SECTION 9. JURISDICTIONAL ANNEXES

9.3 City of Beasley

This section presents the jurisdictional annex for the City of Beasley 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, the City of Beasley representatives who participated in the planning process, an assessment of the City of Beasley's risk and vulnerability, the different capabilities used in the City of Beasley, and an action plan that will be implemented to achieve a more resilient community.

9.3.1 Hazard Mitigation Planning Team

The City of Beasley identified the primary and alternate points of contact and developed this 2023 Hazard Mitigation Plan (HMP) over the course of several months with input from many City of Beasley departments, including the Mayor. The Mayor represented the community on the Fort Bend County HMP Planning Partnership and supported the local planning process requirements by securing input from persons with specific knowledge to enhance the plan. All departments were asked to contribute to the annex development through reviewing and contributing to the capability assessment, reporting on the status of previously identified actions, and participating in action identification and prioritization.

The following table summarizes municipal officials that participated in the development of the annex and in what capacity. Additional documentation on the municipality's planning process through Planning Partnership meetings is included in Volume 1, Section 2 (Planning Process) and Appendix C (Meeting Documentation).

Table 9.3-1. Hazard Mitigation Planning Team

Primary Point of Contact		Alternate Point of Contact	
Name/Title:	Kenneth Reid/Mayor*	Name/Title:	-
Address:	319 S 3rd Street, Beasley, TX 77417	Address:	-
Phone Number:	979-387-2775	Phone Number:	-
Email:	kennethreid14@yahoo.com	Email:	-
NFIP Floodplain Administrator			
Name/Title:	Kenneth Reid/Mayor*		
Address:	319 S 3rd Street, Beasley, TX 77417		
Phone Number:	979-387-2775		
Email:	kennethreid14@yahoo.com		
Additional Contributors:			
Name/Title: Method of Participation:	Misty Tiemann, City of Secretary Provided critical information in the planning process		

*Information from https://www.texasflood.org/flood-basics/fpa.html

9.3.2 Municipal Profile

The City of Beasley is located on the western side of Fort Bend County. Located 59 miles southwest of downtown Richmond, the City of Beasley is known for the Southern Pacific Railroad on which it is located. The City of Beasley has a total area of 1 square mile, where 0.004 square miles is made up of water.

According to the American Community Survey, the 2021 population for the City of Beasley was 957. Data from the 2021 American Community Survey indicates that 7 percent of the population is 5 years of age or younger and 8.4 percent is 65 years of age or older. Communities must deploy a support system that enables all populations to safely reach shelters or to quickly evacuate a hazard area.

9.3.3 Jurisdictional Capability Assessment and Integration

The City of Beasley performed an inventory and analysis of existing capabilities, plans, programs, and policies that enhance its ability to implement mitigation strategies. Volume 1, Section 5 (Capability Assessment) describes the components included in the capability assessment and their significance for hazard mitigation planning. The jurisdictional assessment includes the following analyses:

- An assessment of legal and regulatory capabilities
- Development and permitting capabilities
- An assessment of administrative and technical capabilities
- An assessment of fiscal capabilities
- An assessment of education and outreach capabilities
- Classification under various community mitigation programs
- The community's adaptive capacity to withstand hazard events

For a community to succeed in reducing long-term risk, hazard mitigation must be integrated into the day-to-day local government operations. As part of the hazard mitigation analysis, planning/policy documents were reviewed, and each jurisdiction was surveyed to obtain a better understanding of their progress toward plan integration. The updated mitigation strategy provided an opportunity for the City of Beasley to identify opportunities for integration of mitigation concepts that can be incorporated into municipal procedures.

Planning, Legal, and Regulatory Capability and Integration

The table below summarizes the regulatory tools that are available to the City of Beasley. The comment field provides information as to how the capability integrates hazard mitigation and risk reduction.

Table 9.3-2. Planning, Legal, and Regulatory Capability and Integration

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Codes, Ordinances, & Regulations				
Building Code	Yes	International Building Code	Local	Building Inspector
How does this reduce risk? The City of Beasley adopted the International Building Code and updates the Code annually.				
Zoning/Land Use Code	No	-	-	-
How does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Subdivision Ordinance	Yes	Land Subdivision – Ordinance No. 2003-6	Local	City Council
How does this reduce risk? The purpose of this ordinance is to provide for the orderly, safe, and healthful development of the area within the City and its exterritorial jurisdictions and to promote health, safety, morals, and welfare of the community.				
Site Plan Ordinance	No	-	-	-
How does this reduce risk?				
Stormwater Management Ordinance	No	-	-	-
How does this reduce risk?				
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
How does this reduce risk?				
Real Estate Disclosure	No	-	-	-
How does this reduce risk?				
Growth Management	No	-	-	-
How does this reduce risk?				
Environmental Protection Ordinance	No	-	-	-
How does this reduce risk?				
Flood Damage Prevention Ordinance	Yes	Flood Damage Prevention Ordinance	Local	FPA
How does this reduce risk? Dictates the minimum flood standards adopted by the City to meet the federal standards of the National Flood Insurance Program (NFIP) that could be enhanced through higher standards adoption (e.g., adopting standards for non-regulatory flood areas).				
Wellhead Protection	No	-	-	-
How does this reduce risk?				
Emergency Management Ordinance	Yes	Emergency Management – Ordinance No. 91	Local	City Council
How does this reduce risk? The ordinance identifies potential hazards and the prevention or mitigation of the impacts associated. With the identification of hazards, the ordinance helped to establish a Comprehensive Emergency Management Plan and an Emergency Management Director.				
Climate Change Ordinance	No	-	-	-
How does this reduce risk?				
Other	No	-	-	-
Planning Documents				
Comprehensive/Master Plan	No	-	-	-
How does this reduce risk?				
Capital Improvement Plan	No	-	-	-
How does this reduce risk?				
Disaster Debris Management Plan	No	-	-	-
How does this reduce risk?				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Floodplain Management or Watershed Plan	No	-	-	-
How does this reduce risk?				
Stormwater Management Plan	No	-	-	-
How does this reduce risk?				
Open Space Plan	No	-	-	-
How does this reduce risk?				
Urban Water Management Plan	No	-	-	-
How does this reduce risk?				
Habitat Conservation Plan	No	-	-	-
How does this reduce risk?				
Economic Development Plan	No	-	-	-
How does this reduce risk?				
Shoreline Management Plan	No	-	-	-
How does this reduce risk?				
Community Wildfire Protection Plan	No	-	-	-
How does this reduce risk?				
Community Forest Management Plan	No	-	-	-
How does this reduce risk?				
Transportation Plan	No	-	-	-
How does this reduce risk?				
Agriculture Plan	No	-	-	-
How does this reduce risk?				
Climate Action/ Resiliency/Sustainability Plan	No	-	-	-
How does this reduce risk?				
Tourism Plan	No	-	-	-
How does this reduce risk?				
Business/ Downtown Development Plan	No	-	-	-
How does this reduce risk?				
Other	No	-	-	-
Response/Recovery Planning				
Comprehensive Emergency Management Plan	Yes	Comprehensive Emergency Management Plan	Local	Emergency Management Director
How does this reduce risk? The plan will set forth the form of the organization, tasks, duties, and powers and designate officers and employees to carry out the provisions of the plan. The plan will follow the standards and criteria established by the State Division of Emergency				

