



Brownsville Public Utilities Board Hazard Mitigation Plan – 2022 Update

Planning Team Meeting #2 | October 7, 2021

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Agenda

- Welcome
- Project Schedule and Status Review
- Hazards of Concern
- Confirm Critical Facility Types and Lifelines
- Mission Statement, Goals and Objectives
- Strengths, Weaknesses, Obstacles, and Opportunities
- Next Steps



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Project Schedule

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Schedule

- Overview and Milestones
 - Planning Process
 - Currently working on reviewing plans, studies, and codes/ordinances
 - Info Gathering Worksheets – due **October 8th**
 - Planning Team Meeting #2 – TODAY!
 - Risk Assessment and Hazard Ranking Meeting – Date TBD (mid-November?)
- Update Risk Assessment
 - Data collection is underway; Confirm building and critical facility inventory
 - Confirm hazards of concern; once confirmed, begin vulnerability assessment for each
- Public Involvement Strategy – ongoing throughout the planning process
 - The HMP website is live!
<https://www.brownsvillepub-hmp.com/>
 - Need your help to get the word out about the HMP
- Mitigation Strategy
 - Mitigation Strategy Workshop with FEMA and TDEM– January 2022
- Draft Plan to Planning Team by April 2022
- Final draft plan to TDEM and FEMA by May 2022

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Project Status

Data Collection - In Progress	Risk Assessment - In Progress	Public Involvement - In Progress	Mitigation Strategy
<ul style="list-style-type: none"> ✓ Plan Collection - Complete • General Building Stock – Update in Progress • Critical Facility Inventory - In Progress (feedback and input needed – stay tuned!) 	<ul style="list-style-type: none"> • Hazard Profile Drafts – Initiated • Vulnerability Assessment 	<ul style="list-style-type: none"> • Public Survey - in progress • Website is LIVE!! • BPUB and the City must document local outreach 	<ul style="list-style-type: none"> • Confirm Goals And Objectives - Today • SWOO - In Progress - Today • Municipal Annex Updates - In Progress • Identify Problem Areas - In Progress • Develop Mitigation Strategy - Pending

Phase 1 Organize the Resources → Phase 2 Risk Assessment → Phase 3 Public Involvement Strategy → Phase 4 Update Mitigation Strategy → Phase 5 Update Maintenance Strategy → Phase 6 Assemble the Plan → Phase 7 Plan Review and Adoption → Phase 8 Project Management → IMPLEMENTATION

TETRA TECH 6

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Participation Status

- Annex updates are in progress
- Info gathering worksheets were sent out to everyone – due **October 8th** (tomorrow)
 - Any questions on completing the worksheets?
 - Document new development using this link: <https://arcg.is/9qT5r>
 - Document problem areas using this link: <https://arcg.is/qXyVP>
- Next Steps
 - Review and confirm risk ranking – November 2021
 - Review and identify critical facilities – due **October 22nd**
 - Tetra Tech will be sending out the list of facilities and survey to input new facilities
 - Identify mitigation actions – January 2022

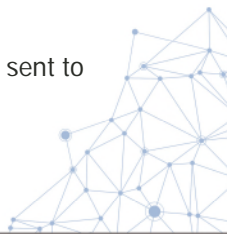
TETRA TECH 7


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Public and Stakeholder Outreach

- Website is live!
 - <https://www.brownsvillepub-hmp.com/>
- Press Release and Social Media
 - Tetra Tech has provided sample press release and will provide social media posts for the Planning Team to use
- Survey (public and stakeholder)
 - Next step – distribute and advertise survey links and brochure
 - Stakeholders begin to complete survey
 - Municipalities to post an HMP project link and flyer on their website; press release sent to newspapers
- Outreach – present key info on the HMP process at local meetings
 - Tetra Tech can provide some talking points if needed



 TETRA TECH 8

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Hazards of Concern



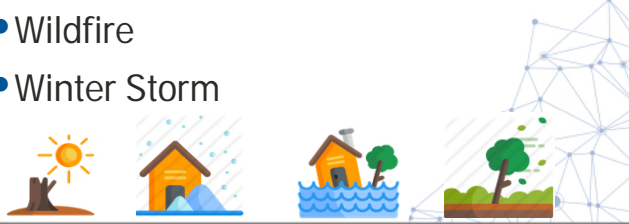
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Potential 2022 Hazards of Concern

