



CITY COMMISSION MEETING CITY OF ST. PETE BEACH

155 Corey Avenue
St. Pete Beach, FL 33706

Tuesday, August 10, 2021
4:30 PM

Call to Order
Pledge of Allegiance
Roll Call

WORKSHOP MEETING

1. Presentations -

a. Lisa Foster, Pinellas County Floodplain Administrator, will make a presentation on "Pinellas County Vulnerability Assessment vs. FEMA Flood Map".

2. Adjournment

APPEAL: In accordance with 286.0105, Florida Statute (Notices of meetings and hearings must advise that a record is required to appeal), if a person decides to appeal any decision made by this committee, board, agency, or commission with respect to any matter considered at this meeting or hearing, he or she will need a record of the proceedings, and that, for such purpose, he or she may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

AMERICANS WITH DISABILITIES ACT (ADA): In accordance with the Americans with Disabilities Act and Florida Statutes, if any person with a disability defined by the ADA needs special accommodation to participate in this proceeding, then not later than two business days prior to the proceeding, he or she should contact City Hall at (727) 367-2735.

**The public is cordially invited to attend this meeting.
All agenda material is available for review at City Hall or www.stpetebeach.org.**

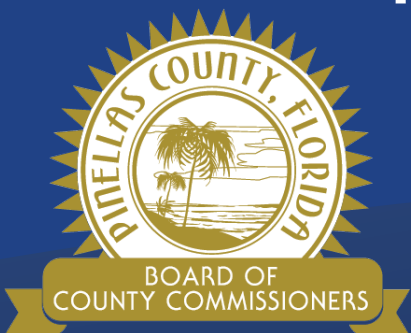
FEMA Map Update for Pinellas County



Public Works

Lisa Foster

Floodplain Administrator



Our Vision: To Be the Standard for Public Service in America

Flood Insurance Rate Map (FIRM) Update for Pinellas County



Pinellas County Flood Risks

Multiple Flood Sources

Multiple Flood Maps and Data

FEMA Flood Insurance Rate Map (FIRM)

FIRM Update

Changes from Current FIRM

Differences from Vulnerability Assessment

Floodplain Ordinances

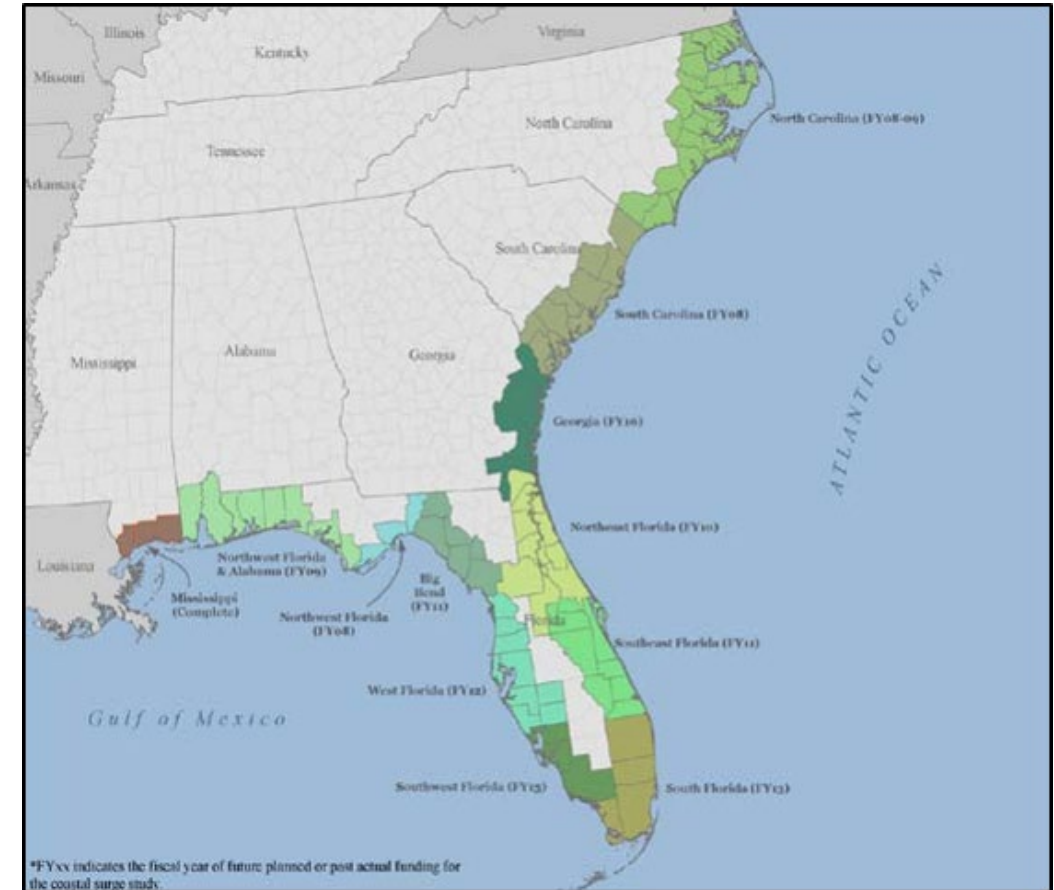


Flood Insurance Rate Map (FIRM) Update for Pinellas County



FEMA Flood Insurance Rate Map (FIRM) Update

- **Region IV Coastal Analysis and Mapping Project – Southeast United States**
- **Multiyear effort**
- **Kicked off 2012**
- **Preliminary received 2018**
- **Effective August 24, 2021**



Flood Insurance Rate Map (FIRM) Update for Pinellas County

FEMA Flood Insurance Rate Maps (FIRM) Uses

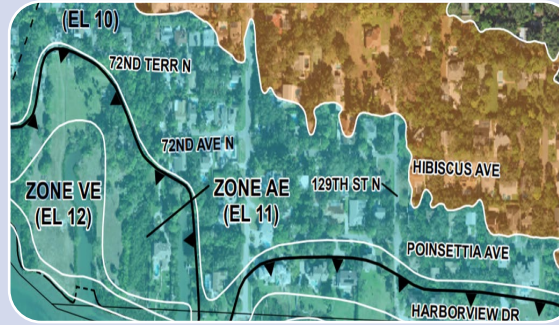
1. Flood Insurance Requirements

2. Flood Insurance Rates

- Current vs Risk Rating 2.0

3. Floodplain Development requirements

- Determine whether proposed development will be reasonably safe from flooding (44 CFR § 60.3)
- Freeboard – Safety factor



