

Florida Tropical Training Week 2025

PRESENTED BY NATIONAL WEATHER SERVICE FLORIDA OFFICES



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 TRAINING TIMELINE

DAY 1

**Seasonal
Readiness &
Monitoring the
Tropics**

DAY 2 (Tues)

**Gearing Up for
Potential Impacts**

DAY 3 (Wed)

**Sheltering &
Hunker-Down Mode**

DAY 4 (Thurs)

**Post-Storm Safety
Lessons Learned**

<https://www.weather.gov/jax/FloridaTropicalTrainingWeek2025>



TODAY'S TEAM

Jenn Hubbard, Presenter
NWS TBW
Warning Coordination
Meteorologist



Robert Garcia, Presenter
NWS MFL
Warning Coordination
Meteorologist



Paige Klingler, Chat
NWS JAX
Meteorologist



Felecia Bowser, Chat
NWS TAE
Meteorologist-in-Charge



Angie Enyedi, Chat
NWS JAX
Lead Meteorologist

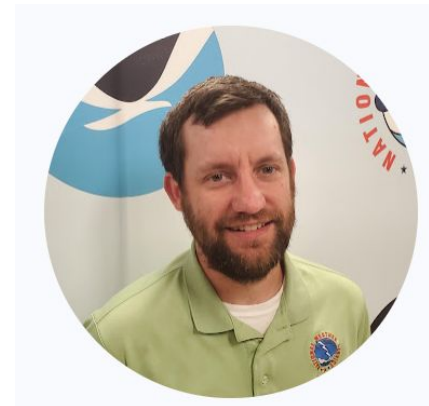


THIS AFTERNOON'S TEAM

Angie Enyedi, Presenter
NWS JAX
Lead Meteorologist



Matt Anderson, Presenter
NWS TBW
Science and Operations Officer



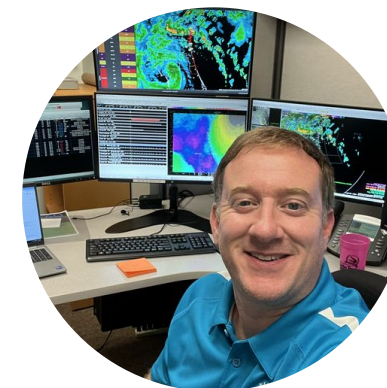
Bryce Tyner, Chat
NWS KEY
Lead Meteorologist



Kennedy Tart, Chat
FDEM
Assistant Meteorologist



Ben Nelson, Chat
NWS JAX
Lead Meteorologist

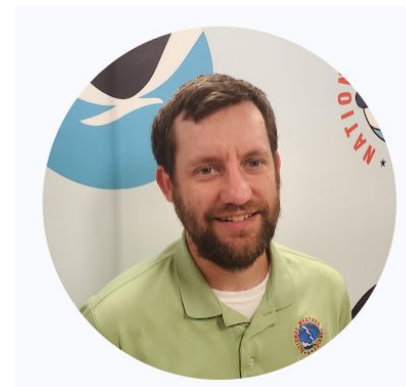


THIS EVENING'S TEAM

Kelly Godsey, Presenter
NWS TAE
Senior Service
Hydrologist



Matt Anderson, Presenter
NWS TBW
Science and Operations Officer



Keily Delerme, Chat
NWS TBW
Meteorologist



Kennedy Tart, Chat
FDEM
Assistant Meteorologist



Morgan Barry, Chat
NWS MOB
Lead Meteorologist





Prepare What can you do *NOW*? Ready

**Seasonal
Readiness**

**Monitoring
the Tropics**
Days 6-7

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

Hunker Down
< 48 hrs to Impact

**Post-Storm
Safety**

Identifying Your vulnerability

Credible Forecast Sources

Tropical Monitoring tools

Seasonal Preparedness – What Does it look like?

Poll Question

What part of Florida
do you live in?



PERSONAL VULNERABILITY

PATHS OF KNOWN TROPICAL STORMS &
HURRICANES SINCE 1842
WITHIN 60 MILES OF FLORIDA

Did You Know...

The term “tropical cyclone”
includes tropical depressions,
tropical storms & hurricanes.



PREPARE - KNOW YOUR RISK

What is your tropical cyclone risk?

Visualize past tracks & frequency

Available Source:

<https://coast.noaa.gov/hurricanes>



Tracks of known tropical storms & all hurricane within 100 miles of Duval county since 1851

Hurricane Preparedness

Get an Insurance Checkup



Check with
your agent



Know your
policy



Consider
flood insurance



Keep
documents
with you

weather.gov



PREPARE - REGISTER FOR EVACUATION ASSISTANCE

When to consider registering:

- If you need evacuation assistance to a public shelter
- If you rely on electricity or need assistance accessing medication during a disaster

<https://snr.flhealthresponse.com/>



TROPICAL CYCLONE HAZARDS

**STORM
SURGE**



**FLOODING
RAINFALL**



WIND



TORNADOES



**COASTAL
HAZARDS**



Poll Question

Since 2013, what is the tropical hazard directly responsible for the most tropical cyclone deaths in the U.S.?

- a.) Storm Surge
- b.) Freshwater Flooding
- c.) Wind
- d.) Tornadoes
- e.) Coastal Hazards



Know Your Risk: Water & Wind



Consider your threats: storm surge, flooding from heavy rain, strong winds, tornadoes, rip currents



Determine if you live in a flood-prone area



Find out if you live in an evacuation zone



Identify your home's structural risks (mobile homes & basements can be especially vulnerable)





