

# Appeal of AD-20-19 Coastal Evacuation Area

Nicole M. Knapp (on behalf of)  
Public Safety Department  
2/4/2021



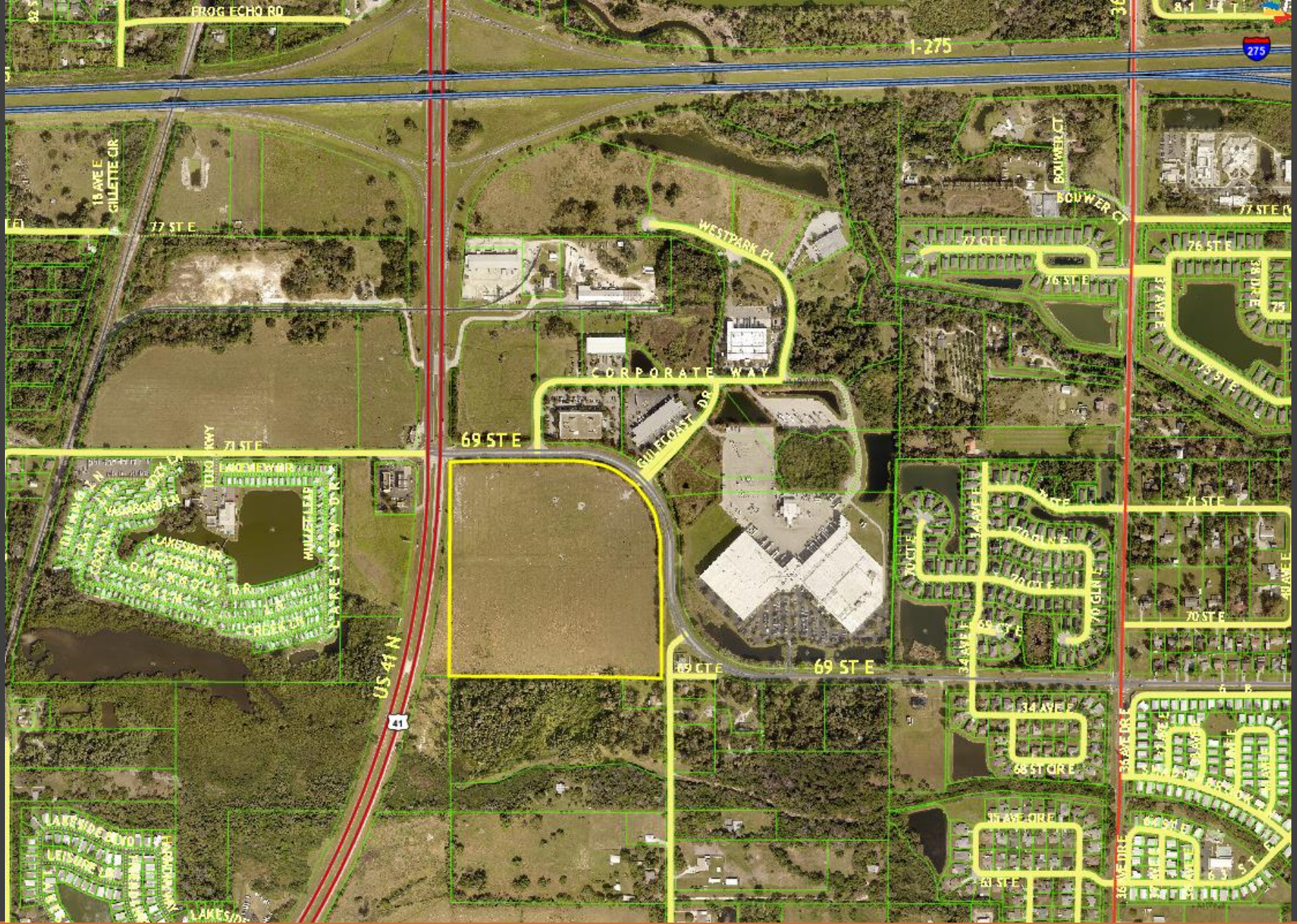
# Request

- Resolution 21-006 - Appeal of Administrative Determination (AD-20-19)
- **Denying** the Appeal and Affirming the AD
- 39.69 acres located at 2845 69<sup>th</sup> St E and 6900 U.S. 41 North, Palmetto