- Flood Zones (FIRM)
- Elevations (Elevation Certificate)
- Rating Tables



- Building specifics
- Distance to water
- Type/size nearest water bodies
- Elevation relative to flooding source
- Drainage & urban flooding
- Structure Value

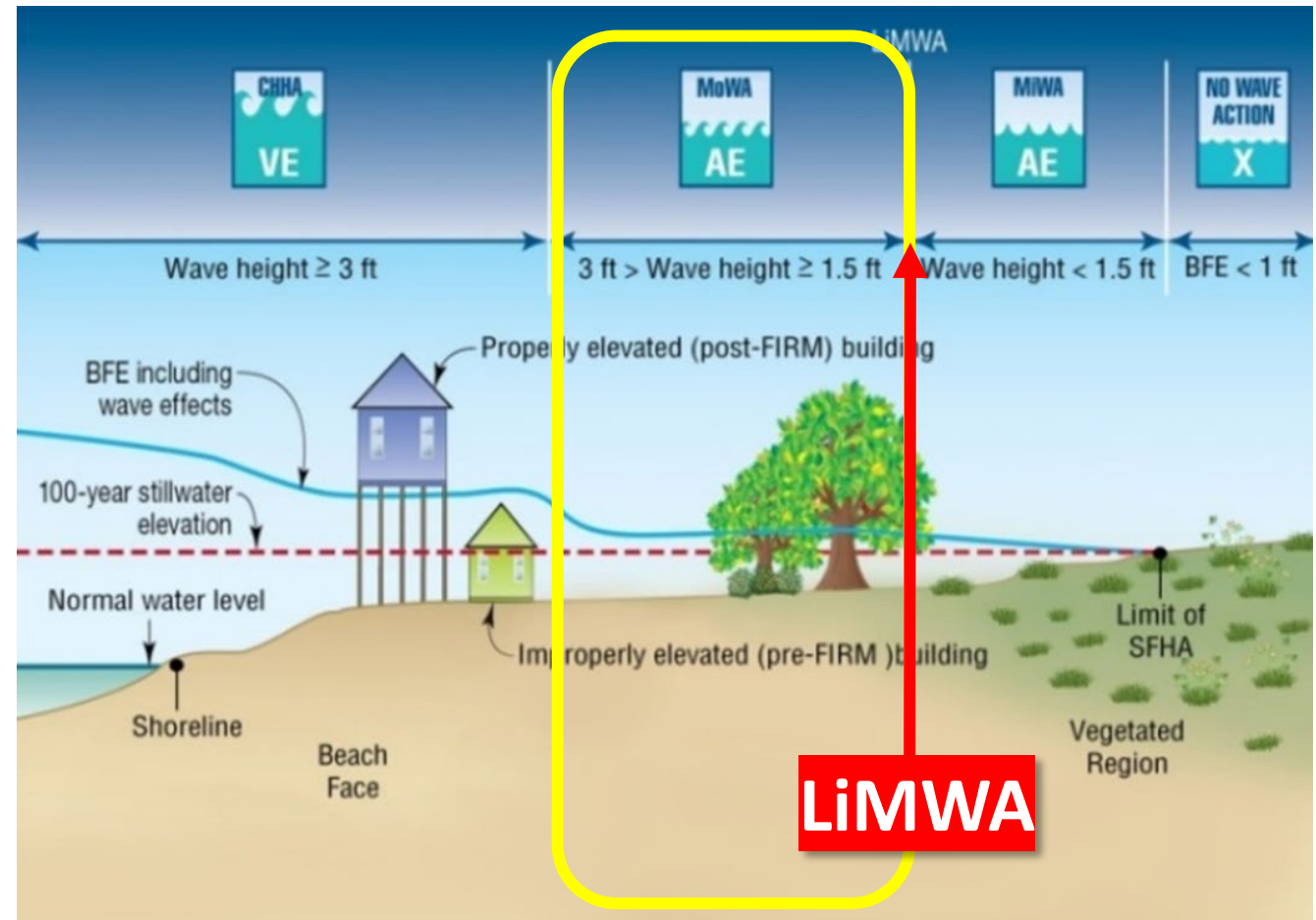
The logo for Pinellas County, featuring the words "Pinellas County" in a white serif font on a dark blue background. To the right of the text is a stylized sun with a yellow center and red rays, and a blue wave-like shape below it.

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Flood Insurance Rate Map (FIRM) Update for Pinellas County

FEMA Flood Insurance Rate Maps (FIRM)