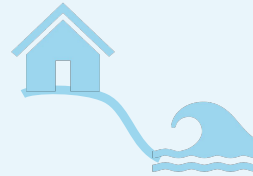
PHOTO USAF
MSgt Mark Olsen

SURGE RISK



LOCATION

PROXIMITY TO COAST, INTRACOASTAL WATERWAY, TIDAL RIVERS INCREASES RISK



ELEVATION

STRUCTURES NOT ELEVATED NEAR TIDAL BODIES OF WATER HAVE GREATER SURGE RISK



STRUCTURE

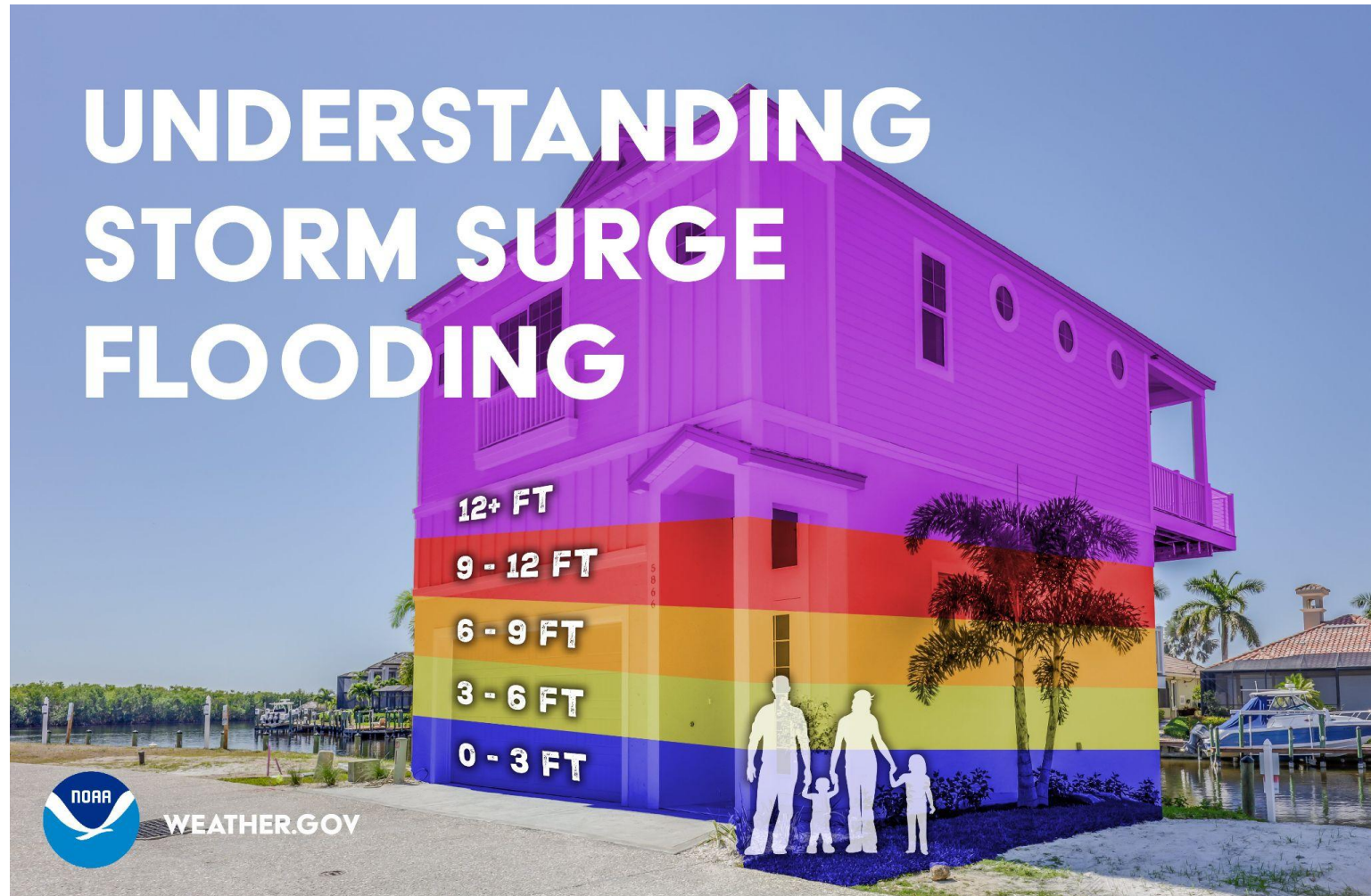
STRUCTURAL COMPOSITION & INTEGRITY INFLUENCES RESILIENCE TO STORM SURGE WATER – WOOD MORE VULNERABLE, CONCRETE BLOCK LESS VULNERABLE

