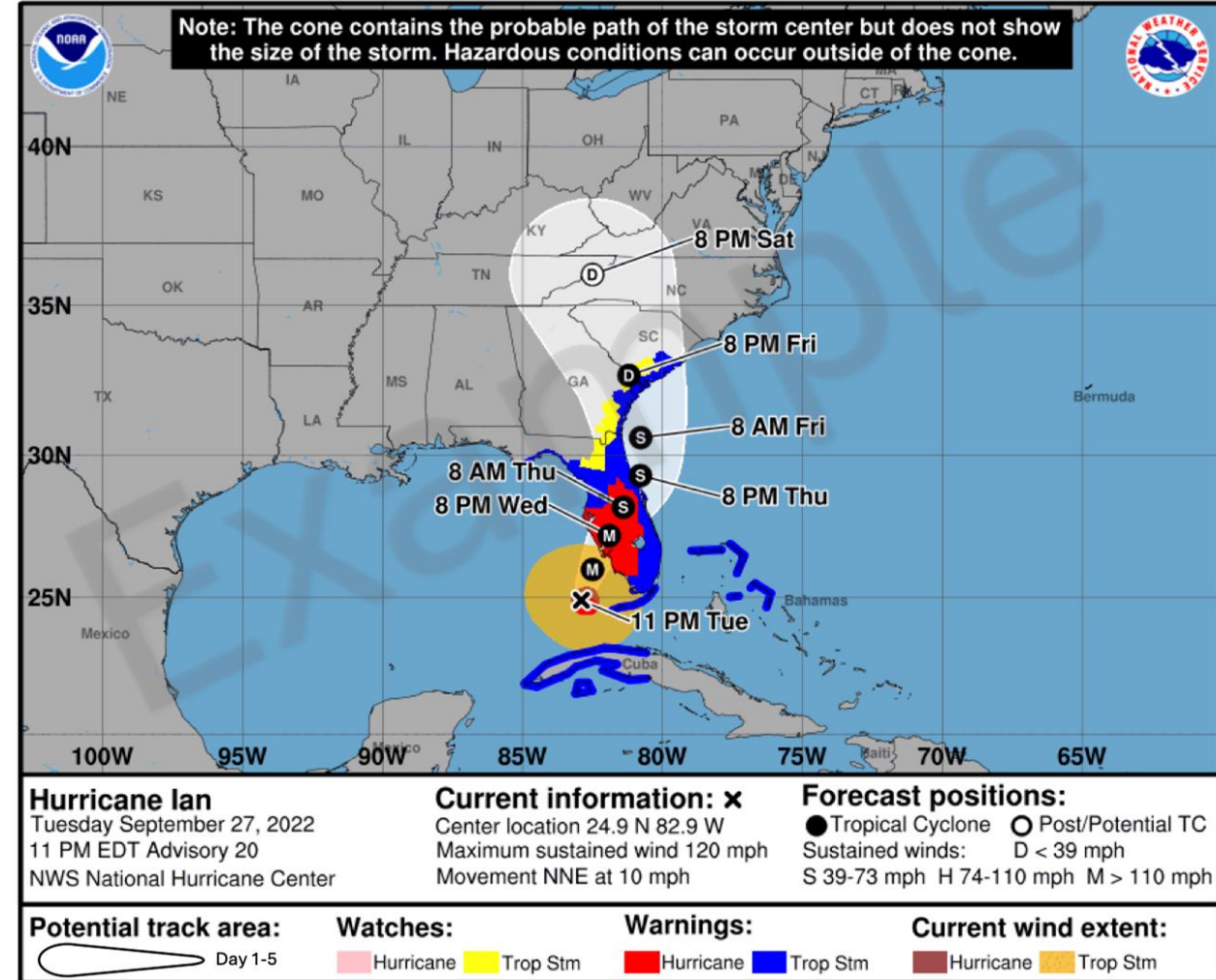
INTERPRET WATCHES & WARNINGS

HUNKER DOWN

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

~ 48 hours out
hours

~ 36



Tropical Storm Warning

Tropical storm conditions
(sustained winds of 39 to 73 mph)
are **expected** within the **next 36 hours**



Tropical Storm Watch

Tropical storm conditions
(sustained winds of 39 to 73 mph)
are **possible** within the **next 48 hours**

Hurricane Warning

Hurricane conditions
(sustained winds of 74 mph or higher)
are **expected** within the **next 36 hours**

Hurricane Watch

Hurricane conditions
(sustained winds of 74 mph or higher)
are **possible** within the **next 48 hours**





STORM SURGE WATCHES & WARNINGS

STORM SURGE RUN FROM THE WATER



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

Storm Surge Warning

There is a **danger of life-threatening inundation** from rising water moving inland from the shoreline generally **within 36 hours**.

Promptly follow evacuation and other instructions from local officials.

Storm Surge Watch

There is a **possibility of life-threatening inundation** from rising water moving inland from the shoreline generally **within 48 hours**.

Promptly follow evacuation and other instructions from local officials.