	Jurisdiction has this? (Yes/No)	Code Citation and Date (code chapter, name of plan, date of plan)	Authority (local, county, state, federal)	Individual / Department / Agency Responsible
Management of the State of Texas. The form of organization, titles, and terminology conform to the recommendations of the State Division of Emergency Management. The emergency management plan is considered supplementary to the Emergency Management Ordinance.				
Continuity of Operations Plan	No	-	-	-
How does this reduce risk?				
Strategic Recovery Planning Report	No	-	-	-
How does this reduce risk?				
Threat & Hazard Identification & Risk Assessment (THIRA)	No	-	-	-
How does this reduce risk?				
Post-Disaster Recovery Plan	No	-	-	-
How does this reduce risk?				
Public Health Plan	Yes	The Fort Bend County Health and Human Services Department (FBHHS) provides public health services for the City. FBCHHS has public health plans as part of Annex H of the Fort Bend County Emergency Operations Plan.	County	FBHHS
How does this reduce risk?				
Other	No	-	-	-
How does this reduce risk?				

Development and Permitting Capability

The table below summarizes the capabilities of the City of Beasley to oversee and track development.

Table 9.3-3. Development and Permitting Capability

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Do you issue development permits? • If yes, what department is responsible?	Yes	Requests and applications for building, moving, and demolishing permits can be found on the City of Beasley website along with lists of requirements. This is done through City Hall.
If you do not issue development permits, what is your process for tracking new development?	N/A	-
Are permits tracked by hazard area? (For example, floodplain development permits.)	No	The City does not have flood hazard areas.
Do you have a buildable land inventory? • If yes, please describe	N/A	-

Indicate if your jurisdiction implements the following	Yes/No	Comment:
Describe the level of build-out in your jurisdiction.	N/A	-

Administrative and Technical Capability

The table below summarizes potential staff and personnel resources available to the City of Beasley and their current responsibilities that contribute to hazard mitigation.

Table 9.3-4. Administrative and Technical Capabilities

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Administrative Capability		
Planning Board	Yes	The Planning Commission was established in 2003; their duties include: • Identify the needs and to advise the City Council of their short-range and long-range implications for City development • Recommend achievable community goals as a basis for long-range planning and development programs • Recommend plans, programs, policies, that will benefit the entire community • Interpret and adopt plans and programs to concerned citizens so that private activities and desires are accomplished in harmony with public needs and policies
Zoning Board of Adjustment	No	-
Planning Department	No	-
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	No	-
Public Works/Highway Department	Yes	
Construction/Building/Code Enforcement Department	Yes	-
Emergency Management/Public Safety Department	Yes	Emergency Management Director is responsible for: • Conduct an ongoing survey of actual or potential hazards which threaten life and property within the City • Supervision of the development and approval of an emergency management plan for the City • Authority to declare a local state of disaster. The declaration may not be continued or renewed for a period in excess of 7 days except by or with the consent of the Town Council • Carry out necessary regulations • Direction and control of Emergency Management • Maintenance of liaison with other municipal, county, district, state, regional

Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		or federal, Emergency Management organizations • Marshaling of all necessary personnel, equipment or supplies from any department
Warning systems/services (mass notification system, outdoor warning signals, etc.)	Yes	-
Maintenance programs to reduce risk (stormwater maintenance, tree trimming, etc.)	No	-
Mutual aid agreements	No	-
Human Resources Manual	No	-
Other	-	-
Technical/Staffing Capability		
Planners or engineers with knowledge of land development and land management practices	No	-
Engineers or professionals trained in building or infrastructure construction practices	No	-
Planners or engineers with an understanding of natural hazards	No	-
Staff with expertise or training in benefit/cost analysis	No	-
Professionals trained in conducting damage assessments	No	-
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-Hazards (MH) applications	No	-
Environmental scientist familiar with natural hazards	No	-
Surveyor(s)	No	-
Emergency Manager	Yes	See Emergency Management above
Grant writer(s)	No	-
Resilience Officer	No	-
Other (this could include stormwater engineer, environmental specialist, etc.)	No	-

Fiscal Capability

The table below summarizes financial resources available to the City of Beasley.

Table 9.3-5. Fiscal Capabilities

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Community development Block Grants (CDBG, CDBG-DR)	Yes
Capital improvements project funding	No
Authority to levy taxes for specific purposes	Yes
User fees for water, sewer, gas or electric service	Yes
Impact fees for homebuyers or developers of new development/homes	No
Stormwater utility fee	No
Incur debt through general obligation bonds	No
Incur debt through special tax bonds	No
Incur debt through private activity bonds	No
Withhold public expenditures in hazard-prone areas	No

Financial Resources	Accessible or Eligible to Use? (Yes/No)
Other federal or state funding programs	No
Open Space Acquisition funding programs	No
Other (for example, Clean Water Act 319 Grants [Nonpoint Source Pollution])	-

Education and Outreach Capability

The table below summarizes the education and outreach resources available to the City of Beasley.

Table 9.3-6. Education and Outreach Capabilities

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	No	-
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	City posts news on the main page of their website.
Social media for hazard mitigation education and outreach	No	-
Citizen boards or commissions that address issues related to hazard mitigation	No	-
Warning systems for hazard events	Yes	-
Natural disaster/safety programs in place for schools	No	-
Does the jurisdiction have any public outreach mechanisms / programs in place to inform citizens on natural hazards, risk, and ways to protect themselves during such events? • If yes, please describe.	No	-

Community Classifications

The table below summarizes classifications for community programs available to the City of Beasley.

Table 9.3-7. Community Classifications

Program	Participating? (Yes/No)	Classification (if applicable)	Date Classified (if applicable)
Community Rating System (CRS)	No	-	-
Building Code Effectiveness Grading Schedule (BCEGS)	No	-	-
Public Protection (ISO Fire Protection Classes 1 to 10)	No	-	-
Storm Ready Certification	No	-	-
Firewise Communities classification	No	-	-
Other	-	-	-

Adaptive Capacity

Adaptive capacity is defined as “the ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or respond to consequences” (IPCC 2014). Each

jurisdiction has a unique combination of capabilities to adjust to, protect from, and withstand a future hazard event, future conditions, and changing risk. The table below summarizes the adaptive capacity for each identified hazard of concern and the jurisdiction's capability to address related actions using the following classifications:

- Strong: Capacity exists and is in use.
- Moderate: Capacity might exist; but is not used or could use some improvement.
- Weak: Capacity does not exist or could use substantial improvement.

Table 9.3-8. Adaptive Capacity

Hazard	Adaptive Capacity – Strong/Moderate/Weak
Dam/Levee Failure	Weak
Disease Outbreak	Moderate
Drought	Moderate
Extreme Temperature	Moderate
Flood	Weak
Geologic Hazards	Weak
Hurricane/Tropical Storm	Moderate
Severe Weather	Moderate
Tornado	Moderate
Wildfire	Moderate
Winter Weather	Moderate

9.3.4 National Flood Insurance Program (NFIP) Compliance

This section provides specific information on the management and regulation of the regulatory floodplain, including current and future compliance with the NFIP. The Floodplain Administrator is responsible for maintaining this information and is listed in the Hazard Mitigation Planning Team table at the beginning of this annex.

