

The slide features two circular logos at the top left: the Seal of the State of Texas and the Fort Bend County Hazard Mitigation & Emergency Management logo. The main title is "Fort Bend County Hazard Mitigation Action Plan 2023 Update". Below the title, it says "Draft Plan Presentation June 20, 2023 | 2:00 pm". A blue diagonal line runs from the bottom left to the top right. The background is an aerial view of a flooded residential neighborhood. A white text box on the right contains the instruction: "If you are joining virtually, please enter your name and department/agency in the chat."

Fort Bend County
Hazard Mitigation Action
Plan
2023 Update

Draft Plan Presentation
June 20, 2023 | 2:00 pm

If you are joining virtually,
please enter your name and
department/agency in the
chat.

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The slide has a dark blue background with a white text box on the left containing the title "Today's Agenda". On the right, there is a numbered list of four items: "1. Welcome", "2. Progress Report", "3. Draft Plan Review", and "4. Questions/Next Steps/Wrap Up". The background image shows a field of tall grasses and wildflowers.

Today's Agenda



1. Welcome
2. Progress Report
3. Draft Plan Review
4. Questions/Next Steps/Wrap Up

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Project Schedule

<input checked="" type="checkbox"/> November 2022	Kick-Off Meetings
<input checked="" type="checkbox"/> November – February	Data Collection and Update Hazard Profiles
<input checked="" type="checkbox"/> February 9, 2023	Steering Committee Meeting #2 (Goals and Objectives)
<input checked="" type="checkbox"/> March 29, 2023	Risk Assessment Presentation and Identifying Mitigation Actions
<input checked="" type="checkbox"/> June 7, 2023	Mitigation actions due (County)
<input type="checkbox"/> June 20, 2023	Draft Plan Presentation (virtual)
<input type="checkbox"/> June 27, 2023	Draft sections (Volume I) available for Steering Committee Review (OneDrive)
<input type="checkbox"/> July 12, 2023	All input from Steering Committee and Planning Partnership due
<input type="checkbox"/> June 28-July 12, 2023	Public Review Period
<input type="checkbox"/> July 19, 2023 (tentative)	Submit Plan to TDEM
<input type="checkbox"/> September 2, 2023 (tentative)	Submit Plan to FEMA
<input type="checkbox"/> October 17, 2023 (tentative)	APA



Fort Bend County Hazard Mitigation Action Plan Update

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Annex Progress

- Looking ahead...
 - Identify new mitigation actions ASAP (if you have not done so)
 - Complete action worksheets - <https://forms.office.com/r/skApygNAJZ>
 - Tetra Tech sent out your annex last week. You have until June 23rd to make revisions before we post for public review – if we do not hear from you by June 23rd, your annex will be posted as-is for public review





Fort Bend County Hazard Mitigation Action Plan Update

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Jurisdiction	Mitigation Actions	Municipal Feedback Provided?	Notes
Fort Bend County	X		Tt to finalize annex to send to Steering Committee for review/input
Arcola (C)	X		No input on actions received to date; Tt developed actions for the city; annex sent to City on 5/30
Beasley (C)	X		Received actions; Tt developed additional actions to meet the two actions/hazard requirement; annex sent to City on 5/30
Fairchilds (V)	X	X	Received actions; Tt developed additional actions to meet the two actions/hazard requirement; annex sent to Village on 5/30
Fulshear (C)	X		Received actions; Tt developed additional actions to meet the two actions/hazard requirement; annex sent to City on 5/30
Katy (C)	Not Participating		
Kendleton (C)	X		Annex will be sent to city on 5/30/23
Meadows Place (C)	X	X	Received actions; Tt developed additional actions to meet the two actions/hazard requirement; annex sent to City on 5/30
Missouri City (C)	X	X	Annex will be sent to city on 5/30/23
Needville (C)	X		Received actions; Tt developed additional actions to meet the two actions/hazard requirement; annex sent to City on 5/30
Orchard (C)	X		Received actions; Tt developed additional actions to meet the two actions/hazard requirement; annex sent to City on 5/30
Pearland (C)	Not Participating		
Pleak (V)	X	X	Received actions; Tt developed additional actions to meet the two actions/hazard requirement; annex sent to Village on 5/30
Richmond (C)	X		Received actions; annex sent to City on 6/16
Rosenberg (C)	X		Received actions; annex sent to City on 6/16
Simonton (C)	X		Received actions; annex sent to City on 6/15
Stafford (C)	Tt developed actions		No input on actions received to date; Tt incorporating carried over actions; annex sent to City on 6/15
Sugar Land (C)	X	X	Received actions; annex sent to City on 5/30
Thompsons (C)	Tt developed actions		No input on actions received to date; Tt incorporating carried over actions; annex sent to City on 6/15
Weston Lakes (C)	Tt developed actions		No input on actions received to date; Tt incorporating carried over actions; annex sent to City on 6/15

