

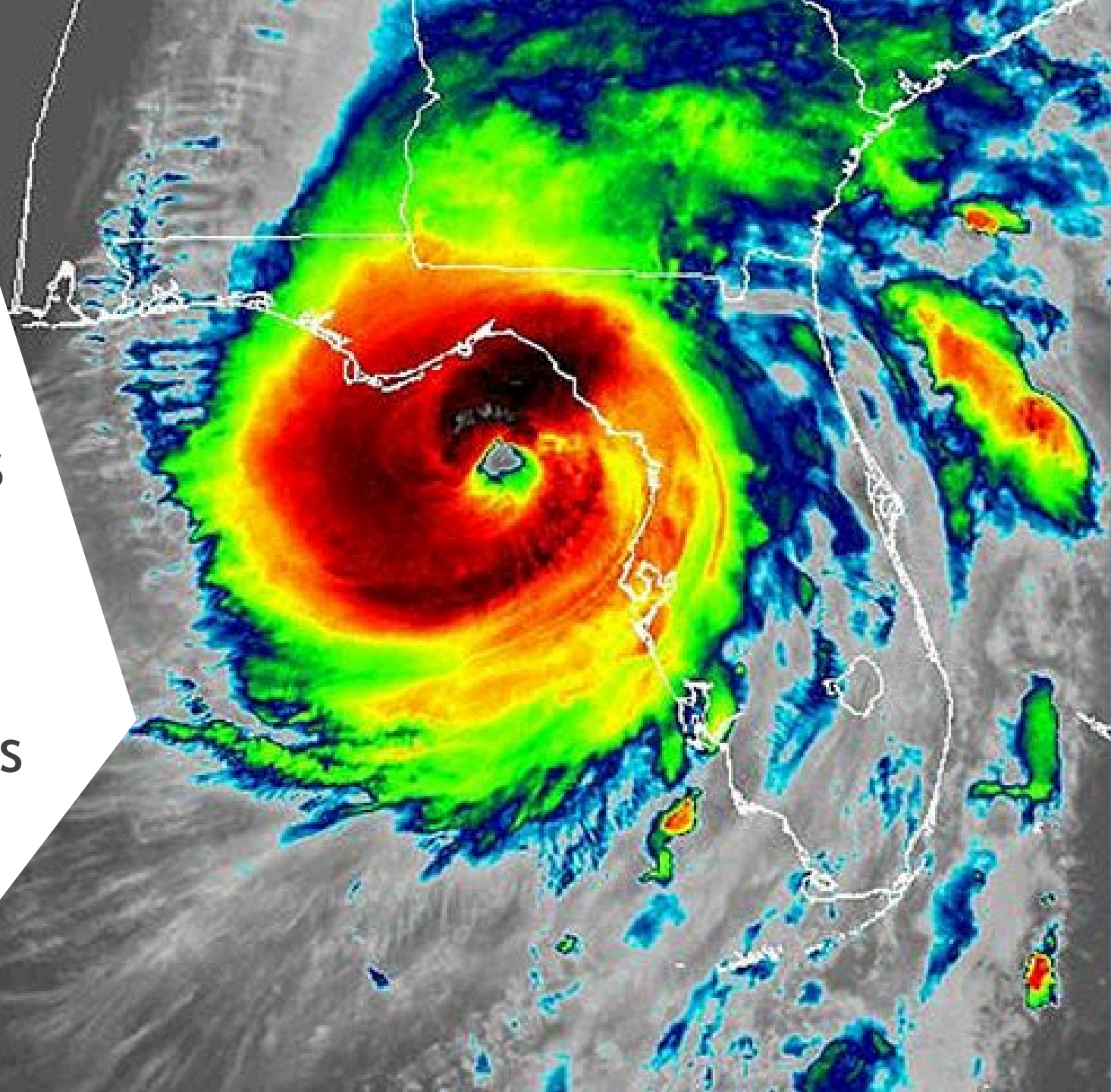
HELENE & MILTON COUNCIL UPDATE

NOVEMBER 19, 2024



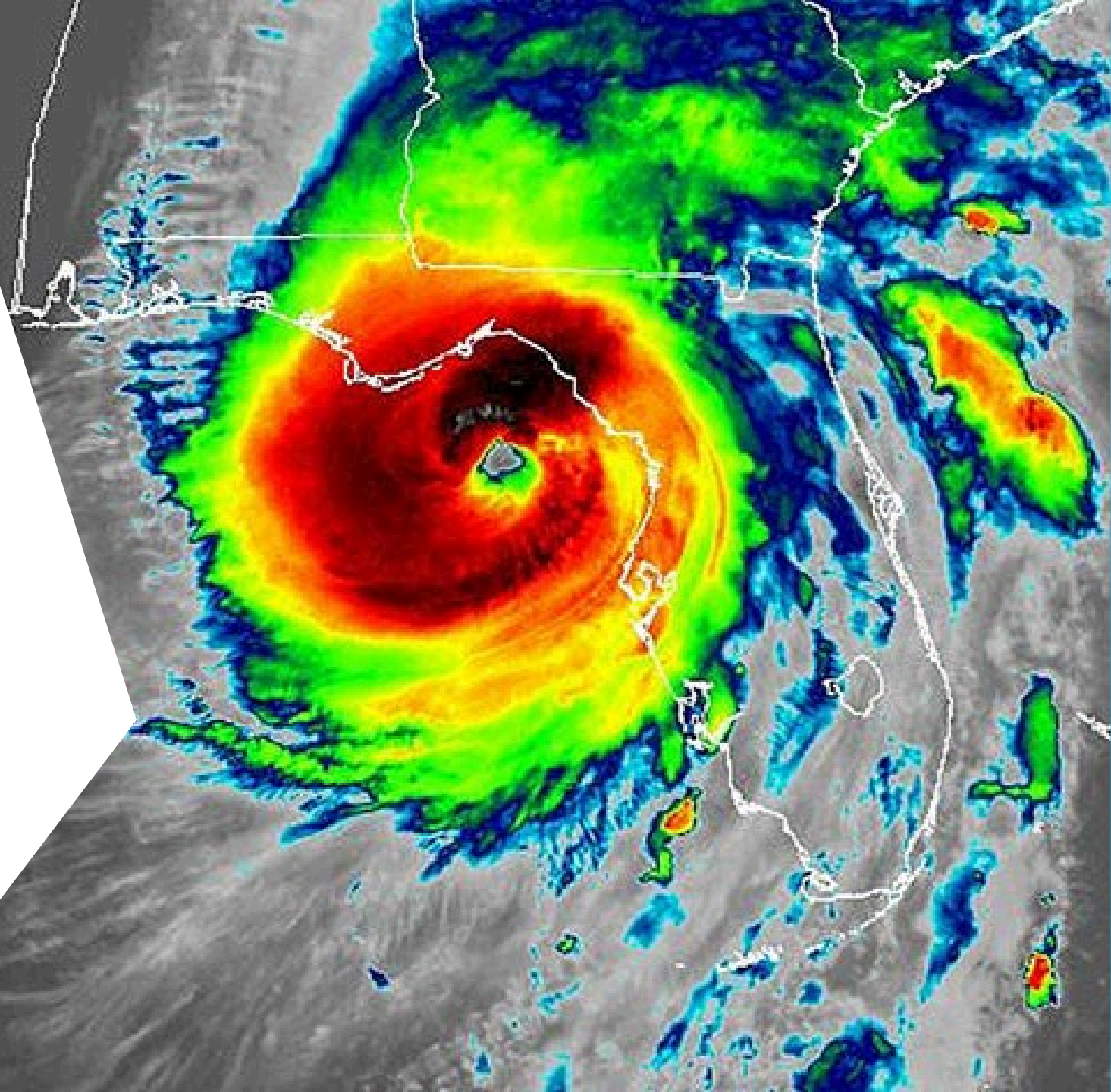
AGENDA

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



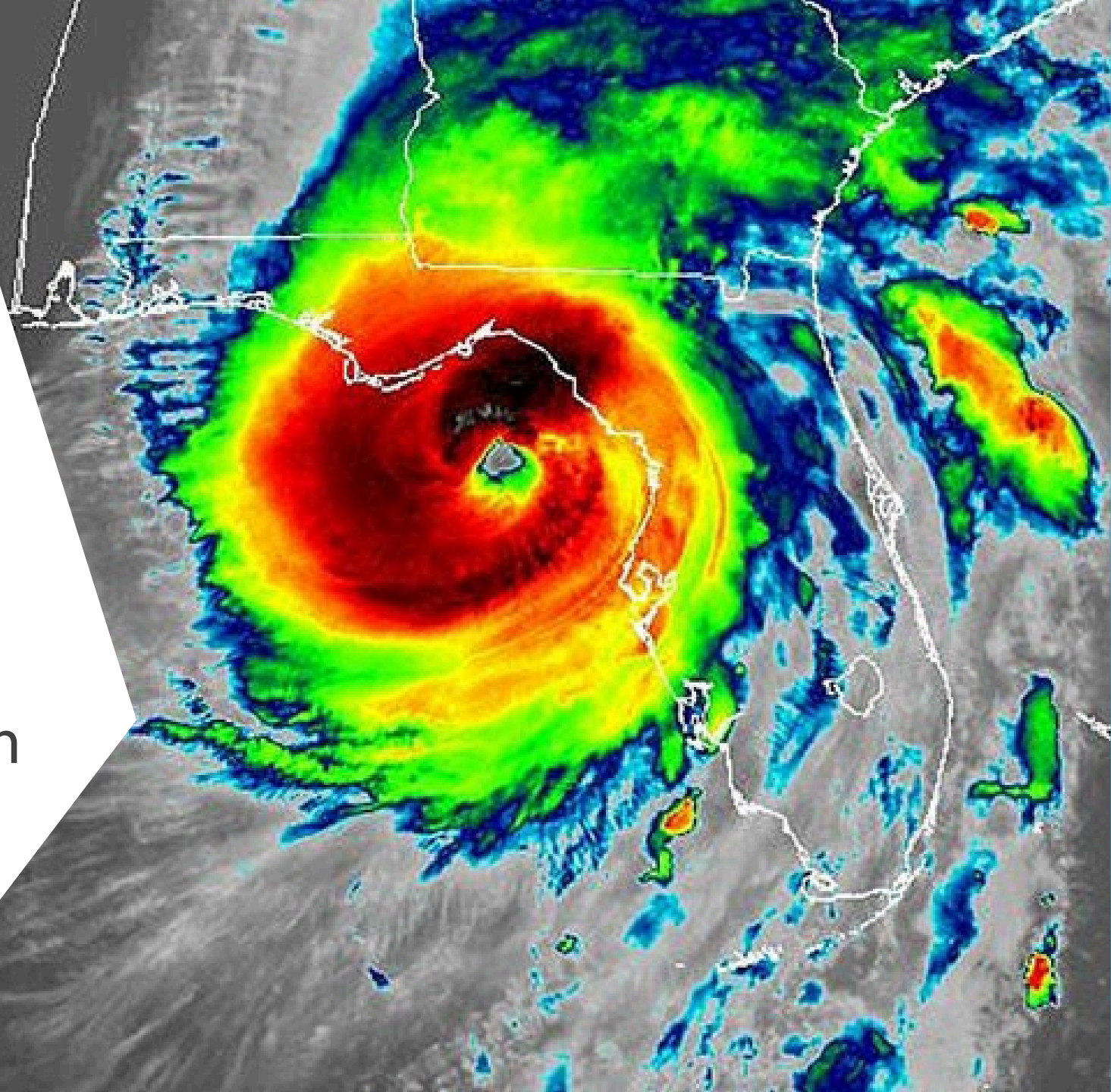
HURRICANE HELENE

- ▶ 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)