NFIP Summary

The following table summarizes the NFIP statistics for the City of Beasley.

Table 9.3-9. NFIP Summary

Municipality	Policies in Force[a]	Number of Paid Claims[a]	Amount of Paid Claims[a]	Number of NFIP RL Properties[b]	Number of NFIP SRL Properties[b]
Beasley (C)	9	0	None Documented	0	0

Sources: a BureauNet 2022 (https://nfipservices.floodsmart.gov/reports-flood-insurance-data)
b 2018 Fort Bend County HMP

Notes: Due to a contractual agreement with FEMA, detailed information at the municipal level was not available to incorporate into the 2023 HMP Update. The information presented here was collected from data provided by the State of Texas and from FEMA's HUDEX Report.

**Number of RL and SRL properties provided by the State of Texas*

***Total policies in force and paid claims collected from FEMA's OpenFEMA Dataset: FIMA NFIP Redacted Claims*

RL Repetitive Loss

SRL Severe Repetitive Loss

Flood Vulnerability Summary

The following table provides a summary of the NFIP program in the City of Beasley.

Table 9.3-10. NFIP Summary

NFIP Topic	Comments
Flood Vulnerability Summary	
Describe areas prone to flooding in your jurisdiction. • Do you maintain a list of properties that have been damaged by flooding?	The City has no homes that have flooded.
• Do you maintain a list of property owners interested in flood mitigation? • How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?	City does not maintain a list.
Are any RiskMAP projects currently underway in your jurisdiction? • If so, state what projects are underway.	N/A
• How do you make Substantial Damage determinations? • How many were declared for recent flood events in your jurisdiction?	The City does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The City is in need of a formal process and plan to provide a framework for conducting such inspections and determinations. No SD declarations for recent flood events.
How many properties have been mitigated (elevation or acquisition) in your jurisdiction? • If there are mitigated properties, how were the projects funded?	N/A
Do your flood hazard maps adequately address the flood risk within your jurisdiction? • If not, state why.	N/A
NFIP Compliance	
What local department is responsible for floodplain management?	Emergency Management Director
Are any certified floodplain managers on staff in your jurisdiction?	N/A
Do you have access to resources to determine possible future flooding conditions from climate change?	No
Does your floodplain management staff need any assistance or training to support its floodplain management program? • If so, what type of assistance/training is needed?	N/A
Provide an explanation of NFIP administration services you provide (e.g. permit review, GIS, education/outreach, inspections, engineering capability)	N/A
How do you determine if proposed development on an existing structure would qualify as a substantial improvement?	N/A
What are the barriers to running an effective NFIP program in the community, if any?	Funding and Staffing
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? • If so, state the violations.	N/A
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	N/A
• What is the local law number or municipal code of your flood damage prevention ordinance?	Ordinance Amendment – 2014-3, Last amended March 18th, 2014

NFIP Topic	Comments
• What is the date that your flood damage prevention ordinance was last amended?	
Does your floodplain management program meet or exceed minimum requirements? • If exceeds, in what ways?	Meets the minimum requirements
Are there other local ordinances, plans or programs (e.g. site plan review) that support floodplain management and meeting the NFIP requirements? For instance, does the planning board or zoning board consider efforts to reduce flood risk when reviewing variances such as height restrictions?	N/A
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	No

9.3.5 Growth/Development Trends

Understanding how past, current, and projected development patterns have or are likely to increase or decrease risk in hazard areas is a key component to appreciating a jurisdiction's overall risk to its hazards of concern. The table below summarizes recent and expected future development trends, including major residential/commercial development and major infrastructure development.

Table 9.3-11. Number of Building Permits for New Construction

Type of Development	2018		2019		2020		2021		2022	
Number of Building Permits for New Construction Issued Since the previous HMP* (total/within regulatory floodplain)										
	Total	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**	**Total**	**Within SFHA**
Single-Family	1	0	0	0	3	0	11	0	30	0
Multi-Family	0	0	0	0	0	0	0	0	0	0
Other (commercial, mixed-use, etc.)	3	0	2	0	6	0	1	0	5	0
Total Permits Issued	4	0	2	0	9	0	12	0	35	0

SFHA Special Flood Hazard Area (1% annual chance flood event)

** Only location-specific hazard zones or vulnerabilities identified.*

Table 9.3-12. Recent and Expected Future Development

Property or Development Name	Type (e.g. Res., Comm.)	# of Units / Structures	Address and Parcel ID	Known Hazard Zone(s)	Description/Status of Development
Recent Major Development from 2018 to Present					
None Identified					
Known or Anticipated Major Development in the Next Five (5) Years					
None Identified					

9.3.6 Jurisdictional Risk Assessment

The hazard profiles in Volume 1, Section 4 (Risk Assessment) provide detailed information regarding each plan participant's vulnerability to the identified hazards. Section 4.1 (Methodology and Tools) and Section 4.4

(Hazard Ranking) provide detailed summaries for the City of Beasley's risk assessment results and data used to determine the hazard ranking discussed later in this section.

Hazard area extent and location maps provided below illustrate the probable areas impacted within the jurisdiction based on the best available data at the time of the preparation of this plan and are adequate for planning purposes. Maps were generated only for those hazards that can be identified clearly using mapping techniques and technologies and for which the City of Beasley has significant exposure. The maps also show the location of potential new development, where available.