STORM SURGE

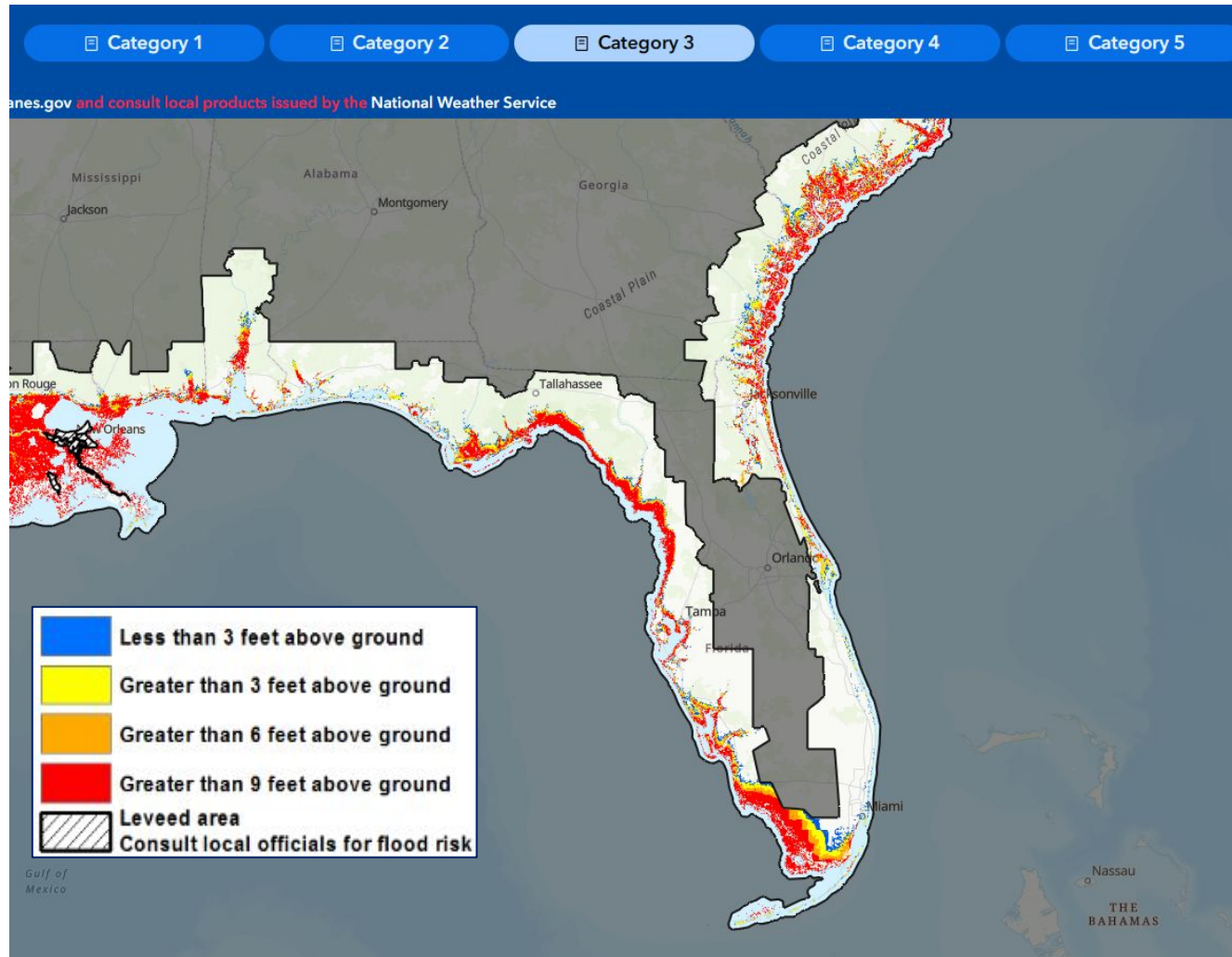
Storm surge > 3 feet is considered life-threatening

Forecasts in 'still water' heights (example, pool depth)

Consider destructive wind waves on top of storm surge!



Storm Surge Risk Assessment Tool



Displays Maximum Storm Surge Inundation value by Hurricane Category

- Identifies surge prone areas
- NOT for active storms! Use BEFORE storm to identify your surge vulnerability
- Intended use as a long-range planning tool
- Actual event storm surge is a result of MANY factors

Available from
National Hurricane Center:



<https://experience.arcgis.com/experience/203f772571cb48b1b8b50fdcc3272e2c>

FLOOD ZONES vs EVACUATION ZONES

FLOOD ZONES

- Mapped by FEMA
- Represented by Letter(s)
- Tells homeowner the risk of property flooding from flooding rainfall
- Does NOT relate to storm surge

EVACUATION ZONES

- Determined by local emergency managers
- Identifies areas prone to storm surge inundation during tropical events
- Areas that may be evacuated during a tropical event

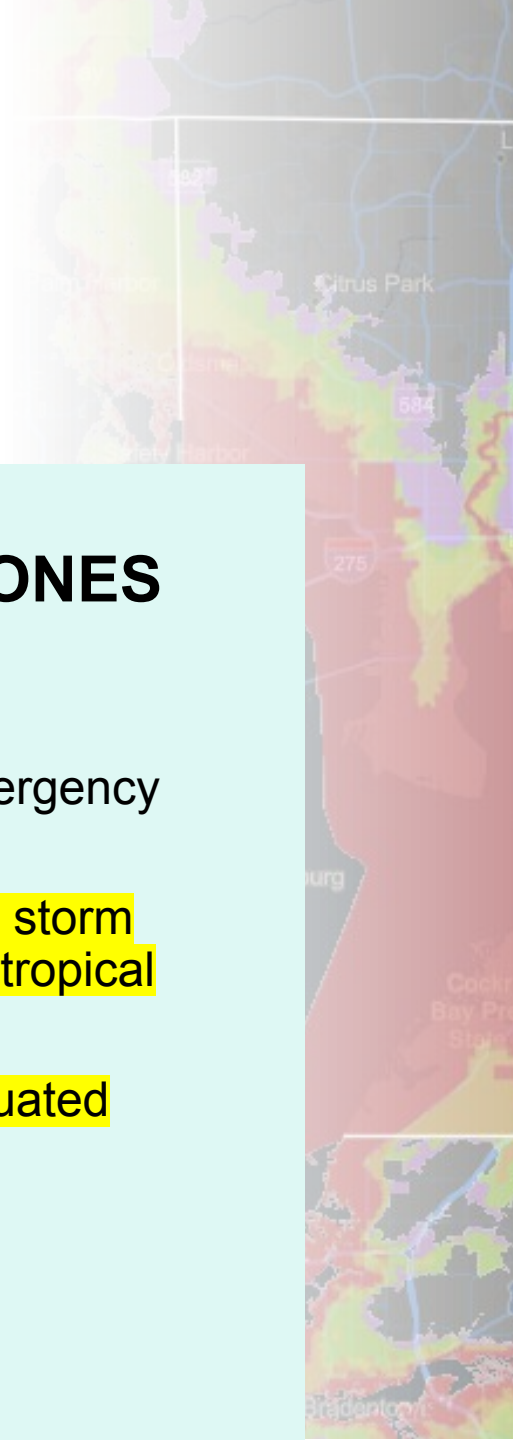




PHOTO GETTY
IMAGES

FLOOD RISK



LOCATION

PROXIMITY TO INLAND LAKES, RIVERS,
CREEKS, LOW-LYING AND/OR POOR
DRAINAGE AREAS



ELEVATION

STRUCTURES NOT ELEVATED NEAR
INLAND BODIES OF WATER OR NEAR
POOR DRAINAGE AREAS HAVE
GREATER FLOOD RISK



FEMA Flood Zones

<https://msc.fema.gov/portal/search>

Poll Question

Do you know your
evacuation zone?



PREPARE - KNOW YOUR ZONE

Are you in an evacuation zone?
Are you flood prone?
Are nearby roads flood prone?