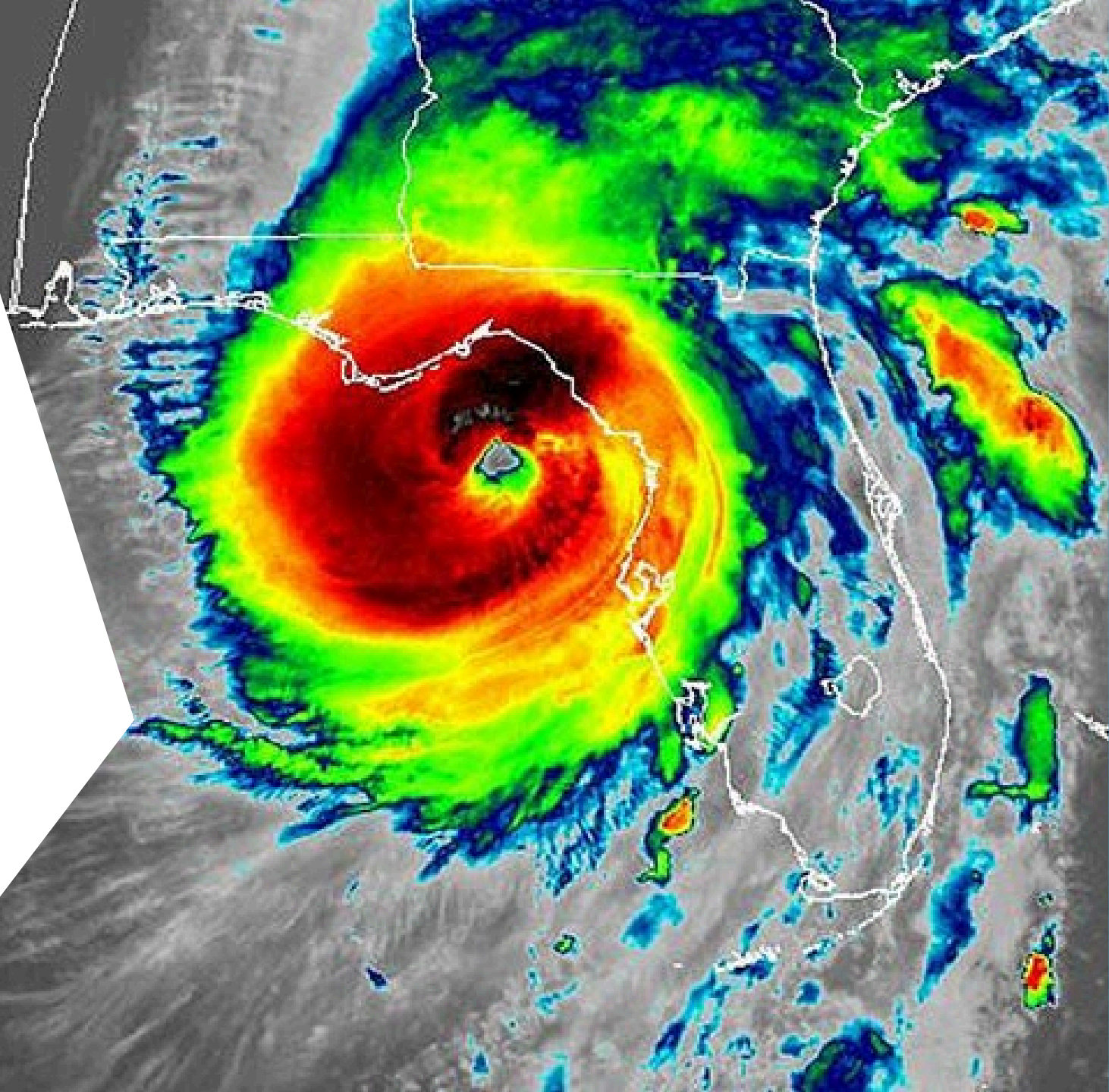
HURRICANE HELENE

- ▶ 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

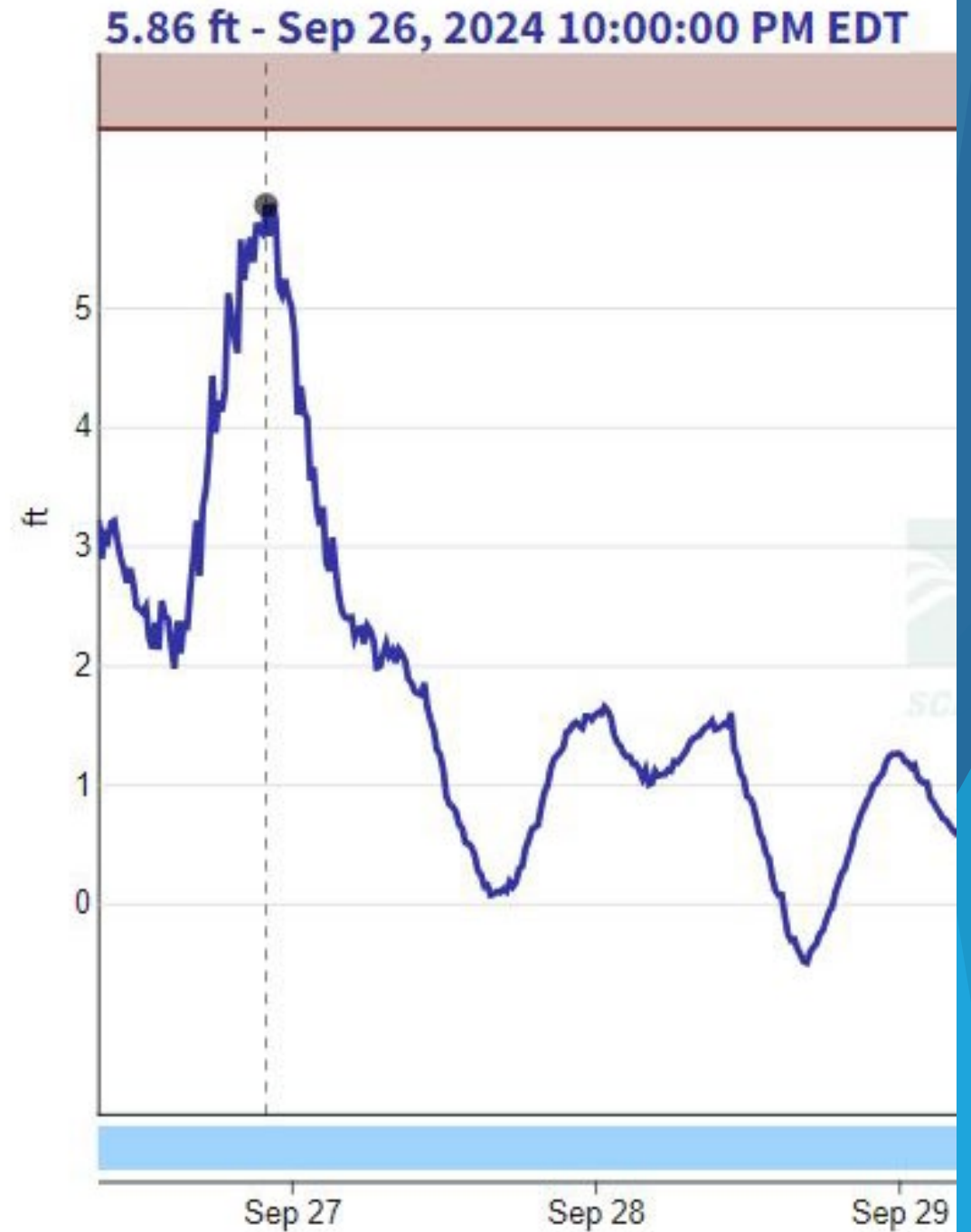
What Actually Happened?

- ▶ 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.

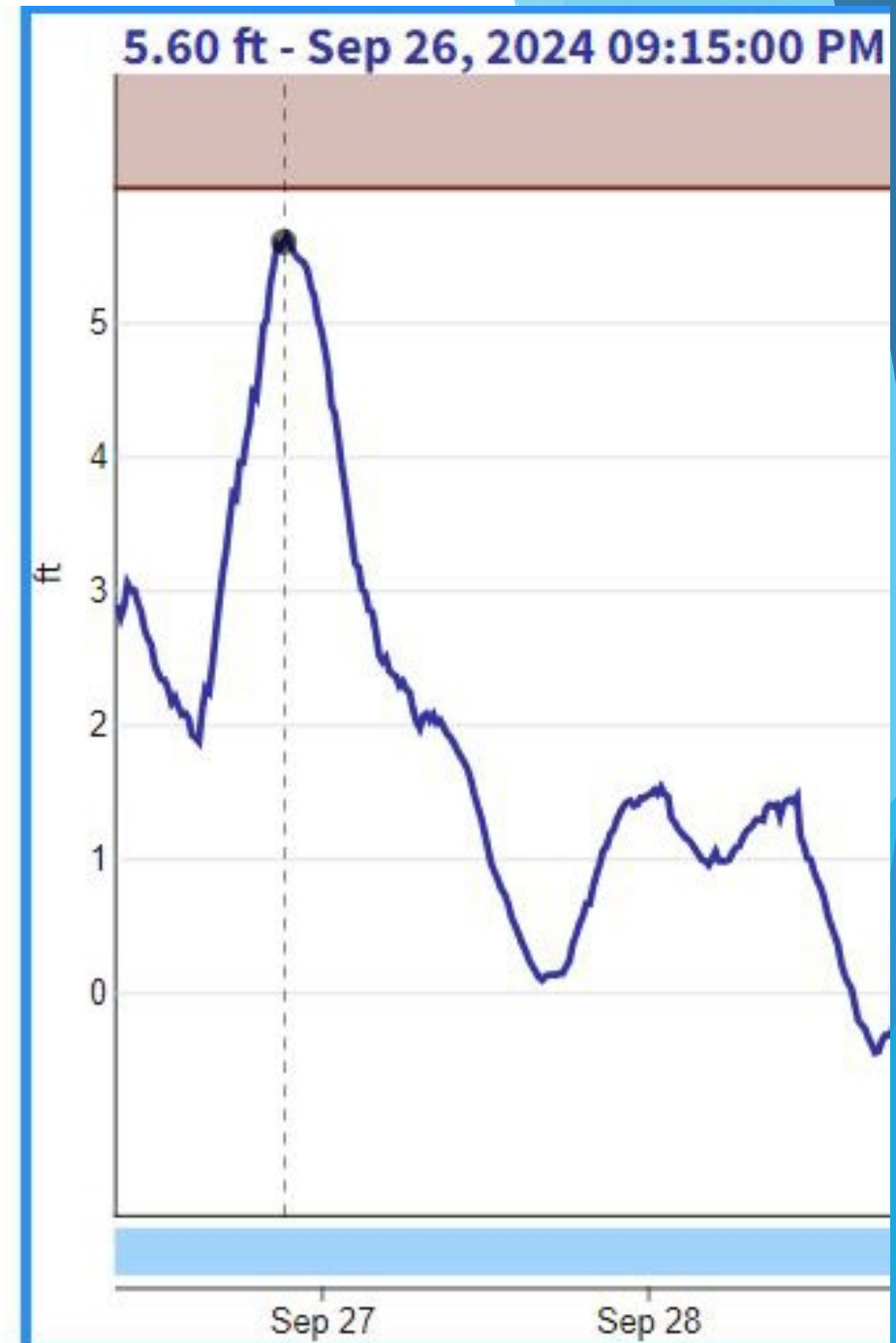
- ▶ USGS Gauge at Crow's Nest Marina = 5.86 ft.