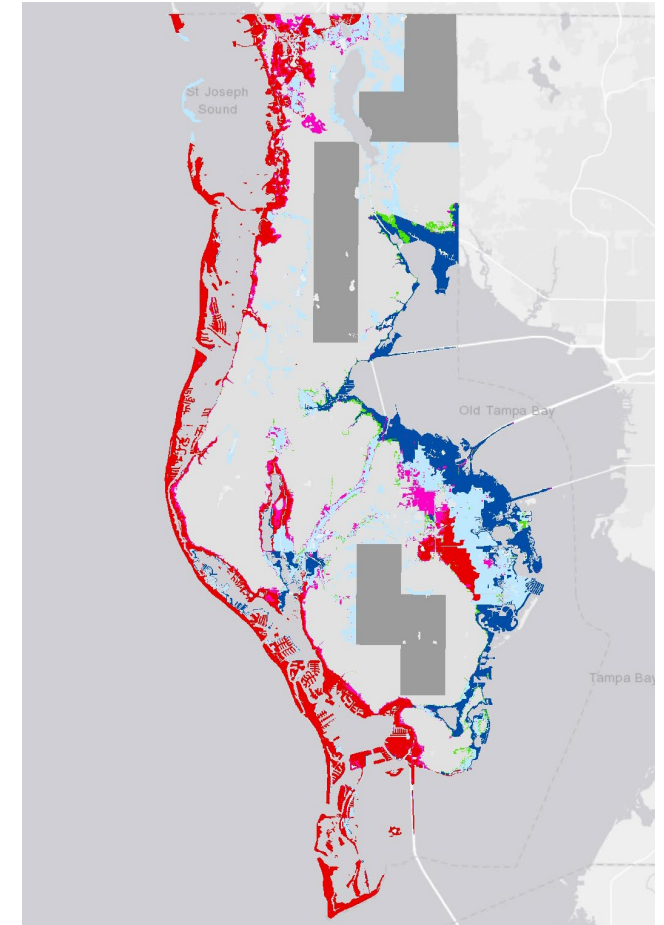
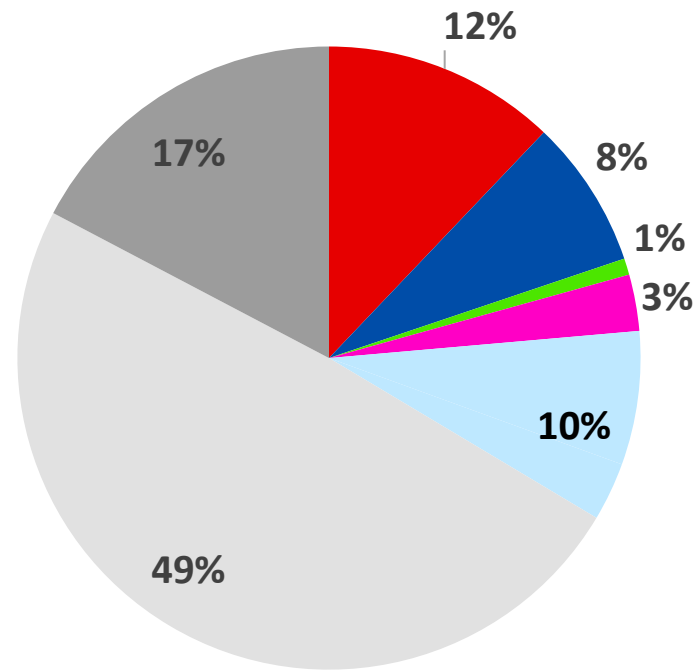
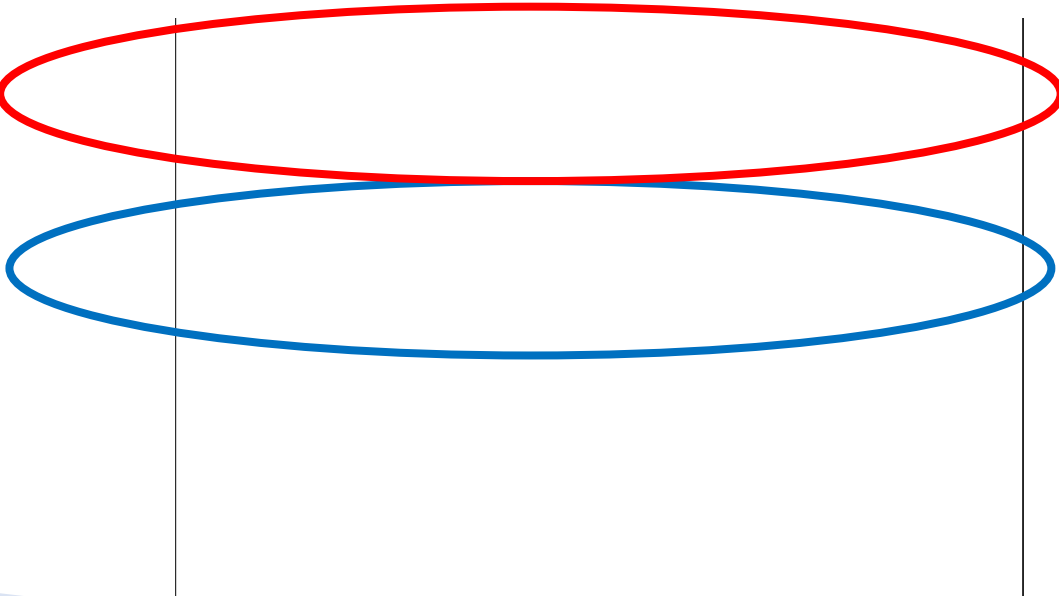
- **CAZ - Coastal A Zone**
 - *"Due to the higher risk of Damage from waves to homes and other structures in the Coastal A Zone, FEMA encourages the practice of building to V Zone Standards within this area." (FEMA 2020)*