Are you able to be self-sufficient for numerous days?

Visit your County Emergency Management Website for Evacuation Zone Map or FL Division of Emergency Management:



www.floridadisaster.org/knowyourzone

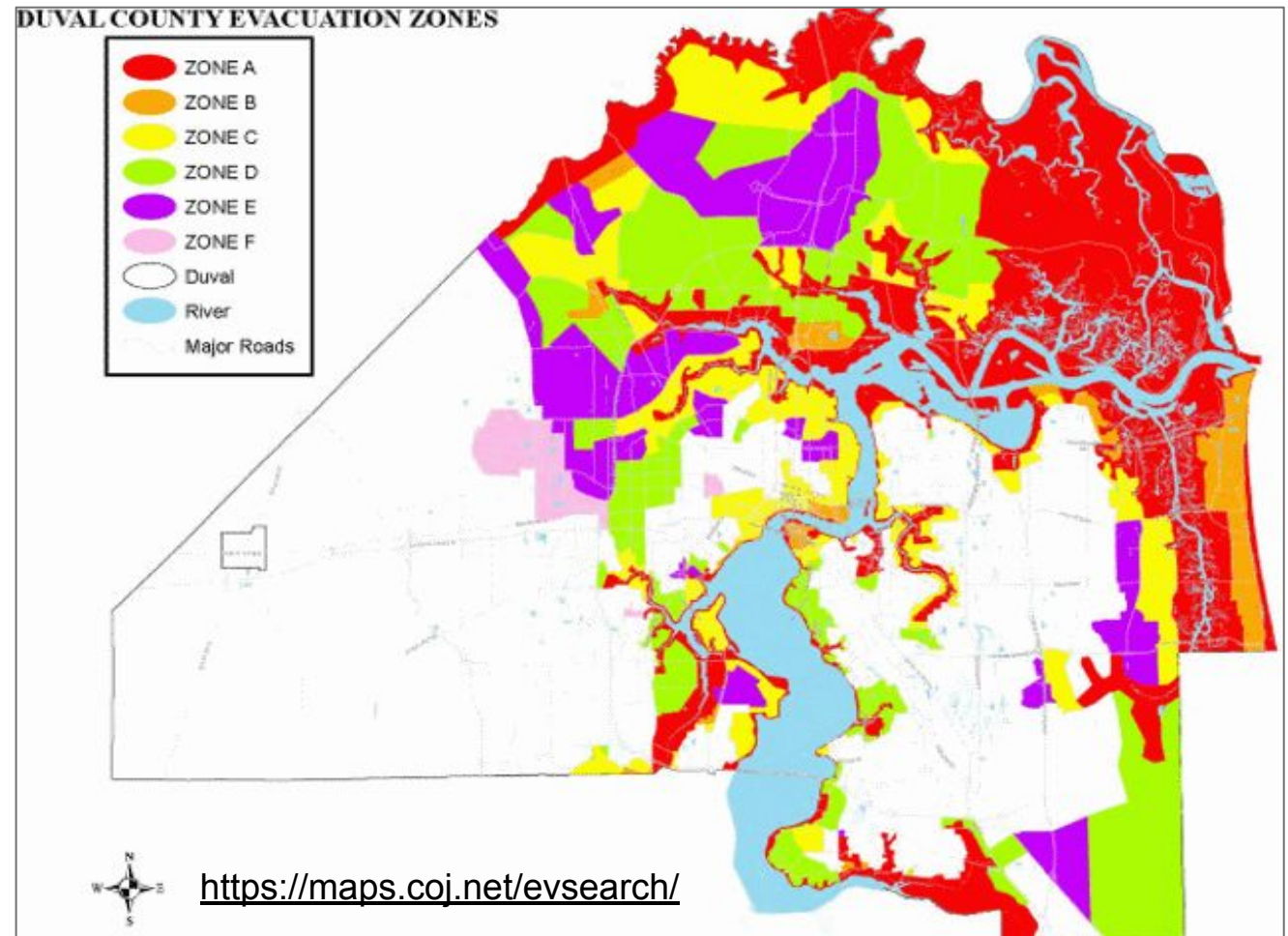




PHOTO PETER BLASL

WIND RISK



STRUCTURE INTEGRITY

NEWER CONSTRUCTION = NEWER BUILDING CODES

FL CONSTRUCTION SINCE 2002 MUST HAVE:

- ✓ IMPACT-RESISTANT GLASS OR SHUTTERS
- ✓ WITHSTAND HURRICANE FORCE WINDS



STRUCTURE EXPOSURE

LARGE TREES OR TALL OBJECTS NEAR HOME

FACING OPEN AREAS – WIND EXPOSURE

WIND EXPOSURE

LARGE SURFACE AREA FACING WIND

**MOBILE & MODULAR HOMES:
WIND ROLLS, BLOWS or LIFTS OFF OF
FOUNDATION**

**CONSIDER ROOF & MOBILE HOME TIE
DOWNS**

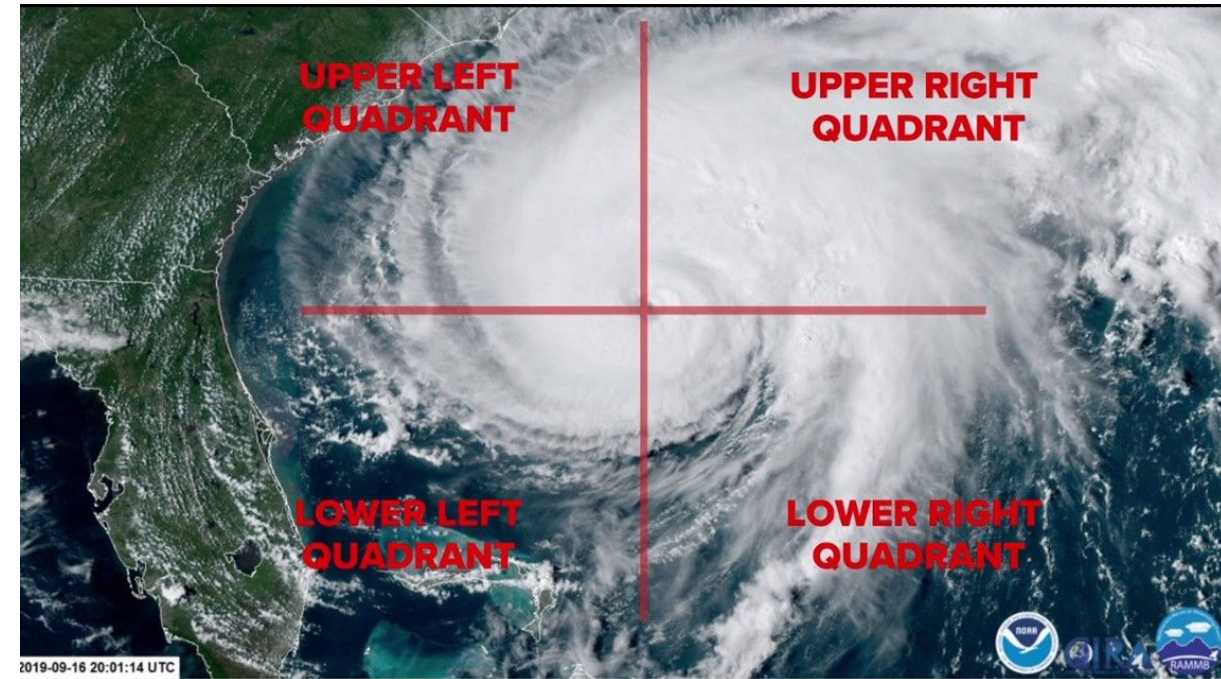


PHOTO ESRI MAPS

TORNADOES

TORNADOES ASSOCIATED WITH TROPICAL CYCLONES ARE NOT UNCOMMON.

TROPICAL CYCLONE TORNADOES ARE MOST COMMONLY OBSERVED IN THE UPPER RIGHT QUADRANT OF THE STORM (RELATIVE TO THE MOTION OF THE STORM).



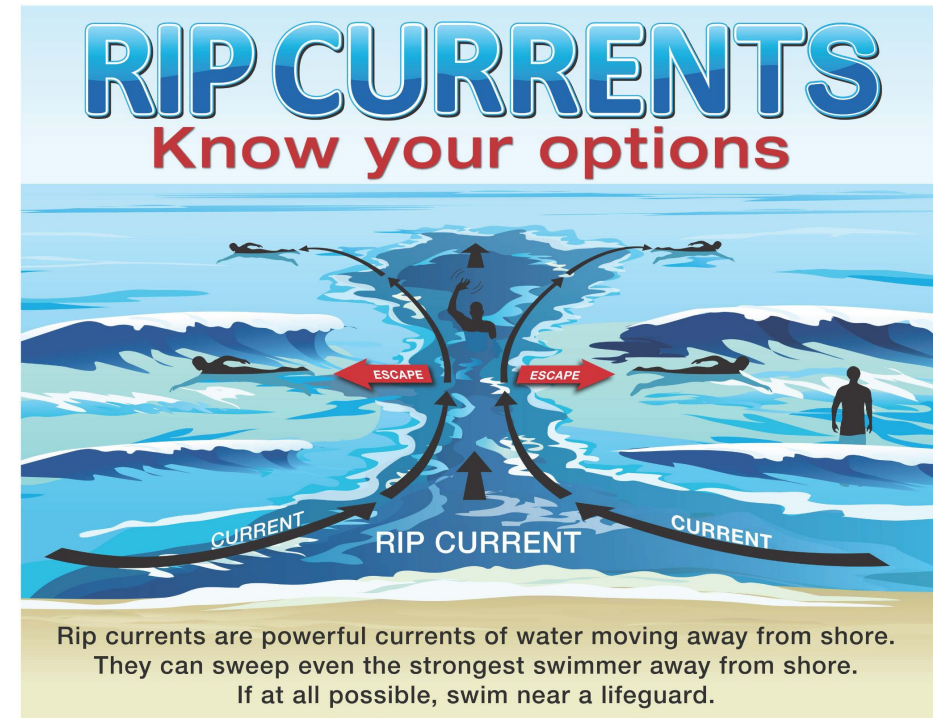
COASTAL HAZARDS

Dangerous rip currents & high surf can lead to very dangerous conditions well-ahead of a storm.

If caught in a rip current..

- Try to stay calm
- Don't fight the current
- Swim out of the current, then to shore
- If you can't escape, float or tread water

Always swim at beaches with lifeguards.



A collection of emergency preparedness supplies is shown, including a first aid kit, a water bottle, a flashlight, a radio, a sleeping bag, and a Go Fish card game. The items are arranged on a wooden surface, and the text "SEASONAL PERSONAL PREPAREDNESS" is overlaid in large, bold, black letters.

SEASONAL PERSONAL PREPAREDNESS

WHAT DOES THAT LOOK LIKE?

Prepare Before Hurricane Season



Develop an evacuation plan



Assemble disaster supplies: food, water, batteries, charger, radio, cash



Get an insurance checkup and document your possessions



Create a communication plan with a hand-written list of contacts



Strengthen your home



PREPARE - STOCK UP SUPPLY KIT

Did You Know??

FL Statutes (below) state that you may be able to receive up to a 30-day supply of prescription medicine in advance when a tropical cyclone threatens your location. Please refer to the below sources for more details.

Hurricane Preparedness

Assemble Disaster Supplies



NOAA

-  Food & water
-  Medicine & prescriptions
-  Keep gas tank full
-  Cash on hand
-  Radio, batteries, phone chargers

weather.gov 

Enough medicines

FL Statute 465.0275

<https://www.flsenate.gov/Laws/Statutes/2024/0465.0275>

FL Statute 252.358

<https://www.flsenate.gov/Laws/Statutes/2022/0252.358>

Special Dietary Needs

Medical items

Comfort items

Pet items

Consider shared resources with neighbors

Available Guidance:

www.ready.gov/kit

PREPARE - MAKE EVACUATION & SHELTER PLAN

Hurricane Preparedness

DEVELOP AN EVACUATION PLAN



Find out today if you live in a hurricane evacuation zone and identify trusted sources for receiving evacuation orders. Plan for multiple options on where to go and how to get there. Have a go bag for supplies and a plan for your pets. Be prepared to leave immediately if ordered to evacuate.