Figure 9.3-1. City of Beasley Hazard Area Extent and Location Map-Dam Inundation

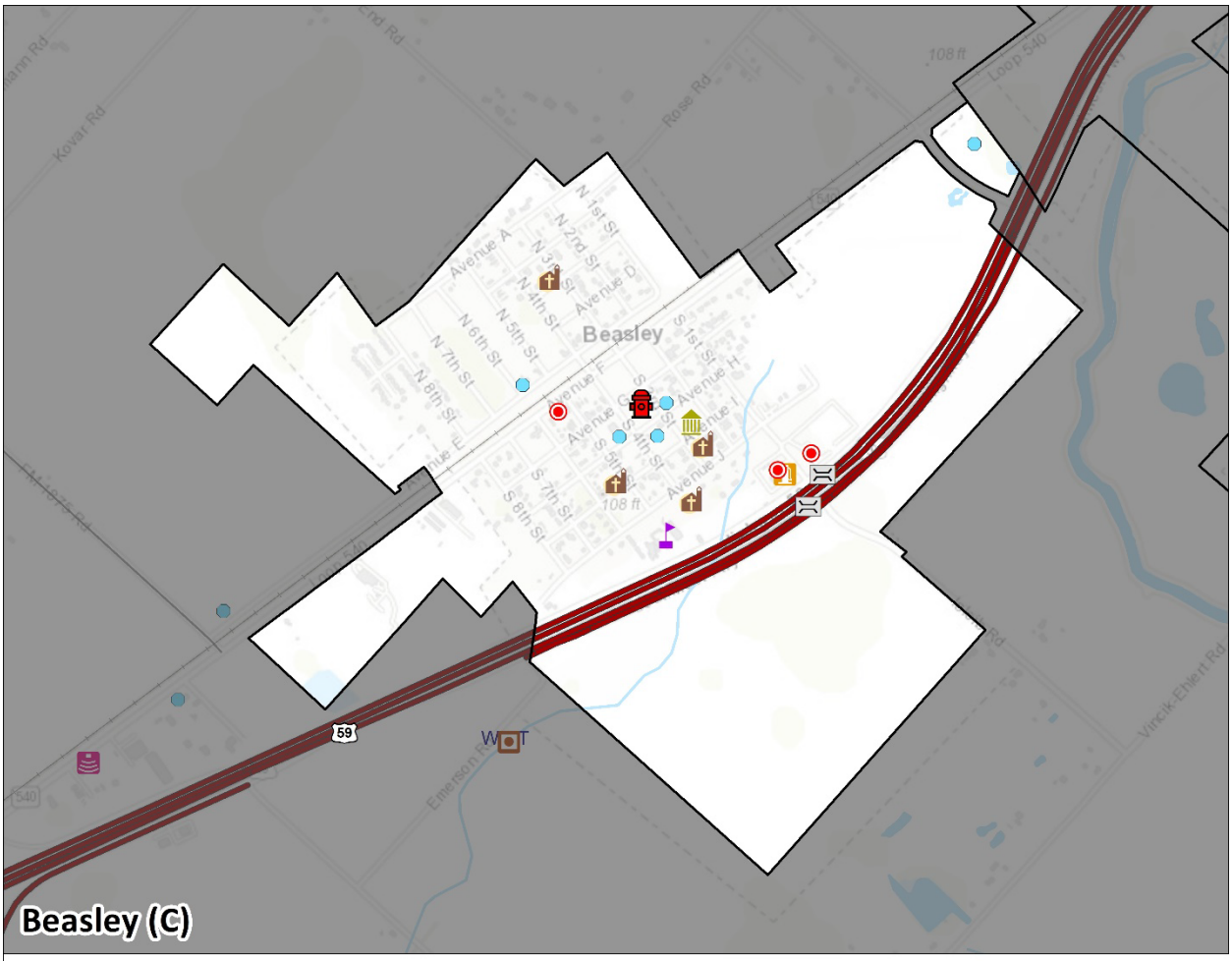


Figure 9.3-2. City of Beasley Hazard Area Extent and Location Map-Expansive Soils