## Alternative Motion:

- Resolution 21-007 to Grant the Appeal of AD-20-19
- Subject to conditions specified in R-21-007

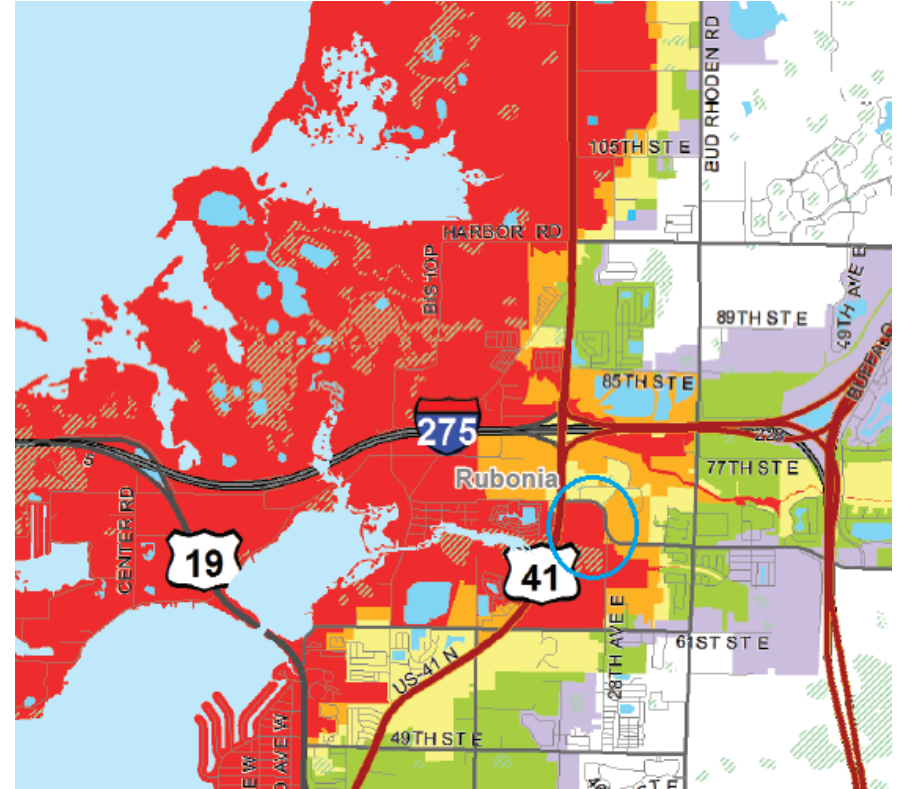
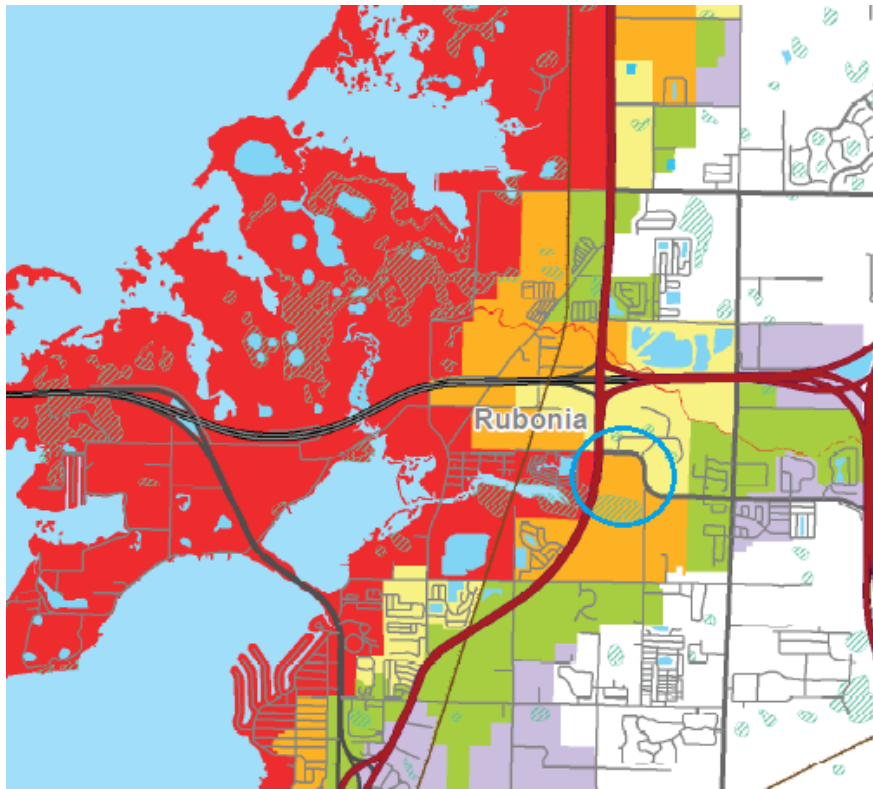