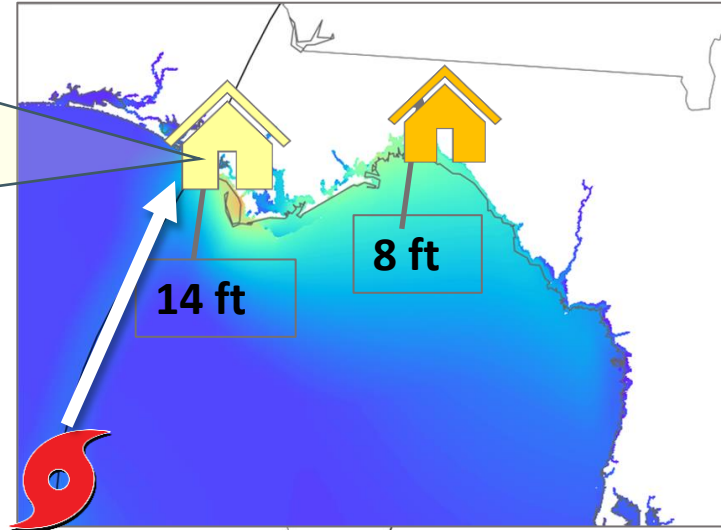
WATCHES & WARNINGS

TRACK WOBBLES

HUNKER DOWN

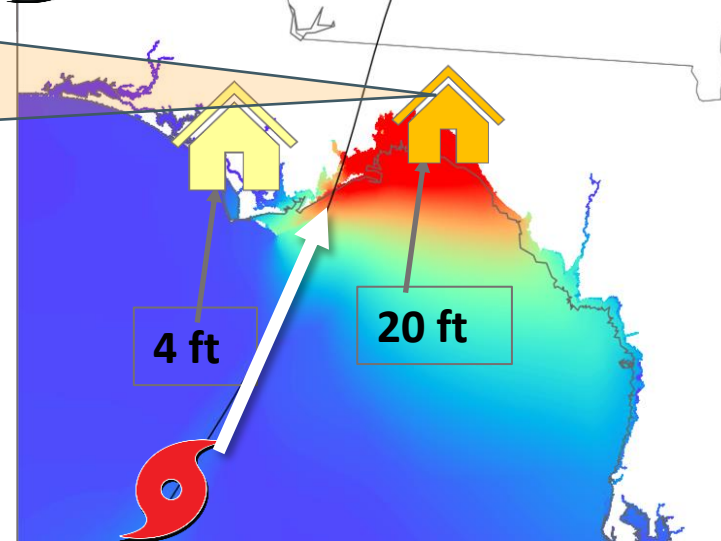
Just this morning they said 10-14 ft of surge, now it's 3-5 ft.

Can't they make up their mind?



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

We were fine last time...



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

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

**Prepare for
THREAT & IMPACT
POTENTIAL**

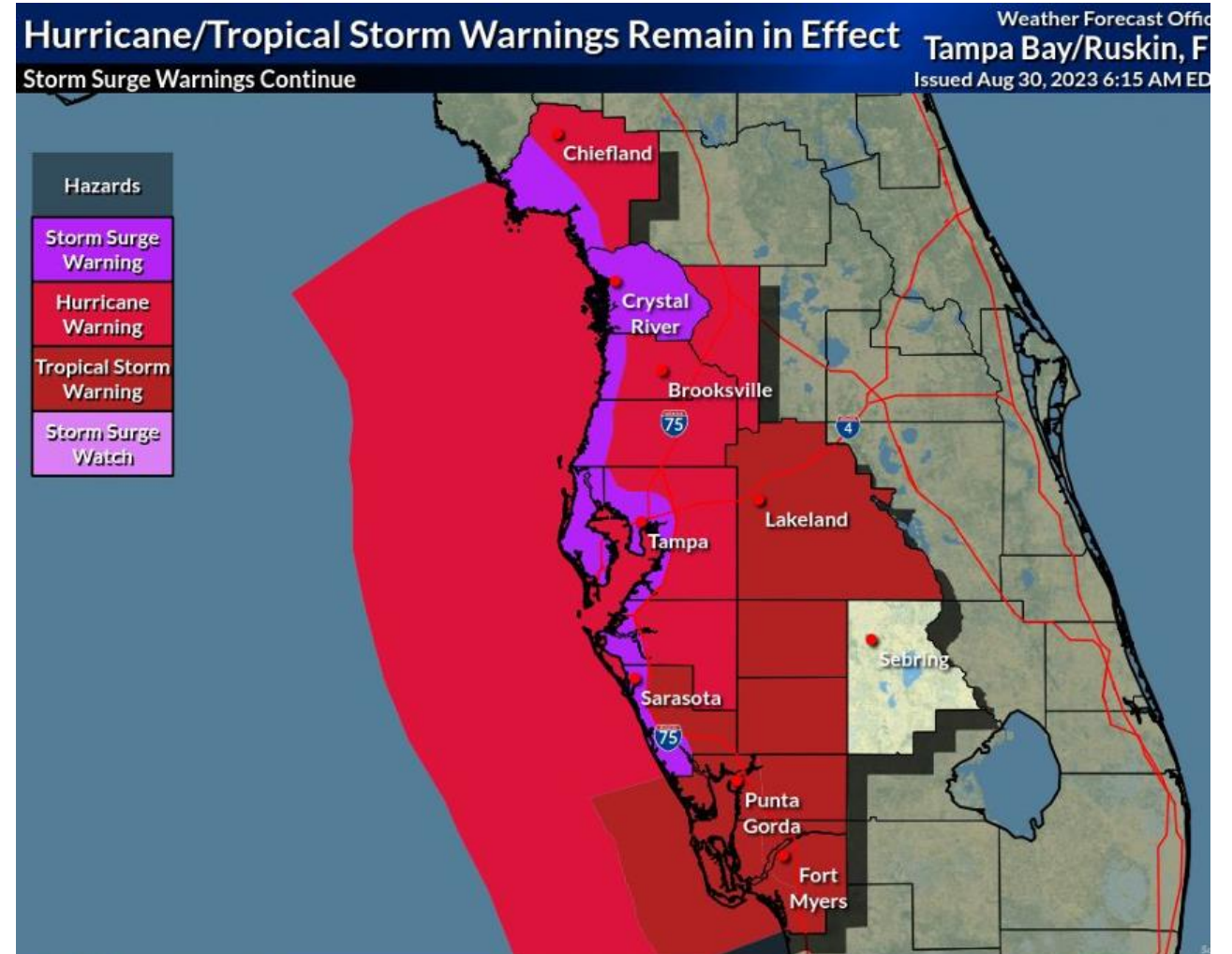
WATCHES & WARNINGS

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





MOTIVATING EVACUATION

HURRICANE
EVACUATION
ROUTE

HUNKER DOWN

POLL QUESTION



What would motivate you to evacuate?