Flood Insurance Rate Map (FIRM) Update for Pinellas County

Overview of Changes from Current FIRM to New FIRM

Area - Countywide

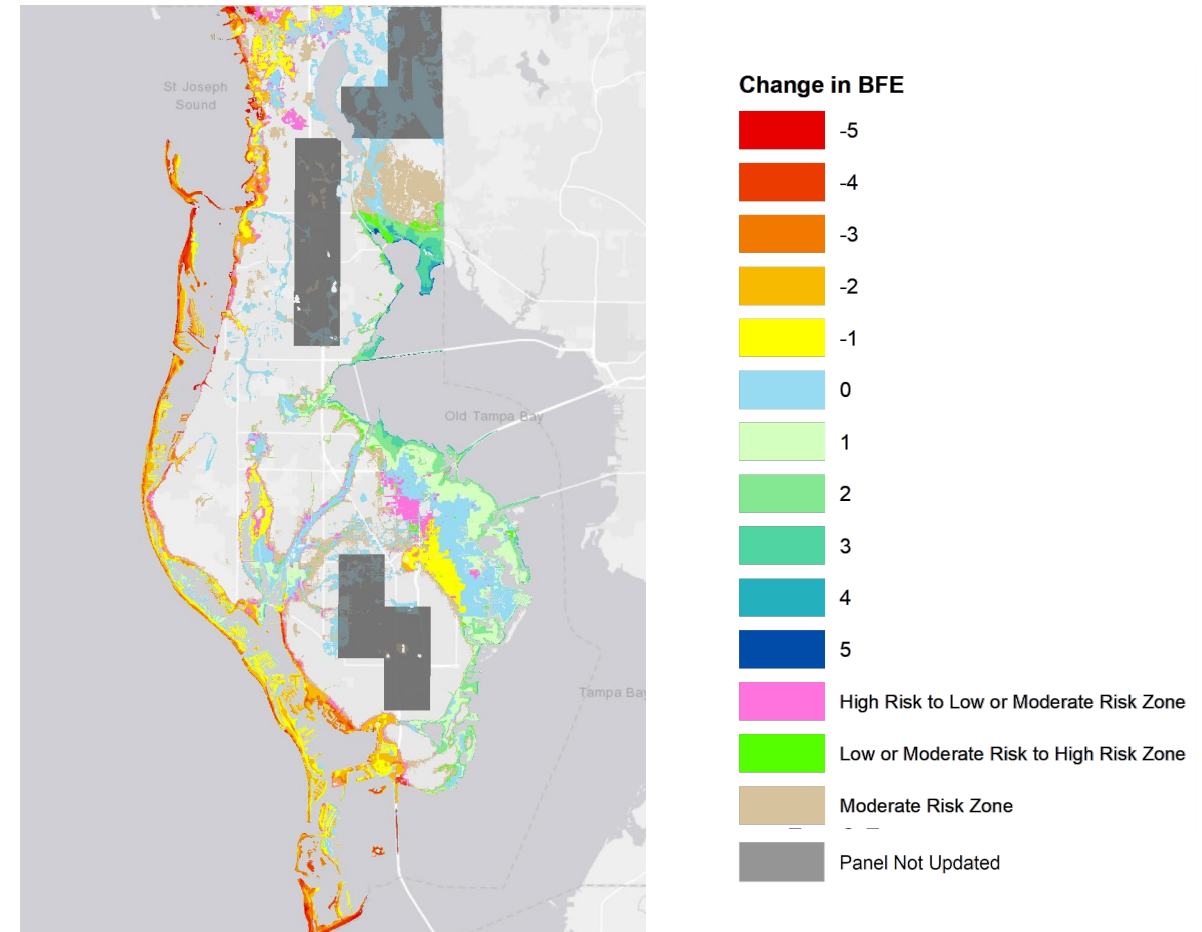


Flood Insurance Rate Map (FIRM) Update for Pinellas County

BFE Changes from Current FIRM to New FIRM

Varies Across County

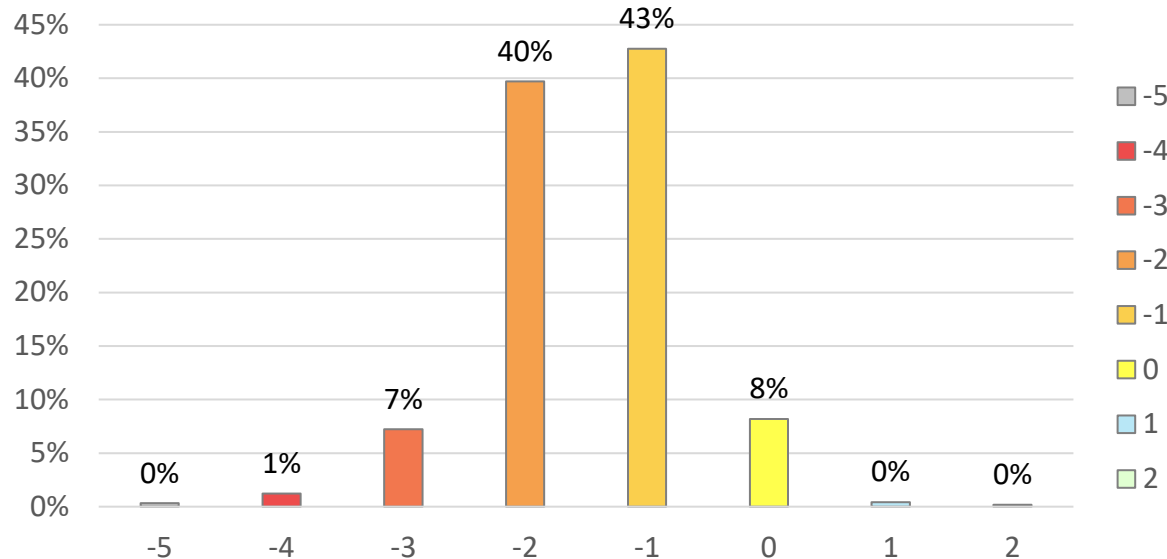
*Negative values are a reduction in
BFE from current to new FIRM.*



Flood Insurance Rate Map (FIRM) Update for Pinellas County

BFE Changes from Current FIRM to New FIRM

Current_vs_Prelim: BFE Changes (Percent of Area with BFEs)