- Dam and **Levee** Failure
- Disease Outbreak
- Drought
- Earthquake
- **Erosion (coastal and inland)**
- Extreme Heat
- Flood (riverine, coastal, flash, stormwater)
- Hail
- Hurricane/Tropical Storm
- Lightning
- Thunderstorm Wind
- Tornado
- Wildfire
- Winter Storm




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Critical Facilities and Lifelines



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Critical Facilities and Community Lifelines



- To be reviewed:
 - 911 Centers
 - Airport
 - Bridges
 - Churches
 - Communication Towers
 - Community Services
 - Detention Centers
 - Emergency Operation Centers
 - Evacuation Routes
 - Fire Stations
 - Government Buildings
 - Heliports
 - Hospitals
 - Nursing Homes
 - Parks
 - Police Stations
 - Ports
 - Public Works
 - Pump Stations
 - Schools
 - Shelters
 - Utilities
 - Wastewater facilities
 - Water pipelines



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Critical Facilities and Lifelines



- **What are lifelines?**
 - A lifeline enables the continuous operation of critical government and business functions and is essential to human health and safety or economic security.
 - Lifelines are the most fundamental services in the community that, when stabilized, enable all other aspects of society to function.
 - When disrupted, decisive intervention (e.g., rapid re-establishment or employment of contingency response solutions) is required to stabilize the incident.
- Tetra Tech conducted a preliminary review of the critical facilities and assigned the lifeline categories to each
- We will be distributing a list of facilities for your review and input. We will also be using an online survey to collect new facilities to be included.
 - All input is due **October 22nd!**

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Compatibility with Other Planning Goals




The HMP update's goals should be compatible with the needs and goals expressed in other available community planning documents as well as the Texas State HMP. These goals and objectives should be reasonably in-line with goals established in other related planning documents and mechanisms including:

- 2018 State of Texas HMP
- 2016 Brownsville Public Utilities Board HMP
- Other local comprehensive and emergency management plans

2018 State of Texas HMP



- Goal 1. Saving lives and reducing public risk exposure from natural, technological, and human-caused hazard events.
- Goal 2. Reducing or preventing damage to public and private property from natural, technological, and human-caused hazard events.
- Goal 3. Empowering units of local government to understand and effectively manage public risk exposure through the development of comprehensive mitigation action plans.
- Goal 4. Enhancing the quality of vulnerability and risk assessments through the collection, organization, and analysis of data.
- Goal 5. Reducing adverse environmental, natural resource, and economic impacts from natural, technological, and human-caused hazard events.
- Goal 6. Empowering citizens and businesses to make risk-informed decisions through public education and outreach activities.
- Goal 7. Enhancing coordination between local, state, tribal, and federal agencies by understanding the impact of hazards in Texas and developing policies and strategies to effectively manage risk.
- Goal 8. Reduce the number of Repetitive Loss and Severe Repetitive Loss properties through acquisition of real property from property owner


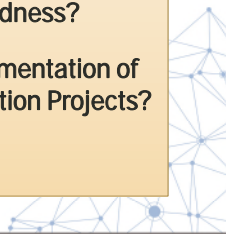


Revisit the 2016 Goals and Update if Needed


- Do the goals and objectives address current and expected conditions?
- Do the goals and objectives reflect current natural hazard risk?
- Did the goals and objectives lead to mitigation projects and/or changes in policy that helped jurisdictions to reduce vulnerability?
- Do the goals and objectives support changes in mitigation priorities?
- Do the goals and objectives reflect updated State goals?
- Do the goals incorporate a focus on resiliency?

What are the basic goals?

- Protect Life?
- Protect Property?
- Protect the Environment?
- Build Partnerships?
- Increase Preparedness?
- Encourage Implementation of Long-Term Mitigation Projects?
- Protect Lifelines?



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Review Goals

According to CFR 201.6(c)(3)(i): "The hazard mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards."

Goal #	Goal Statement
G-1	Protect public health and safety from natural, technological, and human-caused hazard events
G-2	Protect new and existing public and private properties from natural, technological, and human-caused hazard events
G-3	Build and support public, private, and non-profit partnerships to enhance mitigation to continuously become less vulnerable to hazards.
G-4	Leverage outside funds for investment in hazard mitigation.
G-5	Enhance and promote hazard mitigation awareness and education to help residents understand the need for mitigation, and steps they can take to protect people and properties.
Additional Goals?	