- A. I am asked to leave by local officials
- B. I've never experienced a storm & don't know what to expect
- C. My neighbors evacuate
- D. The category of the storm
- E. No reason can make me evacuate



EVACUATION

VOLUNTARY VS MANDATORY

EVACUATE WHEN TOLD TO
DO SO BY EMERGENCY
OFFICIALS



**Disclaimer: Orders will be different from location to location.
Follow the direction of your emergency officials!*

Voluntary orders*

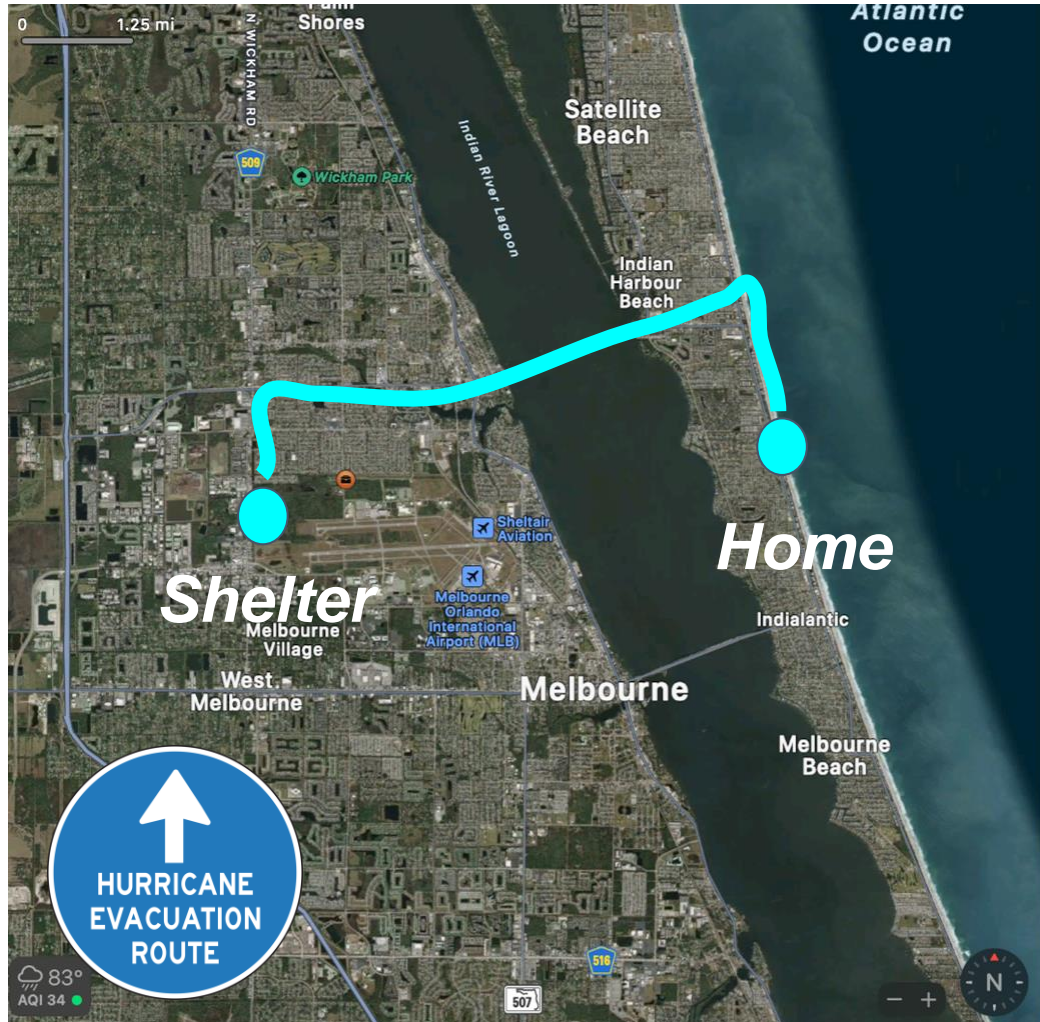
- Highly suggested to evacuate
- Consider special needs and the condition/safety of your home
- **Threat to life and property may still escalate!**

Mandatory orders*

- Life-threatening conditions expected
- Know your evacuation zone ([FDEM](#))
- Resources likely to be limited and you may become partially/entirely isolated
- **You assume 100% responsibility**

EVACUATION

WHERE TO EVACUATE



“MOVE AWAY FROM THE WATER”

- ✓ If your evacuation zone is requested to evacuate, your location is vulnerable to storm surge inundation
- ✓ Consider reaching out to local family, friends, nearby hotels & county shelters

YOU DO NOT HAVE TO EVACUATE FAR to find safe shelter from storm surge

10s of miles, not 100s of miles!



SHELTERING – HUNKER DOWN

WHAT DOES IT LOOK LIKE?

Ready ✓

SHELTERING – AT HOME

WHAT DO YOU DO?

- Stay indoors –
Do **not** conduct outdoor assessments during the storm
- Remain away from windows, doors, exterior walls
- Shelter away from where large trees could fall into/onto structure
- **Monitor** for tornado, flash flood & extreme wind warnings



SHELTERING – AT SHELTERS

WHAT DO YOU DO?

Consider other options first

Only basic necessities may be provided

Bring only medical & personal items

Check if pet friendly

Remain away from windows, doors, exterior walls



SHELTERING – ELDERLY AND SPECIAL NEEDS

WHAT DO YOU DO?

- **Medical equipment** - Have backup power resources in case of a power outage
 - snr.flhealthresponse.com
- **Home care or treatment** - Understand their emergency plans and identify backup service providers
- **Identify yourself** - Wear a medical alert bracelet or pendant to help first responders treat you properly.
- **Helping others help you** - Make others aware of how to access your home, emergency supplies, medication, and other lifesaving equipment.
- **Considerations for deaf/hard of hearing & blind**
Have special devices to help you communicate, extra hearing aid batteries, label supplies in Braille



SHELTERING – PET AND SERVICE ANIMALS

WHAT DO YOU DO?

HUNKER DOWN

- **Crate/transportation** - Sturdy, transportable carrier ready for evacuation
- **Food and water** - 7 day supply on hand
- **Comfort items** - Treats, toys and bedding can help reduce the stress of the storm for your pet
- **Documentation** - Picture of you and your pet, vaccination and medication records in case you become separated



Heading to a community shelter?
Be sure they are pet-friendly!

SHELTERING – TOURISTS & VISITORS

WHAT DO YOU DO?