Find out if you live in an evacuation zone



Plan several routes



Have a go bag for supplies



Plan for your pets



Follow evacuation orders if given

weather.gov/hurricane



Where will you go?

How will you get there?

Does shelter accept pets?

When will you go?

Available Guidance:

www.ready.gov/plan

Hurricane Preparedness

Complete a Written Plan



Have a
contact list



Keep critical
documents
together for
quick access

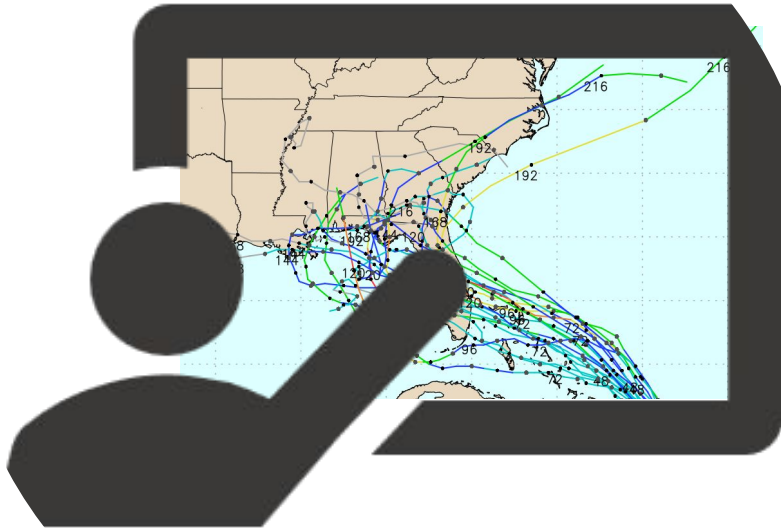


Have at least
one contact
outside of the
impact area



Share your
plan





FORECAST SOURCE CAUTION

SENSATIONALISM VS SCIENCE SIGNS



- ✓ Show one forecast model
- ✓ Specific impacts too early
- ✓ Early landfall prediction

SOCIAL MEDIA-ROLOGISTS



Hype vs Science

Clicks vs Credibility

Distant Friends/Family (good intentions)

ANCHORING BIAS



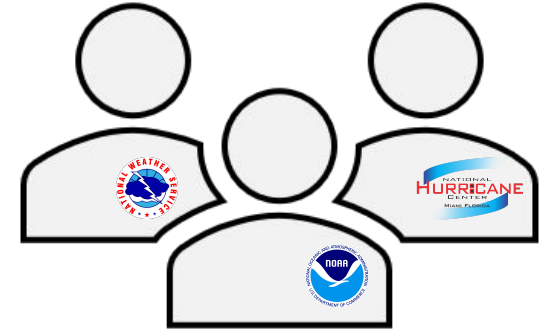
People tend to base actions on first forecast

Dangerous for appropriate preparedness

Monitor storm forecast/updates



ONE TEAM



National Hurricane Center

Storm Scale Forecasts – Size, Intensity & Track

www.hurricanes.gov

Local National Weather Service Offices

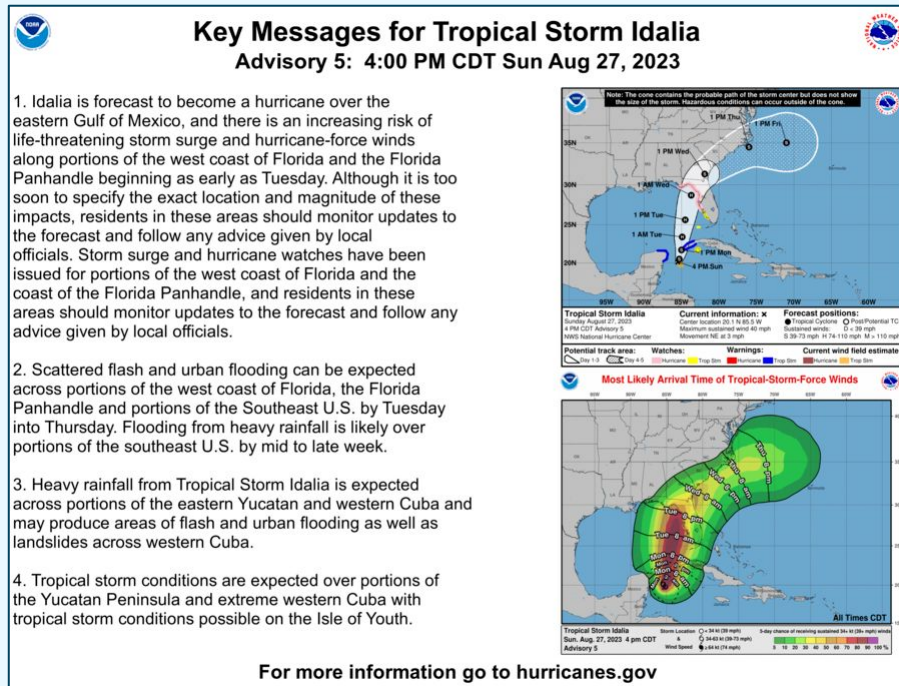
Downscale NHC Forecasts to Local Area (what to prepare for, where, when)