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Public and Stakeholder Outreach



- Public Outreach Toolkit
 - Social media templates and posts
 - Press release templates
 - Printable materials
- Surveys
 - Input on draft plan
 - We will provide outreach materials next week
- County HMP website
- Thank you to everyone for helping with this!

Fort Bend County, TX

Hazard Mitigation Action Plan 2023 Update





[Home](#)
[About](#)
[What's Mitigation?](#)
[Calendar](#)
[Meetings](#)
[Explore the Plan](#)
[Websites](#)



Welcome to the Fort Bend County Hazard Mitigation Action Plan (HMP) Website. This website provides project updates, resources, and links to hazard mitigation in support of the HMP update.

The project aims to save lives and property by reducing hazard vulnerability for Fort Bend County and participating jurisdictions. During the course of this planning project, county and local leaders and the community will work in tandem to identify risks, assess capabilities, and formulate a strategy to reduce disaster vulnerability.

Public participation and feedback are vital parts of the hazard mitigation planning process. The Fort Bend County HMP Steering Committee has developed a Mitigation Survey to assist in providing the public an outlet to contribute to the HMP update. This survey will be used to create portions of the HMP.

Please keep checking back regularly for information on upcoming events, to take our public survey, and to review and comment on the draft plan. If you would like to get in touch with the project team, please fill out the form at the end of the page and someone will be in touch shortly.

Fort Bend County Hazard Mitigation Action Plan Update

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What's New in the 2023 Update?

- New FEMA requirements
 - Participation – engaged and actively participating throughout the process
 - Stakeholder involvement
 - Community lifelines
 - Socially vulnerable populations
 - Effects of future conditions (i.e., climate change) on hazards
 - Current and future capabilities integrating hazard mitigation
 - Two mitigation actions per hazard



Local Mitigation Planning Policy Guide

FP 206-21-0002
Released April 19, 2022, Effective April 19, 2023
OMB Collection #1660-0062






Fort Bend County Hazard Mitigation Action Plan Update

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What's New in the 2023 Update?

- **Critical facilities** – updated inventory and included community lifelines
 - This includes – airports, academia, bridges, transportation, communication, dams, utilities, pump stations, wells, etc.






Fort Bend County Hazard Mitigation Action Plan Update

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What's New in the 2023 Update?



• Hazards of Concern –

- Incorporated new hazards, and concise hazard profiles, including recent events
- Risk assessments for each hazard
- Climate change impacts incorporated into the probability of future occurrences
- Adaptive capacity to reduce vulnerability used in hazard ranking
- Impacts on population (general and socially vulnerable), buildings, lifelines, and economy

Fort Bend County Hazard Mitigation Action Plan Update



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What's New in the 2023 Update?



• Jurisdictional Annexes


- Each jurisdiction has its own 'chapter' of the HMP that focuses on what impacts your jurisdiction and the population you serve.
- Enhanced capability assessment including how hazard mitigation is integrated
- Two mitigation actions for every hazard of concern

