

Miami-Dade County, Florida

Public Information Committee Meeting

June 10, 2021







FEMA Coastal Flood Study Is Not an Evacuation Study



Example Evacuation Map

Example Preliminary FIRM





Why a New Coastal Flood Study?

- Current surge analysis is 30 to 40+ years old
- Topographic data from quad maps
- Overland modeling and mapping outdated
- Limited number of modeling transects (36)
- No LiMWA





Why a New Coastal Flood Study?

- Today's flood risk is better defined
- More advanced and highly-resolved modeling methods
- Updated elevation data
- More modeling transects (now 218)
- Improvement in Geographic Information System (GIS) technologies for mapping



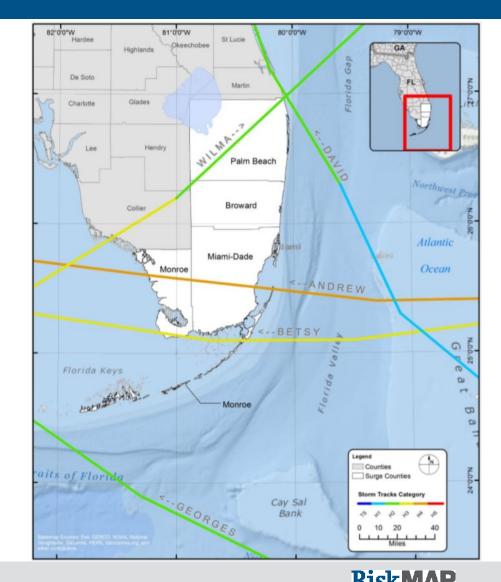


Validation Storms

Storms Selected:

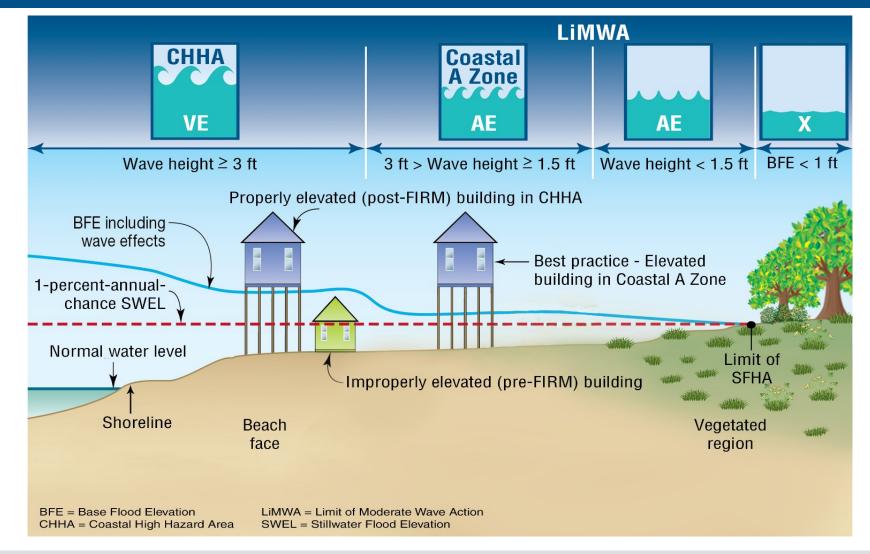
- Hurricane Betsy (1965)
- Hurricane David (1979)
- Hurricane Andrew (1992)
- Hurricane Georges (1998)
- Hurricane Wilma (2005)