www.weather.gov - find your local office

Tropical Weather Forecasts

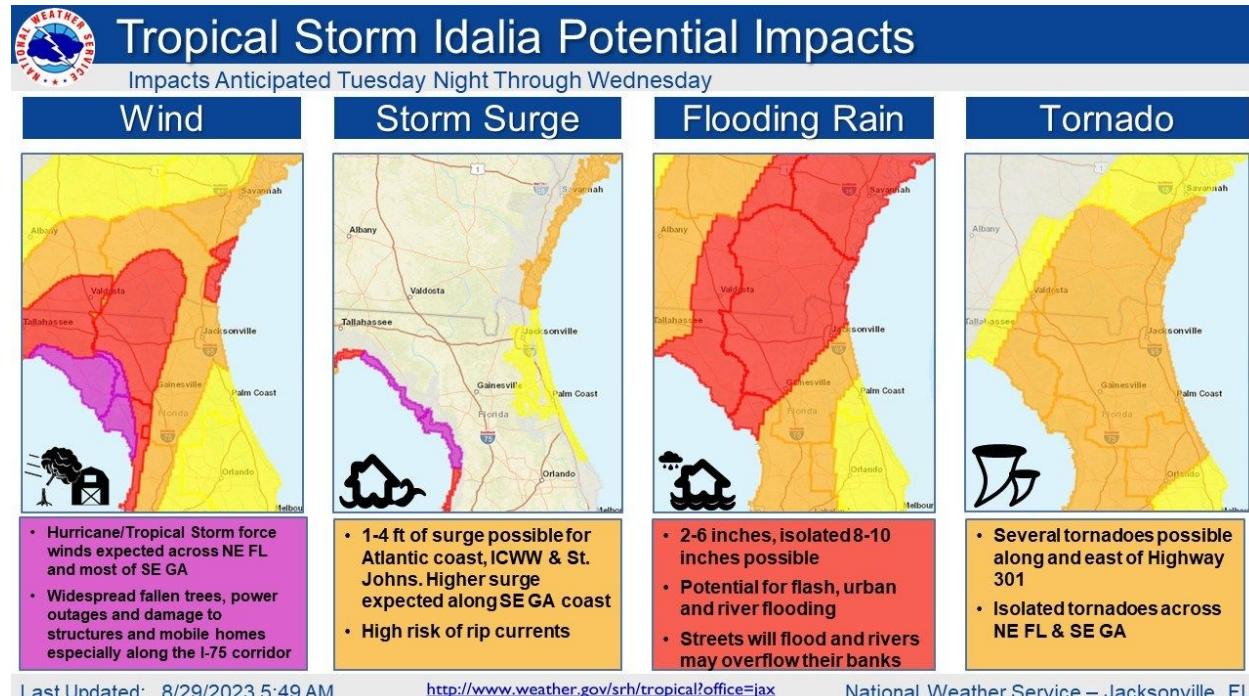
National Hurricane Center

Storm forecast – size, intensity, track
Regional Scale View & Impacts
National & State Level Support



National Weather Service Offices

Downscale NHC forecast for local area
County to City level View & Impacts
State & County Level Support





FEMA APP

Free

Bilingual

Set alerts for up to 5 locations

Customize alerts

Pre - & Post – Storm Guidance

Local Shelter Information

DOWNLOAD THE FEMA APP

Learn “What To Do” before, during and after a hurricane.





All Disturbances

Monitor

What's out there?

**Seasonal
Readiness**

**Monitoring
the Tropics
Days 6-7**

Get Ready
Days 3-5

Hunker Down
< 48 hrs to Impact

**Post Storm
Safety**

What's out there?

What can you do now?

