

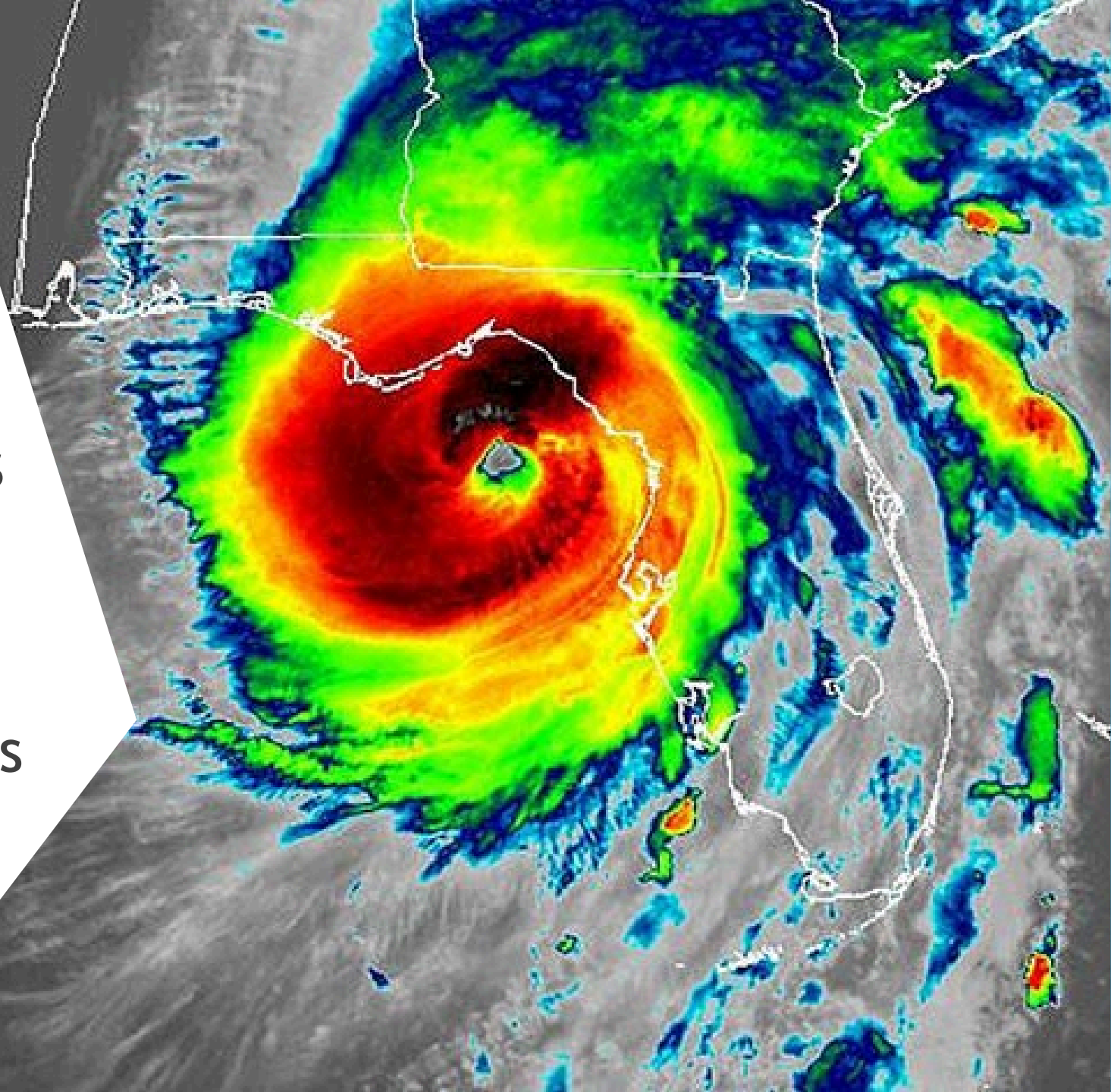
HELENE & MILTON COUNCIL UPDATE

NOVEMBER 19, 2024



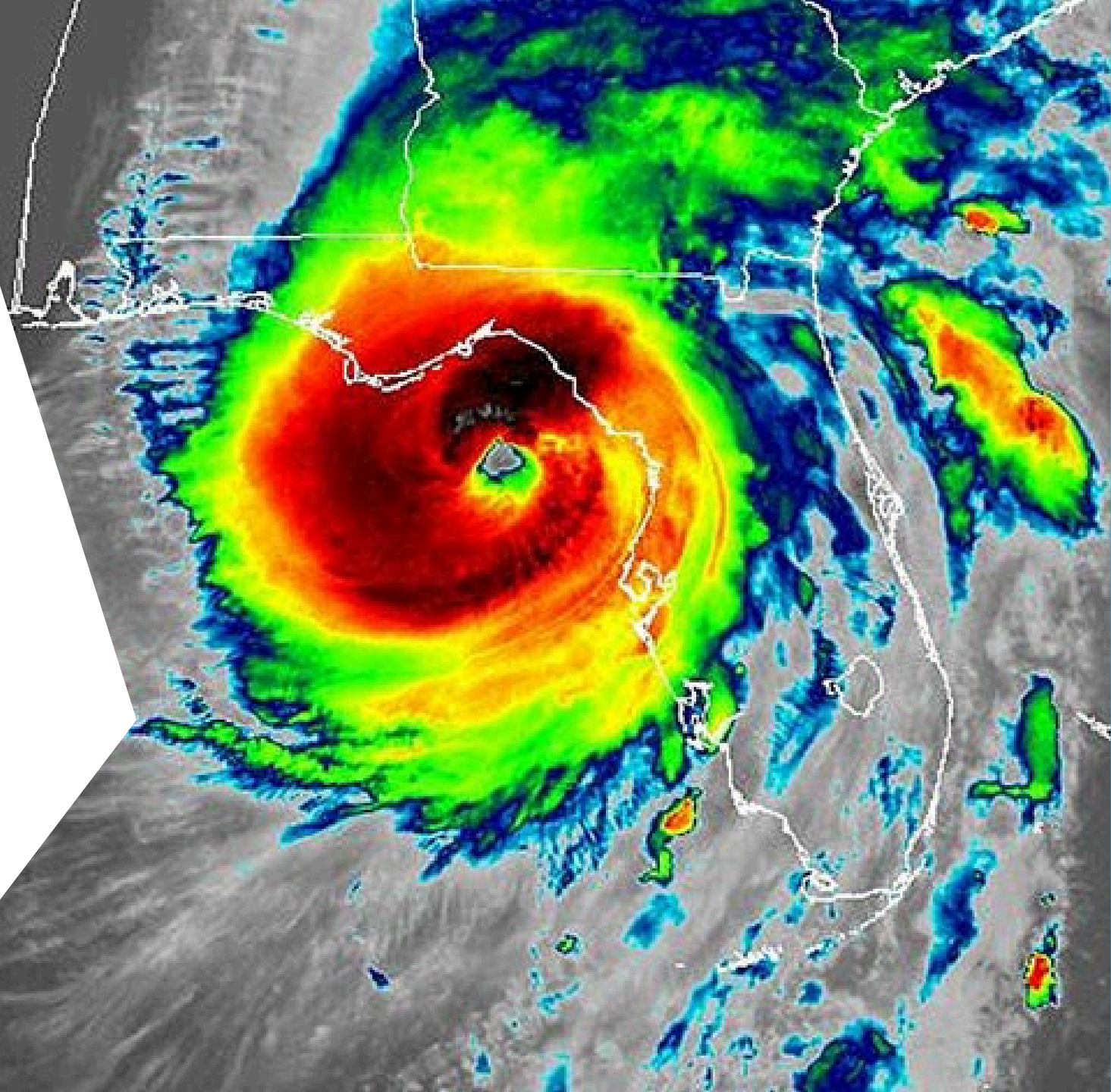
AGENDA

- ▶ Helene & Milton RECAP
- ▶ Storm Surge & Impacts
- ▶ City Damage Assessments
- ▶ Debris Collection
- ▶ Building Permitting
- ▶ After Action Review Process



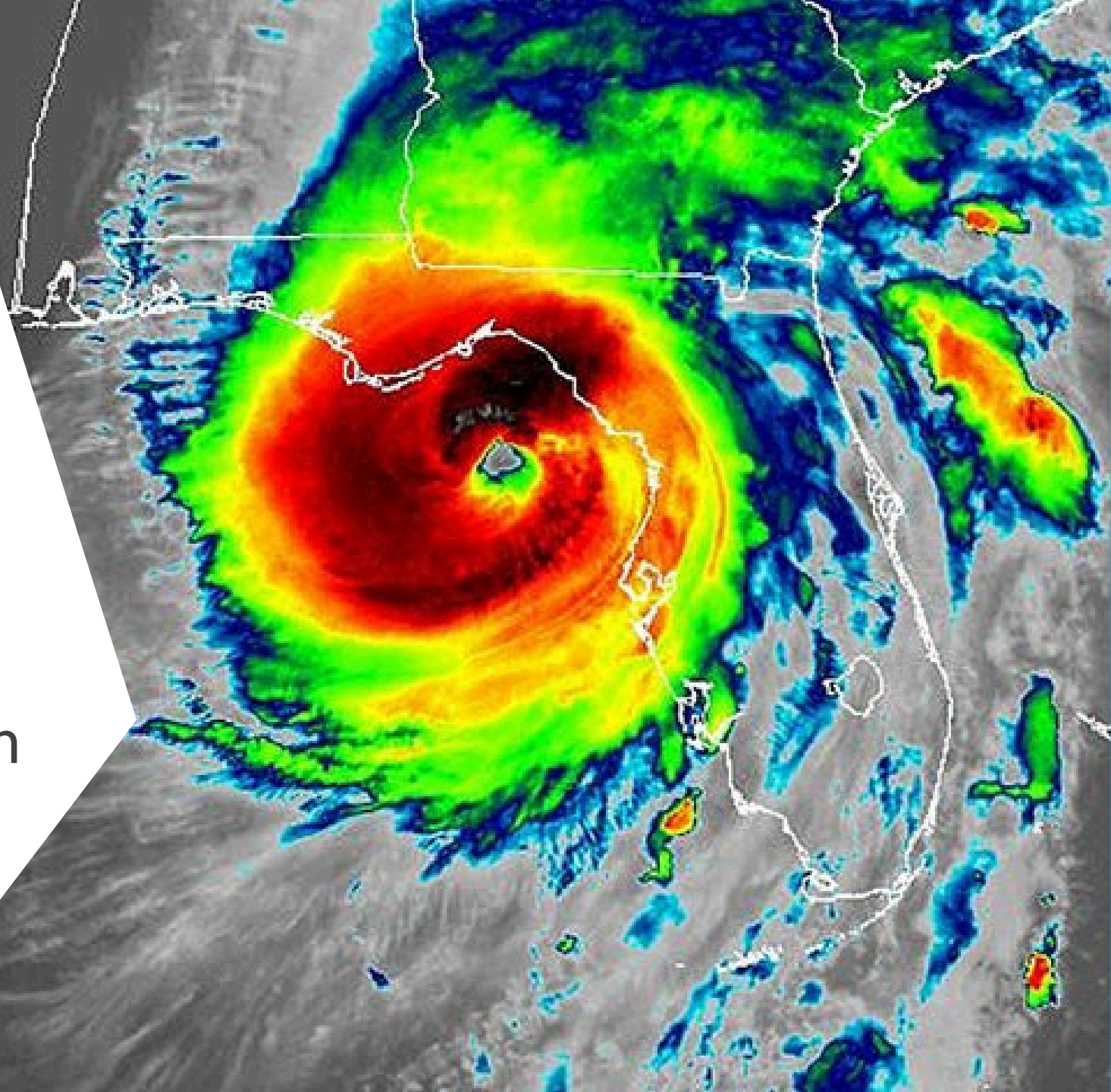
HURRICANE HELENE

- ▶ Thursday, Sept. 26
 - ▶ Landfall as Cat 4 in Big Bend region
 - ▶ Devastated TN, GA, NC
 - ▶ Over 230 deaths
 - ▶ May be the costliest storm in US History (\$200-250 Billion)