Fort Bend County Hazard Mitigation Action Plan Update

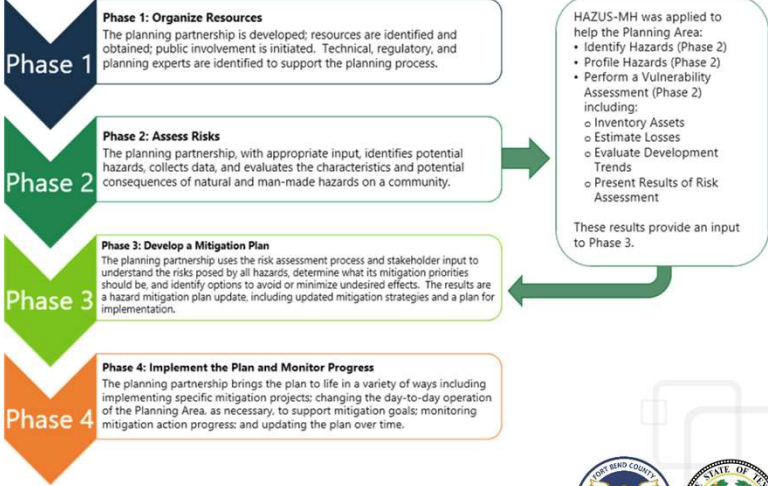


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Section Contents – Volume I



- **Section 1 – Introduction**
 - Mitigation planning overview
 - Participating jurisdictions
 - 2023 updates and summary of changes since last plan




HAZUS-MH was applied to help the Planning Area:

- Identify Hazards (Phase 2)
- Profile Hazards (Phase 2)
- Perform a Vulnerability Assessment (Phase 2) including:
 - Inventory Assets
 - Estimate Losses
 - Evaluate Development Trends
 - Present Results of Risk Assessment

These results provide an input to Phase 3.







Section Contents – Volume I



- **Section 2 – Planning Process**
 - Plan participants (committees, stakeholders, etc.)
 - Activities
 - Ongoing process

Date	DMA 2000 Requirement	Description of Activity	Participants
September 26, 2022	2	Pre-Kick Off Meeting with Fort Bend County: Plan timing and administration, data needs and sharing, hazards of concern, dates, and next steps.	Fort Bend OEM, Tetra Tech
November 09, 2022	2	Steering Committee Meeting #1: Introduce Steering Committee to the HMP update process, discuss mitigation planning, project organization, roles and responsibilities, data collection, hazards of concern, and schedule of the plan.	City of Beasley, Fort Bend OEM, Fort Bend County Utility Authority, City of Fulshear, City of Kendleton, City of Meadows Place PD, City of Meadows Place Public Works, Missouri City OEM, City of Richmond, City of Rosenberg, City of Simonton, City of Sugar Land, Tetra Tech
November 19, 2022	2, 4a	Planning Partnership Meeting #1: Introduce Planning Partnership to the HMP update process, discuss mitigation planning, project organization, roles and responsibilities, data collection, hazards of concern, and schedule of plan.	City of Beasley, Fort Bend OEM, Fort Bend County Utility Authority, City of Fulshear, City of Kendleton, City of Meadows Place PD, City of Meadows Place Public Works, Missouri City OEM, City of Richmond, City of Rosenberg, City of Simonton, City of Sugar Land, Brazos River Authority, LID Solutions, City of

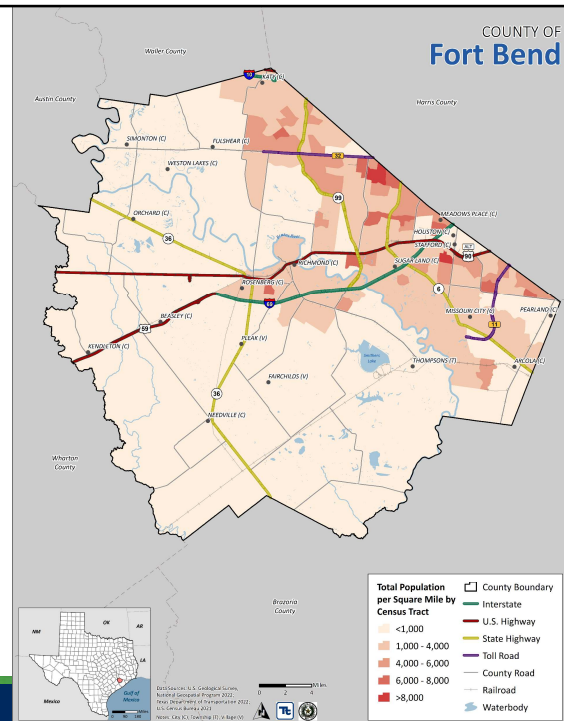


Fort Bend County Hazard Mitigation Action Plan Update

Section Contents – Volume I

- **Section 3 – County Profile**
 - History & Physical Setting
 - Major Hazard Event History
 - Population and Demographics
 - General Building Stock
 - Land Use and Population Trends
 - Critical Facilities & Community Lifelines