# Coastal Evacuation Area

- 2011-2017 (left)
- 2017-today (right)



# Coastal Element

- As a coastal county, and per F.S. 380.24, Manatee County is required to adopt a Coastal Management Element
- Also required to have policies that restrict development activities where such activities could be destroyed, while protecting human life against effects of natural disasters.

# Coastal Areas and Overlay (maps) Defined

- **Coastal High Hazard Area (CHHA):** The geographic area below the **Category 1** storm surge line as established SLOSH.
- **Coastal Evacuation Area (CEA):** The **evacuation Level A for a Category 1** hurricane as established in the regional hurricane evacuation study applicable to Manatee County, as updated on a periodic basis.
- **Coastal Planning Area (CPA):** Those portions of Manatee County which lie within the **Hurricane Vulnerability Area (evacuation levels A, B, and C)** as updated on a periodic basis. This area shall also include water and submerged lands of oceanic water bodies or estuarine water bodies; shorelines adjacent to such water bodies; coastal barriers; living marine resources, marine wetlands; water-dependent or water-related facilities on oceanic or estuarine waters; public access facilities to oceanic beaches or estuarine shorelines; and all lands adjacent to such occurrences where development activities would impact the integrity of the above-mentioned land or water body.

# Designation of CHHA

- Defined by F.S. 163.3178(1)(h)

*“The area below the elevation of Category 1 storm surge lines as established by Sea, Lake, Overland Surges from Hurricane (SLOSH) computerized storm surge model”*

- County is required to base boundaries upon the most relevant data analysis
- Computerized SLOSH model data from 2016 remains the best available data

# History of Coastal Mapping

- Defining and delineating boundaries of the “Coastal Area” since 1989
- Regulation purposes since 1989
- MC evacuation since 2013
- Prior to 2013 – TBRPC evacuation
- Boundaries are amended from time to time to reflect the best available data



# Comprehensive Plan Policies

- Restrict dev't that would damage coastal resources
- Limit dev't type, density & intensity within CPA and direct pop. & dev't to areas outside the CHHA
- Direct population concentrations away from CEA
- Protect human life in areas subject to destruction by natural disasters
- Minimize effect of development on evacuation population from Level A

# Comprehensive Plan

## Policy 2.2.2.4.5

- Prohibit any amendment to the FLU Map, which would result in an increase in allowable residential density on sites within the CEA.
- MU FLUC - 12 du/ac unless located within CEA, which is then 9 du/ac
- 30-40 du/ac – along Urban Corridor
- 30 du/ac – 25% Affordable Housing
- 30 du/ac – Mixed Use Development

# Methodology - CEA and CPA Necessary to Implement Policies

- Established based on Cat 1 storm surge and then expanded with considerations that implement Comprehensive Plan policies
- Designation of CEA – evacuation level A
- Designation of CPA – evacuation levels A, B & C

# Standard Operating Procedures

1. Evaluate boundary by boundary - determine if change in SLOSH category levels
2. SLOSH category level change from one model to the next = mapping of evacuation levels will extend to the property line or the middle of a roadway
3. SLOSH category level divides a roadway = the overall area shall be evaluated, and a more conservative/earlier evacuation level takes priority