STORM SURGE:

Coastal storm surge near 6 ft.

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

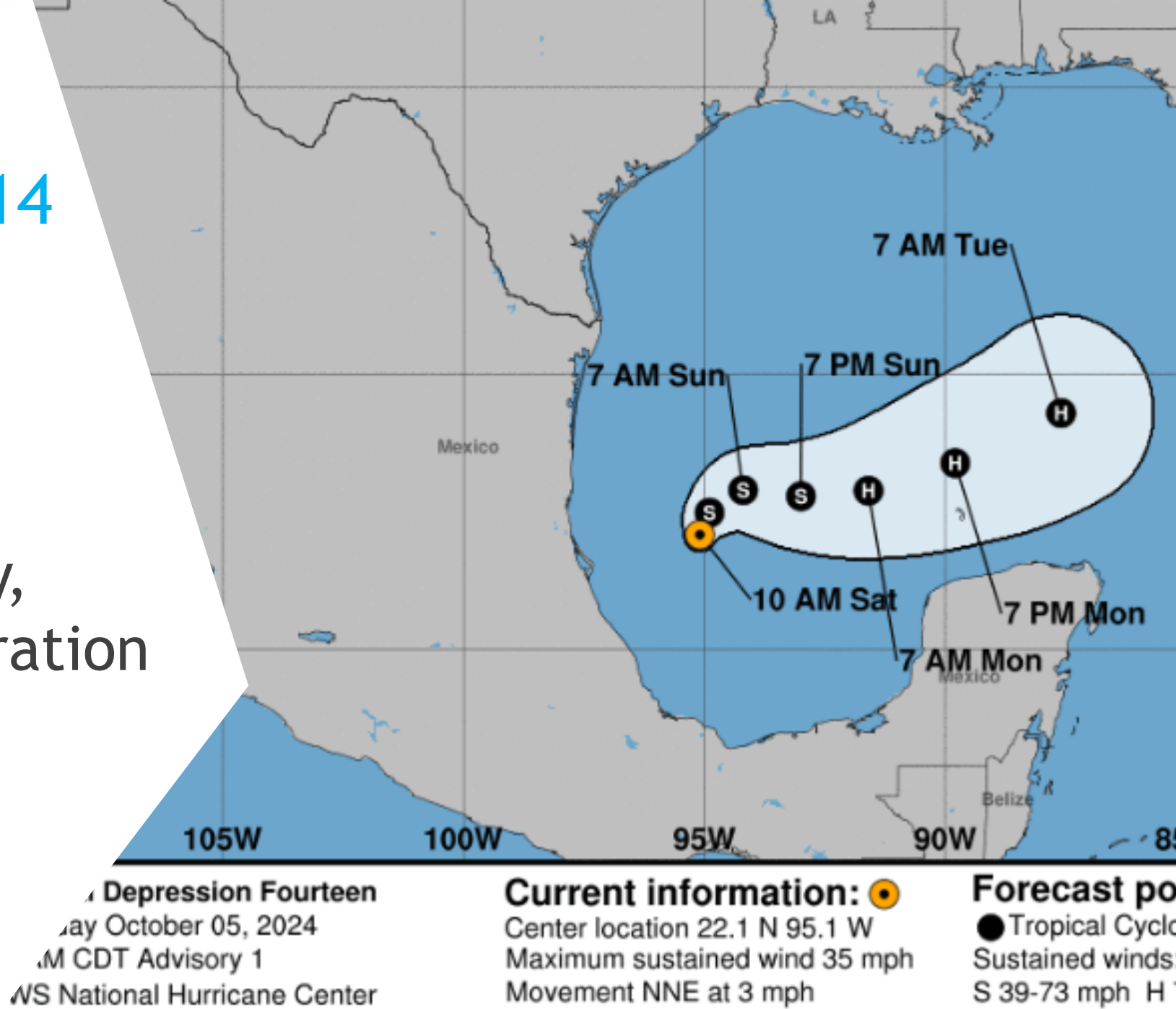


POST-HELENE RECOVERY

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

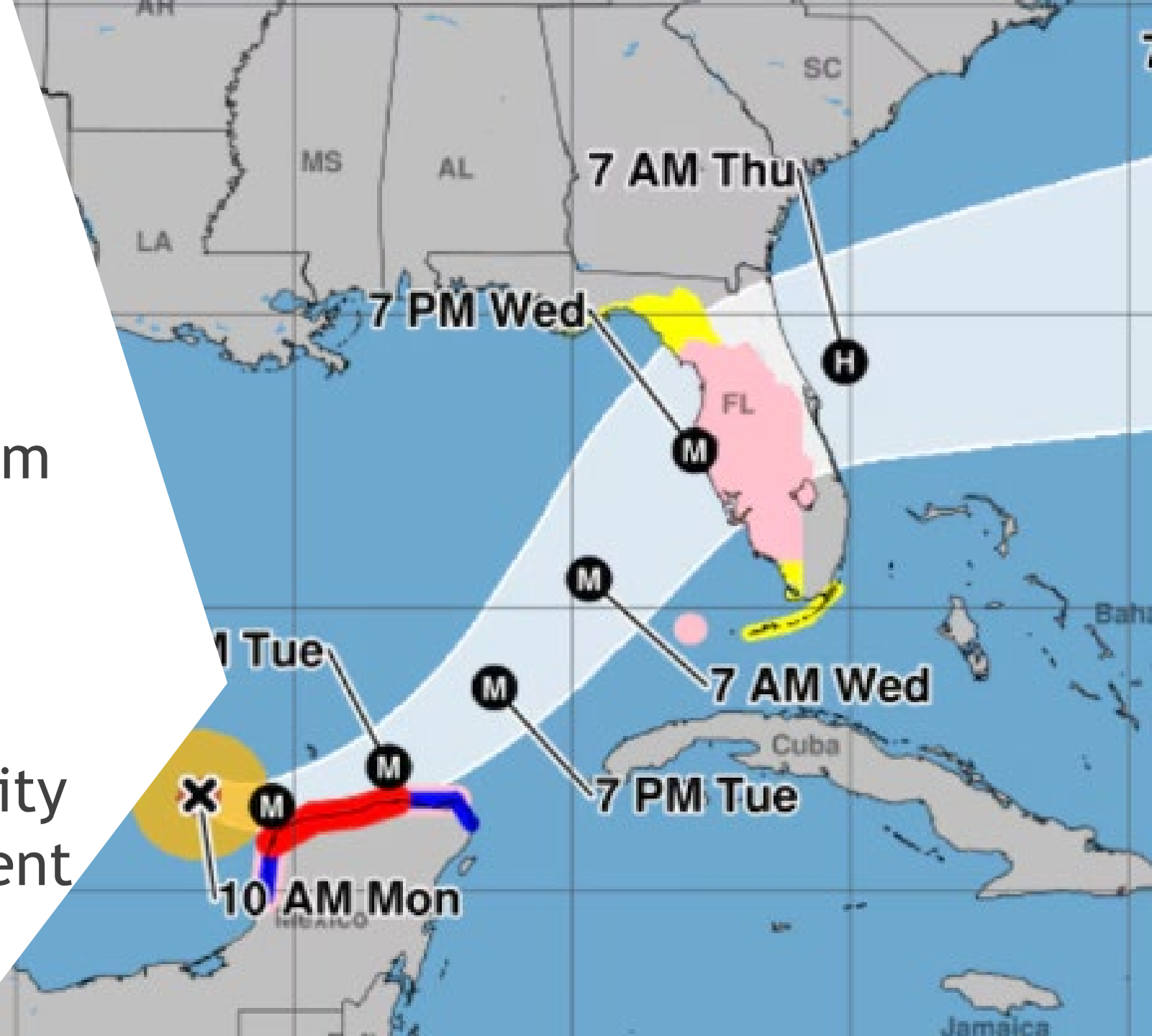
Tropical Depression 14

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



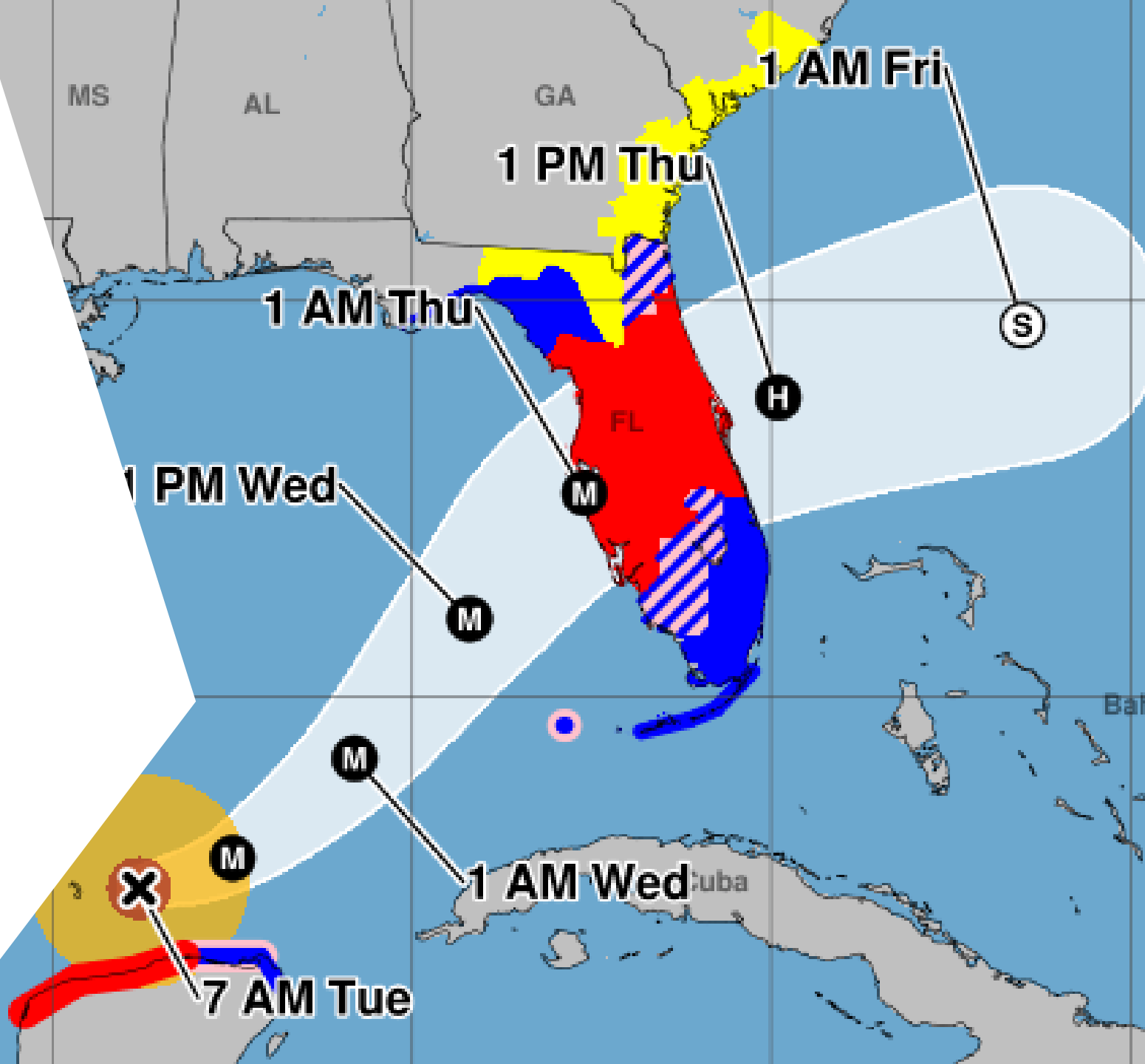