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Section Contents – Volume I


- **Section 4 – Risk Assessment**
 - Identification of Hazards of Concern
 - Process to go through all potential hazards and identify the hazards that have the potential to impact the Planning Area
 - Methodology and Tools
 - Describes the various procedures and tools used to complete the risk assessment
 - Steps to do so included identifying and profiling each hazard of concern; determine exposure to each hazard; and assess the vulnerability of exposed population/buildings/economy



Fort Bend County Hazard Mitigation Action Plan Update





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Section Contents – Volume I

- **Section 4 – Risk Assessment**
 - Hazard Profiles
 - Created individual sections for each hazard of concern.
 - Each section includes:
 - Hazard Profile – description, location, extent, worst-case scenario, previous occurrences, climate change projections, and probability of future events
 - Vulnerability Assessment – impact on life/health/safety, impact on building stock and critical facilities, impact on economy, impact on the environment, future changes that may impact vulnerability, and changes in vulnerability since the last plan
 - Hazard Ranking
 - Provides a preliminary ranking (high, medium, low) of each hazard to show the Planning Area’s hazards of greatest risk


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Section Contents – Volume I


- **Section 5 – Capability Assessment**
 - What is currently available at the federal, state, and county level to support mitigation in Fort Bend County
 - Available plans, programs, & resources
 - Administrative and technical capabilities
 - Fiscal capabilities
 - Education and outreach




Planning and
Regulatory





Administrative and
Technical



Financial



Education and
Outreach

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Section Contents – Volume I



• Section 6 - Mitigation Strategies

- Past accomplishments
- Goals and Objectives
- Mitigation strategy development and update
 - Action identification
 - Evaluation and prioritization
 - Benefit/cost review

2023 HMP Update Goals	
1	Educate and inform citizens regarding potential emergency situations related to hazards.
2	Decrease the risk to life and property from hazards through planning, preparing, and mitigating.
3	Performing projects that reduce the impact of natural hazards in order to increase resiliency and enhance the ability to recover.
4	Enhance coordination between local, county, state, and federal agencies by understanding the impact of hazards in Fort Bend County and developing policies and strategies to effectively manage and reduce risk.
5	Support continuity of operations pre-, during, and post- hazard events including the support of community lifelines and critical facilities.

2023 HMP Update Objectives	
1	Evaluate and improve safety & loss reduction codes/standards for hazards that affect Fort Bend County and its municipalities.
2	Develop and strengthen public/private partnerships between the County, non-profits, and the business community.
3	Identify funding sources and increase awareness of funding sources to obtain funding for mitigation projects from a variety of federal, state, regional and local entities.
4	Promote sustainable communities and hazard resilient development.
5	Promote the use of emergency notification systems and weather alert systems for all hazards.
6	Develop publications and information on all hazards that could potentially impact Fort Bend County.
7	Incorporate hazard mitigation into community planning mechanisms, codes/ordinances, day-to-day operations, and projects.
8	Identify, protect, and assist socially vulnerable populations recover from hazard impacts.
9	Ensure continuity of operations of government, non-government, commerce, private sector, non-profit, and infrastructure.
10	Implement mitigation measures that promote the reliability of community lifeline systems.

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Section Contents – Volume I



• Section 7 – Plan Maintenance



- Ongoing Planning Partnership – meet annually to discuss HMP
- Monitoring
- Continuous evaluation and progress reports
- Updating
- Integrating the HMP with existing and future programs
- Continued public involvement



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- What is it?
 - Online progress reporting for individual mitigation actions – pre-populated by Tetra Tech
 - Web-based, SQL server database created by Tetra Tech
 - Scalable for multiple applications: federal, state or local
 - Secure environment
 - Includes reporting function
- Each jurisdiction has a designated Point of Contact will log in with the general username and password for the BATool [link: <https://www.ttbatool.org>]
 - Once the plan is approved, we will send around the username and password
- Each jurisdiction will sign in and indicate progress made on mitigation actions
- You can add or remove actions as well