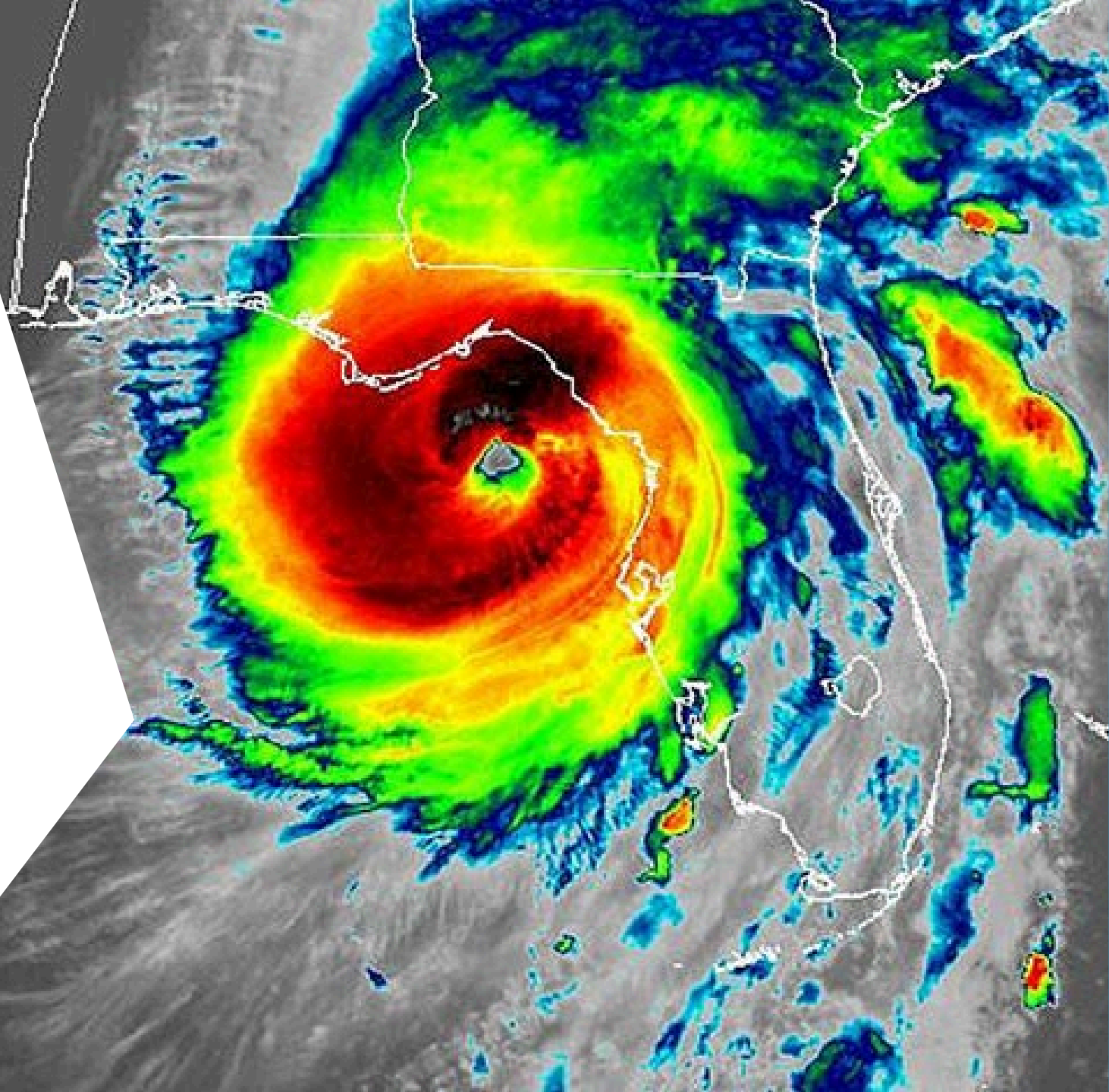
HURRICANE HELENE

- ▶ Venice Area Impacts
 - ▶ Level A Evacuation
 - ▶ Storm Surge Impacts began at 7AM, 9/26
 - ▶ Very little rain 1-2"
 - ▶ Wind gusts up to 65 mph



HURRICANE HELENE

- ▶ Venice Area Impacts
 - ▶ Poor Evacuation Compliance
 - ▶ Over 50 High-Water Rescues Performed
 - ▶ Remarkably, no injuries or deaths locally



STORM IMPACTS - TIMELINE

- ▶ Friday, Sept. 27
 - ▶ High water rescues continued
 - ▶ Damage assessments and cleanup activities started
 - ▶ Contractor secured to open Flamingo Ditch and Outfall 2, as soon as surge receded
 - ▶ Coastal flooding fully receded by Friday afternoon



STORM IMPACTS: HURRICANE HELENE

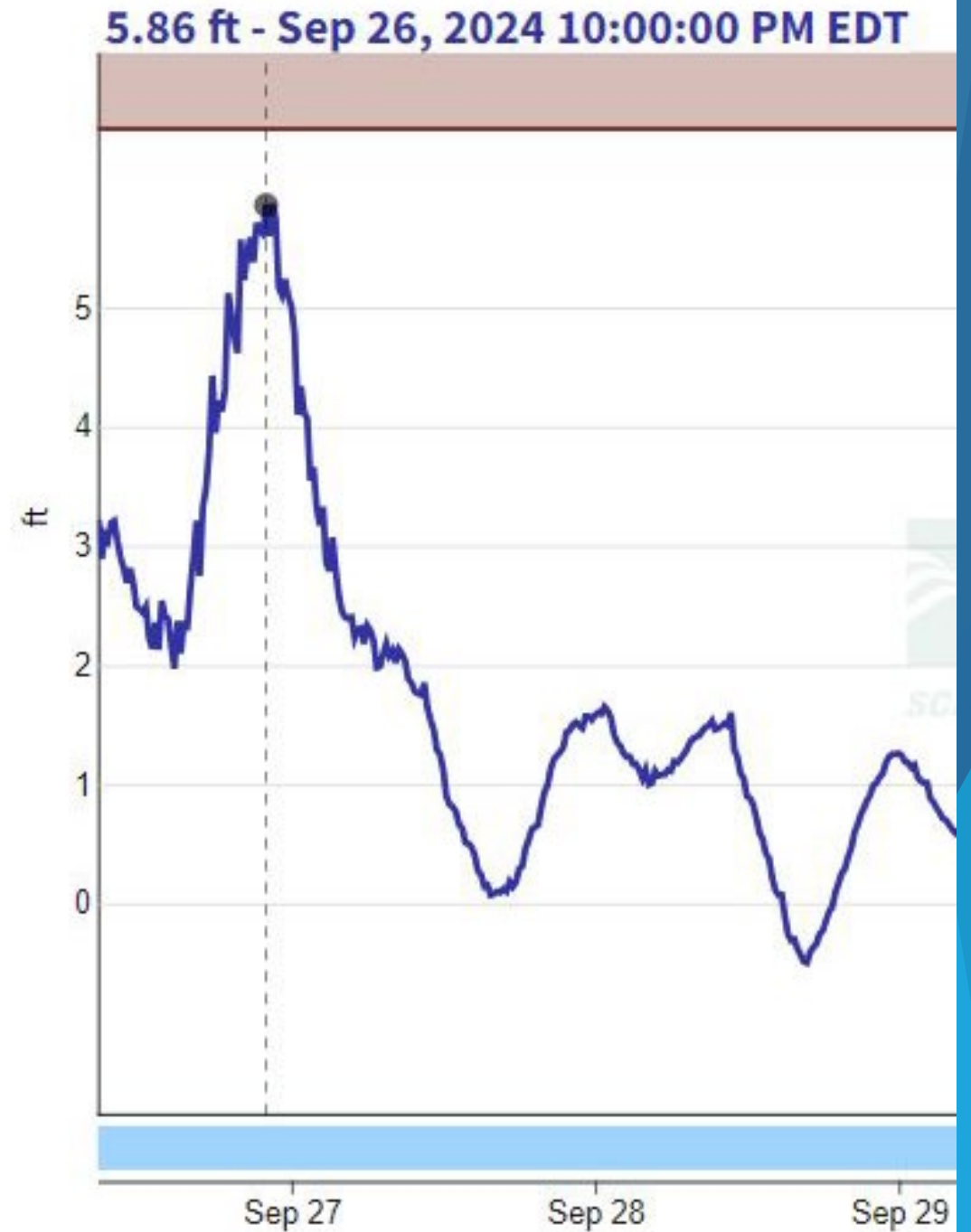
What Actually Happened?

- ▶ PRIMARILY A STORM SURGE EVENT
 - ▶ NOAA Surge Warning was 4-7 ft.
 - ▶ **Actual Storm Surge of approx. 6 ft.**
 - ▶ Flood Levels measured up to +/-10 ft. in some areas due to wave action

STORM SURGE:

Coastal storm surge near 6 ft.

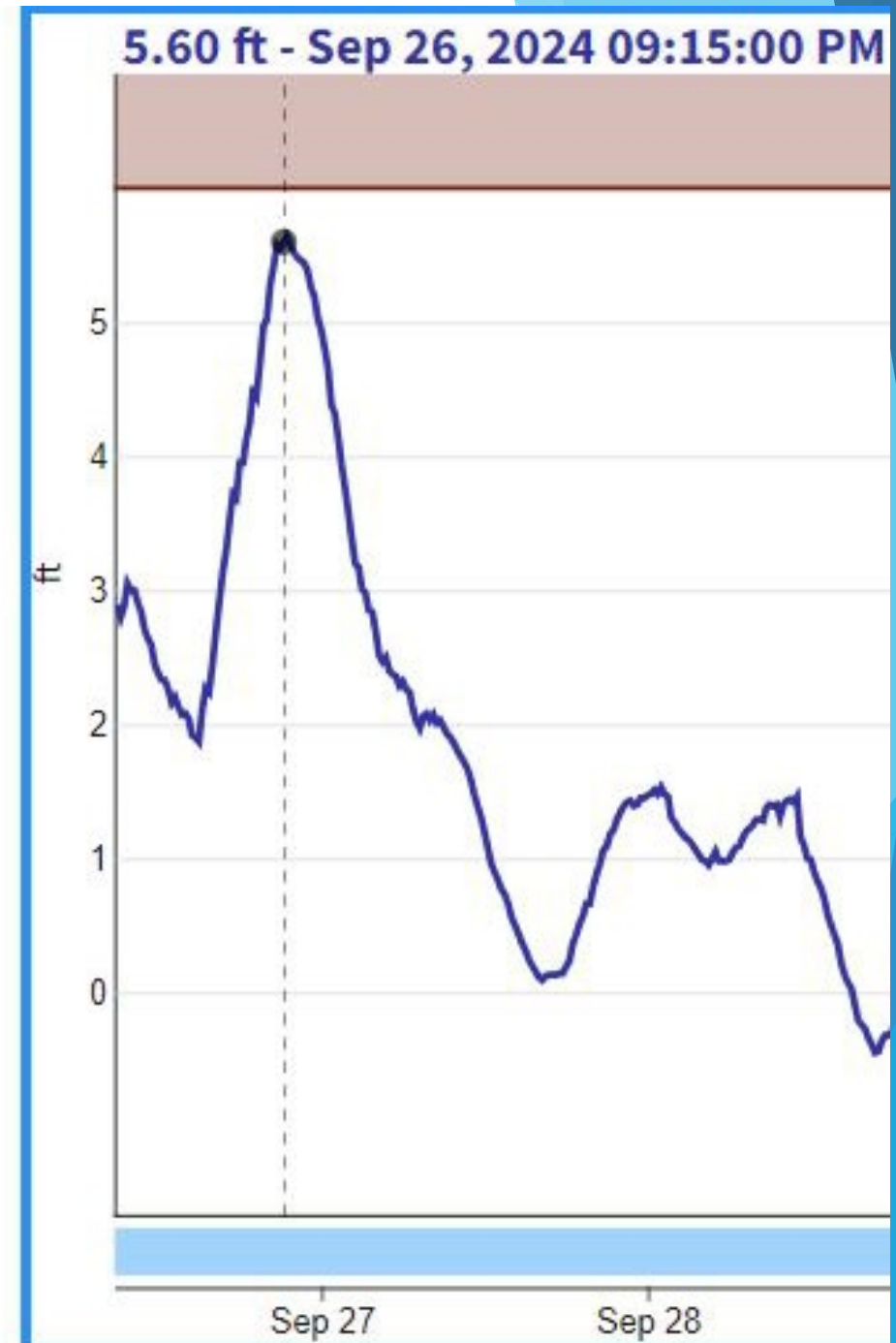
- ▶ USGS Gauge at Crow's Nest Marina = 5.86 ft.