HURRICANE MILTON

- ▶ 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



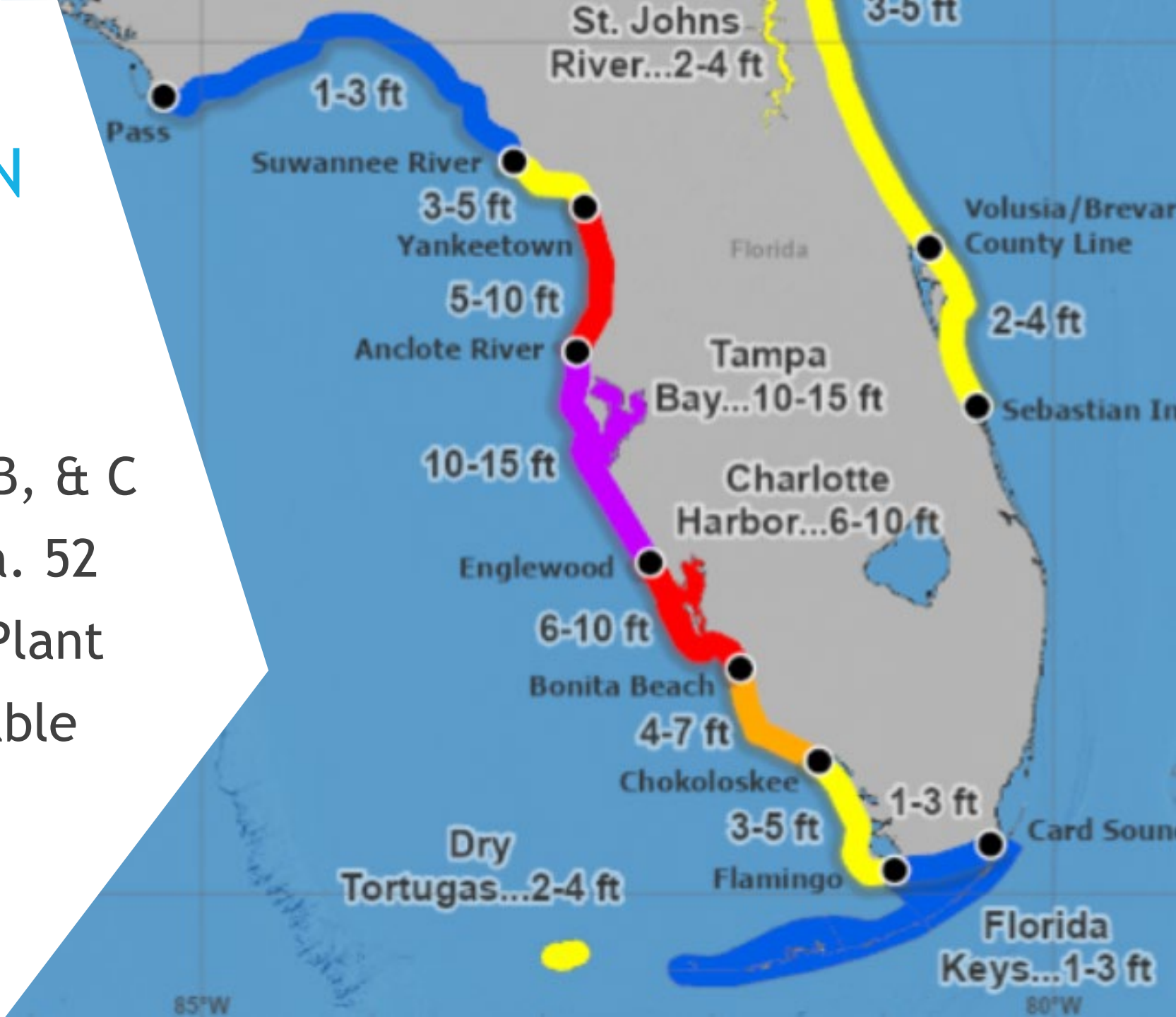
HURRICANE MILTON

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



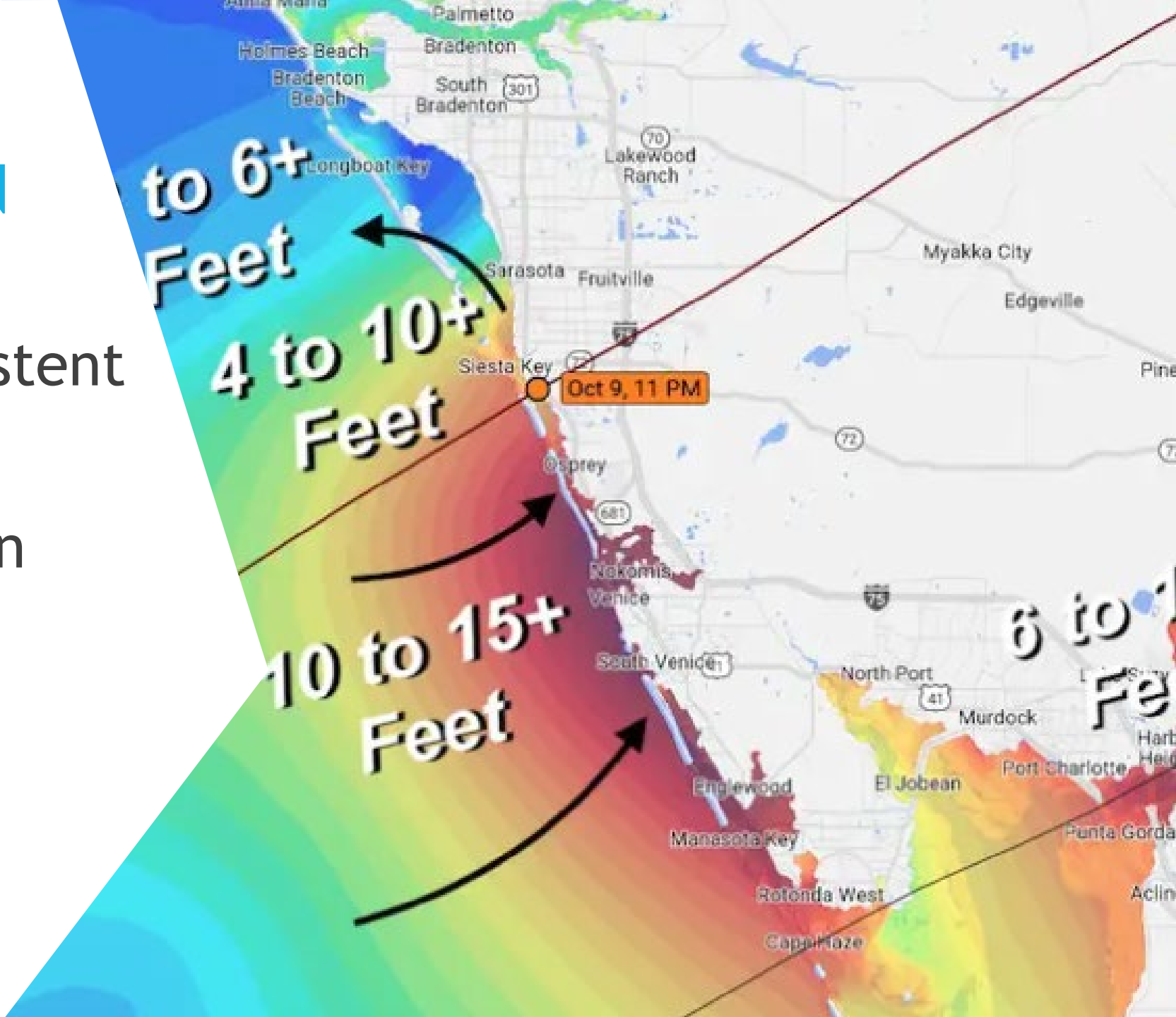
HURRICANE MILTON

- ▶ 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



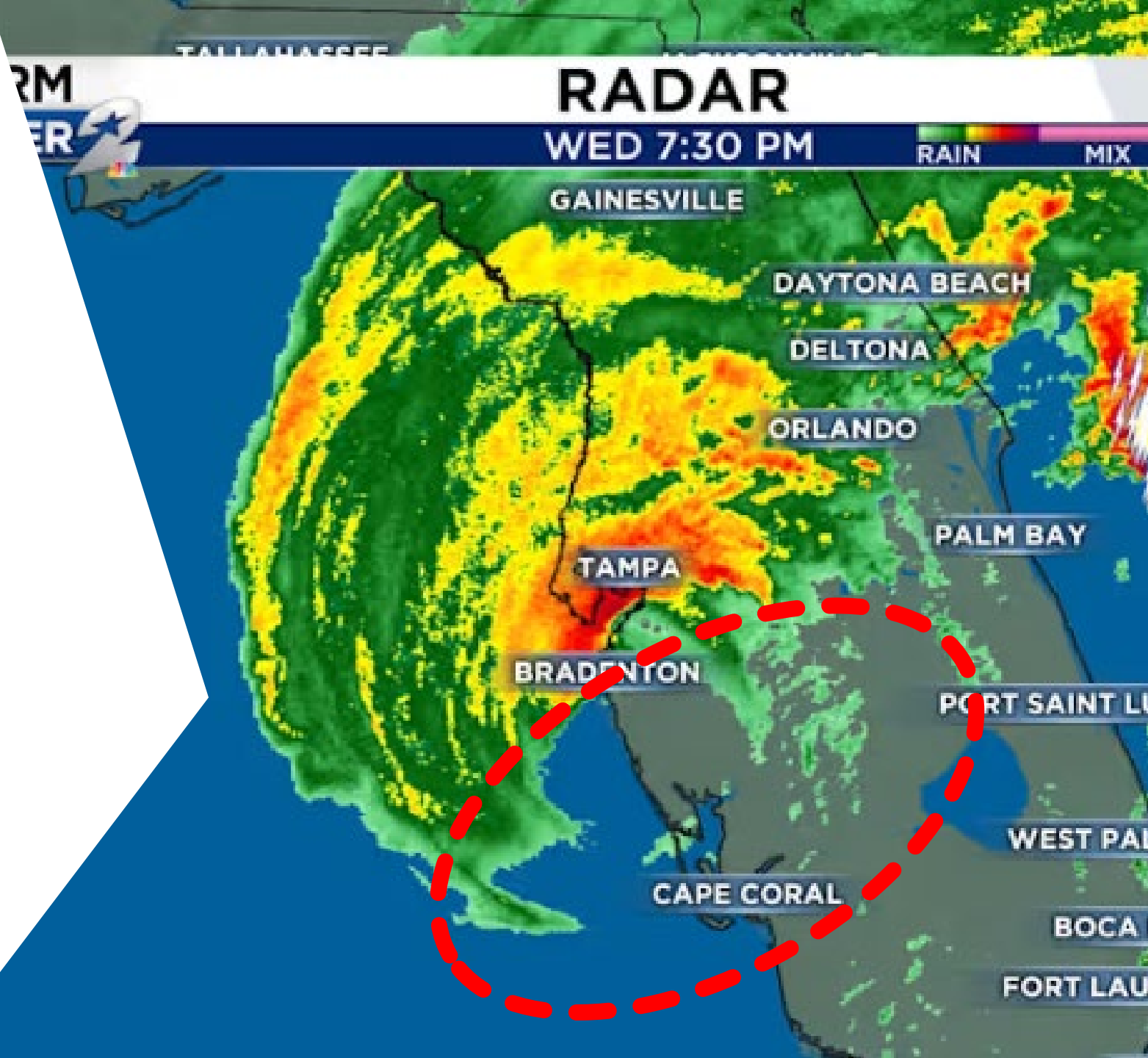
HURRICANE MILTON