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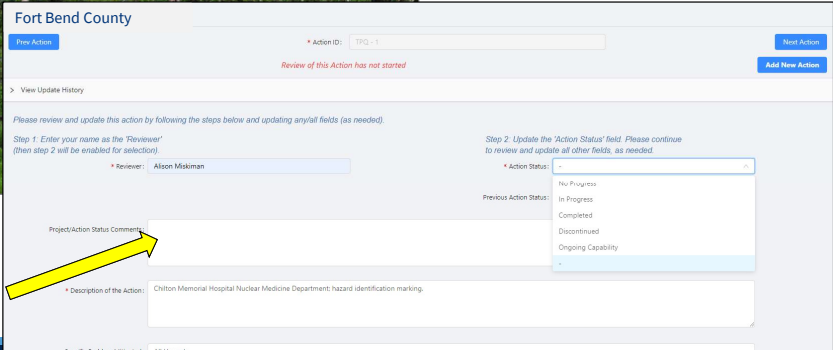
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Hazard Mitigation Plan Review Tool

Progress Reporting



Fort Bend County Hazard Mitigation Action Plan Update

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2021 CAPE MAY COUNTY HAZARD MITIGATION PLAN UPDATE PROGRESS REPORT

Guidance to the report author:
Please refer to one or more of the following to ensure all required information is captured in your progress report prior to submission: *Hazard Mitigation Plan maintenance section, the latest CRS Manual, the CEJIS 2021 CZBG-DR Action Plan, and any applicable programmatic policies and procedures. Please address each planholder section as needed to ensure applicability. Additional guidance is provided throughout the template in yellow-highlighted text.*

Reporting Period
The reporting period for this progress report is **05-15-2022 through 06-15-2022**.

Background
Summarize the purpose of this report - whether it is for the annual update of your hazard mitigation plan, annual justification requirements for the CRS or other. Example text is below for a hazard mitigation plan.
The performance period for the 2021 Cape May County Hazard Mitigation Plan Update is from 05/15/2022 to 06/15/2022. The performance period for the plan will be 5 years, with an annual report. The performance period for the plan is 5 years from the date of the plan's adoption. The plan is being updated to reflect changes in the hazard mitigation plan process, revised mitigation measures, and developed an action plan to address probable impacts from natural hazards. By completing this process, these jurisdictions maintained compliance with the Disaster Mitigation Act, allowing eligibility for mitigation grant funding opportunities afforded under the Robert T. Stafford Act. The plan can be viewed online at [hazard.mis.gov](#).

Summary Overview of Mitigation Measures
Summarize a summary of the plan.

Measure	Long Term (Yr(s))	No	Yes	Progress Reported
2021 CapeMayCounty-041 - The County proposes to undertake drainage improvements in three roadways and conditions with Sea Side City to reduce damage to the vicinities. Ongoing work requires upgrading and opening Stormwater pump stations will be considered.				No
2021 CapeMayCounty-042 - The County proposes to retrofit existing traffic signals to protect life safety during outage incidents.				No
2021 CapeMayCounty-044 - The construction of a sea wall will avoid the pressure of the Ocean City Wastewater Facility would mitigate the catastrophic flood risk.				No

Changes That May Impact Implementation of the Plan
Summarize a brief overview of any significant changes in the planning area that would have a profound impact on the implementation of the plan. Specify any change in technical, regulatory and financial capabilities identified during the plan's development.

Recommendations for Changes or Enhancements
Based on the review of this report by the Planning Committee, the following recommendations will be used for future updates or revisions to the plan. Table 3 lists the new initiatives added this reporting period.

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Public review notice
The contents of this report are considered to be public knowledge and have been prepared for total public disclosure. Copies of the report have been provided to the governing boards of all planning partners and to local media outlets. The report is posted on the [CEJIS Website](#) website. Any questions or concerns regarding the contents of this report should be directed to [Report Contact: Jodi Hahn](#).