STORM SURGE:

Coastal storm surge near 6 ft.

- ▶ USGS Gauge Curry Creek and U.S. 41 = 5.6 ft.

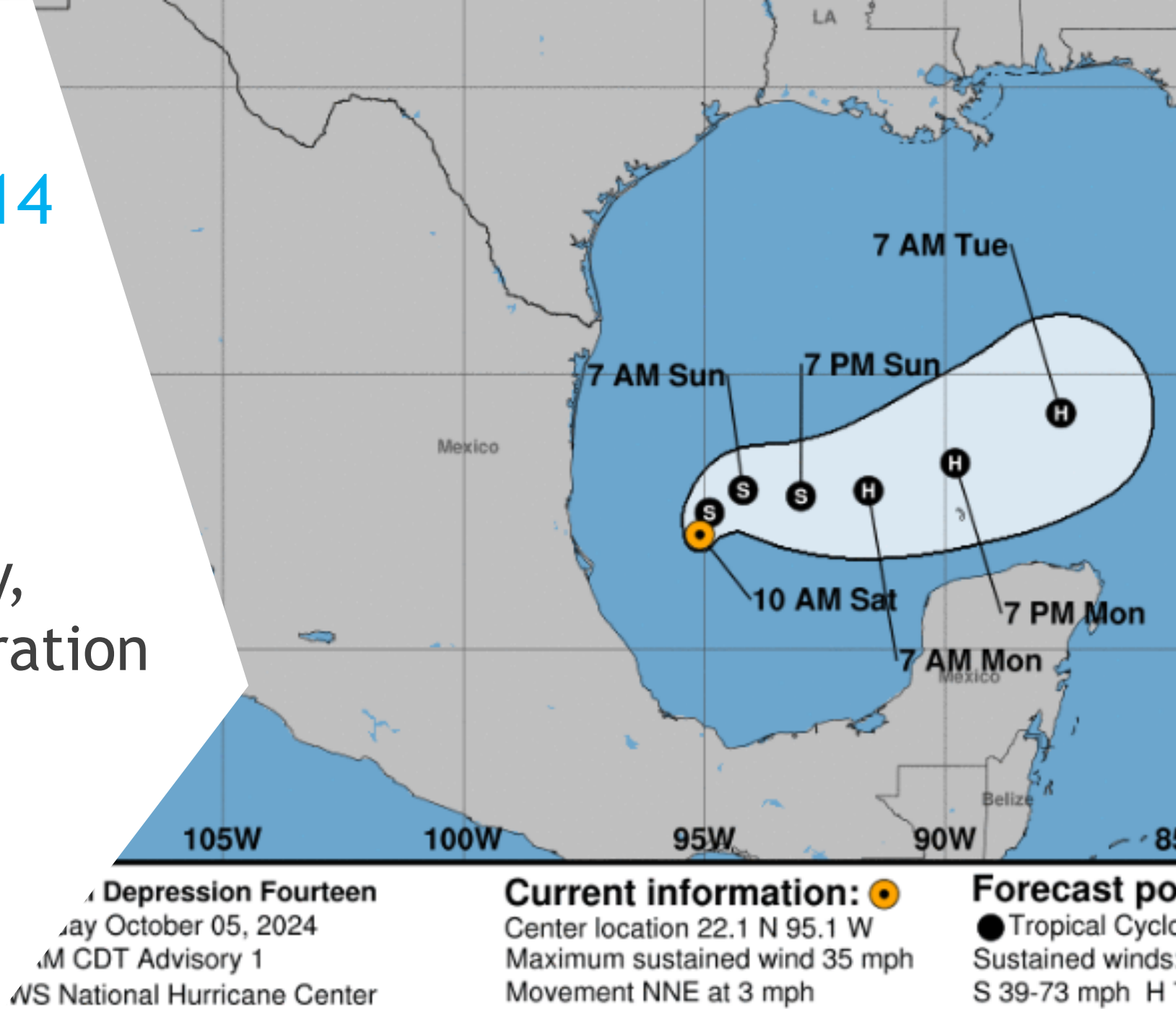


POST-HELENE RECOVERY

- ▶ One-week post-storm
- ▶ Damage Assessment Completed
- ▶ Debris Collection contractor activated
- ▶ City repairs and cleanup started
- ▶ Recovery meeting scheduled
- ▶ AND then.....

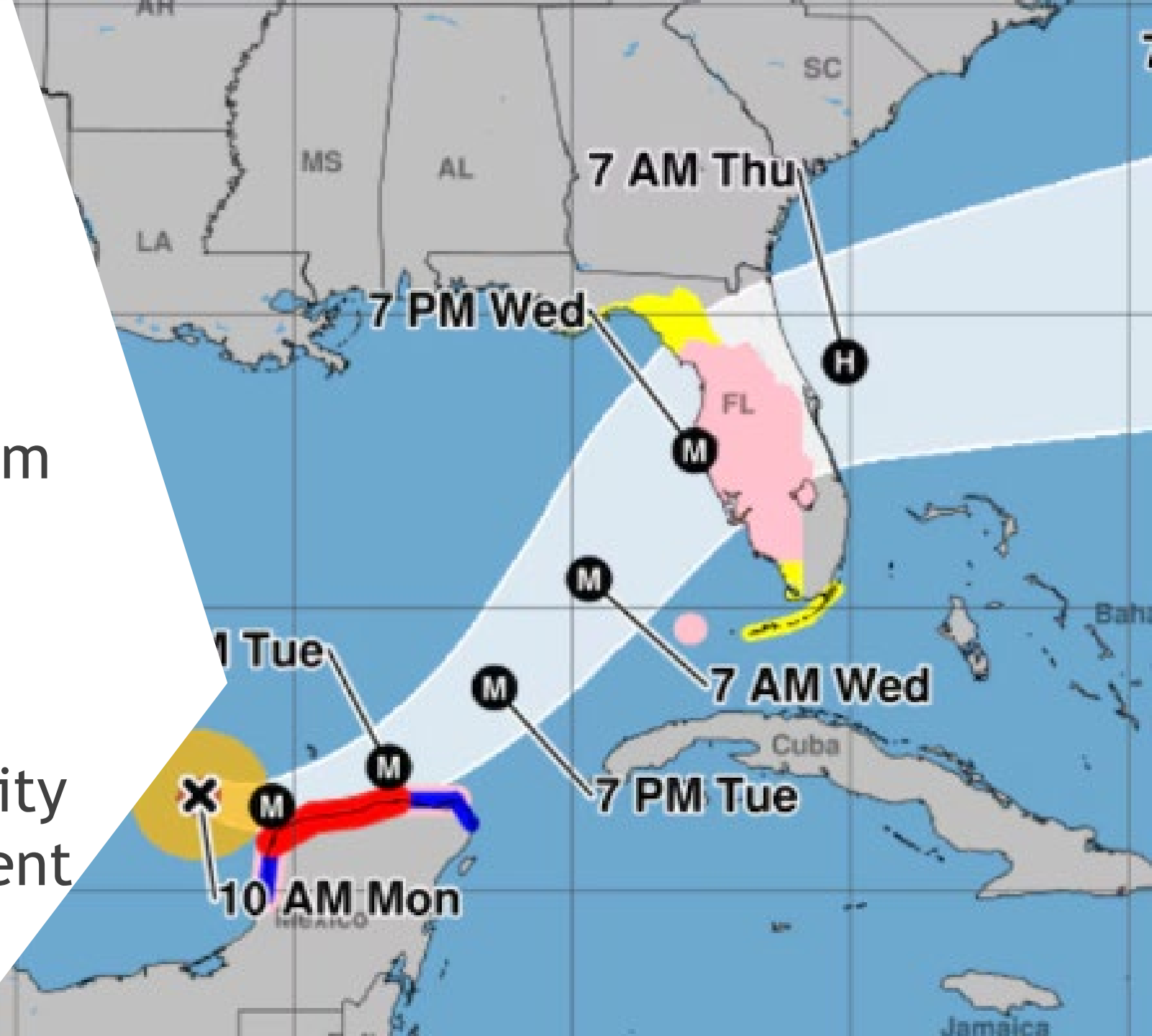
Tropical Depression 14

- ▶ Saturday, Oct. 5
- ▶ 9-days after Helene
- ▶ Back-to-back threat
- ▶ From Storm Recovery, back to Storm Preparation
- ▶ Resources limited
- ▶ Employee Fatigue



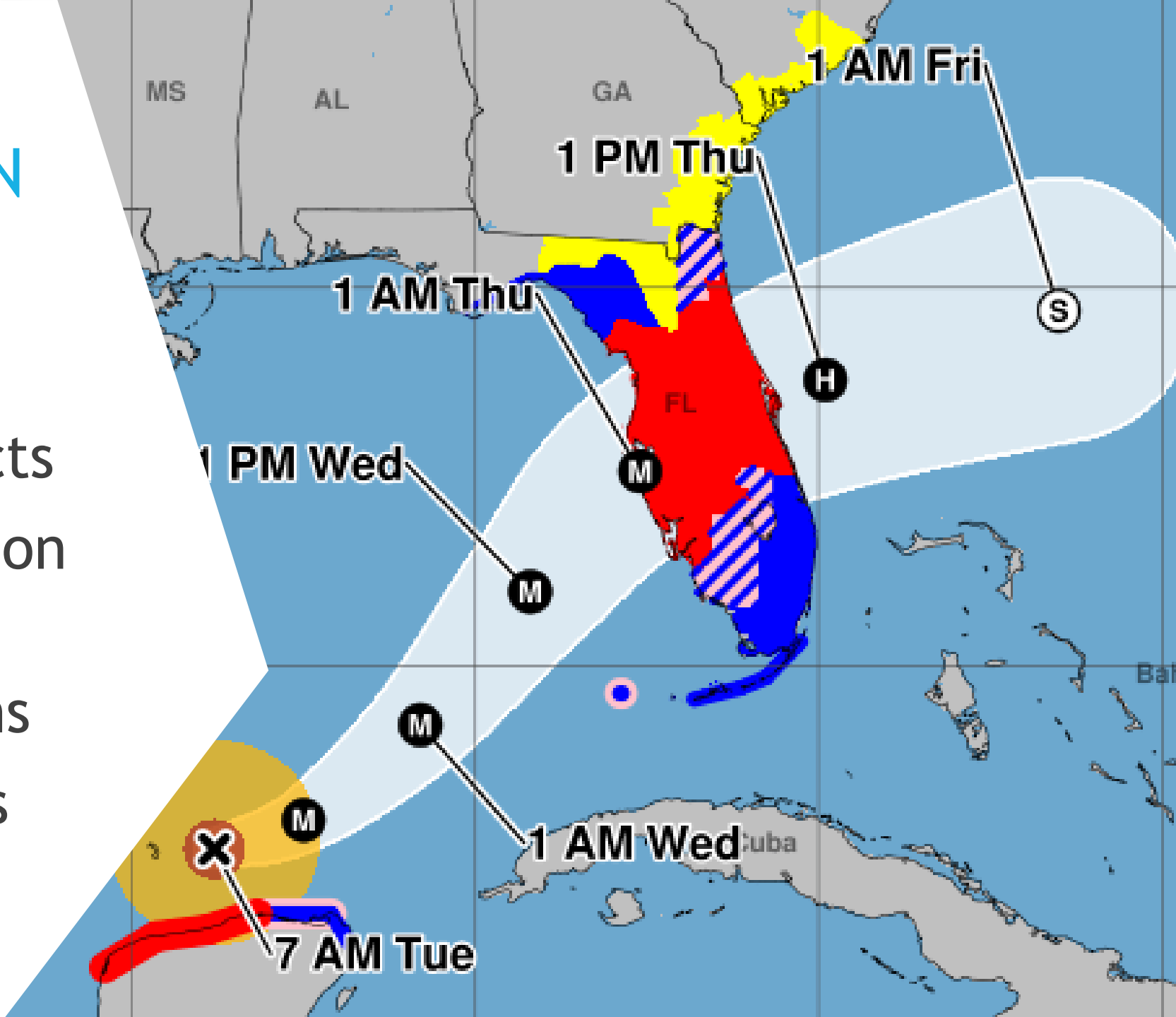
HURRICANE MILTON

- ▶ Monday, Oct. 7
- ▶ 11-days after Helene
- ▶ Switched fully to Storm Preparation
- ▶ Rapid Intensification (CAT 5, 175+ mph)
- ▶ Priority #1: Get the City Ready for another event