# SOPs cont'd

4. SLOSH level touch or changes anywhere within the parcel – parcel is placed in lower/more conservative level
5. More intense SLOSH level falls within a roadway and/or the roadway from which a property would gain access - parcels are also moved into the lower evacuation level
6. SLOSH level removes a parcel from a lower evacuation level = parcel is mapped as being in a higher level or as being removed out accordingly

# Determining Evacuation Levels

- Mapping evacuation levels has changed over the years
  - ✓ New data and science
  - ✓ Increased knowledge of threats
- NOT based on a percent of overall property
- Evacuation levels consider other critical factors which affect evacuation decision making
- SLOSH models do not supersede evacuation levels

# Determining Evacuation Levels cont'd

- NOT arbitrary
- Requires human analysis above the data and science
- Goal is to remove confusion between neighborhoods or areas and not to create areas of isolation
- Methodology is consistent – other parcels had level changes
- County wide map – not an isolated area of county
- Subject site is NOT unique

# Comprehensive Emergency Management Plan

Coastal Management Element is further implemented through:

- CEMP - County's role in organizing & carrying out evacuations, sheltering operations, post-disaster response and recovery activities, and emergency warning and communications coordination



# Local Mitigation Strategy

Coastal Management Element is further implemented through:

- LMS
  - Not just flooding & hurricanes
  - Pre-disaster mitigation techniques
  - All hazards to which MC might be vulnerable
  - Natural, technological, and societal hazards

# 2018 Statewide Emergency Shelter Plan

Coastal Management Element is further implemented through:

- Statewide Emergency Shelter Plan
  - Know Your Home/Shelter in Place (when possible)
  - Level A cannot shelter in place
  - 8,381 person shelter deficit
  - Timely evacuation of Level A is critical

# Local Authority

- Safeguarding the life & property of citizens is an innate responsibility of the governing body of each political subdivision of the state
- Direct timely evacuation
- Determine how to safely evacuate the density of coastal population
- Evacuate and shelter at-risk citizens during an emergency or disaster

# Purpose of CEA

- Comprehensive Plan Policy 2.2.2.4.1:

Purpose of the CEA is to limit population, while also minimizing the effect of development on the evacuation of population from Level A - the first area subject to evacuation in an event of potential high storm surge.

Methodology of evacuation maps

✓ CONSISTENT



# Conclusion

## Staff finds:

1. Evacuation maps are **consistent** with the purpose of the CEA to limit population, while also minimizing the effect of development on the evacuation of population from Level A
2. There is **no empirical data** to support the request to remove the project area from Evacuation Level A