> 5 Days

3-5 Days

< 48 hrs

Impacts

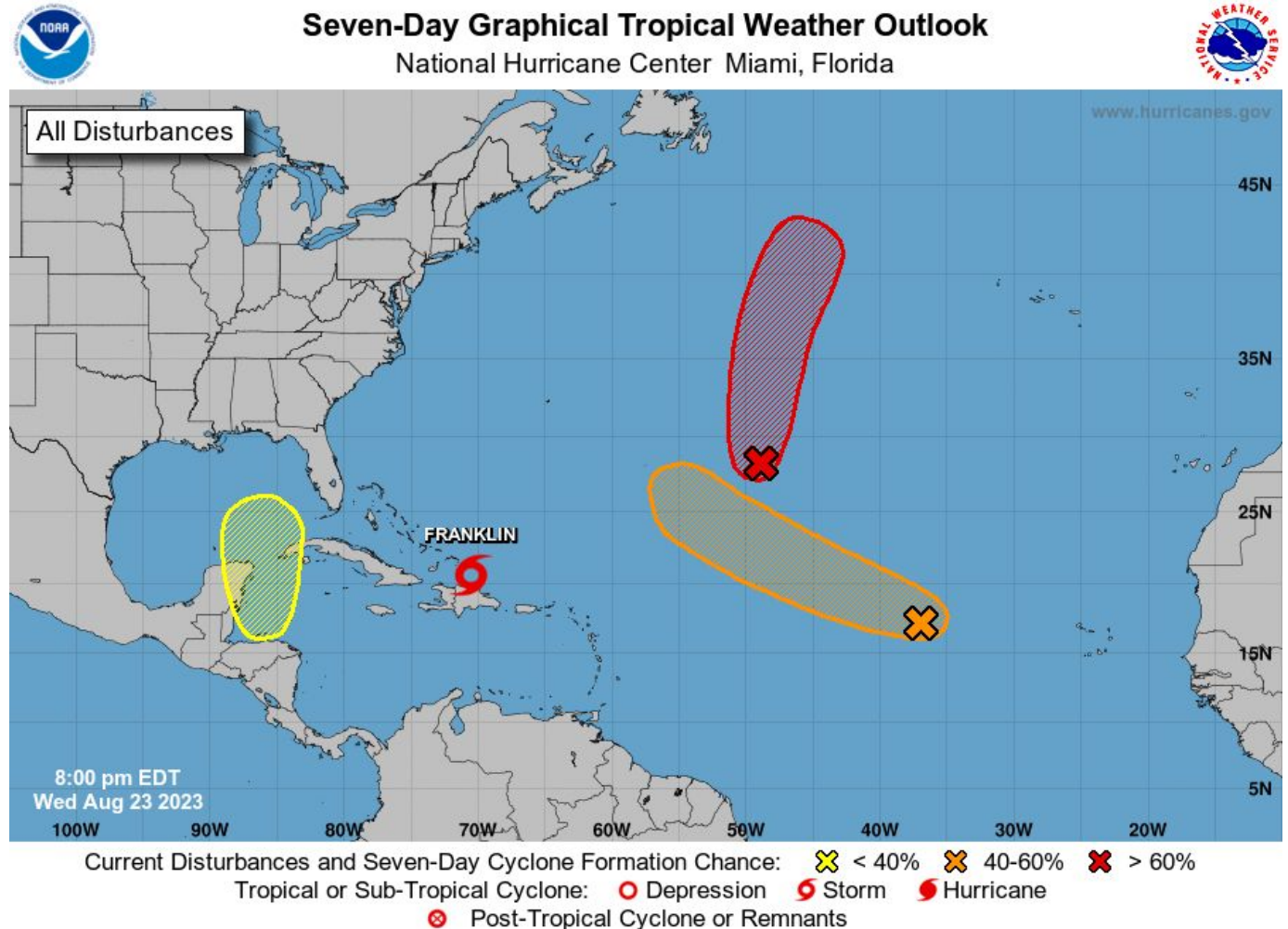
MONITOR – TROPICAL WEATHER OUTLOOK

“Something’s Brewing”

Potential tropical development areas

Where surface low may form:
NOT impact areas!

Available National Hurricane Center
www.hurricanes.gov



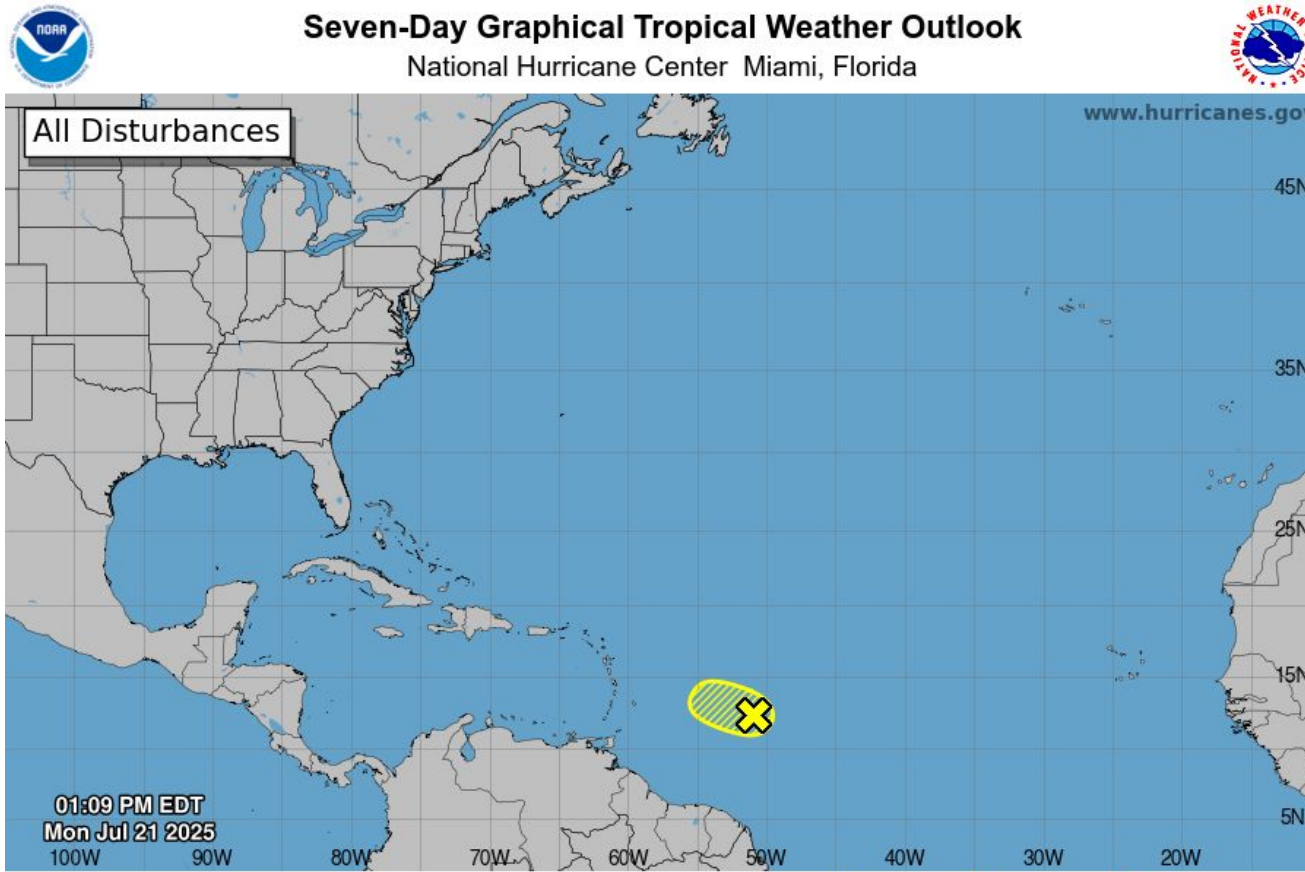
> 5 Days

3-5 Days

< 48 hrs

Impacts

CURRENT – TROPICAL WEATHER OUTLOOK



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

A weak area of low pressure east of the Lesser Antilles is less organized. Conditions are expected to become unfavorable for tropical cyclone development over the next few days. Formation chance 10%.

What to do now:

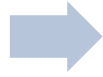
- Stock Supply Kits
- Review Hurricane Plans
- Know your Evacuation Zone
- Monitor here: www.hurricanes.gov

NATIONAL WEATHER SERVICE

Tropical Cyclone Products & Messaging Strategy



> 5 Days



3-5 Days



< 48 hrs



Impacts

MONITOR – REVIEW PLANS & STOCK UP

Monitor Trusted Sources

Finish Stocking Supply Kit
www.ready.gov/kit

Review Shelter & Evacuation
Plans www.ready.gov/plan

Reach out to Family/Friends



Take Action Today



Determine your risk from water & wind



Begin preparing now, before a storm



Learn how to understand hurricane forecasts and alerts



Learn what to do before, during, and after a storm





Program Website



Submit questions



**BE PREPARED.
STAY AWARE.**

<https://www.weather.gov/jax/FloridaTropicalTrainingWeek2025>