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



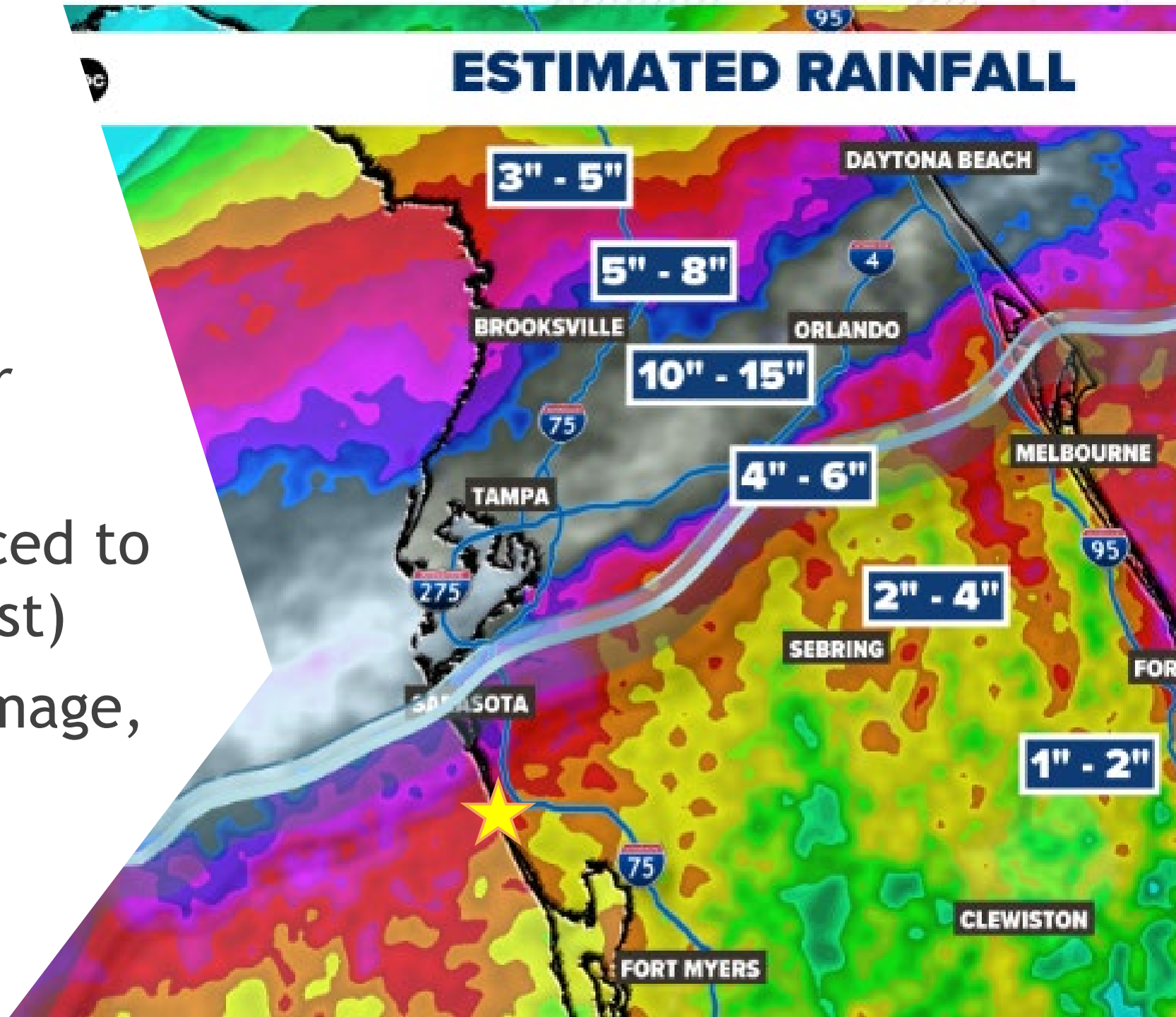
HURRICANE MILTON

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



VENICE IMPACTS

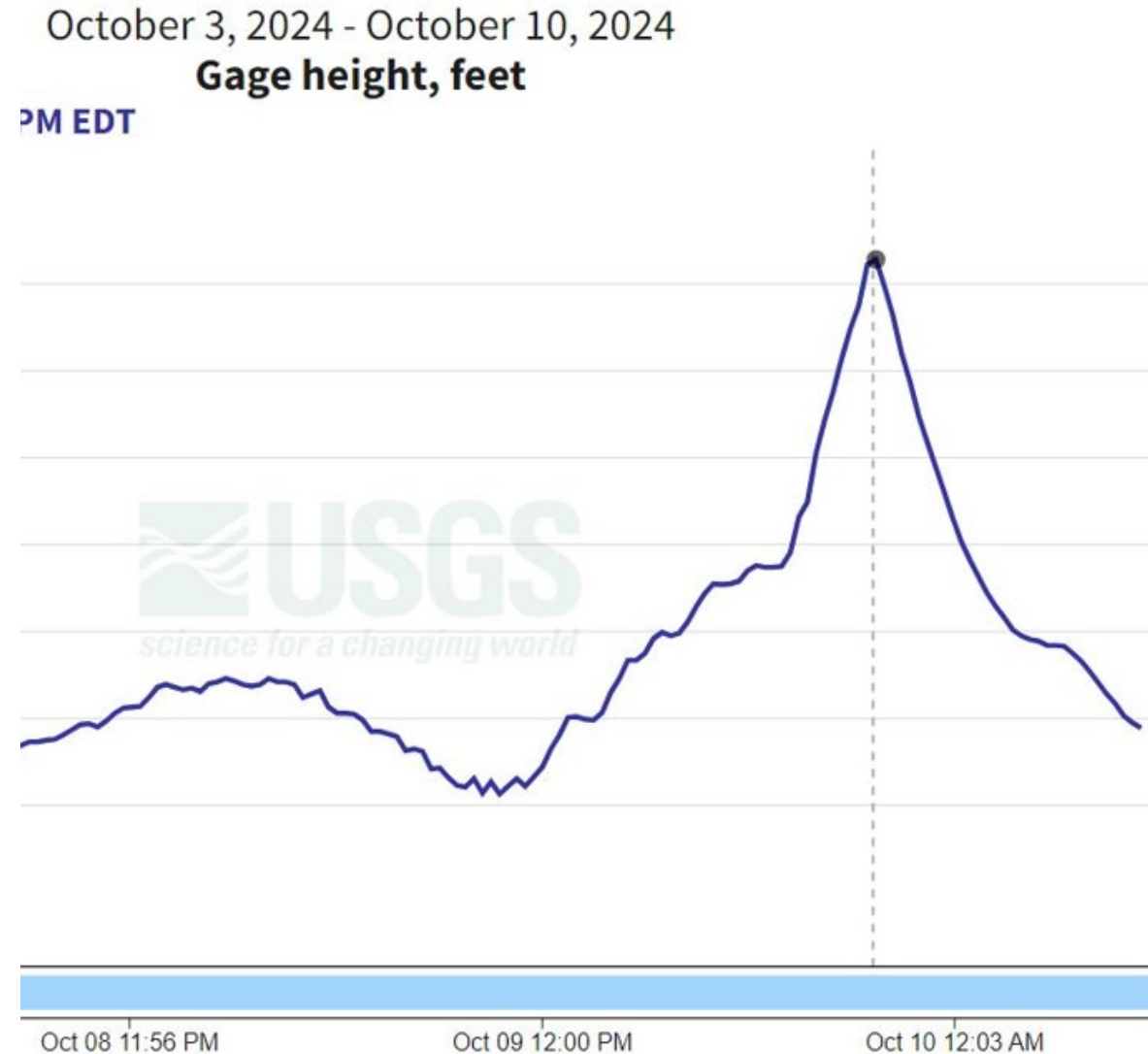
- ▶ Very little rainfall
- ▶ Actual Winds under 100mph (CAT 1)
- ▶ Actual Surge Reduced to 6-7 ft. (1/2 Forecast)
- ▶ Still significant damage, more than Helene



