Fort Bend Map Modernization
Impacts to the Pecan Grove Community

2012 Fall TFMA Conference

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Agenda

- Brief History of FBC’s Map Mod Program
- Brief History of the Pecan Grove Subdivision
- Impacts on the Existing Pecan Grove Levee System
- Impacts to the Pecan Lakes Subdivision
FBC’s Map Modernization

- Started in 2005
- Revised Studies:
  - Brazos River
  - Oyster Creek
- Previous Studied Streams
  - Mapped on new LIDAR
- Preliminary FIRMS October 2009 and March 2010
- Revised Preliminary FIRMs August 2012
- Final Maps... TBD...
Impacts to FBC’s Existing Levees

• FBC Existing Levees
  • 13 Levee Improvement Districts / 5 MUD Owned Levees
  • +100 Miles of Levee
  • Protects ±35,000 Acres / ±44,000 Homes / +$20 Billion

• Main Questions in 2005
  • How many levees need improvements?
  • What elevation do the levees need to be improved to?
Impacts to FBC’s Existing Levees

Countywide Impacts
- 7,500 Acres Added to Zone AE/Zone A
- 45 Miles of Levee’s Improved
  $45,000,000

Pecan Grove Municipal Utility District
FBC Map Modernization
Pecan Grove Municipal Utility District
Pecan Grove MUD Facts

- District Creation: 1975
- Levee Constructed in 1977 - 1978
  - Not in a Special Flood Hazard Area... Until 2009...
- Acreage
  - Inside Levee: 1,400 Acres (4,040 Homes)
  - Outside Levee: 230 Acres (327 Homes)
Impacts to Pecan Grove

- Early Results (6 to 8 Miles of Improvements)
  - Uncertainty on the Modeling
  - 2 to 8 miles of Improvements
    - Limited ROW / 6 Road Crossings

- Reaction Versus Risk
  - Option 1: $8,000,000 to Raise 8 Miles and 6 Crossings
  - Option 2: Wait for More Detailed Modeling/Resolutions
    - Risk: Mapped within Zone AE for Preliminary Maps
Final Results

- 2 Miles of Improvements ($800,000)
  - Completed March 2010
Final FIRM Panel
August 6, 2012
Panels 0140L and 0255L
FBC Map Modernization
Pecan Grove Municipal Utility District
Pecan Lakes Subdivision
Impacts to Pecan Lakes Subdivision

- 110 Acres or 327 Homes Placed in Zone AE
- Total Value $55,000,000
- Access Limited During Events for Emergencies
Project Alternatives

- Purchase Resident’s Flood Insurance
- Buy All Structures below the Proposed BFE
- Improve Structures below the Proposed BFE
- Construct a New Levee System
- Do Nothing
Levee Alignment A

Benefits
- Homes Protected

Costs
- $10,000,000
- Access Still Limited during Events
Levee Alignment B

Benefits
- Homes Protected
- Commercial Properties Protected
- Access Open During Events

Costs
- $10,000,000
Key Points for Future

- During Major Map Revisions, Communities have to remain active throughout the process.
- Understand Reactions Versus Risks
  - Spend $8,000,000 Now
  - Wait and Maybe Spend $800,000
- Partner with Local Agencies
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