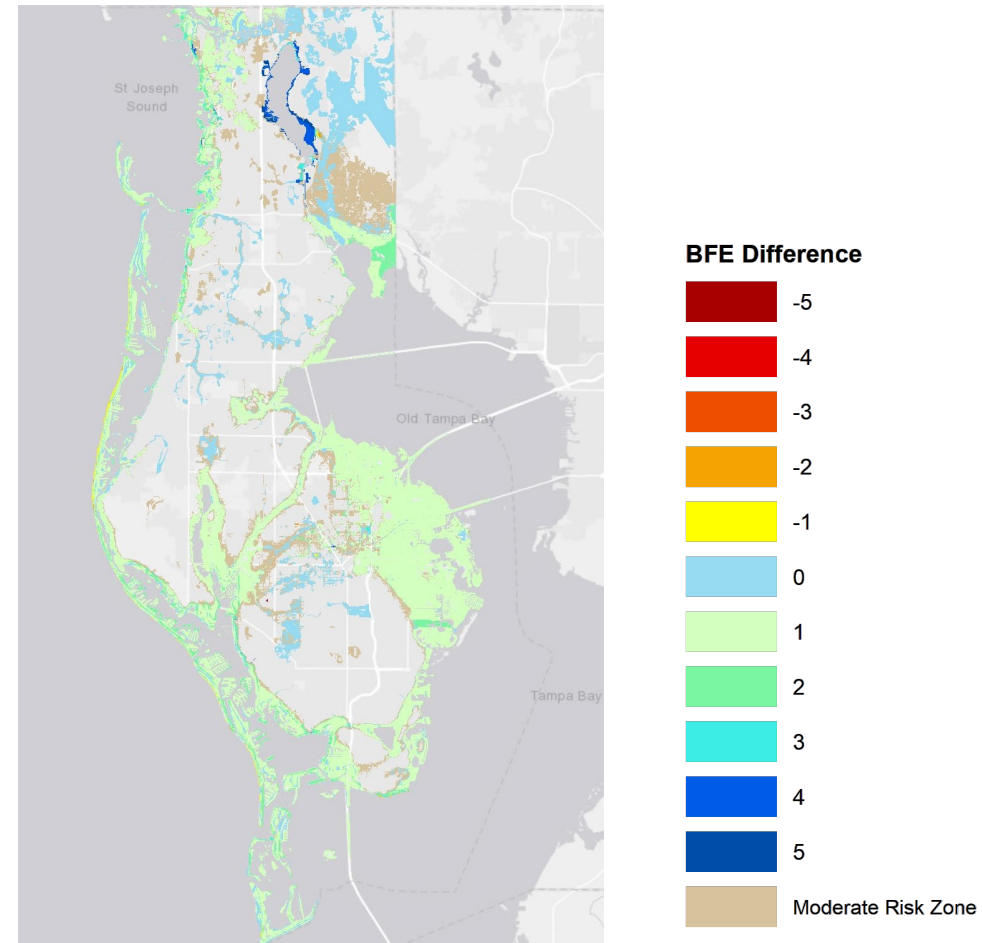


Flood Insurance Rate Map (FIRM) Update for Pinellas County



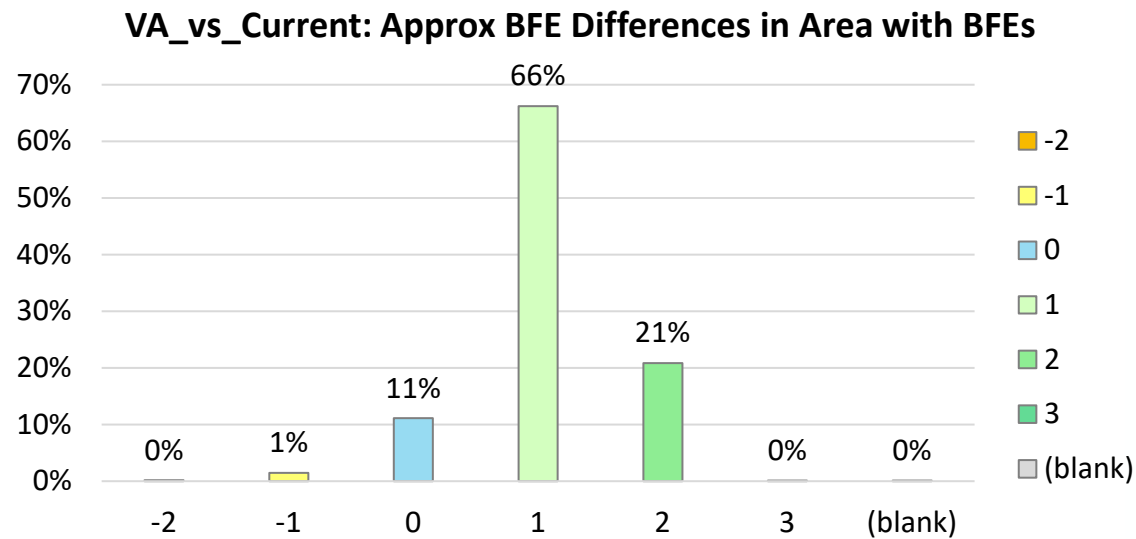
BFE Difference from Current FIRM to Vulnerability Assessment

Generally +1 ft Countywide



Flood Insurance Rate Map (FIRM) Update for Pinellas County

BFE Difference from Current FIRM to Vulnerability Assessment



Flood Insurance Rate Map (FIRM) Update for Pinellas County



New FIRM vs Vulnerability Assessment

- **Data**
- **Methodology**
- **Models**

Study	Storm Ensemble	Current Storms	Future Storms	Model	LiDAR
New FIRM	357	<2012	No	ADCIRC+SWAN (2D)	2007
Vulnerability Assessment	300+	<2018	Yes	CH3D+SWAN (3D)	2017

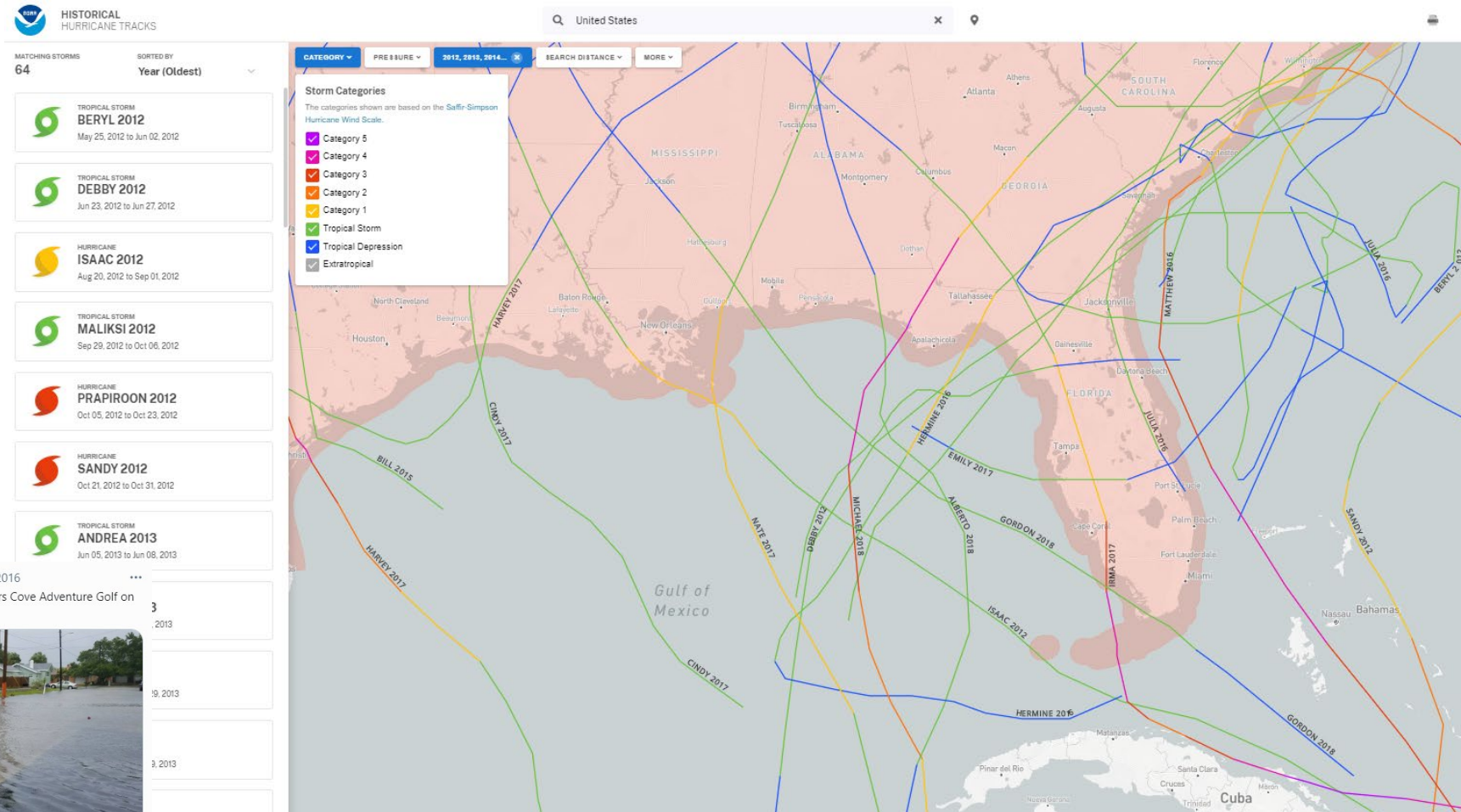
Flood Insurance Rate Map (FIRM) Update for Pinellas County