HUNKER DOWN

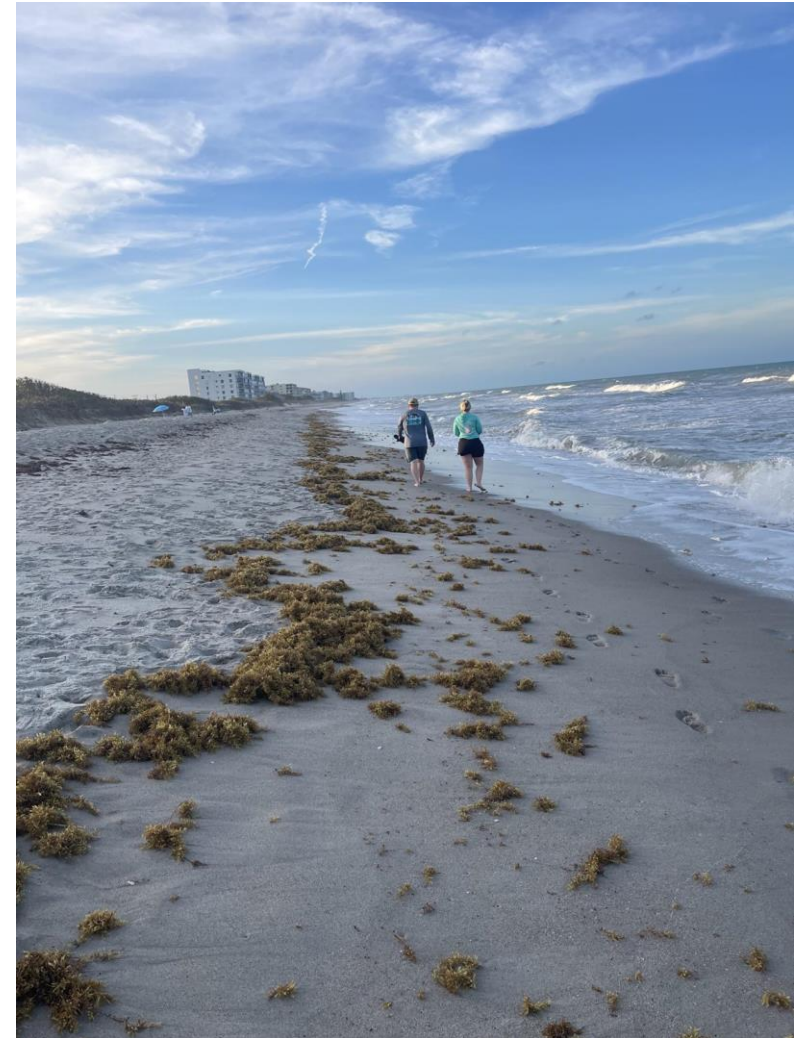
Alter travel plans or leave ahead of time

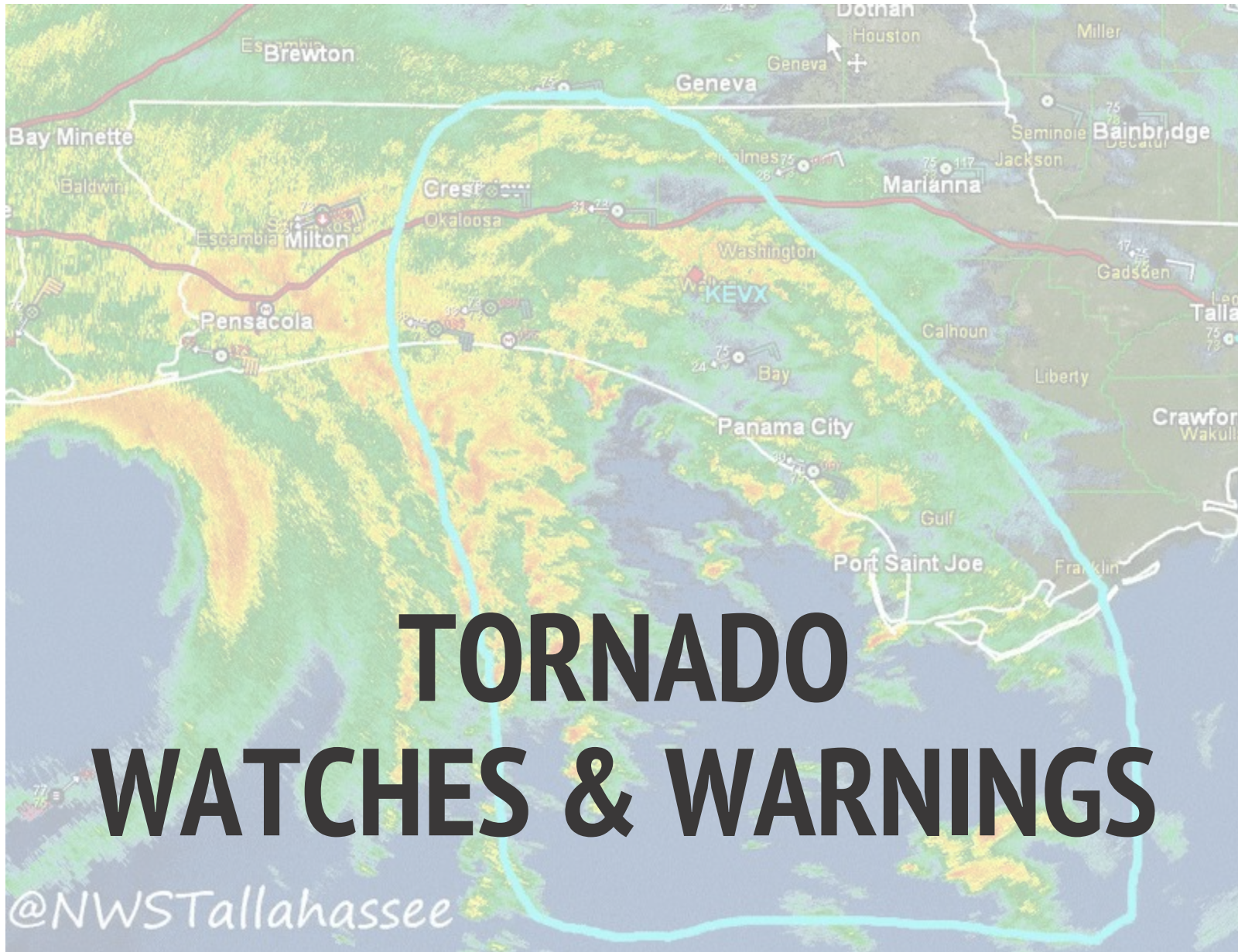
Know your zone - Find out what county you are in and if in an evacuation zone