Selected based on peak surge and available data





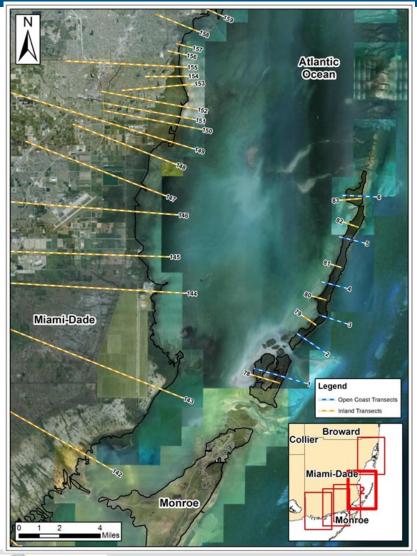
Overland Wave Analysis

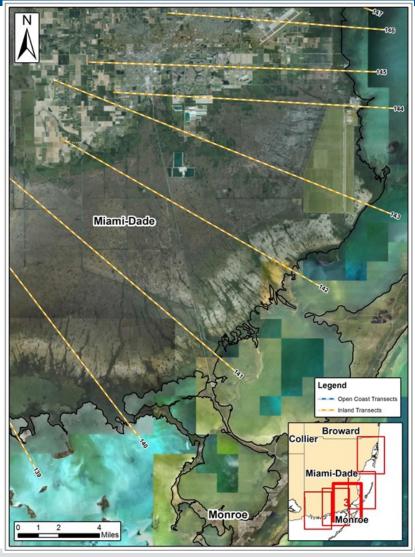






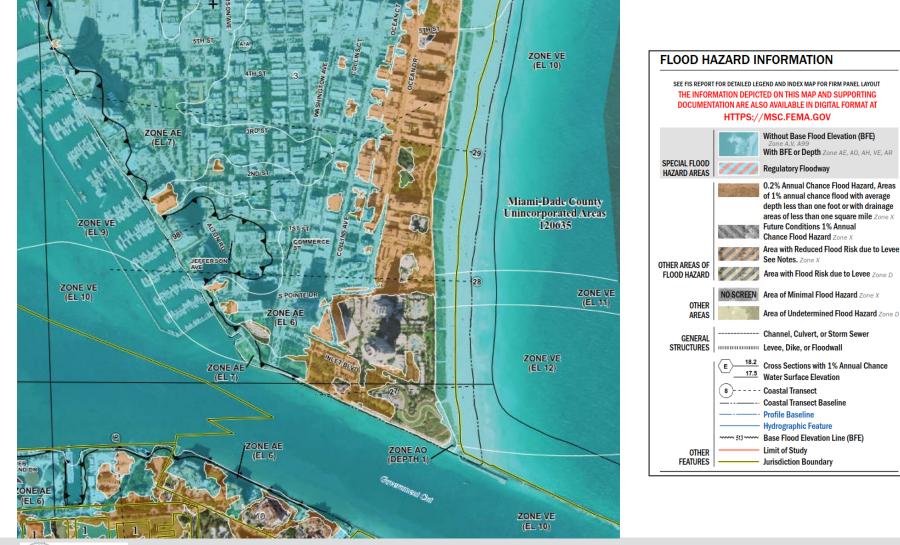
Overland Wave Analysis: Transects







Example FIRM





Limit of Moderate Wave Action (LiMWA)

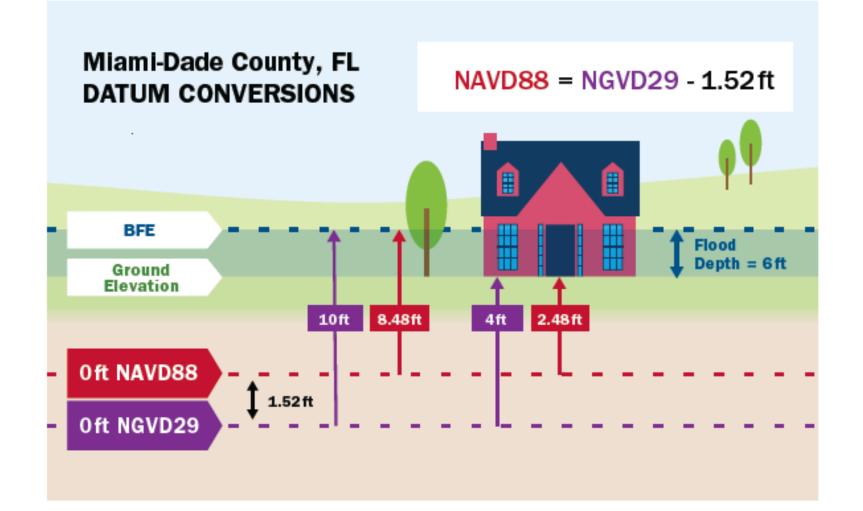
- FEMA Procedure Memorandum No. 50, 2008 and Operating Guidance 13-13
- No Federal insurance regulatory requirement (at present) tied to LiMWA
- Florida Building Code now requires VE zone construction standards in areas defined by LiMWA or areas subject to waves greater then 1.5 feet
- CRS benefit for the requirement







Countywide Datum Conversion







Miami-Dade County Watershed Study

- Hydrologic and Hydraulic Modeling for the following watersheds:
 - **Biscayne Canal Watershed (C-8):** 28.8 mi²
 - Snake Creek Canal Watershed (C-9 West): 17.0 mi²
 - Royal Glades Canal Watershed (C-9 East): 23.4 mi²
- Model results calculated for the 10%, 4%, 2%, 1%, 1% Plus and 0.2% annual chance events
- Delivery consistent with FEMA's Data Capture Standards





Preliminary Map Package

- Sent to each community (CEOs and FPAs)
 - Miami-Dade County: sent February 25, 2021

Package included:

- Preliminary Miami-Dade County FIRM Index panel
- Preliminary FIRM panels for community
- Preliminary Flood Insurance Study (FIS) report
- Preliminary Summary of Map Actions (SOMA)
- Digital data (Changes Since Last FIRM)

• 218 Preliminary FIRM Panels





Preliminary Map Package: CSLF Example (Panel 0454 and 0462)