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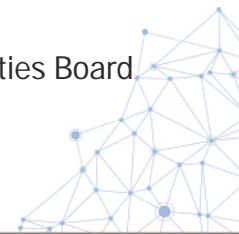


Objectives

Objectives are short-term aims which, when combined, form a strategy or course of action to meet a goal. Unlike goals, objectives are specific, and measurable - *they answer the question, "How?"*

Examples include:

- Integrate the recommendations of this plan into existing regional and local programs.
- Implement mitigation actions that enhance the capabilities of the Utilities Board and City to better profile and assess exposure of hazards.



Review Objectives

2016 Objective #	2016 HMP Objective Statement
1	Maintain and protect critical facilities, community lifelines, and services.
2	Maximize the utilization of the latest technology to provide adequate warning, communication, and mitigation of hazard events.
3	Reduce the danger to, and enhance protection of, high risk areas during hazard events.
4	Protect critical facilities and services.
4	Retrofit, purchase, or relocate structures in high hazard areas including those known to be repetitively damaged
5	Reduce the number of repetitive losses to properties in the National Flood Insurance Program (NFIP).
6	Use the most cost-effective approach to protect existing buildings and public infrastructure from hazards.
7	Enact and enforce regulatory measures to ensure that development will not put people in harm's way or increase threats to existing properties.
8	Build and support local partnerships to continuously become less vulnerable to hazards.
9	Ensure continuity of government operations, emergency services, essential, and lifeline facilities at the local level during and immediately after disaster and hazard events.
10	Strengthen inter-jurisdiction and inter-agency communication, coordination, and partnerships in all phases of emergency management.
11	Build a cadre of committed volunteers to safeguard the community before, during and after a disaster.
12	Build hazard mitigation concerns into the City of Brownsville and Brownsville Public Utilities Board (BPUB) planning and budgeting processes.
13	Maximize the use of outside sources of funding.
14	Maximize participation of property owners in protecting their properties.
15	Maximize insurance coverage to provide financial protection against hazard event.
16	Prioritize mitigation projects based on cost-effectiveness and starting with those sites facing the greatest threat to life, health and property.
17	Heighten public awareness of the full range of natural and human-made hazards they face.
18	Educate the public on actions they can take to prevent or reduce the loss of life or property from all hazards.
19	Publicize and encourage the adoption of appropriate hazard mitigation measures.

Additional Objectives?

Strengths, Weaknesses, Obstacles, and Opportunities (SWOO)

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Strengths, Weaknesses, Obstacles, and Opportunities

The purpose of the SWOO is to identify mitigation strategies and capabilities that will meet the goals and objectives of the plan update. It is also used to develop potential mitigation actions for the participating jurisdictions.

- **Strengths** – what we do well
- **Weaknesses** – what could we do better
- **Obstacles** – things that stand in the way, and either prevents you from doing something or something that need to be overcome
- **Opportunities** – used to develop mitigation strategies

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SWOO Exercise



Thinking about the 2016 hazards of concern and any new hazards for this update...what are some strengths, weaknesses, obstacles and opportunities the Planning Area has for each? Complete the online form (<https://forms.gle/jXQNS6usBxk3BNe56>)



Here are some examples to help brainstorm:

Hazard: Flood	
S	Minimal exposure to flood risk
W	Silt and debris buildup in streams can lead to localized flooding
Ob	Funding for culvert and catch basin maintenance
Opps	Installing stream gages

Hazard: Severe Storms	
S	Tree trimming programs are in place
W	Aging infrastructure; lack of underground utilities
Ob	Cost to retrofit existing utility infrastructure
Opps	Underground utilities; enhance public outreach program

Hazard: Severe Winter Storm	
S	Not a frequent occurrence
W	Not a frequent occurrence and may not have the resources to respond
Ob	Funding; limited staff for prolonged events
Opps	Shared services

2022 SWOO Discussion/Example



Hazard	
Strengths	Weaknesses
<p>What do the Planning Area do well in terms of:</p> <ul style="list-style-type: none"> ➤ Plans and Regulations <ul style="list-style-type: none"> ➤ Codes, Ordinances, Planning Studies, Comprehensive Plans, Adaptation and Resiliency Plans ➤ Structure and Infrastructure Projects ➤ Natural Systems Protection ➤ Education and Awareness Programs? ➤ Preparedness ➤ Others? 	<p>What can the Planning Area do better or what are identified gaps in terms of:</p> <ul style="list-style-type: none"> ➤ Plans and Regulations <ul style="list-style-type: none"> ➤ Codes, Ordinances, Planning Studies, Comprehensive Plans, Adaptation and Resiliency Plans ➤ Structure and Infrastructure Projects ➤ Natural Systems Protection ➤ Education and Awareness Programs? ➤ Preparedness ➤ Others?