Evacuation ordered - Follow the instructions of emergency officials and know where to shelter

Sheltering - Stay inside, have reliable methods to receive warnings, and move to a higher floor or interior room if water or wind threaten

Post-storm travel - Check with transportation companies for their emergency or post-storm travel policies. *Do not travel until safe to do so and avoid disaster areas!*





TORNADO WATCHES & WARNINGS

@NWSTallahassee

SHELTERING

TORNADO WATCHES & WARNINGS

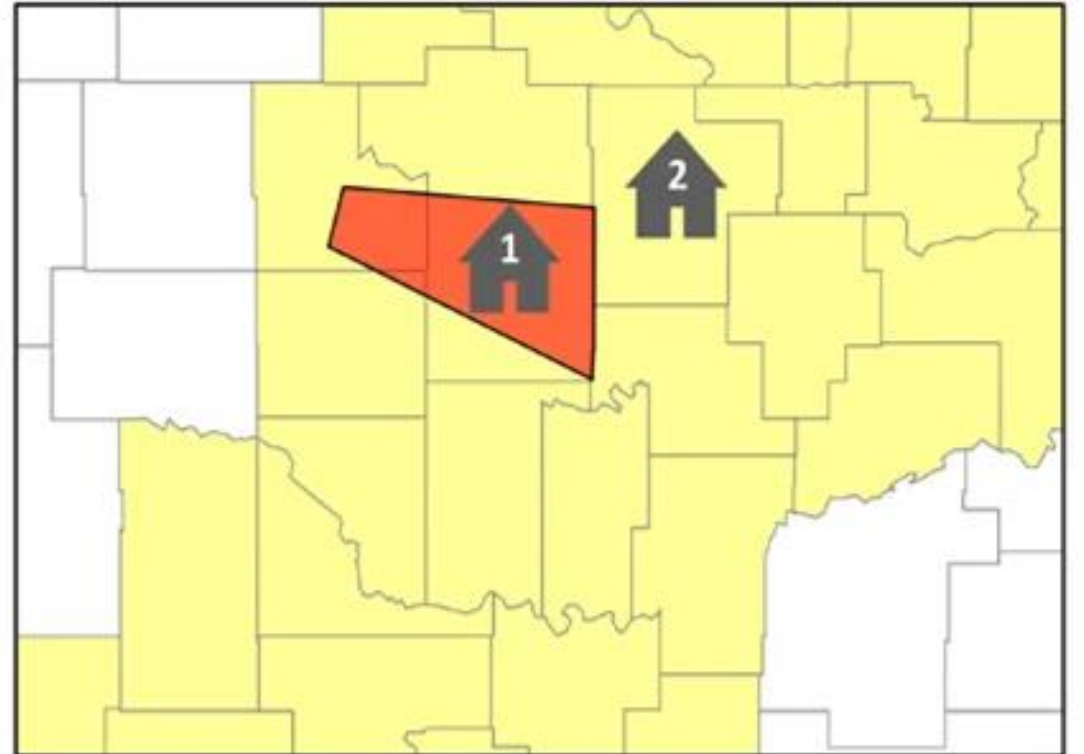
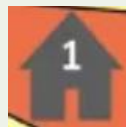
Tornado Watch

- ✓ 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



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





FLASH FLOOD WATCHES & WARNINGS

Image Brian Carlson
Bloomberg, Getty
Images

EVACUATION & SHELTERING

FLOOD WATCHES & WARNINGS

FLOOD WATCH

A Flood Watch is issued when **flooding is possible.**

Stay tuned to trusted news sources and be ready to seek higher ground.

Be Prepared.

FLOOD WARNING

A Flood Warning is issued when **flooding is happening or about to happen.**

Move to higher ground immediately!
Never drive or walk through floodwaters.

Take Action!

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.



EVACUATION & SHELTERING

FLOOD WATCHES & WARNINGS

HUNKER DOWN



Credit: Clay Today
Black Creek, Middleburg, FL



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

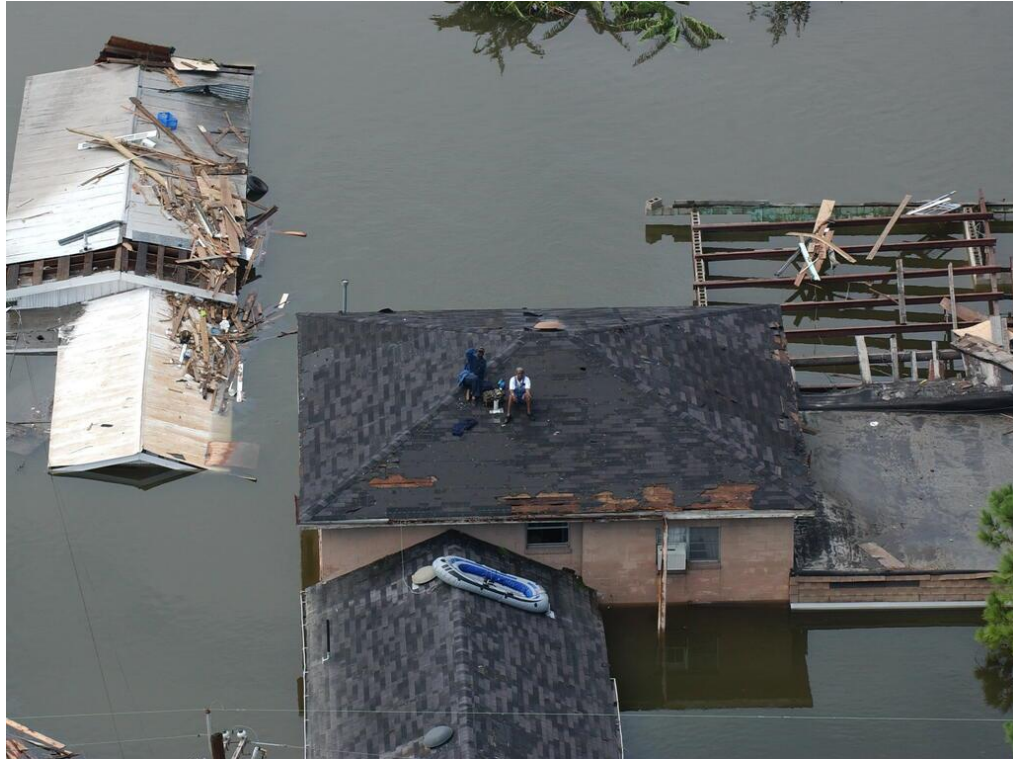
You may be isolated for an extended period during & after the storm due to flooding