Changes Since Last FIRM

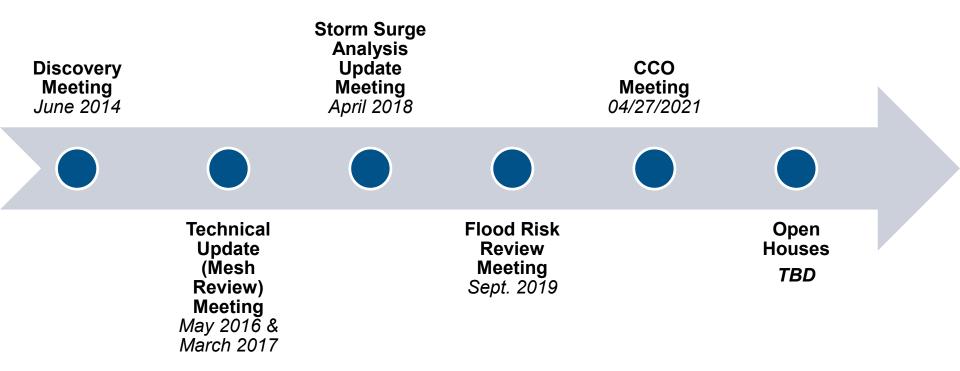
No Zone Change
1% Annual Decrease
Floodway Decrease
Floodway Increase
1% Annual Increase
0.2% Annual Decrease
0.2% Annual increase







Milestones and Schedule: Outreach Meetings

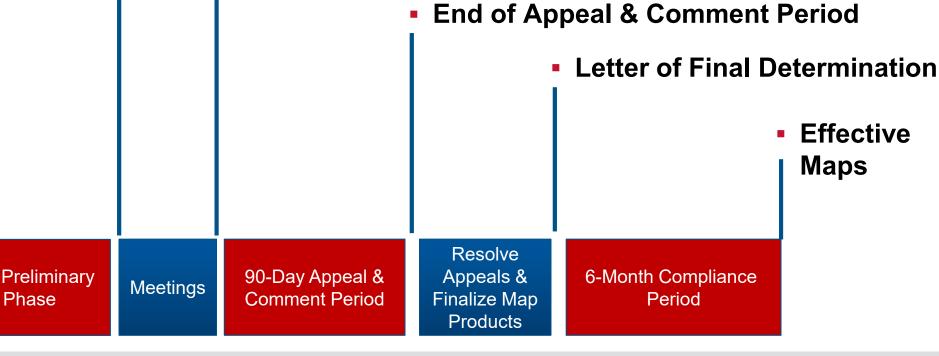






Miami-Dade County Coastal Study: Post Preliminary Processing

- Preliminary Maps Issued February 25, 2021
 - Consultation Coordination Officer (CCO) Meeting April 27, 2021





Phase

Appeal and Comment Period

- Communities in Miami-Dade County will have a 90-day appeal period for all changes to Special Flood Hazard Areas.
 - SFHA changes will be published in the Federal Register
 - SFHA changes will be published in your local newspapers twice within a 10-day period
 - The second newspaper publication will begin the 90-day appeal period

<u>Appeals</u> are for all SFHA changes





What is An Appeal?

- The new or revised BFEs are believed to be scientifically or technically incorrect
- The BFEs are scientifically incorrect if:
 - The methodology used and assumptions made in the determination of the BFEs is inappropriate or incorrect
- The BFEs are technically incorrect if:
 - The methodology was not applied correctly or was based on insufficient or poor-quality data.
 - The methodology did not account for the effects of physical changes that have occurred in the floodplain.
- Must be certified by Professional Engineer and reviewed/approved by community





Appeal and Comment Period

- Communities in Miami-Dade County will also have a comment period.
- Comments do not involve BFEs.
- Comments include, but are not limited to, the following:
 - Channels Names and Locations
 - Road Names and Locations
 - Corporate Limit Changes
 - Topographic Data

All other changes are considered Comments





Appeal Resolution Process

- During the appeal period process, FEMA will:
 - Acknowledge receipt of appeal(s)/comment(s) via letter(s) to CEO(s)
 - Send CEO(s) letter(s) to explain resolution of appeal(s)/ comment(s)
 - Send communities updated FISs and FIRMs (if applicable).

FEMA will deny appeals and comments that are <u>not</u> adequately supported by data/information.





Letter of Final Determination (LFD) and Adoption/Compliance

- LFDs follow the appeal period and begin the 6-month adoption/compliance period.
- Adoption/compliance: communities adopt the new FIRM(s) into floodplain ordinances.
- FDEM or FEMA Region IV staff may contact communities and offer assistance with reviewing and updating their floodplain ordinances.
- If a compliant ordinance is not received before the FIRM effective date, the community will be suspended from NFIP





Flood Map Tools

- FEMA Map Service Center
- https://msc.fema.gov/portal/home
- Flood Map Changes Viewer
- Flood Map Changes Viewer (arcgis.com)







Team Contact Information

Mark A. Vieira, PE – Senior Engineer mark.vieira@fema.dhs.gov

Dewana Davis, CFM – Insurance dewana.davis@fema.dhs.gov