Section Contents - Volume II

- **Section 8 - Planning Partnership**
 - Participating jurisdictions
 - Introduction to jurisdictional annexes
- **Section 9 - Jurisdictional Annexes**
 - Points of Contact and Who Participated
 - Jurisdictional Profile
 - Capabilities
 - Risk Assessment
 - Status of Past Mitigation Actions
 - Current Mitigation Actions

9.9 City of Missouri City

This section presents the jurisdictional annex for the City of Missouri City that provides resources and information to assist public and private sectors to reduce losses from future hazard events. This annex is not guidance of what to do when a disaster occurs. Rather, this annex concentrates on actions to reduce or eliminate damage to property and people that can be implemented prior to a disaster. Information presented includes a general overview of the municipality, who in the City of Missouri City participated in the planning process, an assessment of the City of Missouri City's risk and vulnerability, the different capabilities used in the City of Missouri City, and an action plan that will be implemented to achieve a more resilient community.

9.9.1 Hazard Mitigation Planning Team

The City of Missouri City identified the hazard mitigation plan primary and alternate points of contact and developed this plan over the course of several months with input from many City of Missouri City departments, including Emergency Management, Public Works, and Development Services. The Emergency Management Coordinator represented the community on the Fort Bend County Hazard Mitigation Plan Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge and contributing to the capabilities of the partnership.

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Asset?	Hazard(s) to be Mitigated	Goal in Months	Estimated Timeframe	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Phase	ES	LP	IP
2023-001	Hazard Mitigation Outreach	Problems: The public is unaware of natural hazards, including hazardous areas and potential mitigation projects, making them and their properties extremely vulnerable to all hazards. Solutions: Increase public awareness of natural hazards and hazardous areas; distribute information regarding hazards and potential mitigation measures to the public; promotional sources would include a tab on the City website; additional social media; and public education programs that inform the public of the hazards of concern and how to prepare for them.	New	Down/Leave Failure, Disease Outbreak, Drought, Extreme Temperature (Heat/Cold), Flood (Bovine/Flash/Stormwater), Geologic Hazards (expansive soils, erosion), Hurricane/Tropical Storm, Severe Weather (Lightning/Hail/Wind/Tornado), Wildfire, Winter Weather	1	1 Year	City Public Works	BIC, SNGP, FMA, City Budget	Residents will be more knowledgeable about the hazards of concern	\$5,000	High	Phase 1	ES	LP	IP
2023-002	Drought Emergency Plan	Problems: The City does not currently have a drought contingency plan in place to inform the public on what to do during different levels of drought. Solutions: The City will partner with relevant departments and agencies to develop a	New	Drought	2.5	1 Year	City Public Works	BIC, SNGP, FMA, City Budget	The City will be more prepared for drought events	\$5,000	High	Phase 1	ES	LP	IP

Fort Bend County Hazard Mitigation Action Plan Update



Section Contents - Appendices

- Appendix A Plan Adoption
- Appendix B Participation Documentation
- Appendix C Meeting Documentation
- Appendix D Public and Stakeholder Outreach Documentation
- Appendix E Mitigation Strategy Supplementary Data
- Appendix F Plan Maintenance Tools
- Appendix G Critical Facilities
- Appendix H Linkage Procedures



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Review the Draft Plan

- The entire plan will be posted on the Fort Bend County HMP website for a 14-day review period (starting Wednesday, June 28th)
 - You can review sections of the plan during the public review, and we will incorporate any applicable revisions into the final deliverable to the State and FEMA
- TDEM will begin their review after the public review period
- Public feedback to be incorporated as appropriate prior to submittal to TDEM/FEMA for their review
 - If needed, we will hold a brief meeting to discuss public comments and how to incorporate – date TBD



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Next Steps

- Review/Edits
 - Volume I edits/comments due no later than **June 27th**
 - Annex input is due **June 23rd**
 - Any edits received after this date will not be part of the public review period
 - They will be included in the draft submitted to TDEM
- Public Review Period (14 days) – June 28th through July 12th
- Submit Draft Plan for TDEM review by July 19th
- Submit Draft Plan for FEMA review/approval by September 2nd (tentative)
- FEMA approves plan (~October 2023); begin adoption
- Implement Projects and Maintain the Plan → Increase Resilience!

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Fort Bend County Project Contacts	
Greg Babst, Deputy Emergency Management Coordinator (281) 238-3428 Gregory.Babst@fortbendcountytx.gov	
Tetra Tech Project Contacts	
Brian Rutherford, Project Manager (281) 414-6741 brian.rutherford@tetrattech.com	Heather Apgar, Lead Planner (973) 630-8046 heather.apgar@tetrattech.com

Thank You!