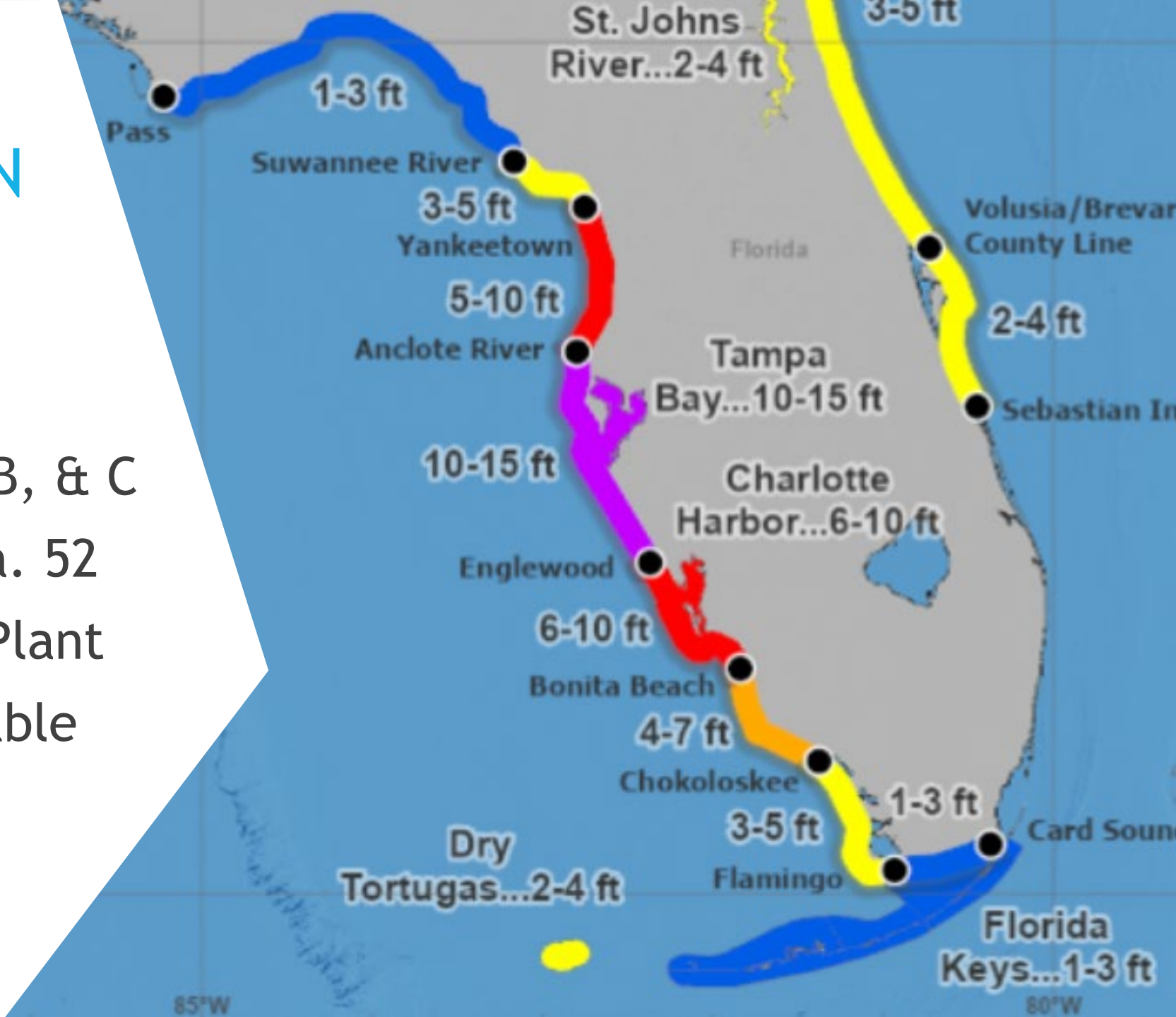
HURRICANE MILTON

- ▶ Tuesday, Oct. 8
- ▶ Forecasting for catastrophic impacts
- ▶ Very good evacuation compliance
- ▶ Full EOC Activations
- ▶ City as prepared as possible



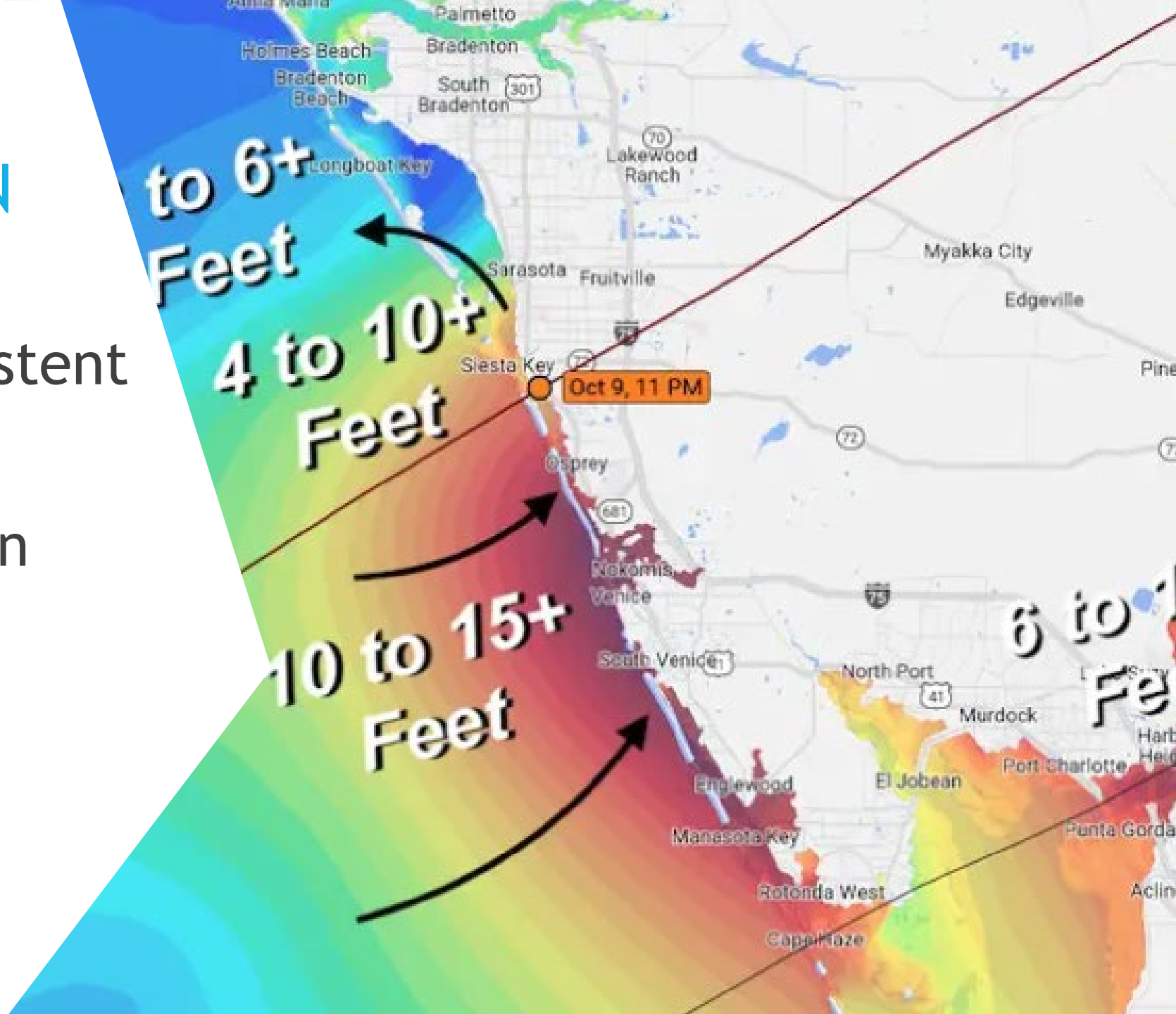
HURRICANE MILTON

- ▶ Surge Forecast of 10 - 15 ft.
- ▶ Evacuation Levels A, B, & C
- ▶ Evacuation of Fire Sta. 52
- ▶ Evacuation of Water Plant
- ▶ Full shutdown of potable water system



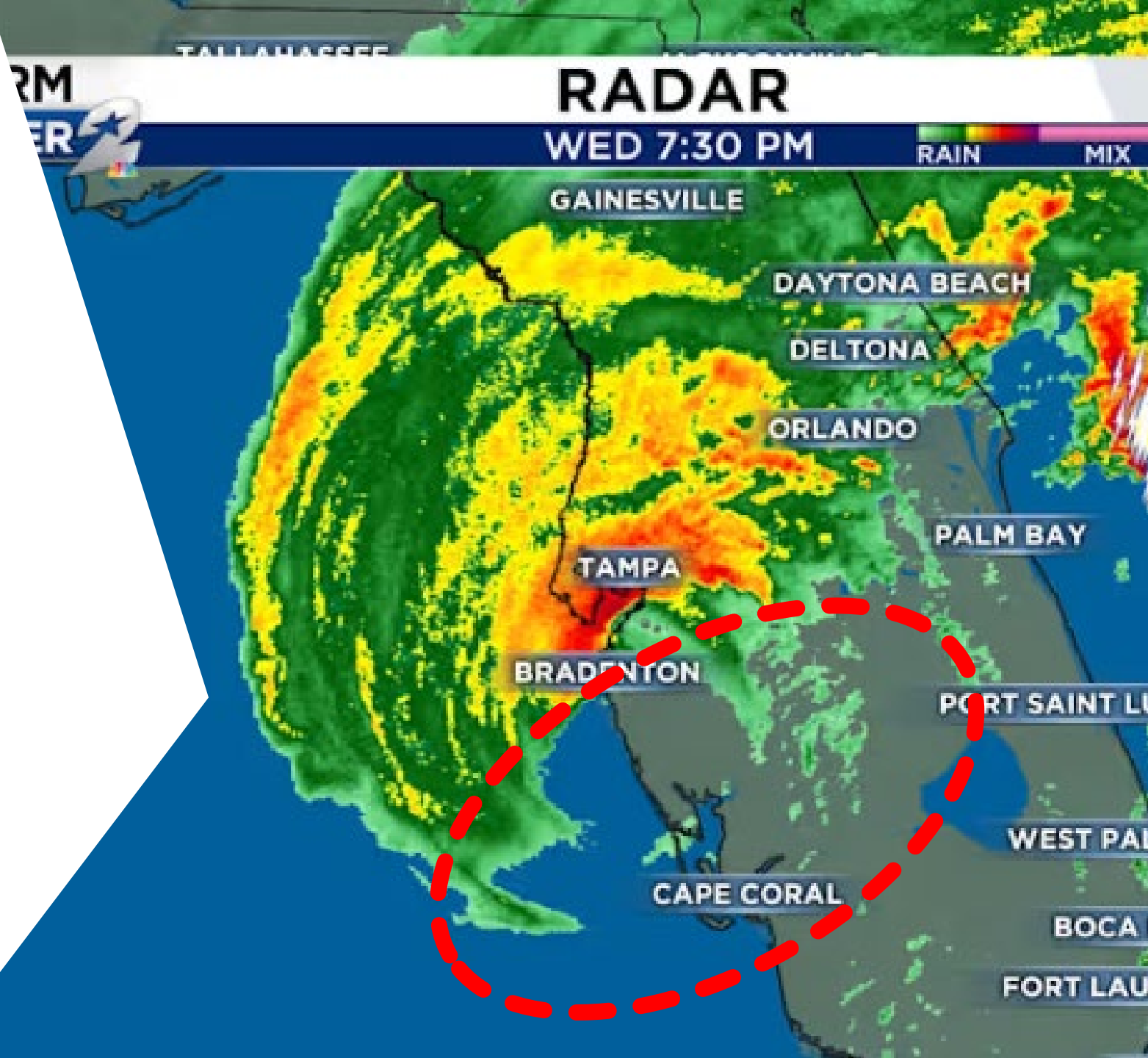
HURRICANE MILTON

- ▶ Surge Models Consistent
- ▶ 15+ Feet surge
- ▶ Ft. Myers Beach, Ian Surge was 12 ft.