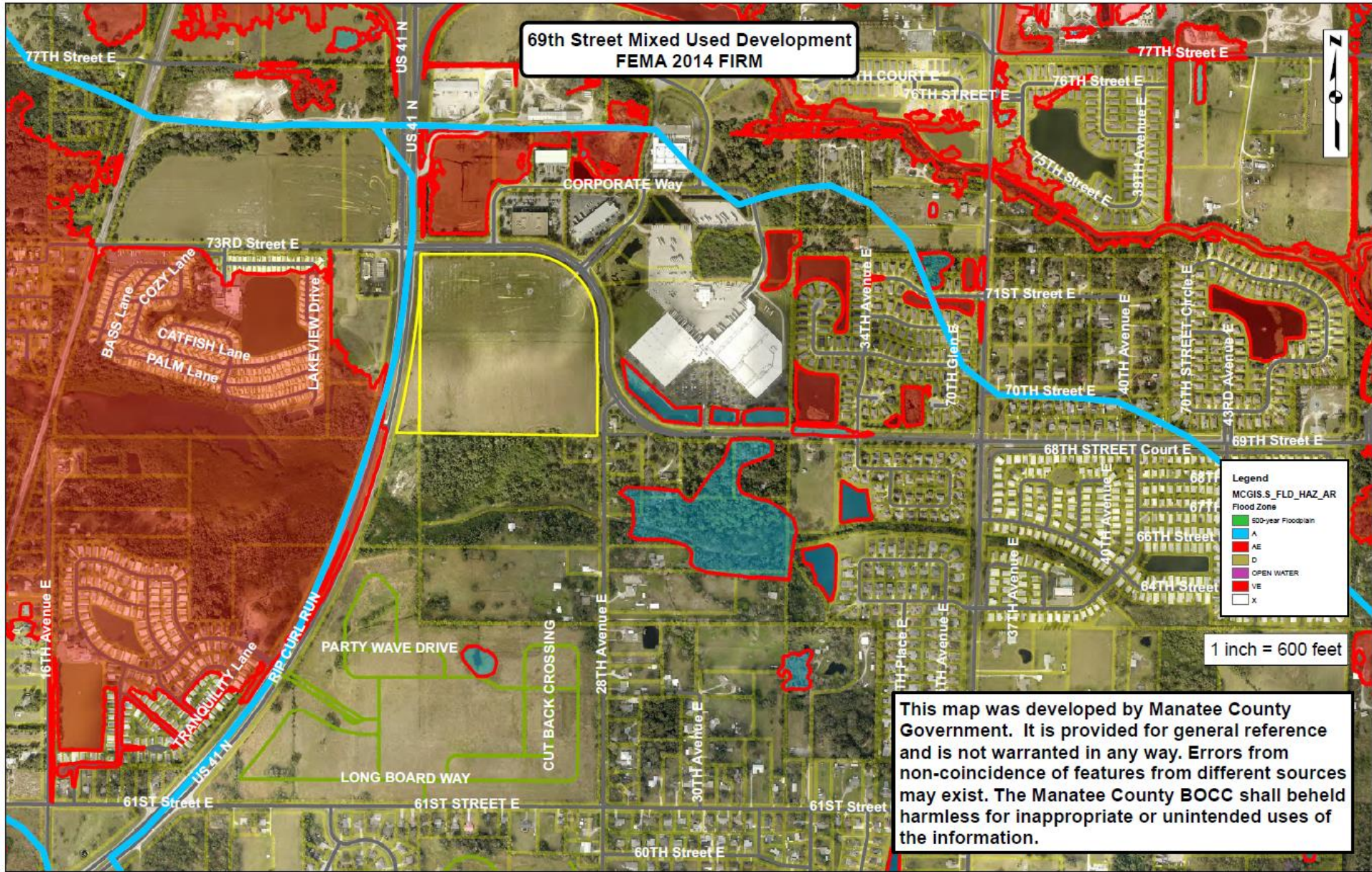
# Recommended Motion

ADOPT Resolution No. R-21-006 to **DENY** the appeal of AD-20-19 and affirm AD-20-19, as recommended by Staff.

- Maintains status quo, and
- Property remains subject to the CEA of the Comprehensive Plan



