El Paso County, Texas

Preliminary Flood Insurance Rate Map and Rio Grande Levee System

Larry Voice, FEMA
FEMA Mitigation
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Study Overview

El Paso County Flood Risk Study:
- County-wide update to regulatory Flood Insurance Rate Maps (FIRM)
- County-wide BLE available
- Detailed study in areas impacted by Rio Grande levees
- Includes latest data, engineering & analysis

Communities Included in the Study Area:
- Ysleta Del Sur Pueblo
- City of El Paso
- City of San Elizario
- City of Socorro
- El Paso County
- Town of Anthony
- Town of Clint
- Town of Horizon City
- Village of Vinton
- Town of Canutillo
- Town of Fabens
- Town of Tornillo
El Paso Rio Grande Levee Systems
Current Effective FIRM

- Dated information with many areas having no updates since the 80s and 90s.
- No Base Flood Elevations are depicted with Zone A floodplain areas
- Preliminary FIRMs with Seclusion Levee Seclusion for El Paso County released in 2014 - Did not move forward to FIRMs
- Extensive coordination and collaboration with El Paso County, USIBWC, EP Water and FEMA over multiple years to identify the current flood hazard risk.
- **SUCCESS:** Worked collaboratively to be able to show ~14 miles of Rio Grande Levee (El Paso 2) as providing reduced flood risk on preliminary FIRM.
FEMA’s Role in Depicting Flood Risk

“The FEMA review will be for the sole purpose of establishing appropriate risk zone determinations for FIRM maps and shall not constitute a determination by FEMA as to how a structure or system will perform in a flood event...”

- FEMA’s role is mapping levee-related flood hazard.
- FEMA depicts levee risk based on data and documentation provided by a community, owner or other party.
- FEMA’s flood hazard mapping depicts existing conditions.
Definitions

**Certified Levee System**
- Local community or levee owner has provided and certified all documentation to FEMA to show that the levee system that meets ALL the requirements of outlined by Title 44, Code of Federal Regulations, Part 65.10 (44 CFR 65.10)

**Accredited Levee System**
- FEMA has reviewed community certification package and has verified that levee system documentation meets ALL the requirements of outlined by 44 CFR 65.10; therefore, is shown on the Flood Insurance Rate Maps (FIRM) as providing protection from the base (one-percent-annual-chance) flood.

**Non-Accredited Levee System**
- Levee system that does not meet the requirements of 44 CFR 65.10; therefore, the levee system is shown on the FIRM as not providing protection from the one-percent-annual-chance flood.
- Reasons for non-accredited status include inadequate freeboard, lack of maintenance (erosion/settlement/sand boils) and/or operational plans, documented structural issues within system, or lack of design documentation.
Certification Criteria

Design
• Freeboard, Closure, Embankment Protection and Foundation Stability, Settlement, Interior Drainage, Other Criteria (as needed)

Operations
• Flood Warning System, Plan of Operation, Periodic Operation of Closures, Interior Drainage Plan

Maintenance
• Documented in an officially adopted plan including inspection frequency and responsibilities

Documentation
• Submittals include as-built drawings
• All submittal documents are certified by Professional Engineer or Certified by Federal Agency
Natural Valley Flood Analysis

- Allows flow on either side of levee system
- More area for flow results in lower Base Flood Elevation, but generally, more floodplain area
- Results used to depict flood risk in vicinity of levee
- Flood Zone based on levee certification data available – Accreditation, Natural Valley, Freeboard Deficient, and/or Sound reach are all possible.

- **Data Quality:** 2010 preliminary FIRMs included the results of with/without levee analysis that are larger than the current preliminary information.
- Graphic to the right shows the 2010 levee results (purple hatching) overlaid on the draft preliminary FIRMs.
Natural Valley Flood Analysis

• New properties will be added to the Special Flood Hazard Area in the preliminary FIRM.

• Area that is particularly impacted is the Upper Valley.

• In map to right, area in red is Special Flood Hazard Area (Zone AE/A), yellow is 500 year floodplain (shaded Zone X), and purple is the area of reduced risk due to El Paso 2 levee (shaded Zone X).
El Paso Changes Since Last FIRM

- Changes Since Last FIRM (CSLF) shows areas of decrease (green) and increase (red) to Special Flood Hazard Area.
Next Steps in Mapping Process

- **Base Level Engineering** available on Estimated BFE Viewer: [https://webapps.usgs.gov/infrm/estBFE](https://webapps.usgs.gov/infrm/estBFE)
- **El Paso Preliminary Map Release** – 7/8/2020
- **Preliminary Maps** available on FEMA’s Map Service Center – [https://msc.fema.gov/fmcv](https://msc.fema.gov/fmcv)
  - View preliminary floodzones and elevation information here
  - Warning: changes since last firm layer at above site is not complete!
- **Changes Since Last FIRM Viewer**: [https://tinyurl.com/EP-ViewChange](https://tinyurl.com/EP-ViewChange)
- **Insurance Outreach** to local insurance agents and real estate professionals – Two workshops on 7/20/2020
- Continued coordination with local communities on communicating flood hazard risk publicly
- **Future** – Flood Risk Open House options being explored
Future Levee Accreditation Efforts

- Coordination with City of El Paso, El Paso Water, USIBWC, and other stakeholders on levee accreditation continues, per 44 CFR 65.10
- Levee accreditation through the LOMR process available at any time
- Flood Insurance will continue to be based on current effective maps
Everyone Lives In a Flood Zone

Floods Don’t Always “Stay Within the Lines”
As overall precipitation increases and communities become more urbanized, the frequency and severity of floods will increase.

More impervious surface + more rainfall + impeded drainage = more flooding.
Mandatory Purchase Guidelines

- El Paso County - Initial FIRM date: 9/4/1991
  - Buildings constructed before this date are known as pre-FIRM
- El Paso County – Current effective FIRM date: 2/16/2006
- Total Flood Policies in Force – El Paso County – 3,431
- Flood Policies in mod-low risk Zone X – El Paso County - 904

When is flood insurance federally required?

- When a building is located in a high-risk flood zone (e.g., Zone A, AE) and you have a federally-backed loan
- Keep in mind that the flood risk is based off the CURRENT EFFECTIVE Flood Insurance Rate Map (FIRM) and not the Preliminary FIRM

FEMA

RiskMAP
Increasing Resilience Together
Newly Identified to Be High Risk

- Keep in mind that the flood risk is based off the CURRENT EFFECTIVE Flood Insurance Rate Map (FIRM) and not the Preliminary FIRM
- Federal Mandatory Purchase Requirement
- NFIP provides a cost-saving option: Newly Mapped Procedure
  - Lower cost preferred risk rates are available 12 months after effective date (additional period if lender required) with a Preferred Risk Policy (PRP)

Don’t wait!
Buy PRP now as risk is higher than previously identified!
Where can I find my Preliminary FIRM?

• FEMA Flood Map Service Center (MSC) https://msc.fema.gov
• Interactive Flood Map Changes Viewer (FMCV) https://msc.fema.gov/fmcv (Preliminary floodzones and BFEs only!)
• Changes Since Last FIRM Viewer: https://tinyurl.com/EP-ViewChange
• Newly Mapped Procedure factsheet https://www.fema.gov/media-library/assets/documents/184799
Questions?

Larry Voice
FEMA
Mitigation Division
Larry.Voice@fema.dhs.gov