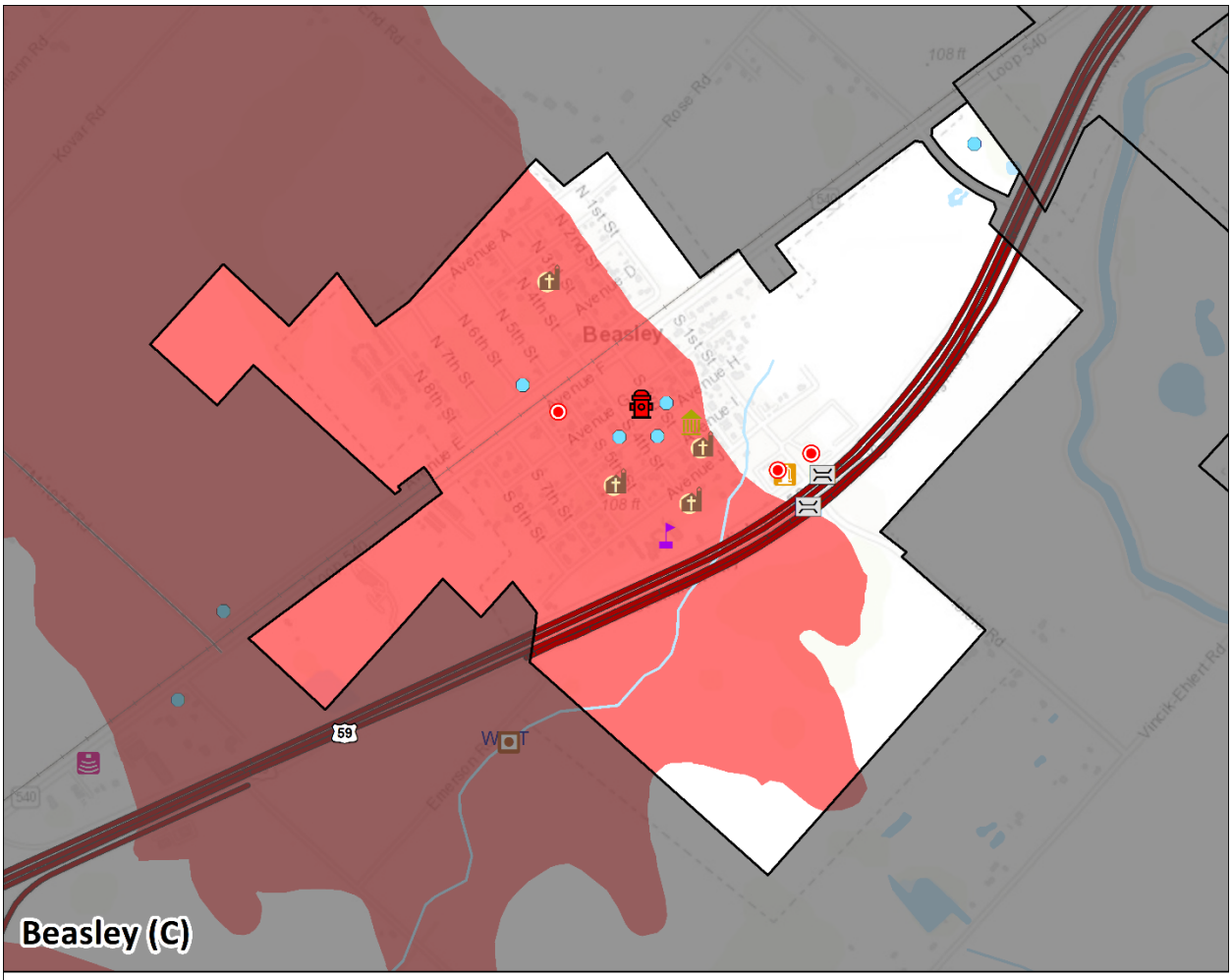


Figure 9.3-3. City of Beasley Hazard Area Extent and Location Map-Flood

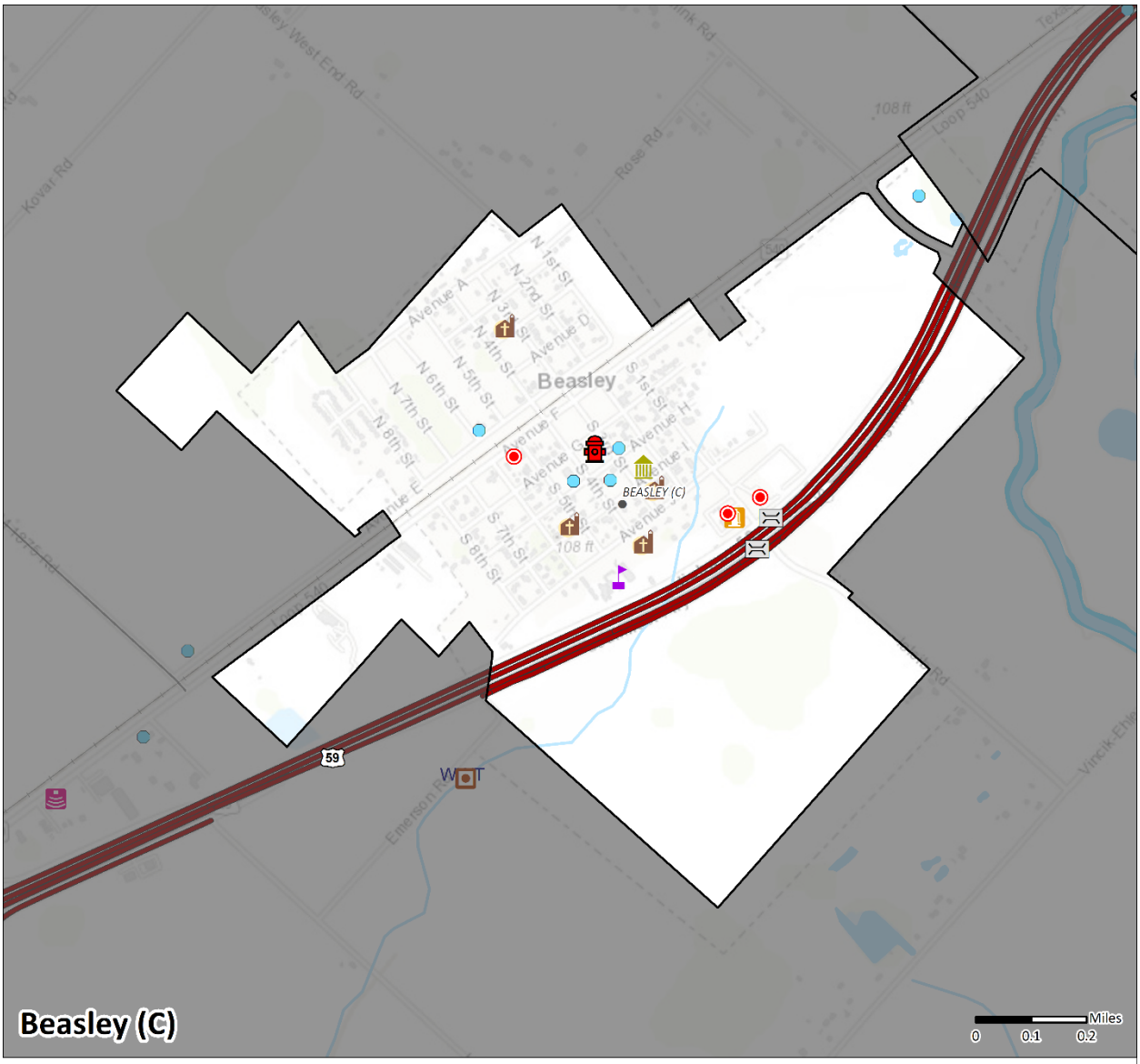


Figure 9.3-4. City of Beasley Hazard Area Extent and Location Map-Inland Erosion

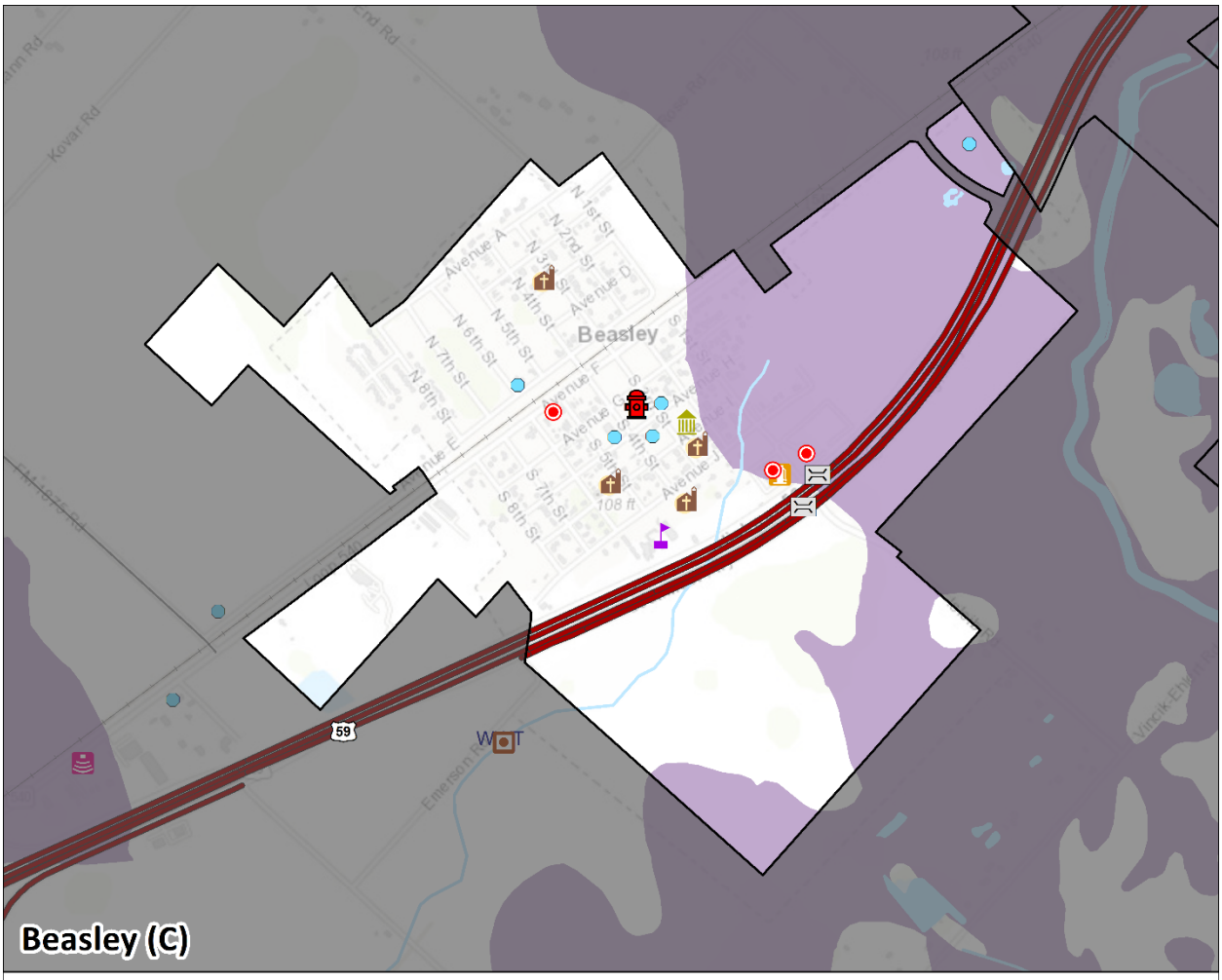
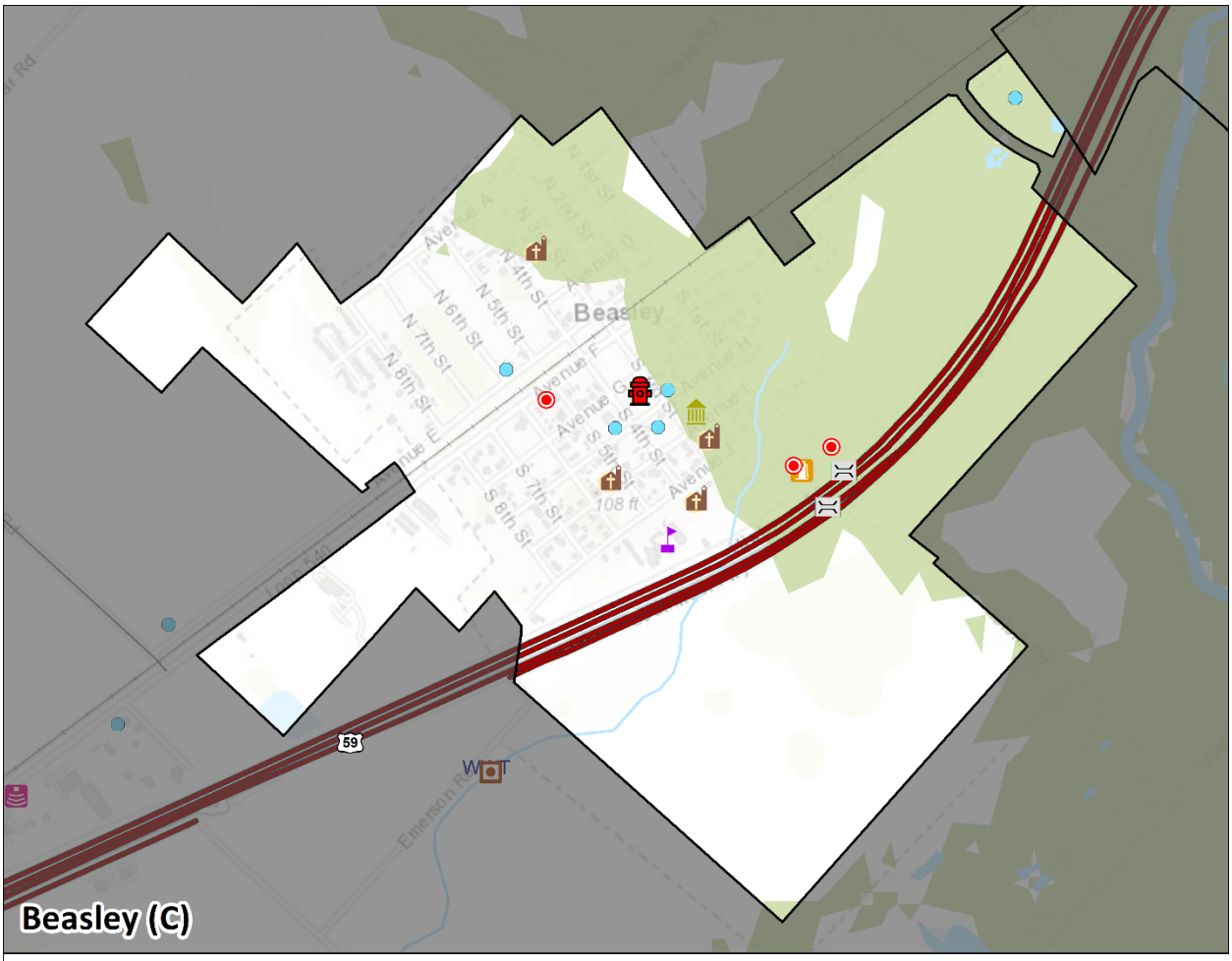