**69th Street Mixed Used Development  
FEMA 2014 FIRM**



**Legend**  
MCGIS\_S\_FLD\_HAZ\_AR  
Flood Zone

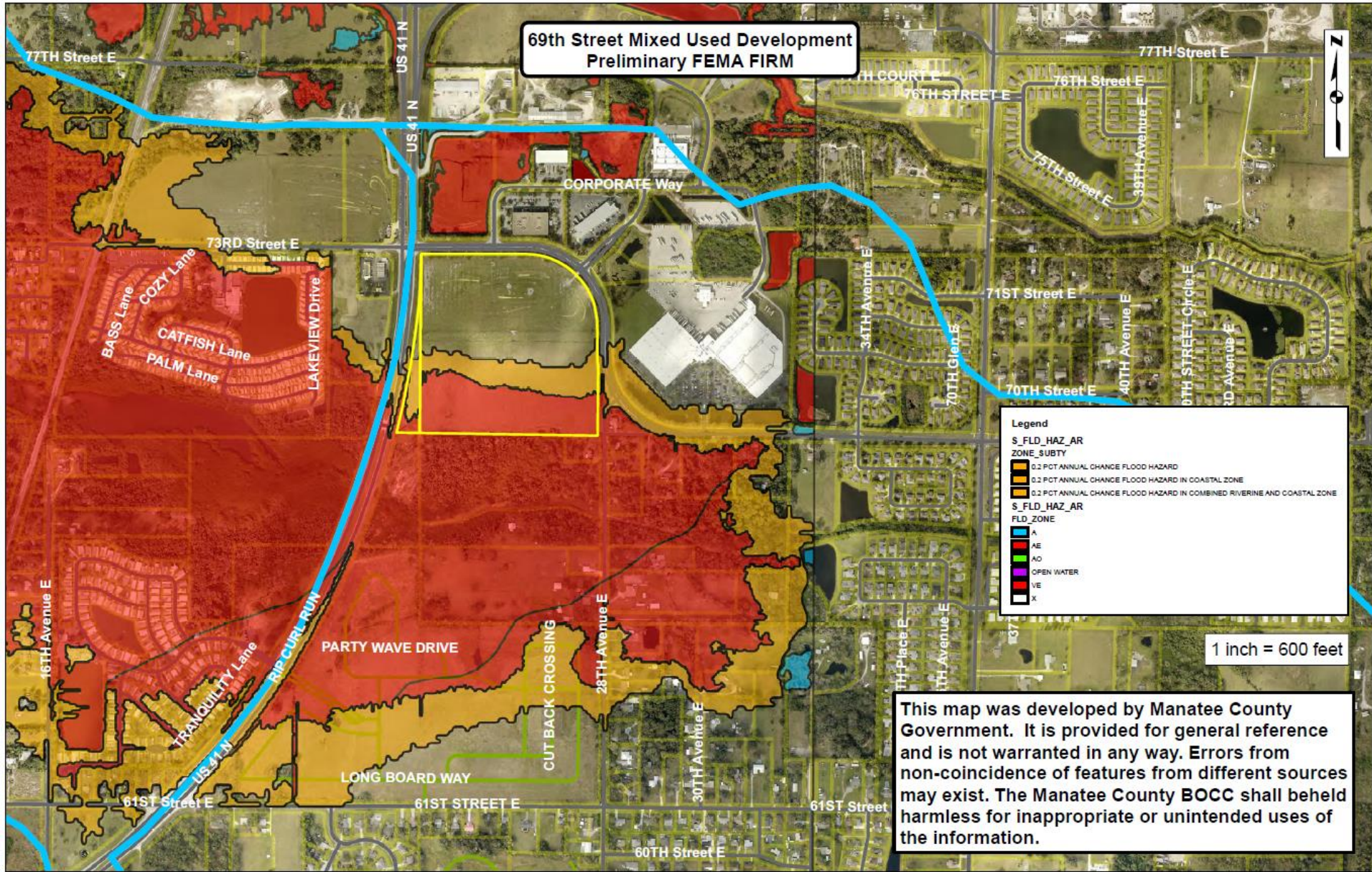
Blue	500-year Floodplain
Red	AE
Yellow	A
Green	D
Purple	OPEN WATER
White	VE
White	X

1 inch = 600 feet

This map was developed by Manatee County Government. It is provided for general reference and is not warranted in any way. Errors from non-coincidence of features from different sources may exist. The Manatee County BOCC shall be held harmless for inappropriate or unintended uses of the information.



**69th Street Mixed Used Development  
Preliminary FEMA FIRM**



**Legend**

**S\_FLD\_HAZ\_AR**  
**ZONE\_SUBTY**  
 0.2 PCT ANNUAL CHANCE FLOOD HAZARD  
 0.2 PCT ANNUAL CHANCE FLOOD HAZARD IN COASTAL ZONE  
 0.2 PCT ANNUAL CHANCE FLOOD HAZARD IN COMBINED RIVERINE AND COASTAL ZONE