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:



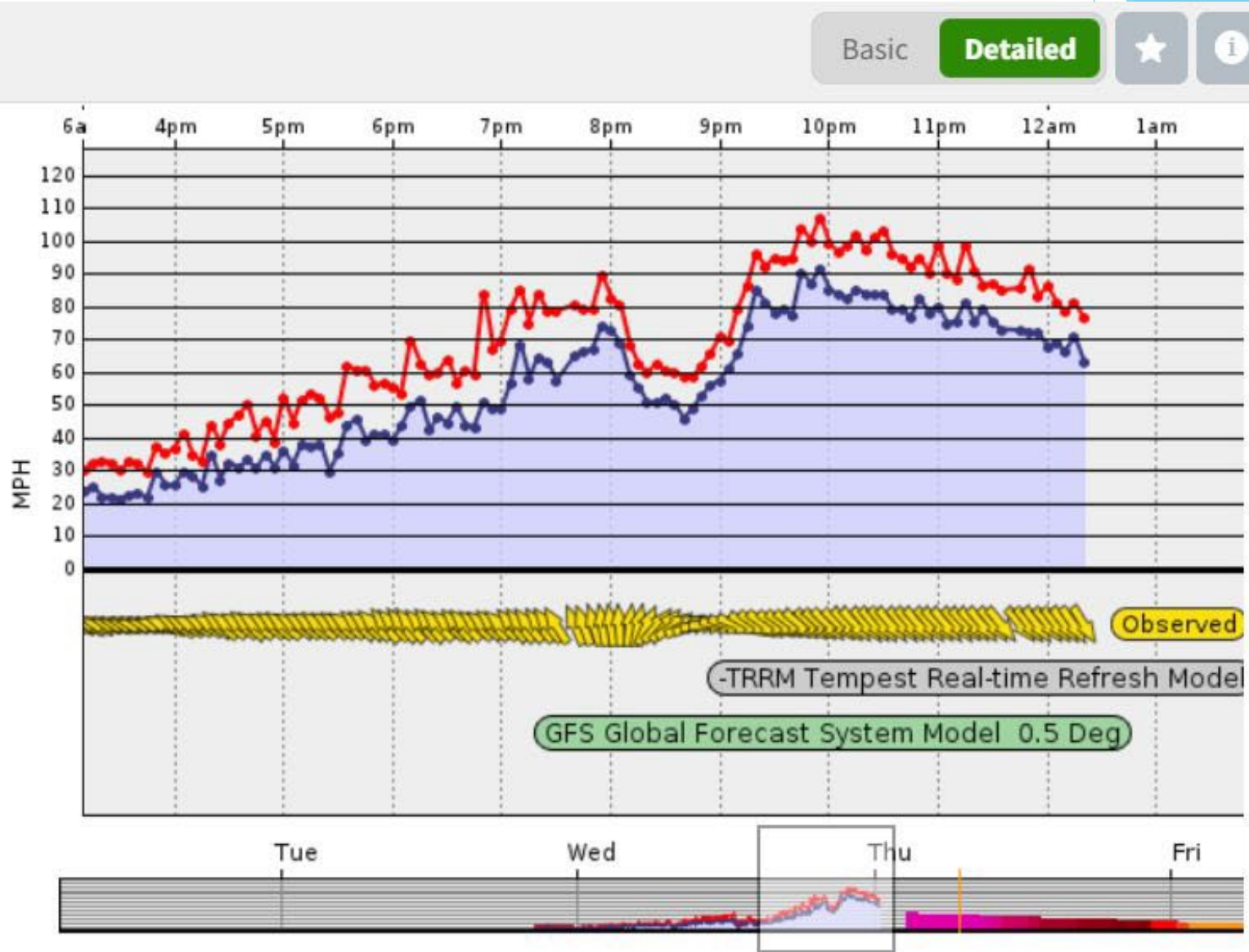
10 Oct 0:20AM

63.2 mph NNW (328°)

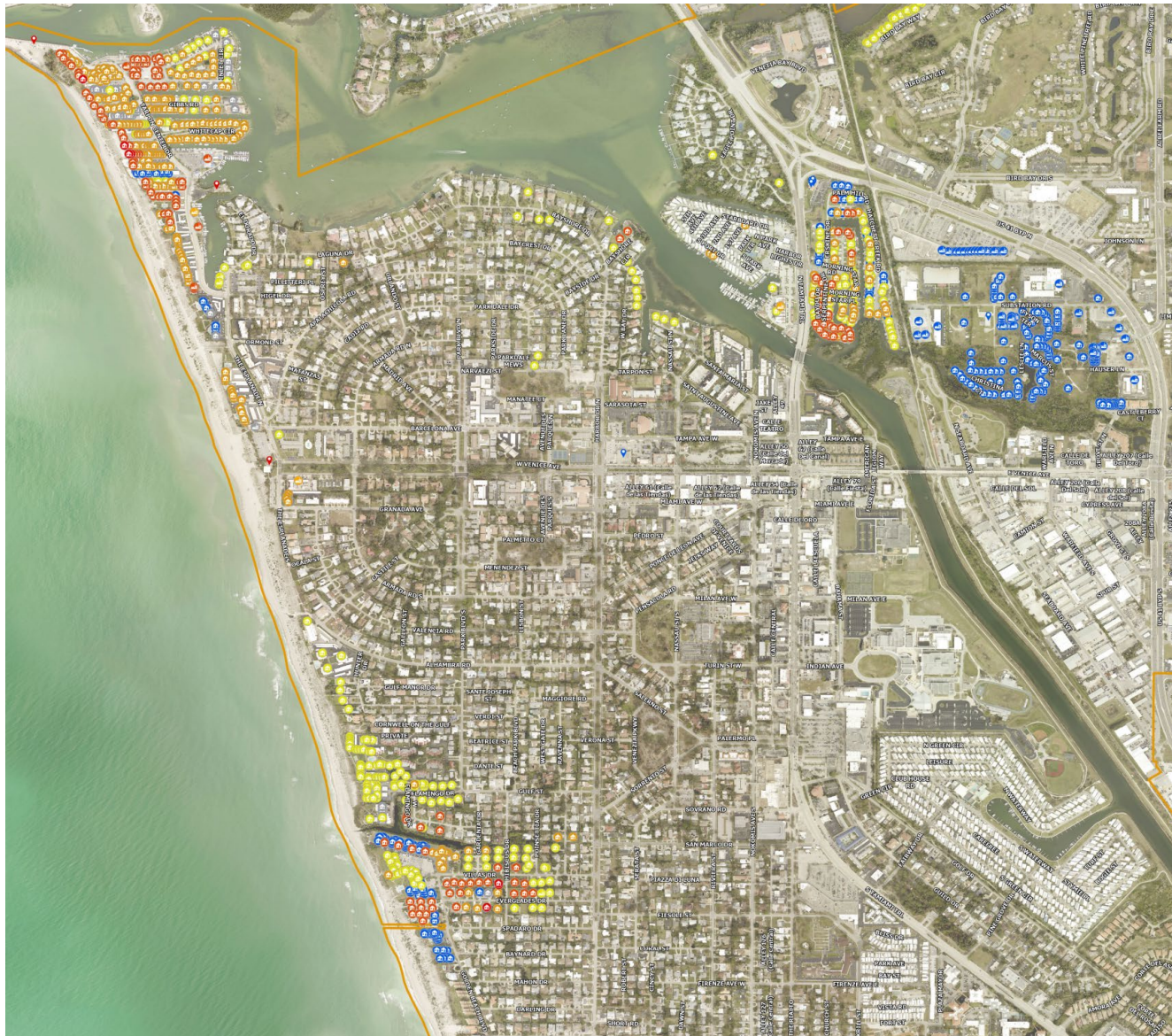
Gusting: to 76.5 mph

Height Above 33 ft
Ground:

WeatherFlow NETWORKS
This data is provided by WeatherFlow Networks.