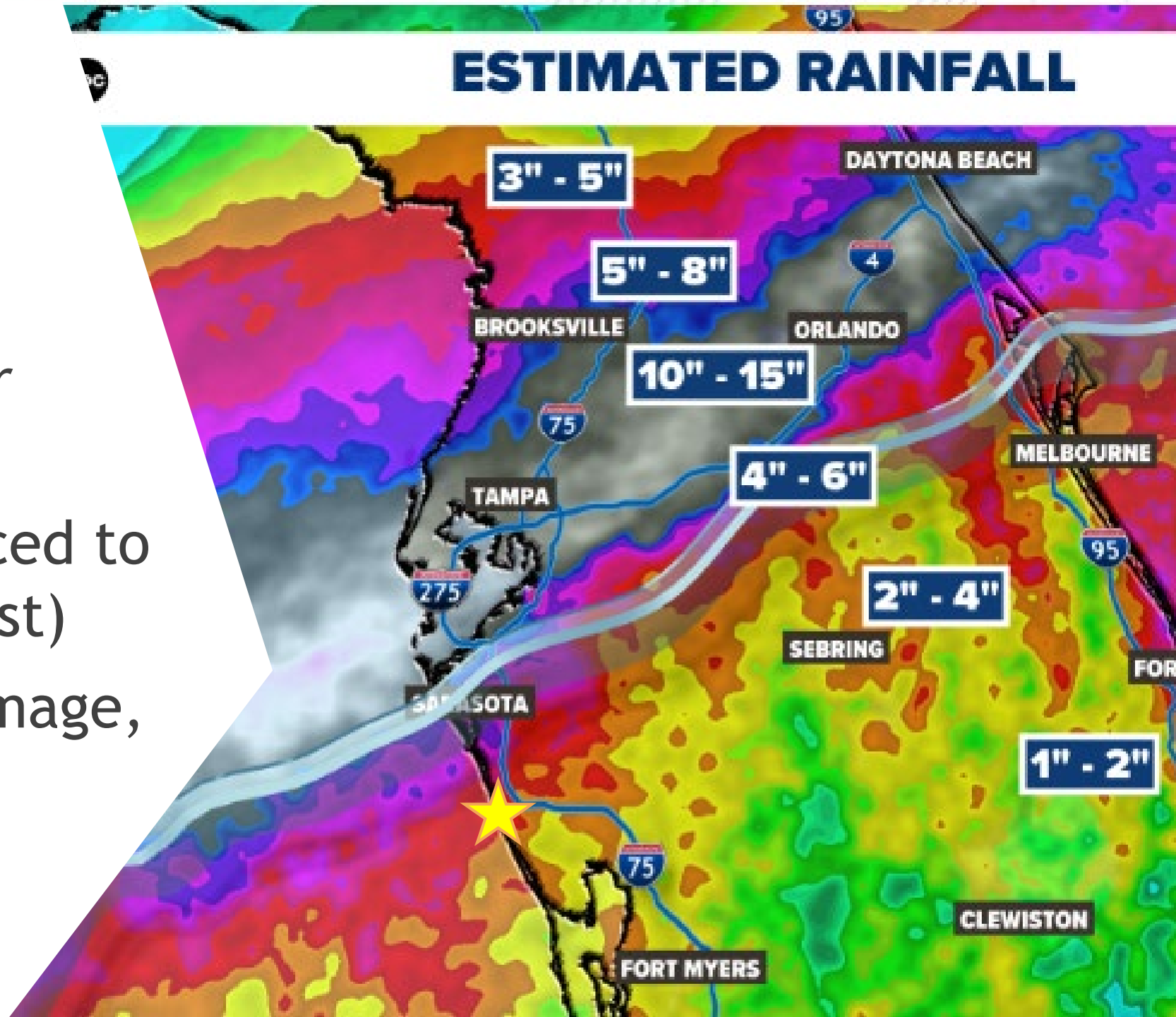
HURRICANE MILTON

- ▶ Landfall Wednesday, Oct. 9, at 8:30 pm
- ▶ CAT 3 at landfall
- ▶ Dry Air intruded into southern storm quadrant



VENICE IMPACTS

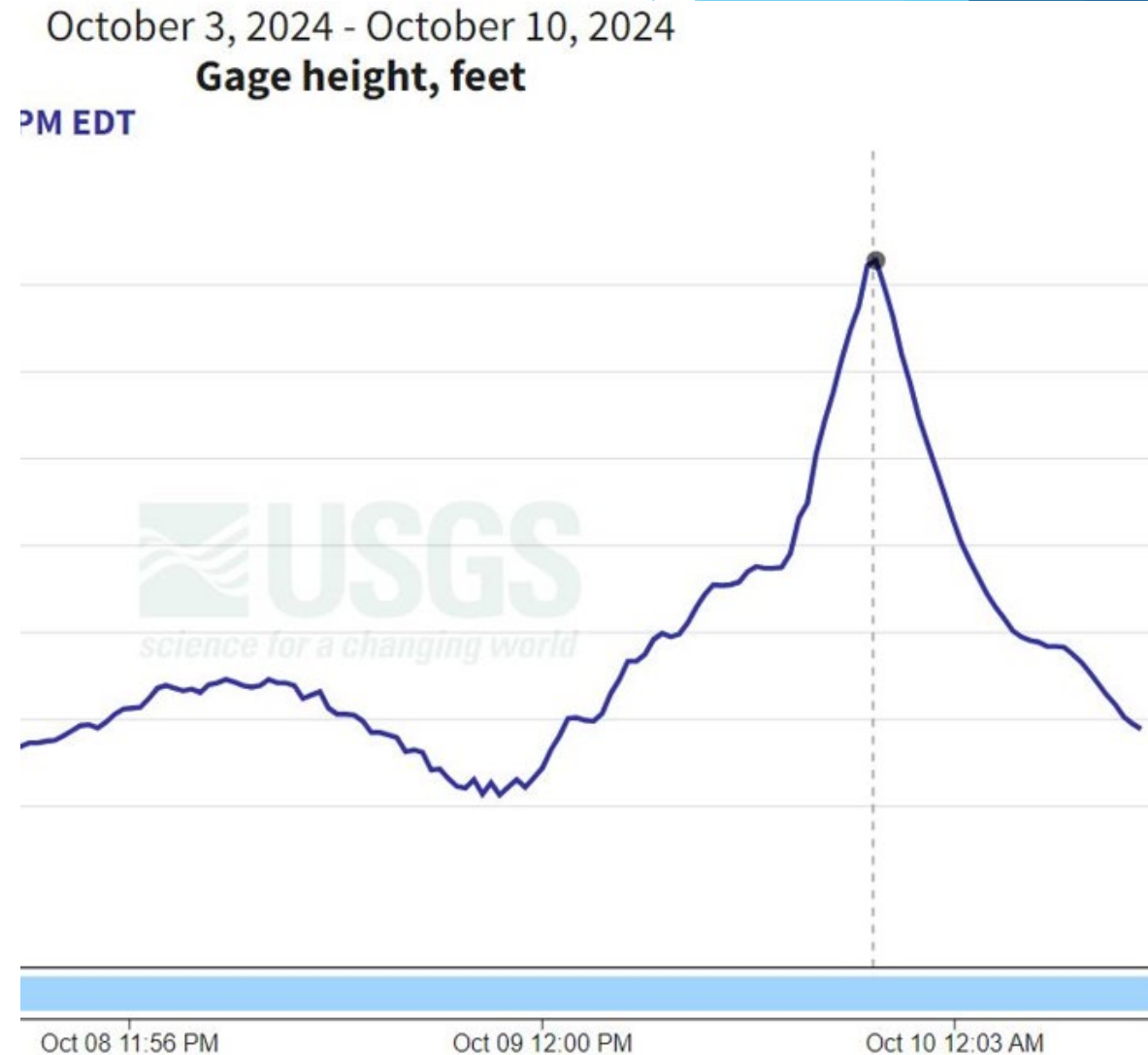
- ▶ Very little rainfall
- ▶ Actual Winds under 100mph (CAT 1)
- ▶ Actual Surge Reduced to 6-7 ft. (1/2 Forecast)
- ▶ Still significant damage, more than Helene



MILTON STORM SURGE:

Coastal storm surge over 6 ft.

- ▶ USGS Gauge at Hatchett Creek = 6.28 ft.
- ▶ Flood Levels up to 10+ ft. from wave action



MILTON WIND DAMAGE:



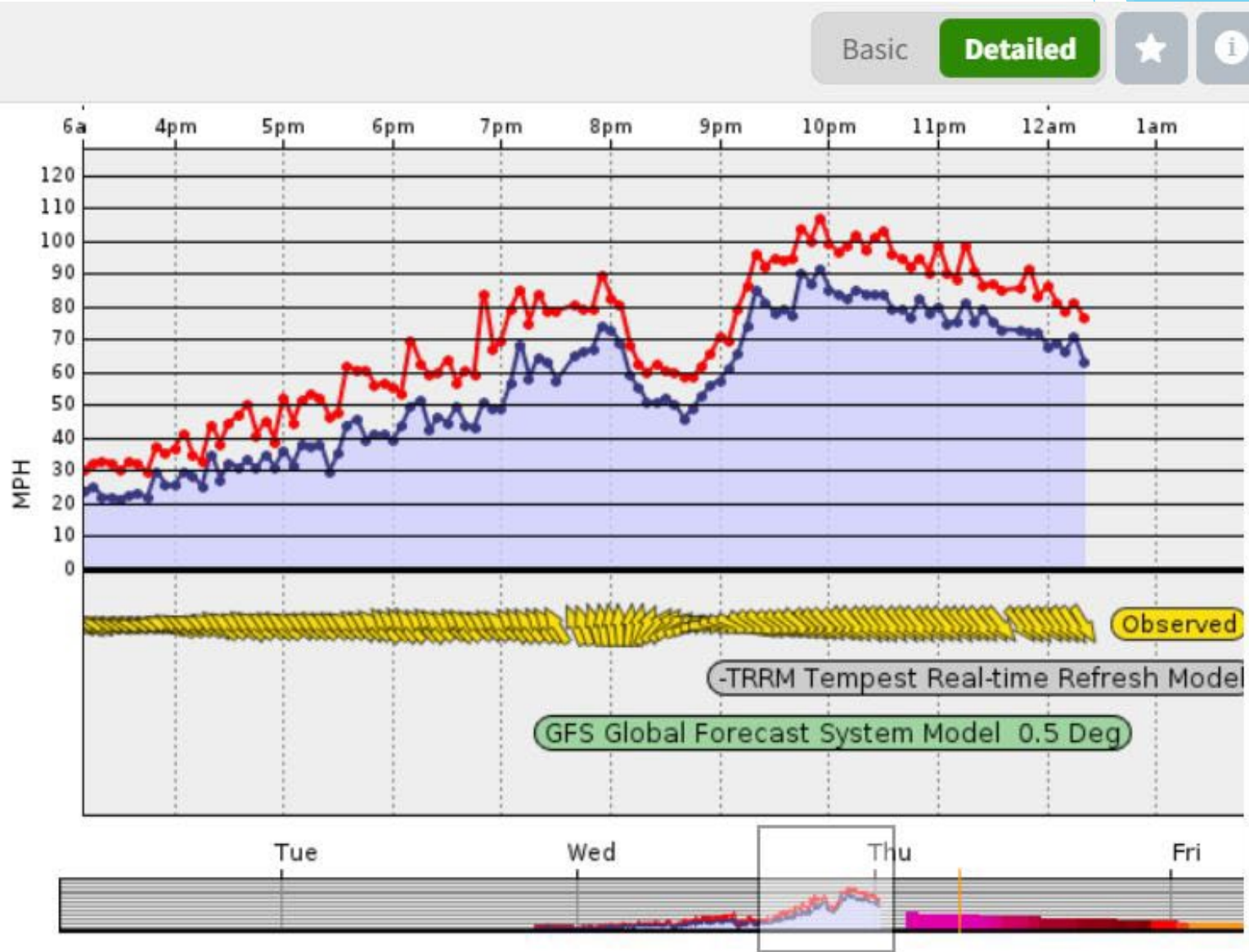
10 Oct 0:20AM

63.2 mph NNW (328°)