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

EVACUATION & SHELTERING

VERTICAL EVACUATION

HUNKER DOWN



Life-threatening flooding compromises shelter

Forces evacuation to higher level

Keep an axe in the attic

You may be isolated for extended period of time

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.



EVACUATION & SHELTERING

EXTREME WIND WARNING



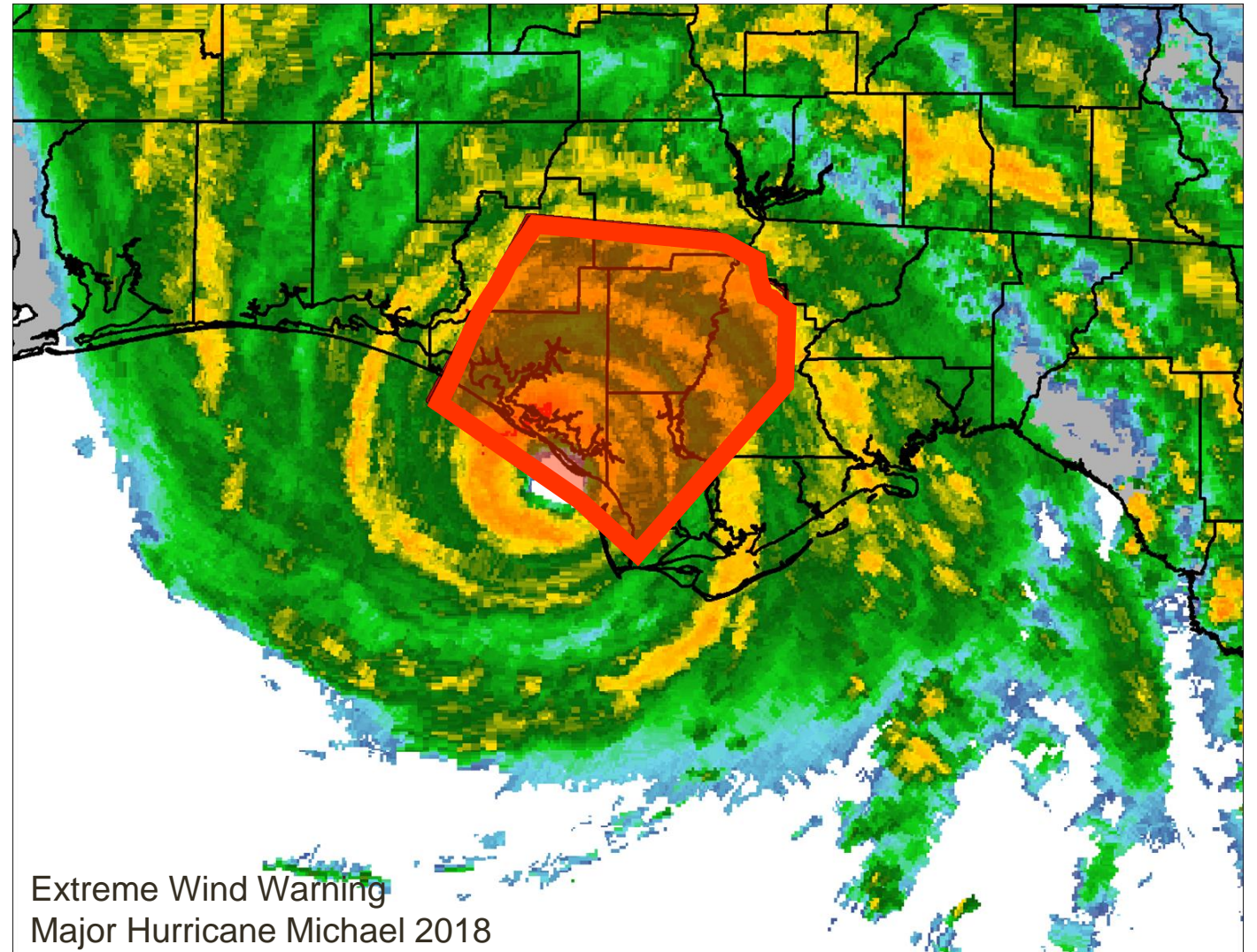
HUNKER DOWN

Shelter-within-Shelter

Go to your interior safe room

Put as many walls between you and the outside as possible

Wireless Emergency Alert on your cell phone



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



SHELTER WITHIN SHELTER

HUNKER DOWN

DAMAGE OUTSIDE...



... SAFETY INSIDE!



You are not safe here.

During high winds **tree damage is expected.**

Stay safe by avoiding exterior rooms and vehicles while the winds are strong.



EVACUATION & SHELTERING

HUNKER DOWN... WITH FAMILY & FRIENDS

HUNKER DOWN



Never try to “ride the storm out” alone!

Ask a neighbor or friend if you can join them in their shelter.

Think about elderly neighbors who may have no family nearby - could you take them in or offer assistance?