Tropical Storms/Hurricanes 2012 – 2018

- Not included in development of new FIRM



FOX @PaulFox13 · Jun 6, 2016
of an adventure at Smugglers Cove Adventure Golf on
flood #Colin



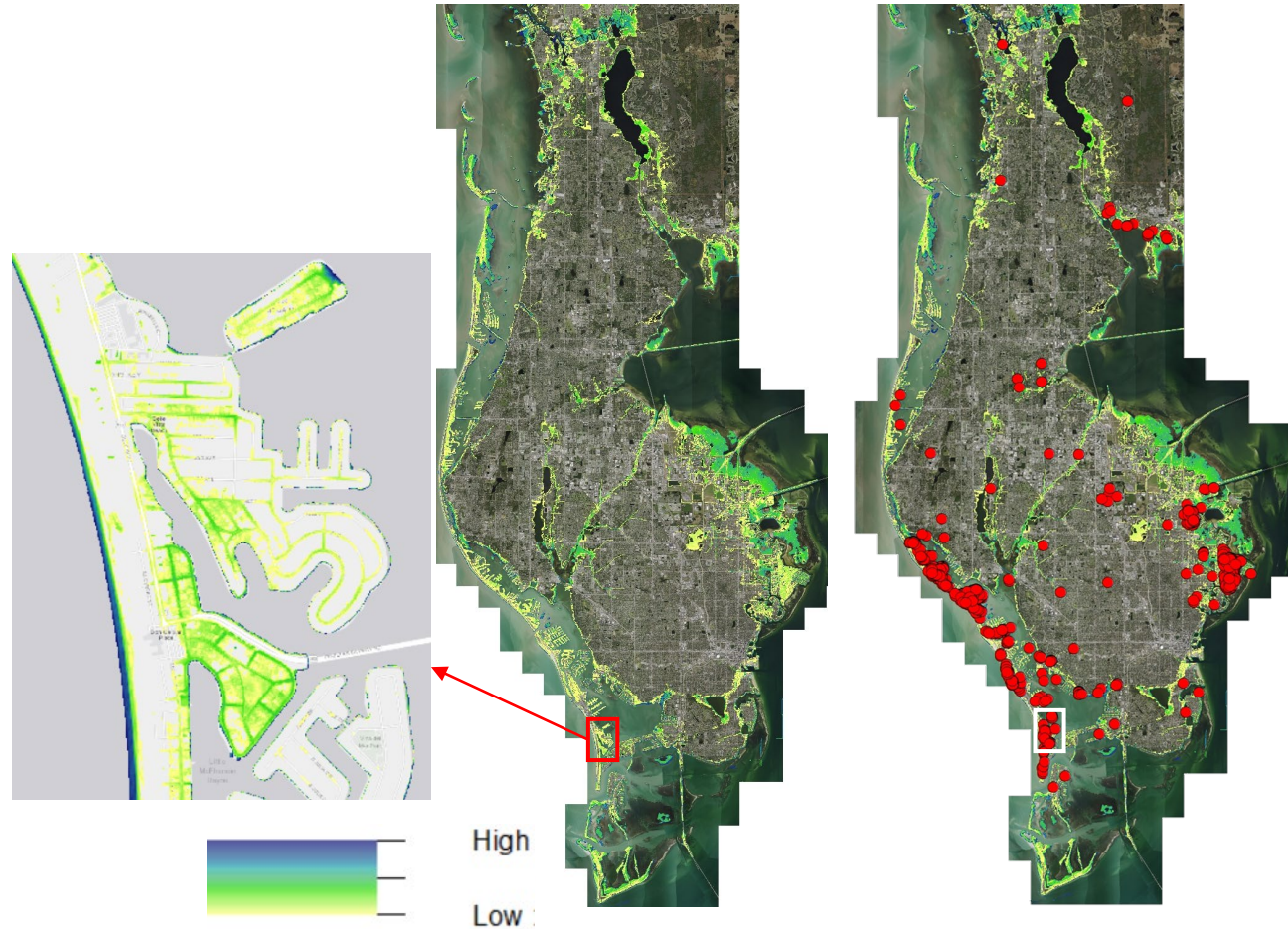
Flood Insurance Rate Map (FIRM) Update for Pinellas County



Flood Insurance Rate Map (FIRM) Update for Pinellas County

Tropical Storm Eta Point of Reference

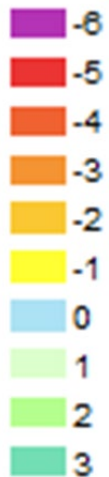
- **Vulnerability Assessment 2070 Intermediate SLR Depth 1HPY**
- **TS Eta NFIP claims about two weeks after storm**