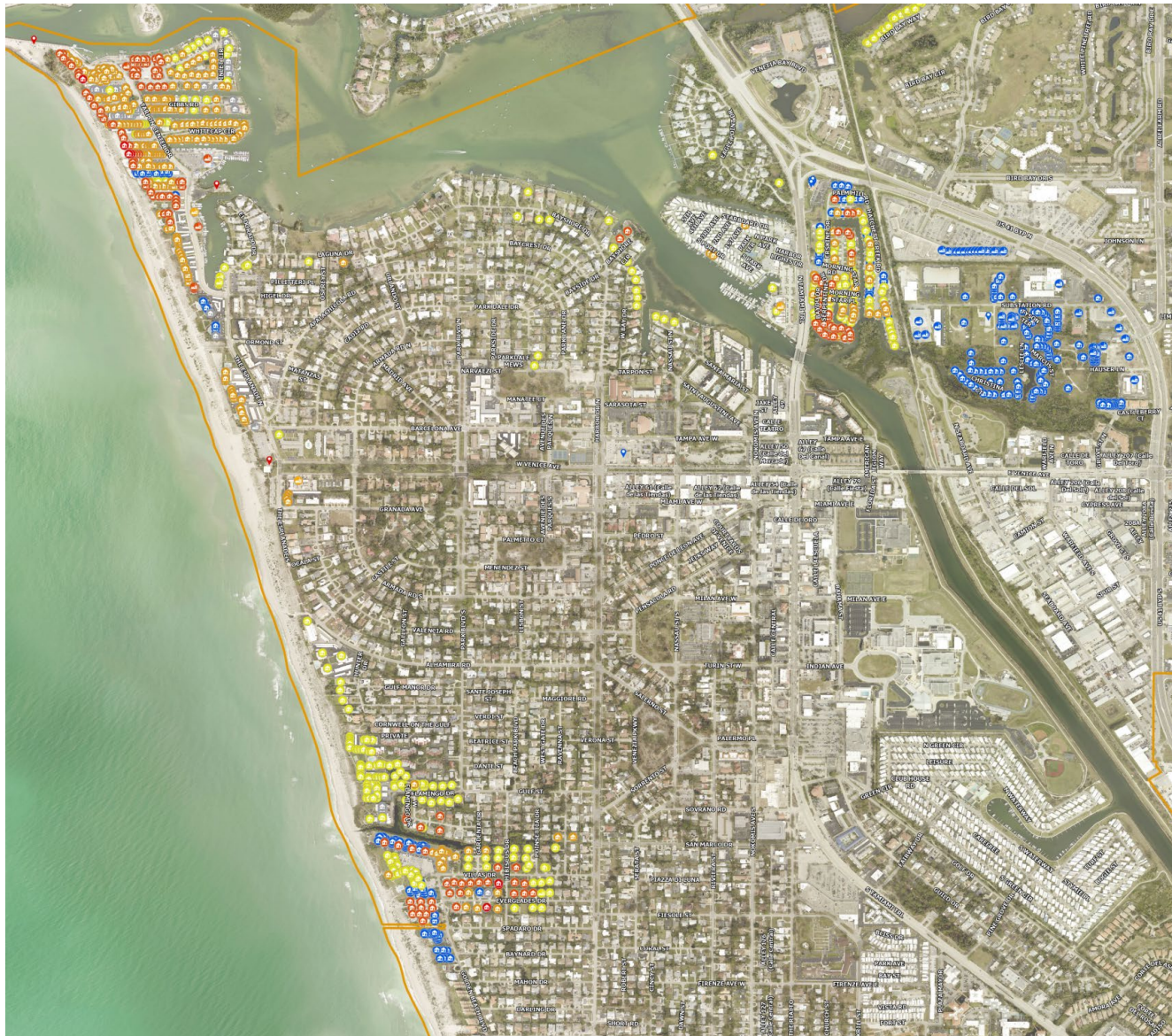
Gusting: to 76.5 mph

Height Above 33 ft
Ground:

WeatherFlow NETWORKS
This data is provided by WeatherFlow Networks.



STORM SURGE: Same locations as Helene



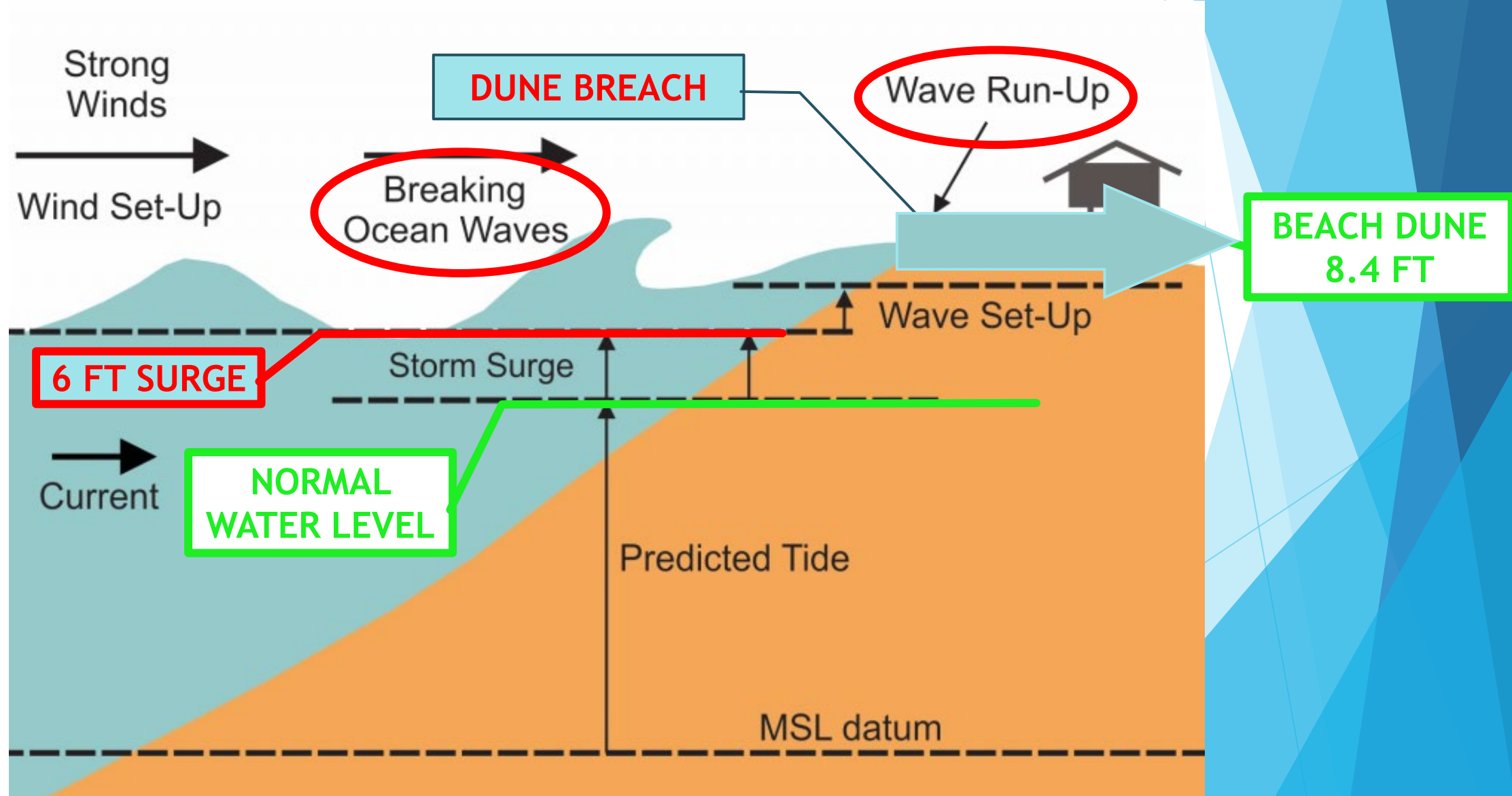
Legend

Commercial Damage	Residential Damage
Assigned	Assigned
None	None
Affected	Affected
Minor	Minor
Major	Major
	Destroyed
Public status	City Boundary
Assigned	
Category: E	

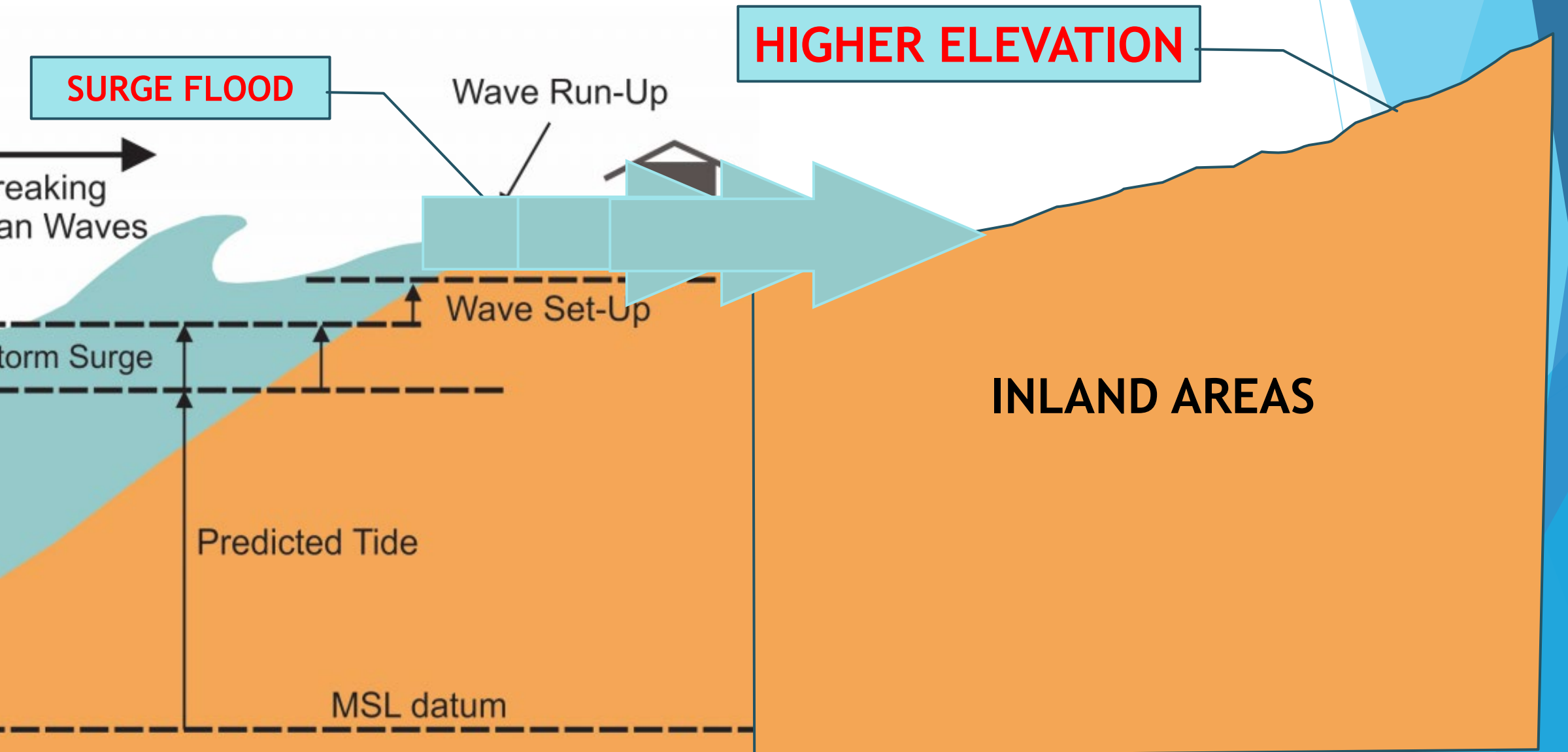
Plus: WIND Damage, Widespread Power Loss, Communication Loss