STORM SURGE: Same locations as Helene



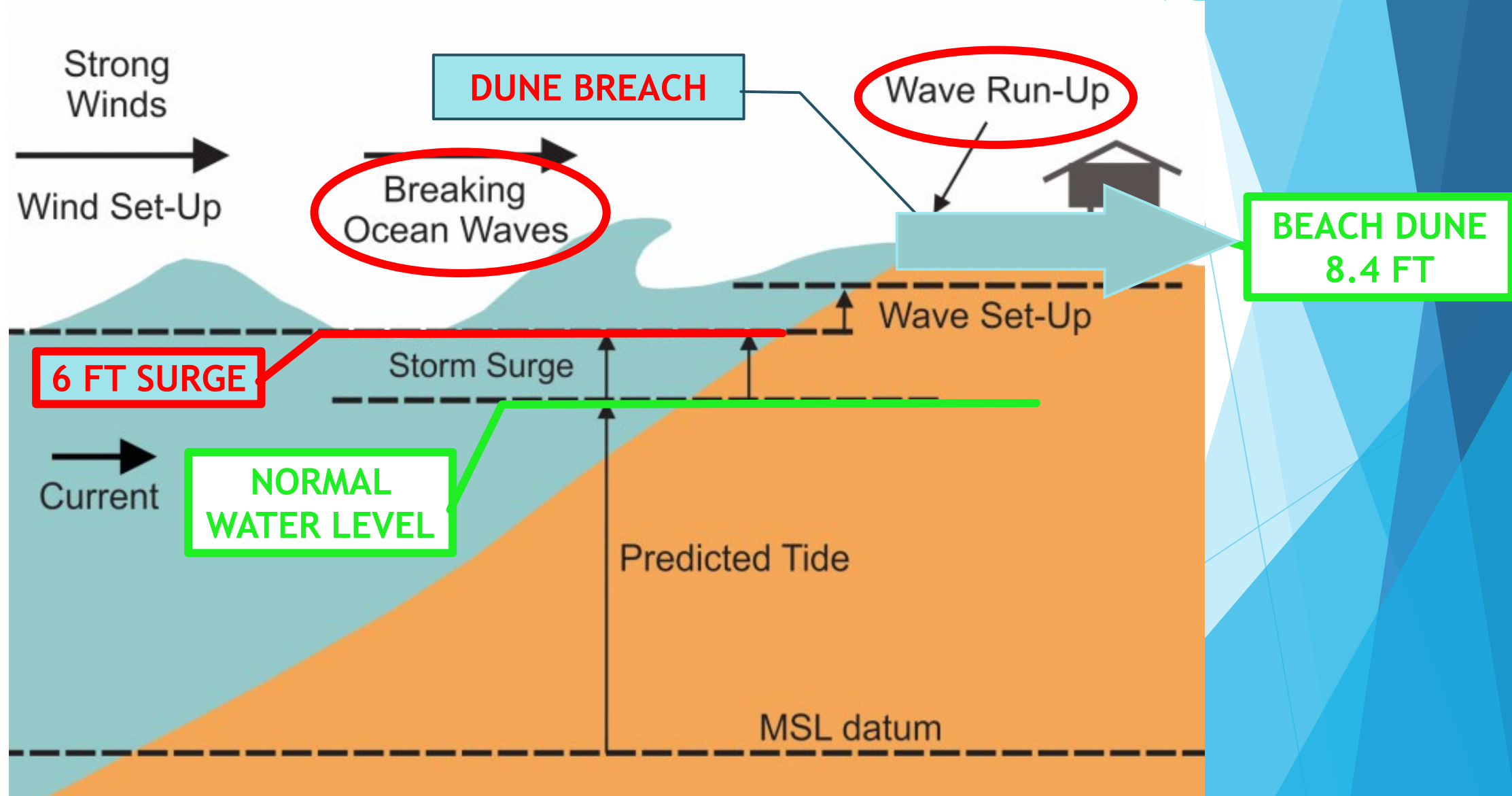
Legend

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

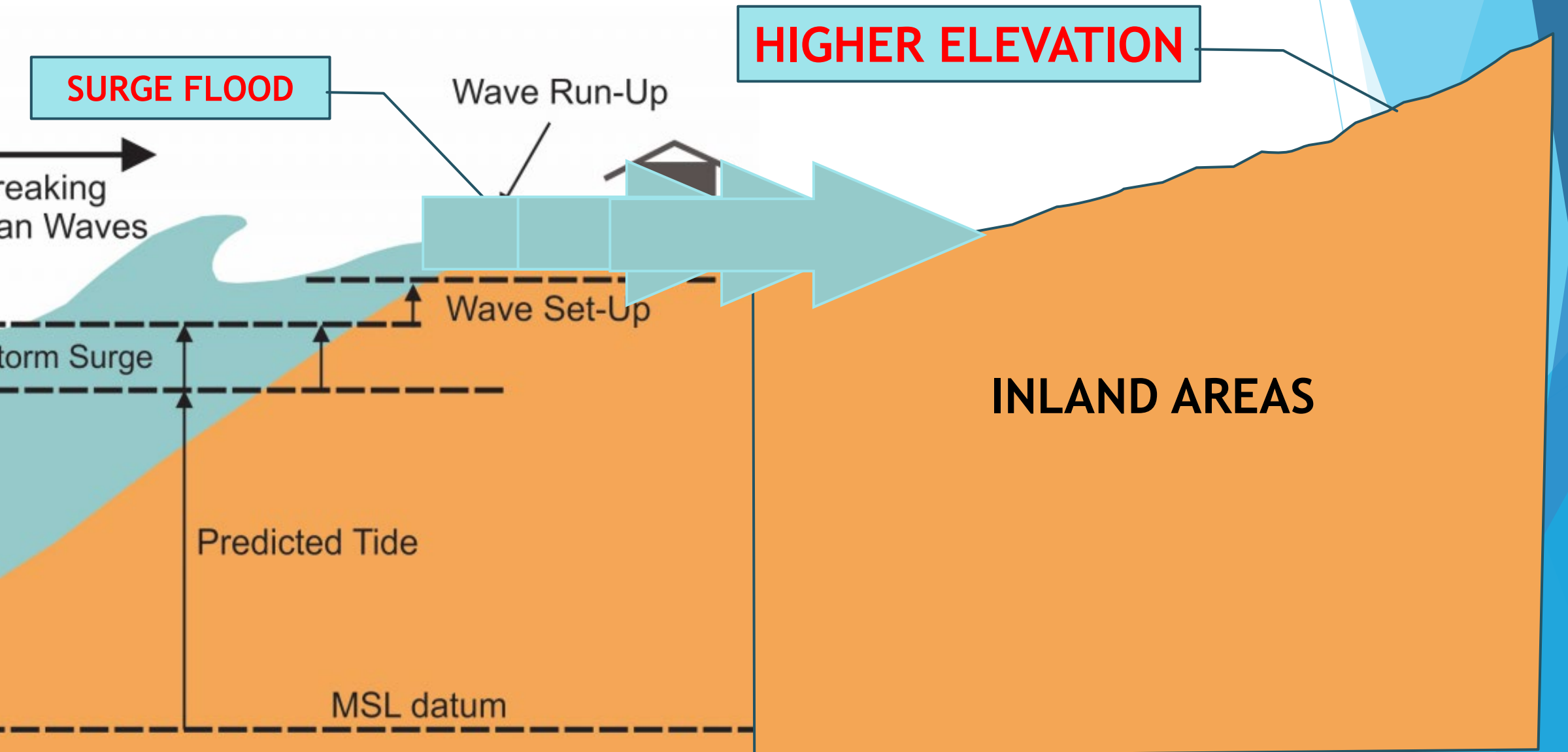
Plus: WIND Damage, Widespread Power Loss, Communication Loss



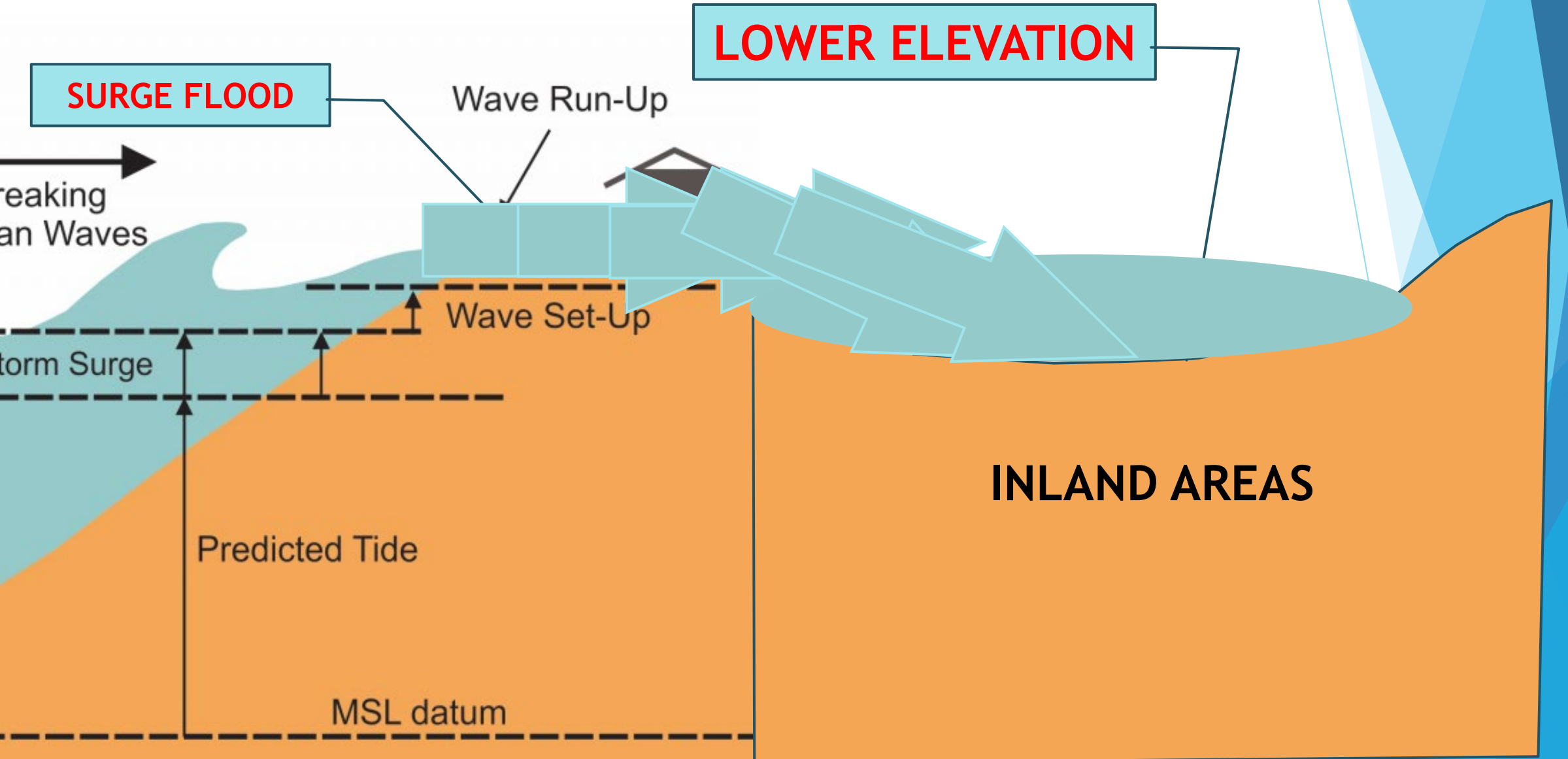
STORM SURGE: 6 FT...How did we get to 10 FT?



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.