Figure 9.3-5. City of Beasley Hazard Area Extent and Location Map-Wildfire



- Airport
- Alternative/Specialized Education
- Bridge
- Bus Station
- Cellular Transmission
- Church
- Community Center
- Correctional Facility
- Dam
- EMS Station
- EOC
- Electric Power
- Fire Station
- Gas Station
- Government Office
- Hazardous Materials
- Hospital
- Library
- Major Employer
- Medical Clinic
- Municipal Hall
- Museum
- Outfall
- Petroleum Storage Tank
- Pharmacy
- Police Station
- Post-Secondary Education
- Potable Water Facility
- Potable Water Pump Station
- Potable Water Tank
- Potable Water Tower
- Potable Water Well
- Primary Education
- Private Water Well
- Public Water Well
- Public Works
- Radio Broadcast
- Secondary Education
- Senior Care
- Stormwater Pump Station
- TV Broadcast
- Urgent Care
- Wastewater Lift Station
- WWT Wastewater Treatment Plant
- Water Treatment Facility
- County Boundary
- Interstate
- U.S. Highway
- State Highway
- Toll Road
- County Road
- Railroad
- Waterbody

Wildfire Hazard Area

- Low Threat
- Moderate Threat

Miles
0 0.1 0.2

Data Sources: U.S. Geological Survey, National Geospatial Program 2022; Texas Department of Transportation 2022; Texas A&M Forest Service 2022

Notes: City (C), Township (T), Village (V)

Hazard Event History

Fort Bend County has a history of natural and non-natural hazard events, as detailed in Volume I, Section 4 (Risk Assessment). A summary of historical events is provided in each of the hazard profiles and includes a chronology of events that have affected the County and its municipalities.

The City of Beasley's history of federally declared (as presented by FEMA) and significant hazard events [as presented in NOAA-National Centers for Environmental Information (NCEI)] is consistent with that of the County. The table below provides details regarding municipal-specific loss and damages the City of Beasley experienced during hazard events since the last HMP update. Information provided in the table below is based on reference material or local sources.

Table 9.3-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
01/20/2020 – continuing	EM-3458 – Covid-19; DR-4485 – Covid-19 Pandemic	Yes	COVID-19	The City experienced damages equivalent to the County level.
July 25-31, 2020	EM-3530 – Hurricane Hanna	Yes	Hurricane-force winds resulted in significant number of downed trees and utility lines.	The City experienced damages equivalent to the County level.
August 23-27, 2020	EM-3540 – Tropical Storms Marco and Laura	Yes	Fort Bend County activated their emergency operations center as fringe impacts of Tropical Storms Marco and Laura impacted the County.	The City experienced damages equivalent to the County level.
September 12-18, 2021	EM-3572 Hurricane Nicholas	No	Hurricane Nicholas produced several hours of tropical storm-force sustained winds and gusts. There were numerous power outages and minor to moderate damage to some structures and roofs. Trees down in areas.	Minor wind damage, down fences and trees and limbs, and minor power outages.
February 11-21, 2021	DR-4586; EM 3554 – Severe Winter Storms	Yes	Winter Storm Uri distributed a record amount of snow throughout Texas. Snow, ice, and ultra-low temperatures caused widespread road closures.	Loss of power for 2 days, loss of water for 2 days, multiple residents as well as City Hall had property damage to structures due to busted pipes.

Source: FEMA 2023; NOAA 2023

Hazard Ranking and Vulnerabilities

The hazard profiles in Volume 1, Section 4 (Risk Assessment) have detailed information regarding each plan participant's vulnerability to the identified hazards. The following summarizes the City of Beasley's risk assessment results and data used to determine the hazard ranking.