**S\_FLD\_HAZ\_AR**  
**S\_FLD\_HAZ\_AR**  
**FLD\_ZONE**  
 A  
 AE  
 AO  
 OPEN WATER  
 VE  
 X

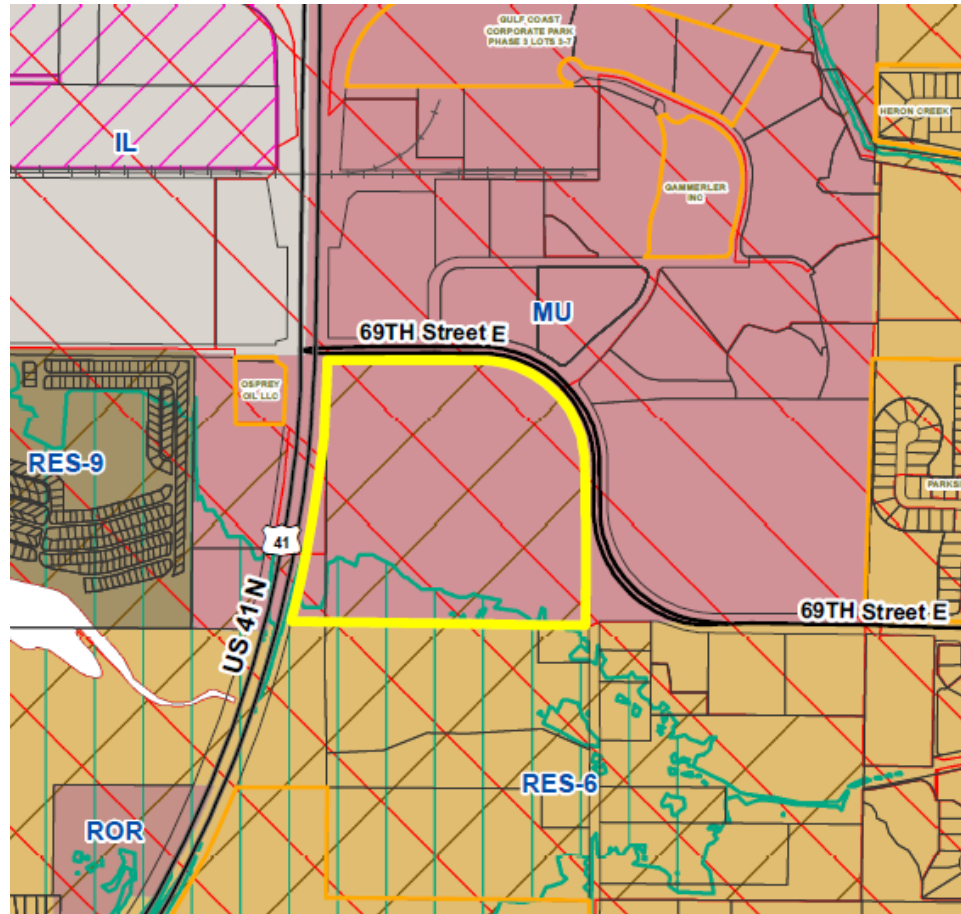
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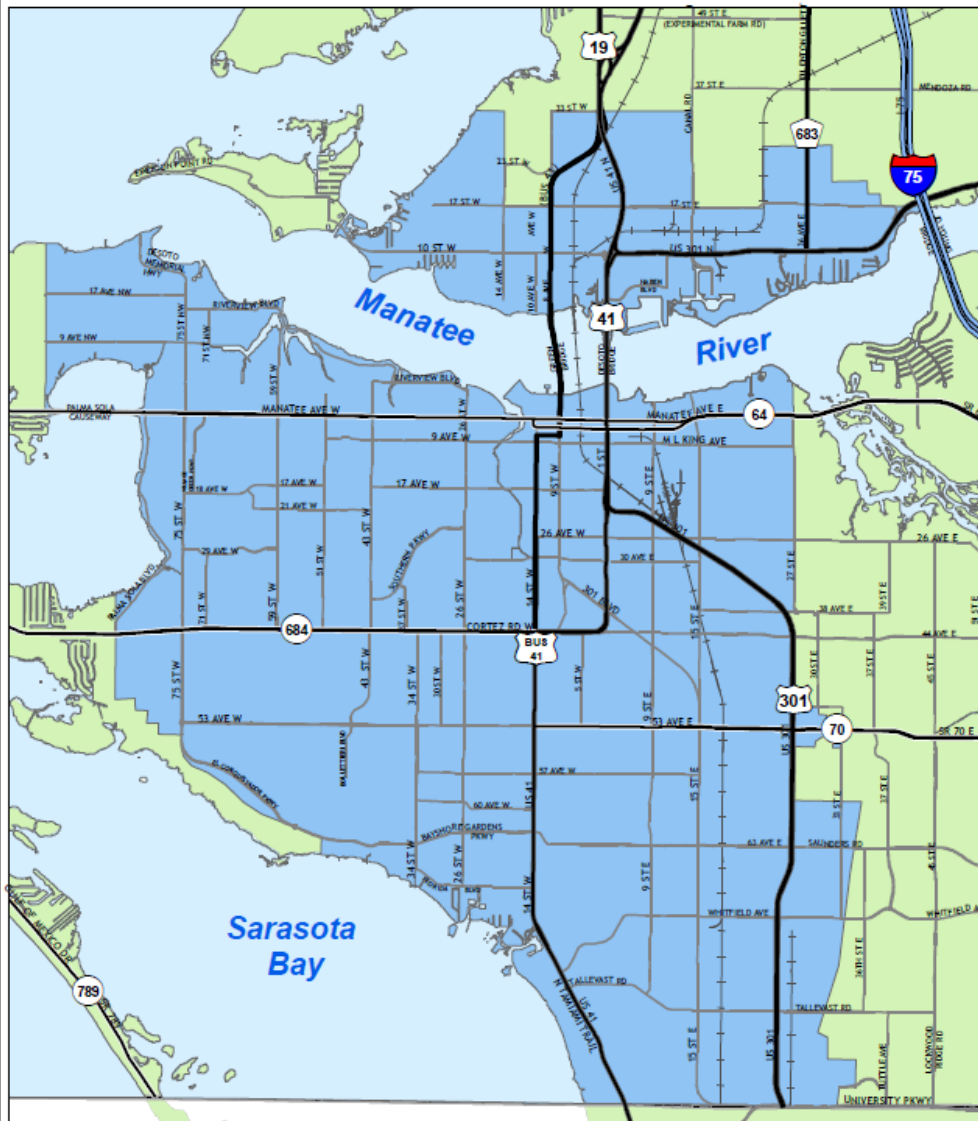