2022 SW00 Discussion/Example

Hazard	
Obstacles	Opportunities
<p>What is preventing the Planning Area to implement:</p> <ul style="list-style-type: none"> ➤ Plans and Regulations <ul style="list-style-type: none"> ➤ Codes, Ordinances, Planning Studies, Comprehensive Plans, Adaptation and Resiliency Plans ➤ Structure and Infrastructure Projects ➤ Natural Systems Protection ➤ Education and Awareness Programs? ➤ Preparedness ➤ Others? 	<p>What can the Planning Area implement terms of:</p> <ul style="list-style-type: none"> ➤ Plans and Regulations <ul style="list-style-type: none"> ➤ Codes, Ordinances, Planning Studies, Comprehensive Plans, Adaptation and Resiliency Plans ➤ Structure and Infrastructure Projects ➤ Natural Systems Protection ➤ Education and Awareness Programs? ➤ Preparedness ➤ Others?

Next Steps

Next Steps

- Review Hazard Profiles
- Review Risk Assessment Results
- Identify Problems and Problem Areas
- Develop Mitigation Strategy
- Review Draft Plan
- Submit Draft Plan for TDEM/FEMA Review
- Adopt FEMA - Approved Plan
- Implement Projects and Maintain the Plan → Increase Resilience!

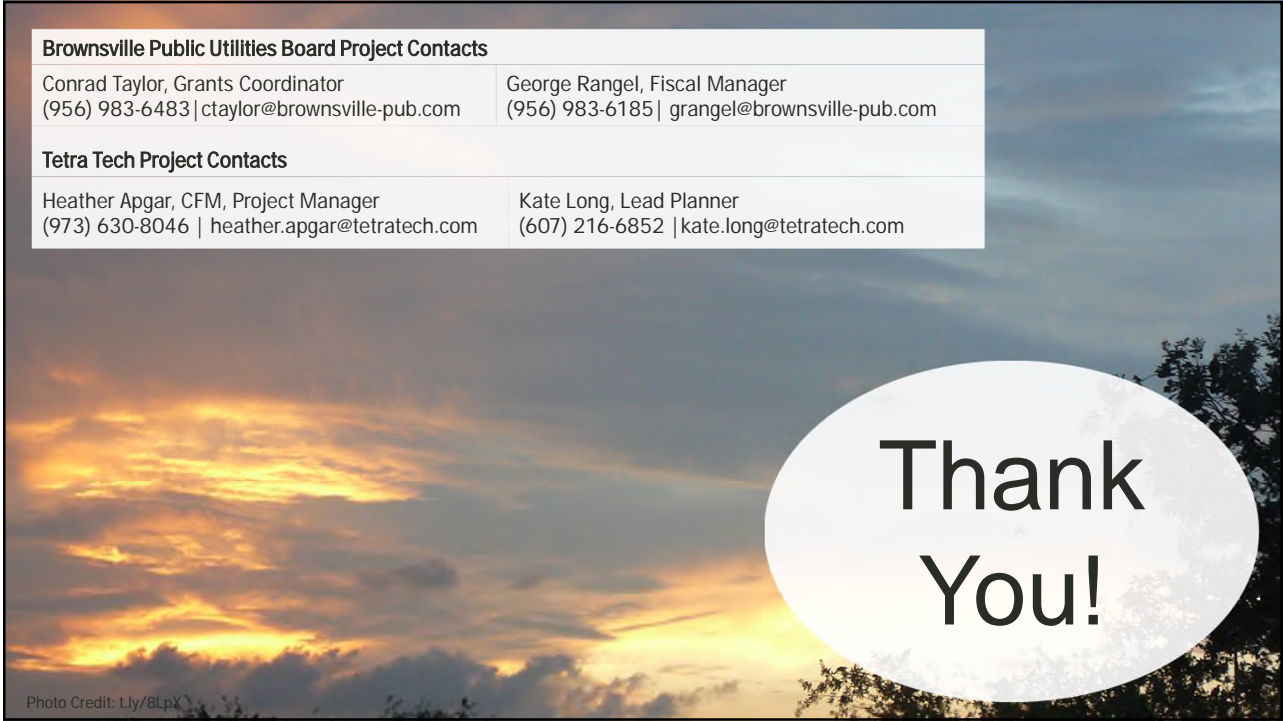


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Questions?



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Thank You!

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