EVACUATION & SHELTERING

DON'T COMPARE THIS STORM TO "LAST TIME"

All Storms are Different Don't Let Past Experiences Dictate Your Planning

- Impacts can be much worse for some hurricanes compared to others, even of similar strength, due to differences in landfall location, size, and forward speed
- The storm's scale only tells you about the strongest winds near the center of the storm and does not tell you about potentially life-threatening flooding from rain or storm surge
- Stay informed of the latest forecasts as changes in track, intensity, and landfall location can result in changes in potential impacts

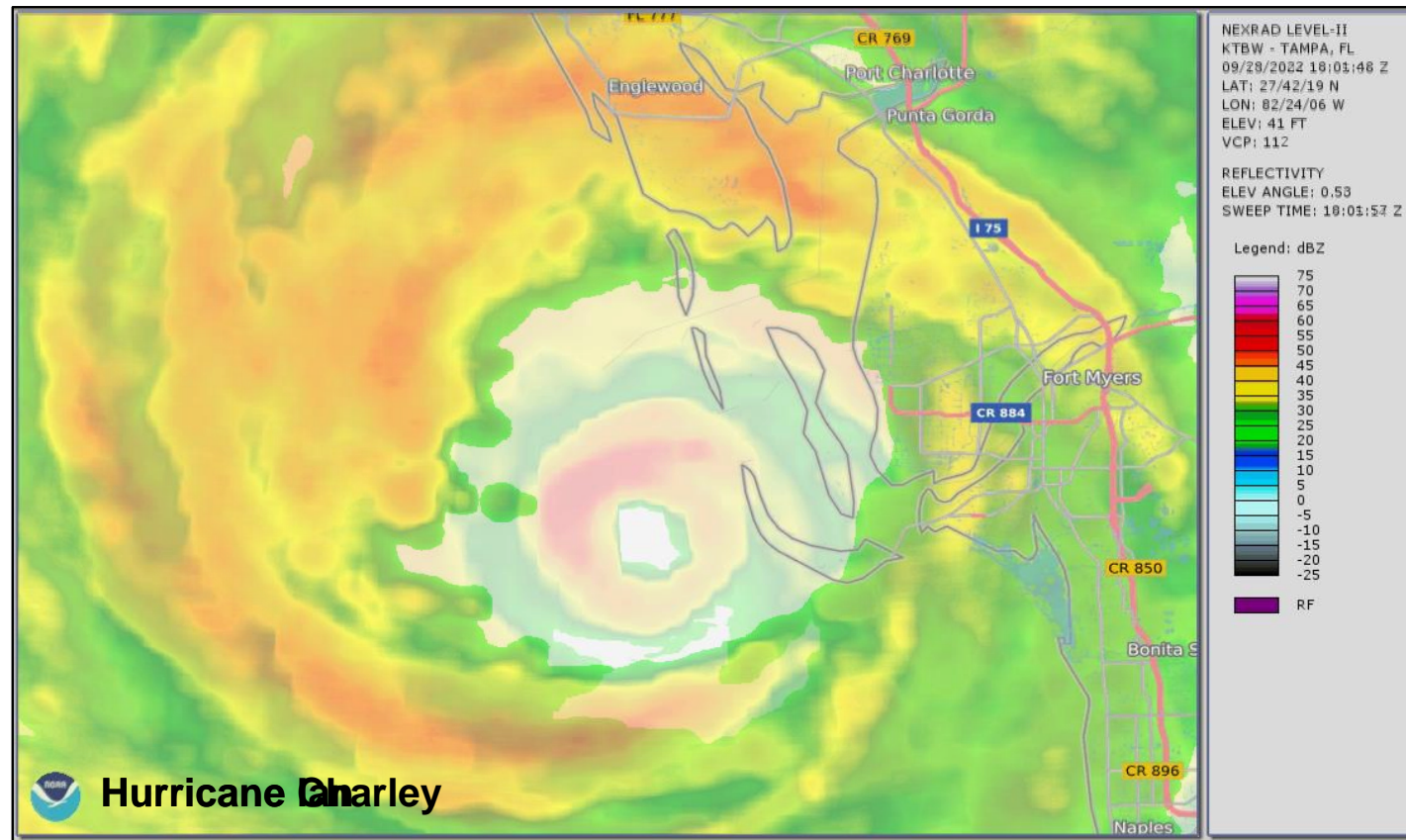
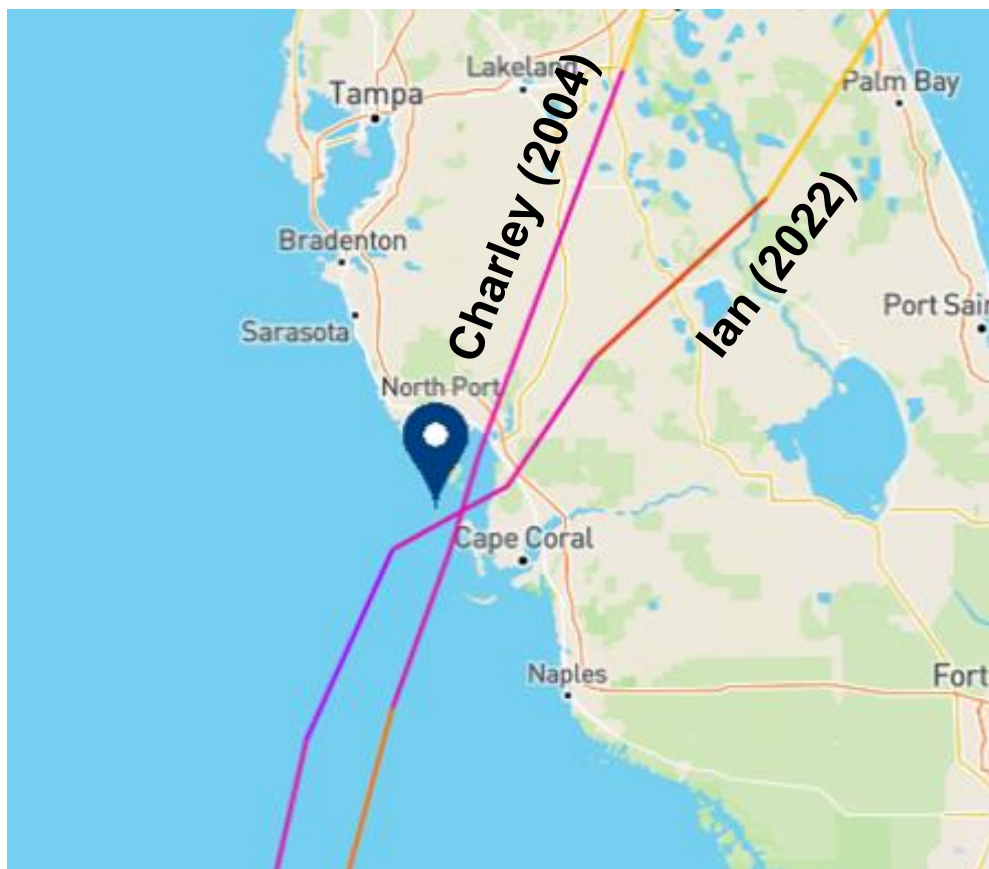
Delivering the Right Message

weather.gov



EVACUATION & SHELTERING DON'T COMPARE THIS STORM TO "LAST TIME"