Flood Insurance Rate Map (FIRM) Update for Pinellas County

Current FIRM vs
New FIRM

Change in BFE



High Risk to Low or Moderate Risk Zone
Low or Moderate Risk to High Risk Zone



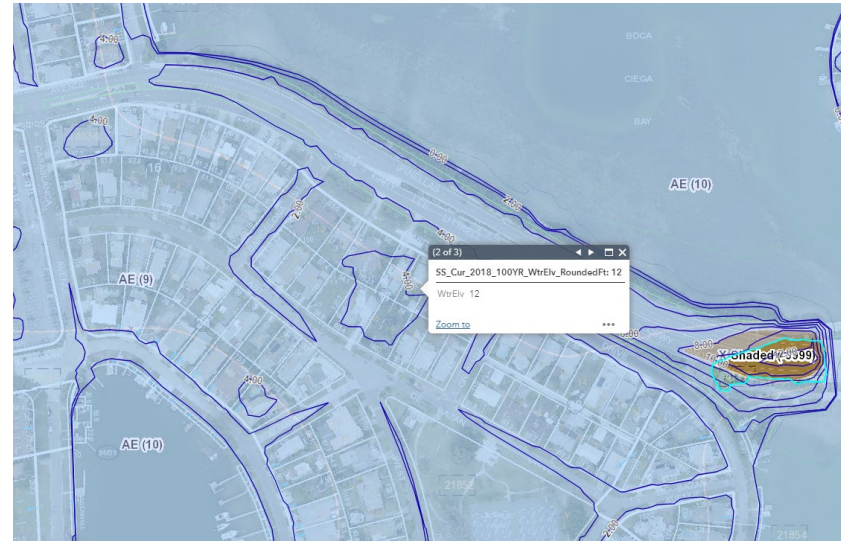
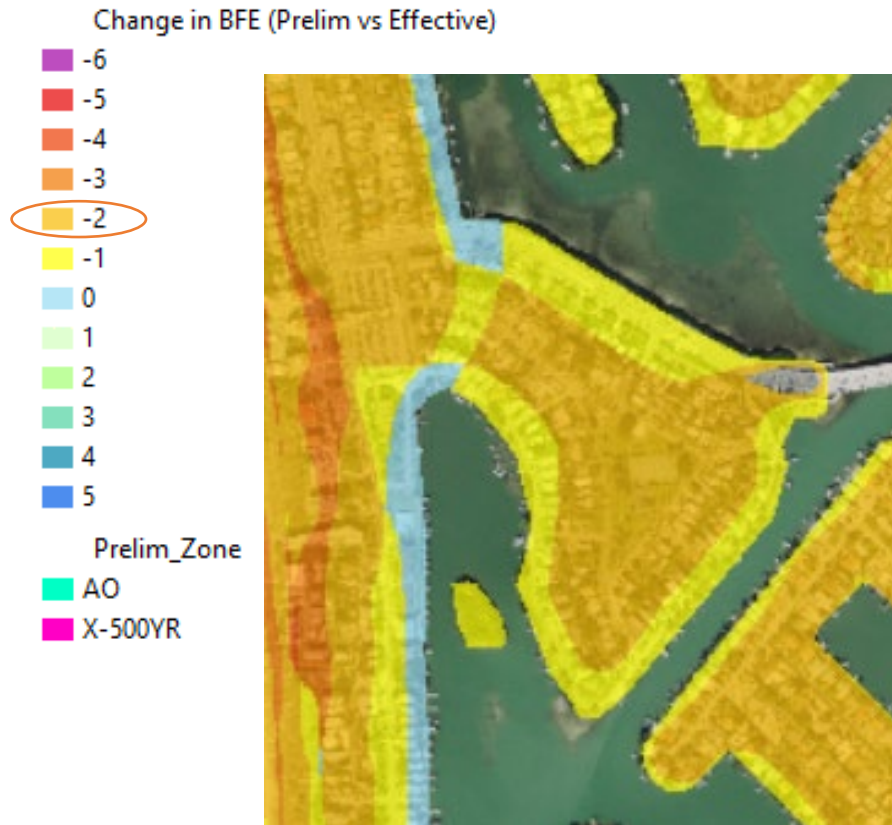
Current FIRM vs
Vulnerability Assessment



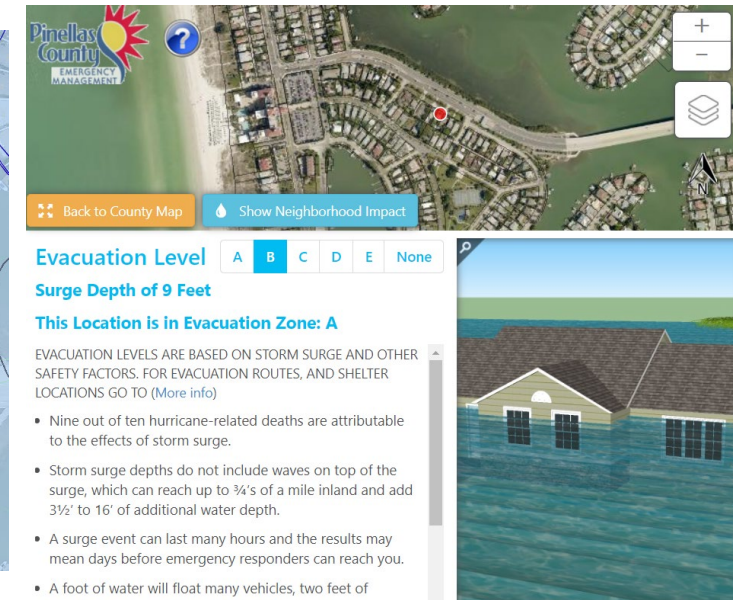
Flood Insurance Rate Map (FIRM) Update for Pinellas County