# CHHA to CEA

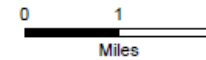


# URBAN CORE



Urban Core -  
Revised 2016

## MAP H



Map Author: Paul W.  
Date: 12/2016

This map was developed by the Manatee County Geographic Information System. It is provided for general information only and should not be used for any other purpose. The Manatee County GISD and its staff assume no responsibility for any errors or omissions in this information.

# Establishing Definitions

- 1989 – adoption of Comprehensive Plan
  - “Coastal Area” and “Coastal Storm Vulnerability Area” defined
- 1997 (Ord. 97-001)
  - “Coastal Area” was redefined as “Coastal Planning Area”
  - Coastal Evacuation Area definition established
- 2008 (Ord. 08-11)
  - CSVA redefined to CHHA



# What is SLOSH?

The Sea, Lake and Overland Surges from Hurricanes (SLOSH) model is a computerized numerical model developed by the National Weather Service (NWS) to estimate storm surge heights resulting from historical, hypothetical, or predicted hurricanes by taking into account the atmospheric pressure, size, forward speed, and track data.



# SLOSH

- Results of SLOSH Model is the mapping of CHHA
- 2009 - SLOSH model coverage 32 regions or basins
- 2016 National Hurricane Center added a new region or basin to the model along the west coast of Florida
- New basin data produced more inundation than 2009 model
- Mid-2016, new SLOSH map was produced by TBRPC



# Peril of Flood - 2015

## F.S. 163.3178(2)(f)

(f) A redevelopment component that ~~which~~ outlines the principles that must ~~which shall~~ be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise. The component must:

1. Include development and redevelopment principles, strategies, and engineering solutions that reduce the flood risk in coastal areas . . . from . . . related impacts of sea-level rise.
2. Encourage . . . the removal of coastal real property from [FEMA] flood zone designations.
3. Site development techniques and best practices [to] reduce [flood] losses [and] flood insurance claims.
4. [Consistent with, or more stringent than, the Florida Building Code and [FEMA] flood regulations 44 C.F.R. part 60.
5. Construction seaward of the coastal construction control lines must be consistent with chapter 161.
6. Encourage local governments to participate in the NFIP CRS to achieve flood insurance premium discounts for their residents.



# Evacuation Levels

EVACUATION LEVEL	POTENTIAL SURGE INUNDATION (ft)
A	11
B	15
C	18
D	28
E	34

- ❖ High tide, wave action, freshwater flooding & rainfall - add additional risk to saltwater surge