Hazard Ranking

This section provides the community specific identification of the primary hazard concerns based on identified problems, impacts and the results of the risk assessment as presented in Volume 1, Section 4 (Risk Assessment). The ranking process involves an assessment of the likelihood of occurrence for each hazard; the potential impacts of the hazard on people, property, and the economy; and community capabilities to address the hazard

and changing future climate conditions. Mitigation action development uses the inputs from the evaluation to target those hazards with highest level of concern.

As discussed in Volume 1, Section 4.4 (Hazard Ranking), each participating jurisdiction has differing degrees of risk exposure and vulnerability compared with the County as a whole. Therefore, each municipality ranked the degree of risk to each hazard as it pertains to their community. The table below summarizes the hazard risk/vulnerability rankings of potential natural hazards for the City of Beasley. The City of Beasley reviewed the County hazard risk/vulnerability risk ranking table and individual results to reflect the relative risk of the hazards of concern to the community.

During the review of the hazard/vulnerability risk ranking, the City of Beasley indicated the following:

- The City changed the wildfire hazard ranking from low to high due to lots of farmland that the fire department has to respond to yearly.
- The City changed the winter weather hazard ranking from low to medium due to more frequent outages from freezing.

Table 9.3-14. Hazard Ranking Input

Hazard	Rankings
Dam/Levee Failure	**Low**
Disease Outbreak	**Low**
Drought	**Medium**
Extreme Temperature	**Medium**
Flood	**Low**
Geologic Hazards	**High**
Hurricane/Tropical Storm	**Medium**
Severe Weather	**High**
Tornado	**Medium**
Wildfire	**High**
Winter Weather	**Medium**

Critical Facilities

The table below identifies the number of critical facilities and community lifelines in the community located in hazard areas. The community reviewed the list of facilities and lifelines to determine appropriate mitigation measures for the facilities, where appropriate. Refer to Section 4.3 (Hazard Profiles) for details on the risk assessment and the facilities and lifelines exposed to each hazard of concern.

Table 9.3-15. Potential Flood Losses to Critical Facilities

Jurisdiction	1-Percent Annual Chance Flood Event Hazard Area		Wildfire Hazard Area – Moderate Risk		Inland Erosion (K-Factor: >= 0.49) Hazard Area		Expansive Soils (Linear Extensibility >6%) Hazard Area		Dam Inundation Hazard Area - Barker Reservoir Dam Inundation Area		Dam Inundation Hazard Area - Lake Sommerville Dam Inundation Area		**Dam Inundation Hazard Area - Kitty Hollow Dam Inundation Area**	
	Critical Facilities	**Lifelines**	**Critical Facilities**	**Lifelines**	**Critical Facilities**	**Lifelines**	**Critical Facilities**	**Lifelines**	**Critical Facilities**	**Lifelines**	**Critical Facilities**	**Lifelines**	**Critical Facilities**	**Lifelines**
Beasley (C)	0	0	0	0	5	5	12	8	0	0	0	0	0	0

Source: Fort Bend County; Hazus v5.1; FEMA 2022; Fort Bend Drainage District 2023

Identified Issues

After review of the City of Beasley's hazard event history, hazard rankings, jurisdiction specific vulnerabilities, hazard area extent and location, and current capabilities, the City of Beasley identified the following vulnerabilities within their community:

- City residents are unaware of certain hazard-related issues that may affect them, their properties, or a neighboring property.*
- The City does not currently have a Continuity of Operations Plan to implement in the event a hazard disrupts the City's function.
- The City does not have resources developed to evaluate future conditions of hazards from the effects of climate change, including storm and hazard frequency and intensity.
- The City of Beasley does not have a Debris Management Plan.
- The City does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The City is in need of a formal process and plan to provide a framework for conducting such inspections and determinations.

**This issue was identified as a specific area of concern based on resident response to the Fort Bend County Hazard Mitigation public survey.*

9.3.7 Mitigation Strategy and Prioritization

This section discusses past mitigations actions and status, describes proposed hazard mitigation initiatives, and prioritizes actions to address over the next five years.

Past Mitigation Initiative Status

The following table indicates progress on the community's mitigation strategy identified in the 2018 HMP. Actions that are in progress are carried forward and combined with new actions as part of this 2023 HMP update and are included in the tables with prioritization. Previous actions that are now ongoing programs and capabilities are indicated as such and previously presented in the Capability Assessment earlier in this annex.

Table 9.3-16. Status of Previous Mitigation Actions

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Install an emergency generator to provide back-up electrical power to City Hall to ensure continuity of government operations and to also provide temporary sheltering for vulnerable populations in the City.	City of Beasley Mayor's Office	In Progress	Yes	The City of Beasley's City Hall does not have back-up electrical power to ensure continuity of government operations.	City of Beasley Mayor's Office
Obtain grant to purchase and install generator to provide emergency power during emergency situations.	Beasley Volunteer Fire Department	Completed by the City of Beasley Mayor's Office	No	-	-
Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of Flood insurance through the National Flood Insurance Program (NFIP).	Beasley City Secretary	Ongoing	No	-	-
Increase public education of mitigation techniques.	Beasley City Secretary	Ongoing	No	-	-
Ensure that the City has adequate evacuation plans and notification procedures in place.	Beasley Volunteer Fire Department	Ongoing	No	-	-
Conduct study to determine and map potential wildfire hazard areas.	Beasley Volunteer Fire Department	No Progress	No	-	-
Develop drought contingency plan through contact with State agencies.	Beasley Mayor's office with the support of Fort Bend County Fire Marshall's Office and Emergency Management	Ongoing	No	-	-
Public information campaigns.	Beasley City Secretary	Ongoing	No	-	-
Evaluate the risks presented by excessive heat and humidity, especially in terms of high-risk populations such as the elderly/low-income.	Beasley City Secretary	Ongoing	No	-	-
In cooperation with County and State officials, ensure that high-risk populations are adequately addressed in response plans that are related to excessive heat risks.	Beasley City Secretary	Ongoing	No	-	-

Project	Responsible Party	What is the status? (e.g., In Progress, No Progress, Ongoing Capability, or Completed) If in progress or completed, please describe the funding source, cost and who is implementing.	If you did not complete the action, should the action be included in the 2023 HMP (i.e., there is still a need, this is still a priority)?		
			Yes/No	If Yes, please describe the original problem (i.e., hazard, location, historic losses)	If Yes, identify the responsible department/person to implement the project.
Review plans and resources to address risk posed by snow and ice hazards during winter storms.	Beasley Volunteer Fire Department	Ongoing	No	-	-
Various mitigation actions to reduce wildfire risk.	Beasley Volunteer Fire Department	Ongoing	No	-	-
Based on the results of the study above, initiate upgrades to at-risk structures and/ or infrastructure. Mitigates specific risks to structures, people and operations.	Beasley Mayor's Office with Support of Contracted Engineers	Ongoing	No	-	-
Complete a detailed structural/engineering survey of Beasley public facilities to ensure their soundness with respect to resisting the effects of high winds, extreme roof loading from snow or ice, and hail. Forms basis of decisions about any additional actions to mitigate risk.	Beasley Mayor's Office with Support of Contracted Engineers	Ongoing	No	-	-
Require road construction to use techniques to include a higher level of soil compaction to help mitigate against expansive soils.	Beasley Mayor's Office	Ongoing	No	-	-
Class for homeowners that provide them with do-it-yourself options for performing mitigation in their own homes.	Beasley City Secretary	No Progress	Yes	City residents are unaware of certain hazard-related issues that may affect them, their properties, or a neighboring property.	City

Additional Mitigation Efforts

In addition to the mitigation initiatives completed in the table above, the City of Beasley identified the following mitigation efforts completed since the last HMP:

- None were identified.