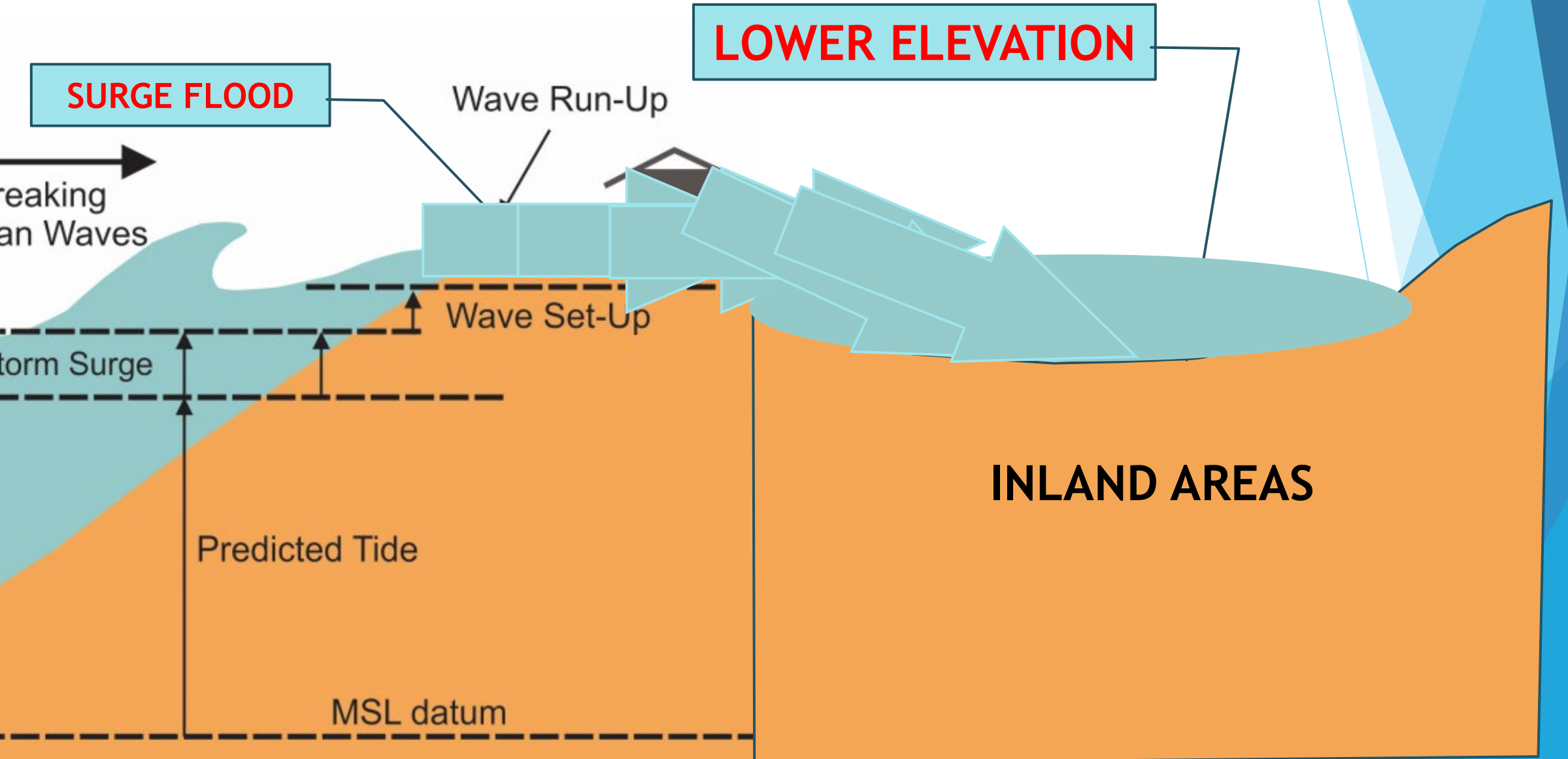
STORM SURGE: 6 FT...How did we get to 10 FT?



STORM SURGE: 6 FT...How did we get to 10 FT?



STORM SURGE: 6 FT...How did we get to 10 FT?



STORM SURGE: BEACH DUNE BREACHED - Sept. 26



Tarpon
Center
4:15 pm

STORM SURGE: BEACH DUNE BREACHED

FLAMINGO DITCH 4:30 PM



STORM SURGE: BEACH DUNE BREACHED 4:35 PM



STORM SURGE: BEACH DUNE BREACHED



Venice Villas
4:35 PM

STORM SURGE: BEACH DUNE BREACHED

Venice Beach “Bowl Effect”



STORM SURGE:

Fishing Pier & North
Brohard Beach (5:00pm)



STORM SURGE: BEACH DUNE BREACHED

South Brohard Beach and Golf Course



STORM IMPACTS:

- ▶ Storm Surge flooding was primary issue from Helene and Milton
- ▶ Venice impacts focused on two factors: coastal areas with lower elevations
- ▶ Regionally consistent: Nokomis, Casey Key, Manasota Key, Siesta, etc.

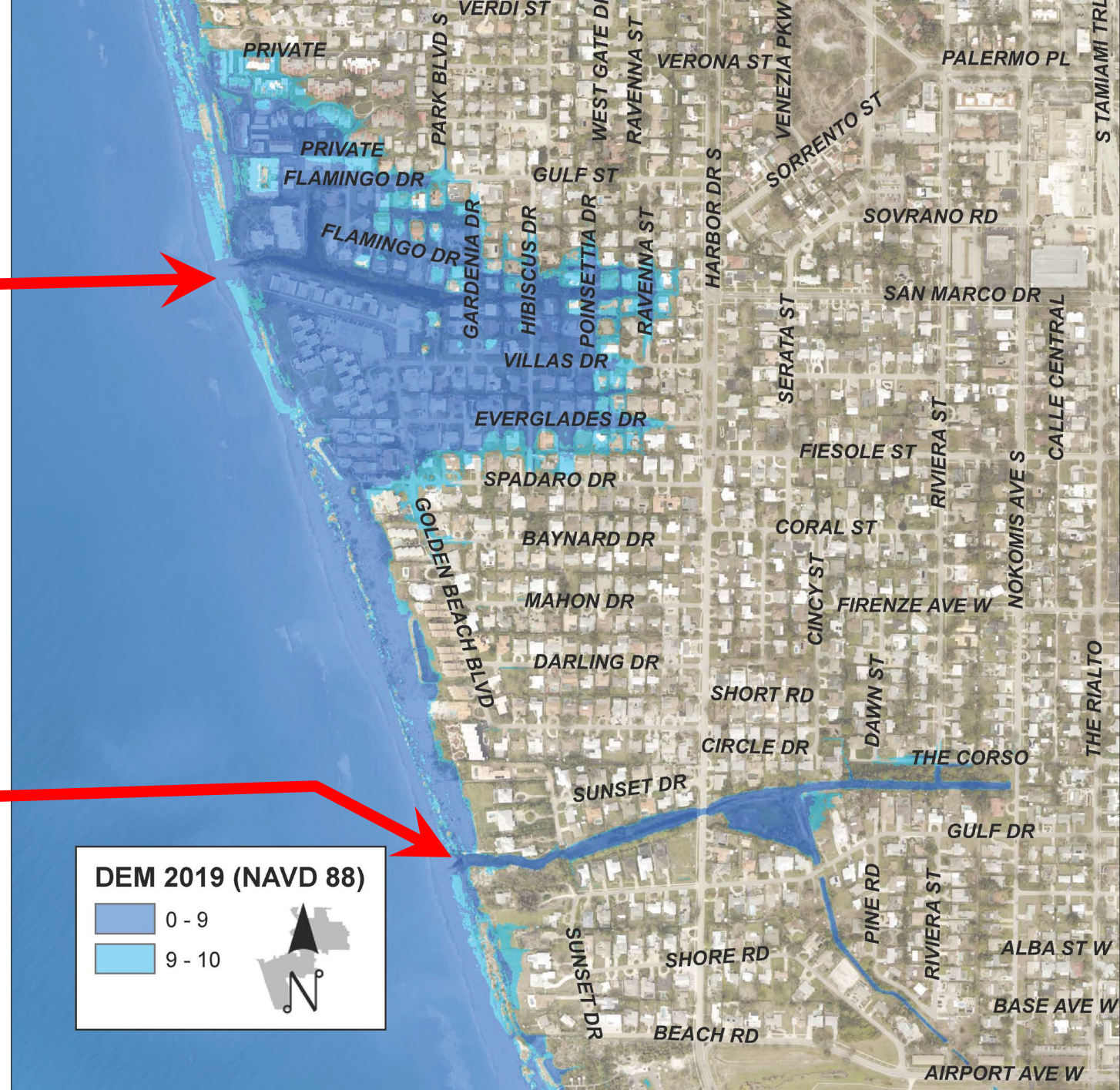
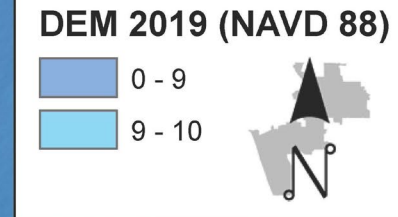
WHY IS THIS SO IMPORTANT?

- ▶ Make informed decisions for their families and property
- ▶ This surge was NOT a once-in-a-lifetime event; it can and will happen again
- ▶ ELEVATION is the best protection

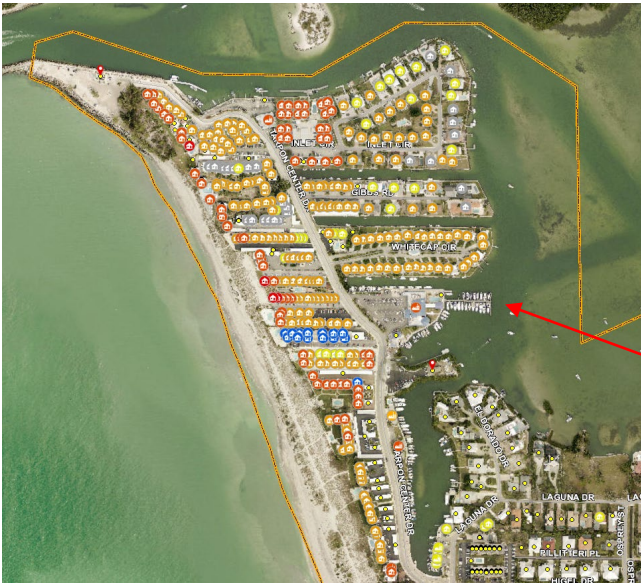
STORM SURGE:

Flamingo Ditch Outfall
Homes and Roads at
4-9 ft. Elevation

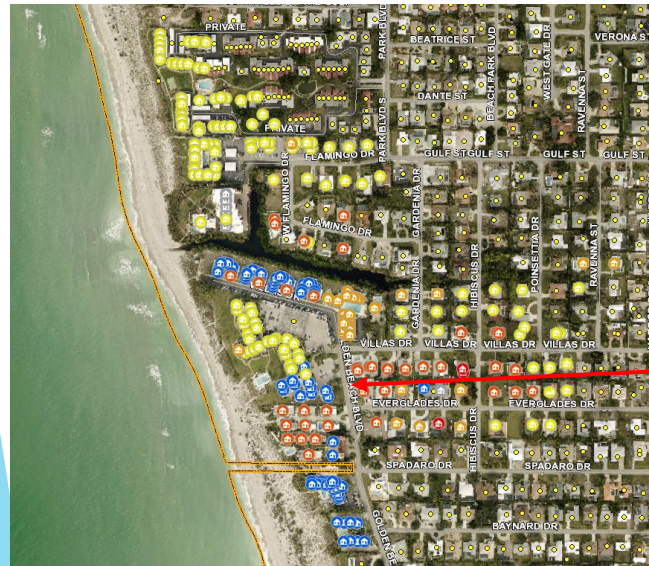
Deertown Gully Outfall
Homes and Roads at
12-15 ft. Elevation



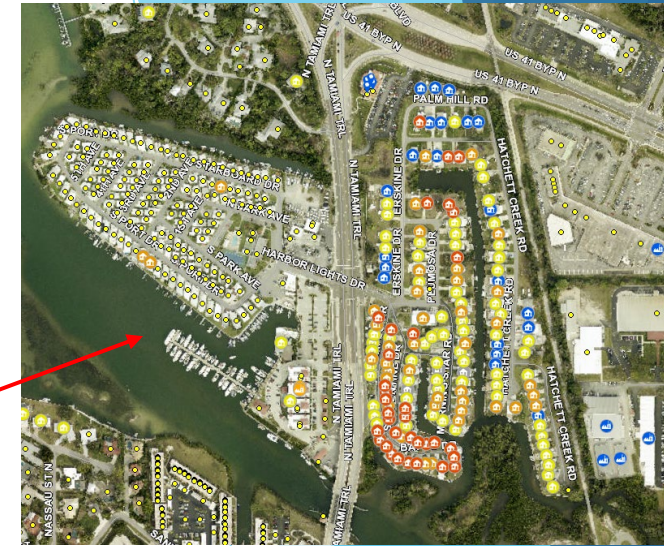
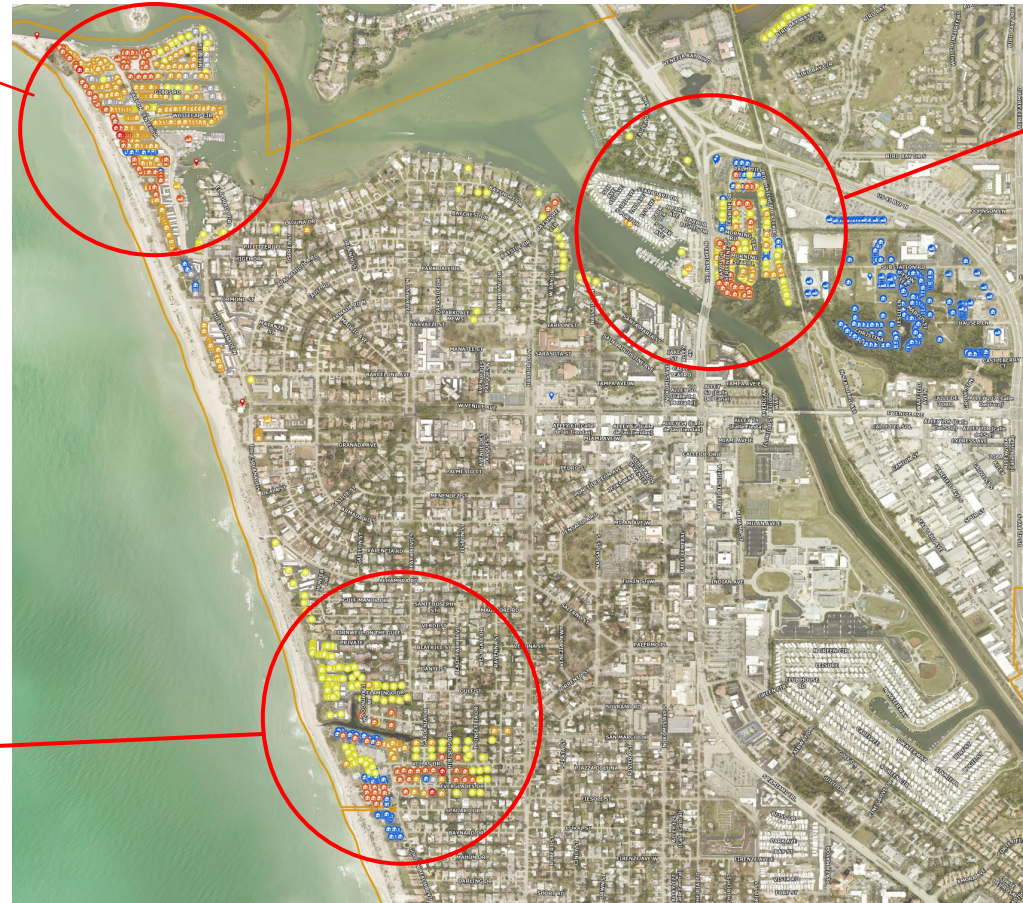
Private Property Impacts Storm Surge



Tarpon Center



Golden Beach



Harbor Lights and Venice Bay

Legend	
Commercial Damage	Residential Damage
Assigned: Blue circle with white center	Assigned: Blue circle with white center
None: Grey circle with white center	None: Grey circle with white center
Affected: Yellow circle with white center	Affected: Yellow circle with white center
Minor: Orange circle with white center	Minor: Orange circle with white center
Major: Red circle with white center	Major: Red circle with white center
Destroyed: Red circle with white center and a red dot in the center	Destroyed: Red circle with white center and a red dot in the center
Public status	City Boundary
Assigned: Blue pin icon	City Boundary: Yellow outline
Category: E: Red pin icon	

Private Property Damage - SAND



Private Property Damage - SAND



CITY DAMAGE ASSESSMENT



CITY DAMAGE ASSESSMENT

COST ESTIMATES 11/6/2024

		HELENE	MILTON
CAT -A	DEBRIS	\$ 9,000.00	\$ 6,400,000.00
CAT -B	EMERGENCY PROTECTIVE MEASURES	\$ 300,000.00	\$ 500,000.00
CAT -C	ROAD AND BRIDGES		
CAT -D	WATER CONTROL FACILITIES (STORMWATER)	\$ 200,000.00	\$ 150,000.00
CAT -E	BUILDINGS AND EQUIPMENT		\$ 2,700,000.00
CAT -F	UTILITIES SYSTEMS	\$ 750,000.00	\$ 700,000.00
CAT -G	RECREATIONAL (PARKS) & OTHER	\$ 6,000,000.00	\$ 2,100,000.00
TOTAL		\$ 7,259,000.00	\$ 12,550,000.00

CITY DAMAGE ASSESSMENT



CITY DAMAGE ASSESSMENT



CITY DAMAGE ASSESSMENT



CITY DAMAGE ASSESSMENT



CITY DAMAGE ASSESSMENT



CITY DAMAGE ASSESSMENT

- ▶ All parks, beaches, roadways now open
- ▶ Lift Stations and Wells functional
- ▶ Athletic fields partially open
- ▶ Airport T-Hangers partially open
- ▶ 29 facilities damaged, 8 “turn-key”
- ▶ City Staff focused on recovery to make the City safe and beautiful

Debris Collection

- ▶ Hurricane Debris Collection is normally a 90+ day operation
- ▶ Debris Collection had started after Helene, but had to be paused due to Milton
- ▶ After Milton, City worked to secure a new debris vendor and did an emergency rate increase to keep resources here

DEBRIS COLLECTION

Collections to date

61,307y³

the equivalent of filling
18.5 Olympic-sized
swimming pools





ENTER "ACK OF RPT."

Datson

Datson

Datson & Son
CORPORATION, INC.
STATE OF CALIFORNIA
USDOT 2361192

DISASTER RELIEF

28

W

941-228-8272
www.seahawk-lift.com





Debris Collection

- ▶ Most expensive part of Recovery (\$6M)
- ▶ Highly Specialized Work
- ▶ Typically, will be reimbursed, **IF** we comply with all FEMA guidelines
- ▶ Reimbursement can take years



RECOVERY: BUILDING DEPARTMENT

- ▶ Building Dept. staff must perform Damage Assessment Immediately Post-Storm
- ▶ City is responsible for Building Permitting and Compliance with Federal and Local floodplain regulations (50% Rule)
- ▶ All damaged structures inspected, notices delivered to every property affected in the Special Flood Hazard Area

RECOVERY: BUILDING DEPARTMENT

- ▶ 44 CFR 59.1 Definition: “ Substantial damage” means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal 50 percent of the market value of the structure before the damage occurred.
- ▶ 50% Rule is not a new process
- ▶ Widespread application after Helene and Milton

RECOVERY: BUILDING DEPARTMENT

- ▶ Applies to ALL buildings in a flood hazard area, regardless of whether the building was covered by flood insurance.
- ▶ ALL repairs must be accounted for at the same time to ensure compliance with 50% rule
- ▶ If the repairs cannot be performed within the 50% threshold, the structure must be brought into code compliance

RECOVERY: BUILDING DEPARTMENT



RECOVERY: BUILDING DEPARTMENT

- ▶ Every situation is different (Single family, Condominiums, Mobile Homes)
- ▶ Building Dept. meeting directly with individuals, contractors, & HOAs
- ▶ Helping residents through the process, without compromising the rules

RECOVERY: BUILDING DEPARTMENT

- ▶ Why is this so important?



**NATIONAL FLOOD
INSURANCE PROGRAM**

- ▶ NFIP participation is the single greatest protection that the City provides its residents

RECOVERY: BUILDING DEPARTMENT

- ▶ Financial recovery support for residents
- ▶ Insures Structures and Contents at discounted rates (25% in April)
- ▶ Required for FDIC insured mortgages
- ▶ Increased Cost of Compliance Coverage
- ▶ Required for Federal grants/assistance
- ▶ City responsible for implementing all FEMA rules consistently and fairly



AFTER ACTION REVIEW (AAR)

- ▶ **Purpose:** Provide essential feedback to determine City CEMP and Department COOP strengths, weaknesses & opportunities for improvement.
 1. What was expected to occur?
 2. What really happened?
 3. What went wrong and why?
 4. What went well and why?

DATA COLLECTION ANALYSIS

Direct Observation & Facilitated Group Discussion

- ▶ 1st AAR Data Collection Meeting held Nov. 1st
- ▶ Surveys - Collect data from subject matter experts and pre-defined groups to gain critical information on: Planning/ Operations/ Logistics/ Finance
- ▶ Identify Common Concerns and Issues

DEVELOP OBSERVATIONS

- ▶ 1) Topic
- ▶ 2) Specific Assertion
- ▶ 3) Effect
- ▶ What happened
- ▶ Why it happened
- ▶ And the effect
- ▶ Recommendation(s)

OBSERVATION REVIEW BY SUBJECT MATTER EXPERTS

Reconvene as a group for review briefing and discuss:

- ▶ Major Takeaways
- ▶ Lessons Learned
- ▶ Recommended Actions

COORDINATION WITH THE CITIZEN ADVISORY BOARD (CAB)

- ▶ Incorporate Community Concerns
- ▶ Share Information on Emergency Response Procedures
- ▶ Review Lessons Learned
- ▶ Develop Recommended Policy Changes

CONCLUSIONS

- ▶ Hurricanes Helene and Milton caused the worst surge events Venice has ever seen
- ▶ Impacts were significant, but less than predicted, no injuries or loss of life
- ▶ The City is actively assisting residents through the Recovery Process



CONCLUSIONS

- ▶ Hurricanes always come with Challenges, Disruptions, and Property Damage
- ▶ The City's role:
 - ▶ Help you prepare in advance
 - ▶ Keep you well informed
 - ▶ Help you through the recovery process
 - ▶ Build resiliency for next time



CONCLUSIONS

- ▶ Looking forward to working with the CAB to enhance future EM policies
- ▶ If we work together, we can rebuild our beautiful City and be even more prepared for future events





DISCUSSION & QUESTIONS