Tracks of Hurricane Charley (2004) and Hurricane Ian (2022)



[Why Tropical Cyclone Size Matters: A Comparison of Hurricanes Charley \(2004\) & Ian \(2022\)](#)

HUNKER DOWN

POLL QUESTION



What do you find to be the most difficult part of waiting out a storm in your shelter?

- A. Lack of power
- B. Uncertainty of damage
- C. Stress
- D. Nothing for entertainment
- E. Cut off from communication





WATCH & WARNING NOTIFICATION

WIRELESS EMERGENCY ALERTS

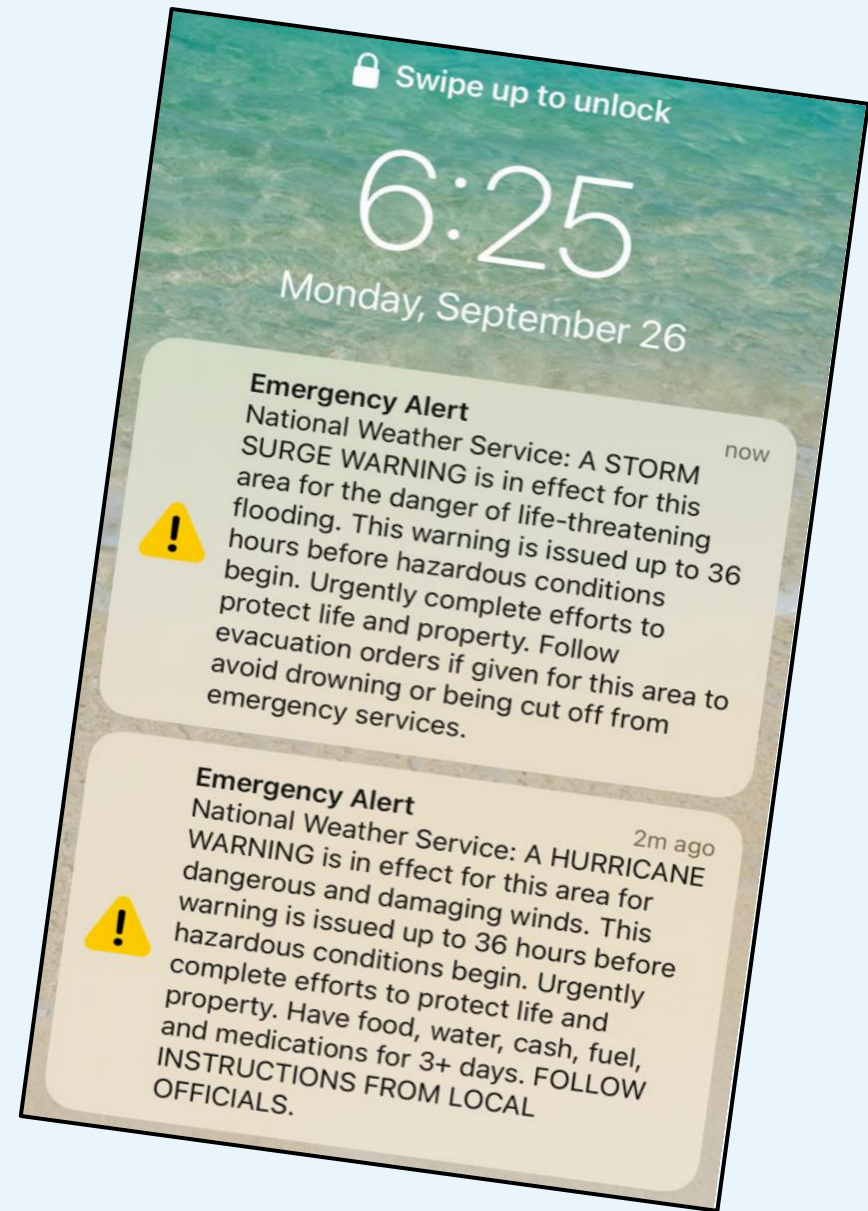
US alerting network to disseminate emergency alerts to mobile devices

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!





Have multiple ways to get warnings
weather.gov



WATCH & WARNING NOTIFICATIONS

MULTIPLE SOURCES

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

HUNKER DOWN

POLL QUESTION



How do you receive weather alerts?

A. NOAA Weather Radio

B. Cell phone alerts (i.e. WEA)

C. TV/Radio Broadcast

D. Friends/family notifying me

E. I don't have a way to receive alerts





**You have completed “Day 3”...well done!
Thank you for participating**

Session certificates will be emailed to each attendee



TOMORROW

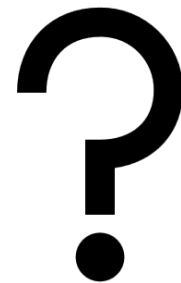
DAY 1
Monitoring the
Tropics
Seasonal Readiness

DAY 2
Get Ready for
Potential Impacts

DAY 3
Sheltering &
Hunker-Down
Mode

DAY 4
Post-Storm
Safety
Lessons
Learned

weather.gov/jax/FloridaTropicalTrainingWeek2024



Submit questions

NATIONAL WEATHER SERVICE



Program Website



Submit questions



**BE PREPARED.
STAY AWARE.**

<https://www.weather.gov/jax/FloridaTropicalTrainingWeek2024>

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