Storm Surge Depth Point of Reference



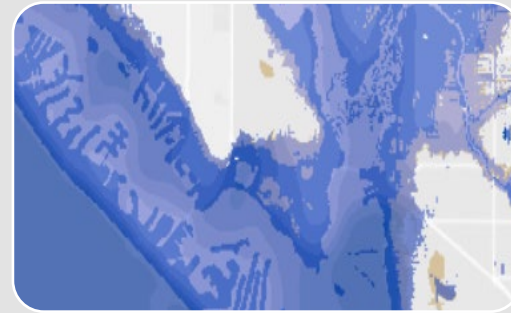
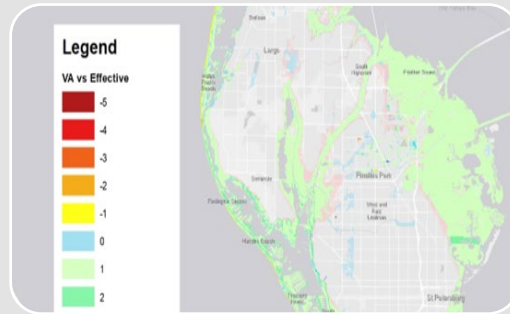
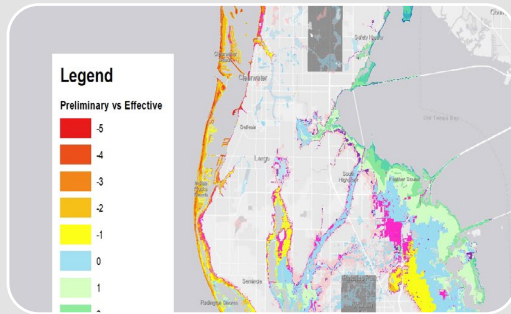
New FIRM ~3 ft
Vulnerability Assessment Depth ~ 8 ft



Cat 1 ~5 ft
Cat 2 ~ 9ft

Flood Insurance Rate Map (FIRM) Update for Pinellas County

Elevation Options



1. Do Nothing

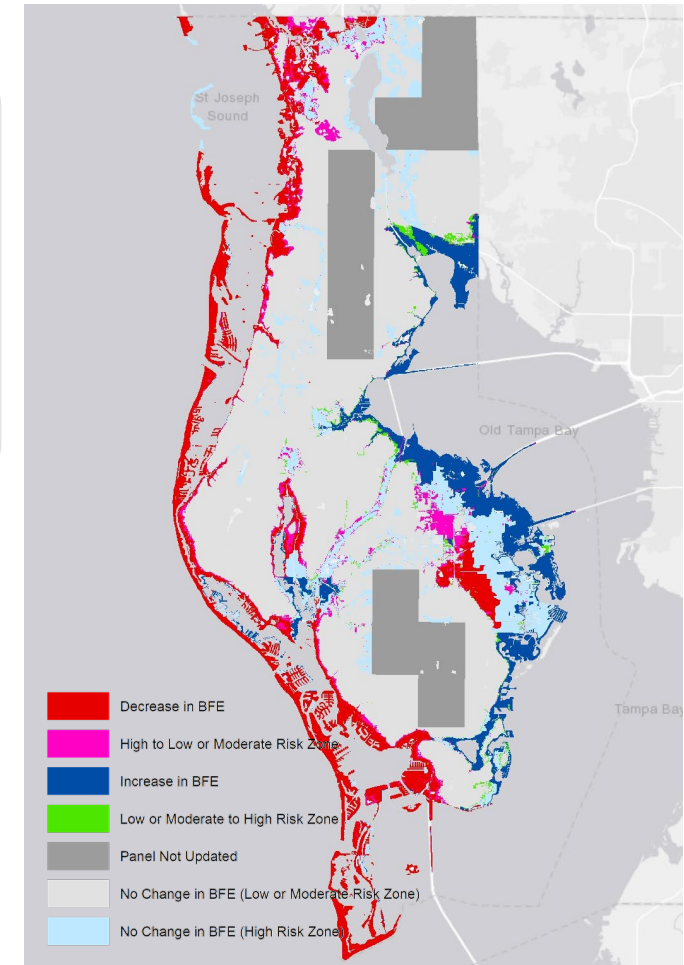
New FIRM +
Current Freeboard

2. Hold the Line

- Adopt Vulnerability Assessment &
- Higher of:
 1. New FIRM BFE + Current Freeboard
 2. Vulnerability Assessment BFE (Current Conditions)

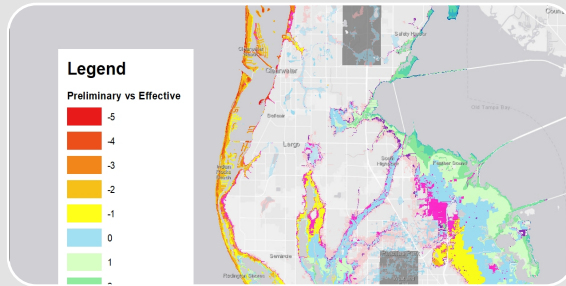
3. Integrate New Data

- BFE Higher of New FIRM or Vulnerability Assessment BFE + Current Freeboard or
- VA 2070 100YR or
- VA 2018 500YR

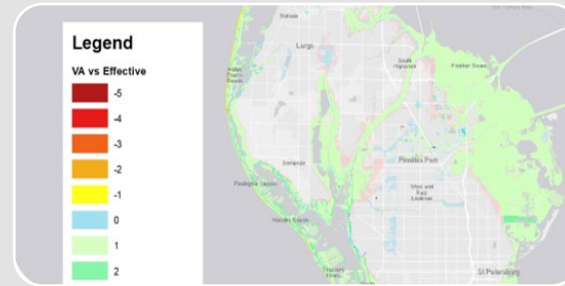


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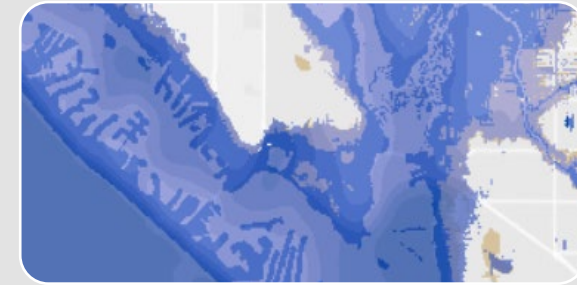
Coastal A Zone (CAZ) Options



1. Do Nothing
No Code Updates



**2. FEMA
Recommended**
VE Regs in CAZ



**3. Modified FEMA
Recommendation**
VE Regs for Residential
(not commercial):
1 - In CAZ
2- In all zones on barrier islands

Flood Insurance Rate Map (FIRM) Update for Pinellas County

Next Steps

DRC (8/9)

FEMA Map Effective (8/24)

**Staff Recommendation to
LPA and BOCC**

Ordinance Updates (TBD)



Flood Insurance Rate Map (FIRM) Update for Pinellas County



Questions



Flood Insurance Rate Map (FIRM) Update for Pinellas County