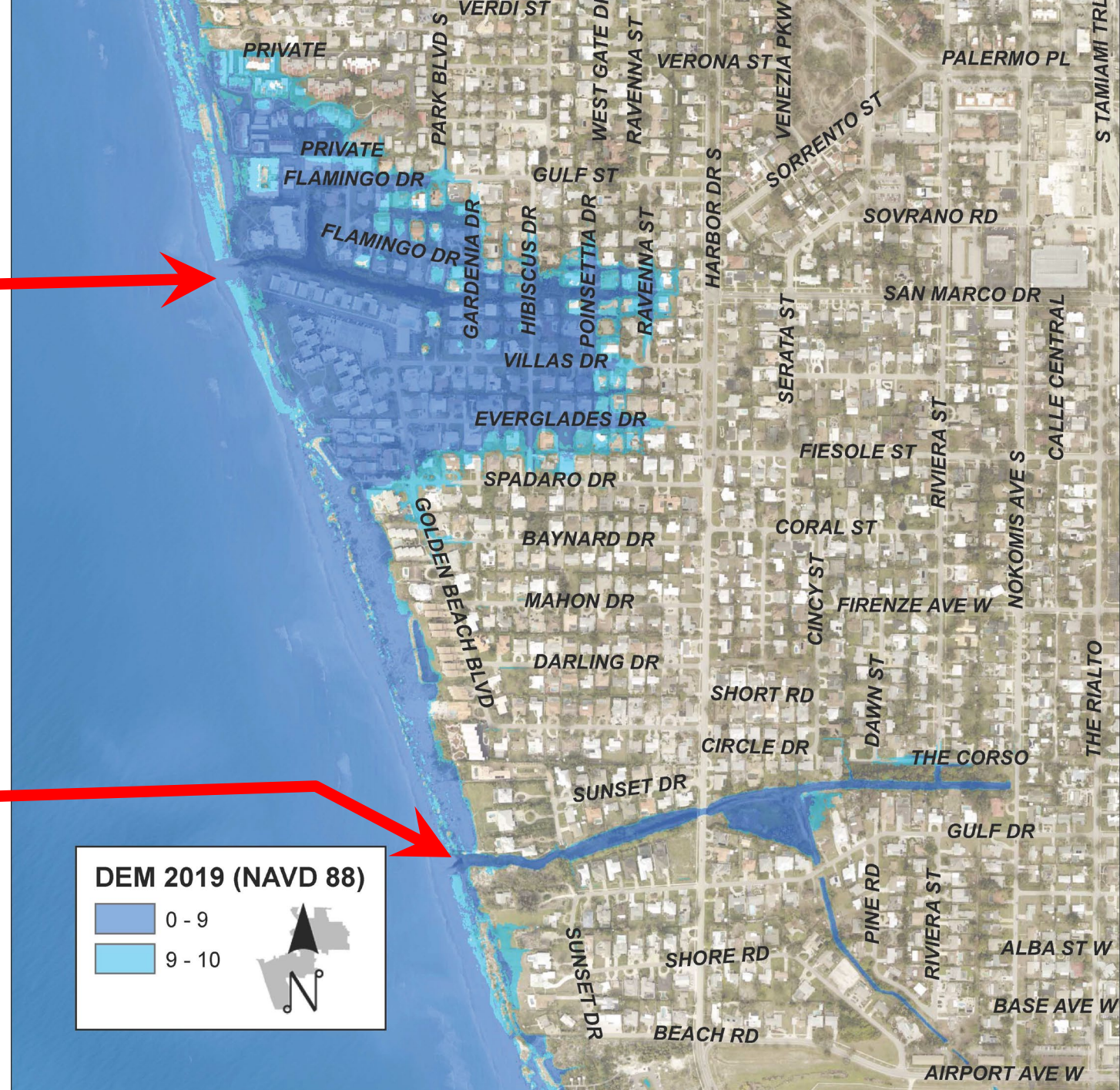
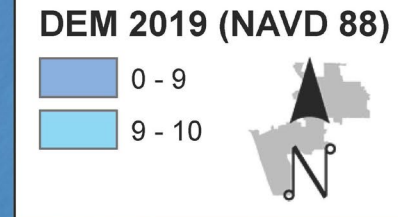
WHY IS THIS SO IMPORTANT?

- ▶ 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

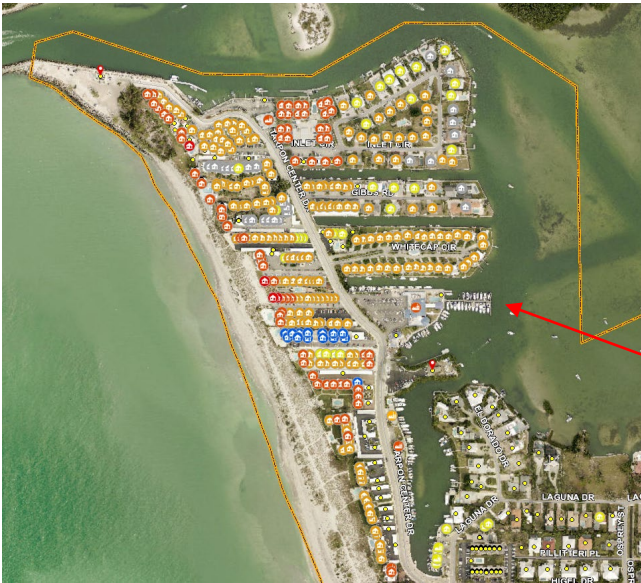
STORM SURGE:

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

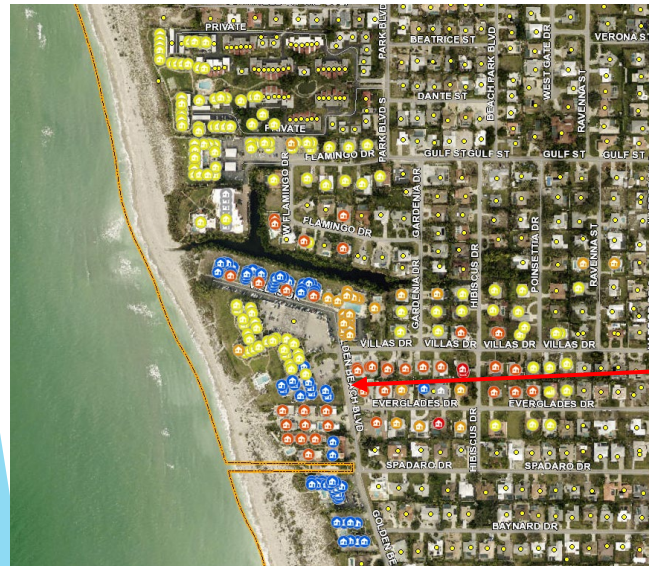
Deertown Gully Outfall
Homes and Roads at
12-15 ft. Elevation



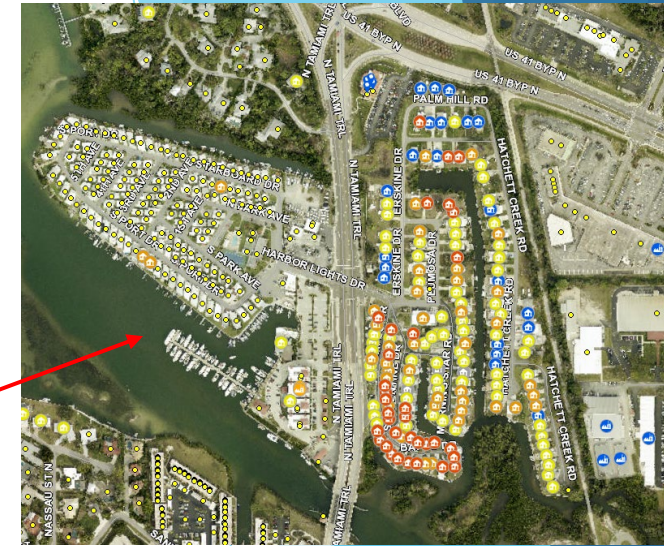
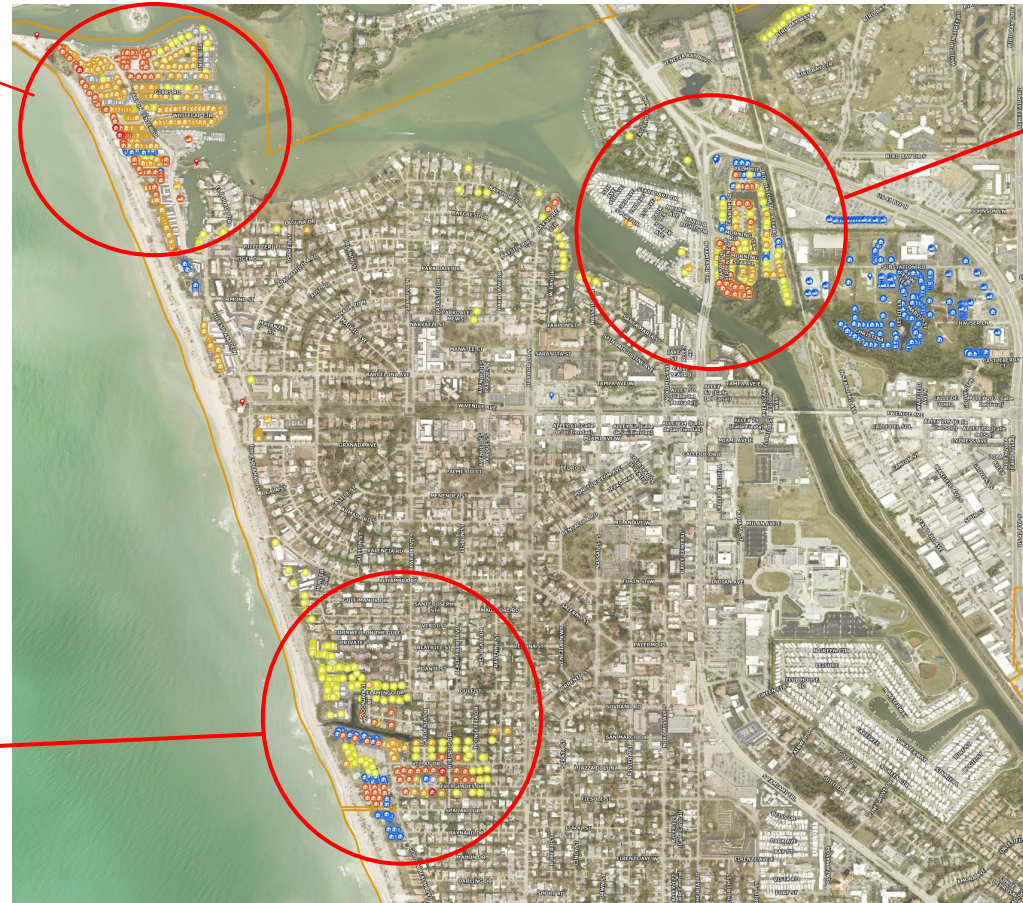
Private Property Impacts Storm Surge



Tarpon Center



Golden Beach



Harbor Lights and Venice Bay

Legend	
Commercial Damage	Residential Damage
Assigned (Blue circle)	Assigned (Blue circle)
None (Grey circle)	None (Grey circle)
Affected (Yellow circle)	Affected (Yellow circle)
Minor (Orange circle)	Minor (Orange circle)
Major (Red circle)	Major (Red circle)
Public status	Destroyed (Red circle)
Assigned (Blue pin)	City (Yellow outline)
Category: E (Red pin)	Boundary (Yellow outline)

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



Don Hubbard

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."

28

28

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

28

DISASTER RELIEF

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www.Seahawk-Action.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