Since the adoption of the County's first HMP, the City of Beasley has made significant mitigation progress in the following areas:

- None were identified.

Proposed Hazard Mitigation Initiatives for the HMP Update

Fort Bend County participated in a mitigation action workshop in March 2023 and was provided the following FEMA publications to use as a resource as part of their comprehensive review of all possible activities and mitigation measures to address their hazards: FEMA Mitigation Ideas – A Resource for Reducing Risk to Natural Hazards (January 2013) and FEMA Mitigation Assistance Resource Guide for Texas (2020).

The table below indicates the range of proposed mitigation action categories. Both the four FEMA mitigation action categories and the six CRS mitigation action categories are listed in the table to further demonstrate the wide-range of activities and mitigation measures selected.

Table 9.3-17. Analysis of Mitigation Actions by Hazard and Category

Hazard	FEMA				CRS					
	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES
Dam/Levee Failure	X	-	-	X	X	X	X	-	-	X
Disease Outbreak	X	-	-	X	X	X	X	-	-	X
Drought	X	-	-	X	X	X	X	-	-	X
Extreme Temperature	X	-	-	X	X	X	X	-	-	X
Flood	X	-	-	X	X	X	X	-	-	X
Geologic Hazards	X	-	-	X	X	X	X	-	-	X
Hurricane/Tropical Storm	X	-	-	X	X	X	X	-	-	X
Severe Weather	X	-	-	X	X	X	X	-	-	X
Tornado	X	-	-	X	X	X	X	-	-	X
Wildfire	X	-	-	X	X	X	X	-	-	X
Winter Weather	X	-	-	X	X	X	X	-	-	X

Note: Mitigation categories are described below the Mitigation Initiatives.

The table below summarizes the specific mitigation initiatives the City of Beasley would like to pursue in the future to reduce the effects of hazards. The initiatives are dependent upon available funding (grants and local match availability) and may be modified or omitted at any time based on the occurrence of new hazard events and changes in municipal priorities.

Table 9.3-18. Proposed Hazard Mitigation Initiatives

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Beasley-001	Mitigation Education	**Problem:** City residents are unaware of certain hazard-related issues that may affect them, their properties, or a neighboring property. **Solution:** The City will provide classes for home/business owners that provides them with do-it-yourself options for performing mitigation measures for the hazards of concern in their own homes and properties. The City will schedule these classes on their website and will record and post the classes online.	Dam/Levee Failure, Disease Outbreak, Drought, Extreme Temperature, Flood, Geologic Hazards, Hurricane/Tropical Storm, Severe Weather, Tornado, Wildfire, Winter Weather	1	1 Year	City	City Budget	City residents will be more knowledgeable about hazards that affect their properties.	Low	High	EAP	PI, PP, PR
2023-City of Beasley-002	Develop a Continuity of Operations Plan	**Problem**: The City does not currently have a Continuity of Operations Plan to implement in the event a hazard disrupts the City's function. **Solution**: The City will develop a Continuity of Operations Plan and integrate the current HMP p Plan covers all the City's hazards of concern. The plan will assist the City in being able to continue critical and essential functions during and after a disaster.	Dam/Levee Failure, Disease Outbreak, Drought, Extreme Temperature, Flood, Geologic Hazards, Hurricane/Tropical Storm, Severe Weather, Tornado, Wildfire, Winter Weather	2	1 Year	City Planning Department	City Budget	Ensures the City can perform essential functions during and after a hazard event.	$5,000	High	LPR	ES
2023-City of Beasley-003	Future Conditions Resources	**Problem:** The City does not have resources developed to evaluate future conditions of hazards from the effects of climate change, including storm and hazard frequency and intensity.	Dam/Levee Failure, Disease Outbreak, Drought,	1,2	3 Years	City, County, and FEMA	BRIC, HMGP, FMA, County, City	The City will be better equipped to handle hazards that have been	$25,000	High	LPR	PR

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
		Solution: The City will work with FEMA and the County to develop future condition maps and resources so that the City may keep plans and regulations up to code with projected conditions of population and building stock exposed to increasing hazard events.	Extreme Temperature, Flood, Geologic Hazards, Hurricane/Tropical Storm, Severe Weather, Tornado, Wildfire, Winter Weather					intensified due to Climate Change.				
2023-City of Beasley-004	Debris Management Plan	**Problem:** The City of Beasley does not have a Debris Management Plan. **Solution:** The City will develop a Debris Management Plan.	Dam/Levee Failure, Disease Outbreak, Drought, Extreme Temperature, Flood, Geologic Hazards, Hurricane/Tropical Storm, Severe Weather, Tornado, Wildfire, Winter Weather	1, 2	1 Year	Public Works	City Budget	Increased disaster response capabilities	$3,000	High	LPR	ES
2023-City of Beasley-005	City Hall Back-Up Power	**Problem:** The City of Beasley's City Hall does not have back-up electrical power to ensure continuity of government operations. **Solution:** Install an emergency generator to provide back-up electrical power to City Hall to ensure continuity of government operations and to also provide temporary sheltering for vulnerable populations in the City.	Dam/Levee Failure, Disease Outbreak, Drought, Extreme Temperature, Flood, Geologic Hazards, Hurricane/Tropical Storm, Severe Weather, Tornado, Wildfire, Winter Weather	2, 3, 5	3 years	City of Beasley Mayor's Office	City Budget, FEMA HMGP	Ensure continued governmental operations during times of an emergency and will provide temporary sheltering to vulnerable populations when needed.	$75,000	High	SIP	ES

Project Number	Mitigation Initiative Name	Description of Problem and Solution	Hazard(s) to be Mitigated	Goals Met	Estimated Timeline	Lead and Support Agencies	Potential Funding Sources	Estimated Benefits	Estimated Costs	Priority	Mitigation Category	CRS Category
2023-City of Beasley-006	Substantial Damage Management Plan	**Problem:** The City does not have a Substantial Damage Management Plan in place, nor do they have a formal process in place when conducting substantial damage determinations. The City is in need of a formal process and plan to provide a framework for conducting such inspections and determinations. **Solution:** The City will develop a Substantial Damage Management Plan, following the six-step planning process in 2021 Developing a Substantial Damage Management Plan (https://crsresources.org/files/500/developing_subst_damge_mgmt_plan.pdf). This plan will outline responsibilities for Substantial Damage determinations, determining market value, and permit approval processes following a disaster event.	Dam/Levee Failure, Drought, Extreme Temperature, Flood, Geologic Hazards, Hurricane/Tropical Storm, Severe Weather, Tornado, Wildfire, Winter Weather	2, 4	Within 5 years to develop the plan; ongoing to maintain and update the plan	Floodplain Administrator, Public Works, OEM, Construction Department	City Budget	This plan will provide a process in making Substantial Damage Determinations and allow the municipality to make these determinations and meet NFIP requirements more quickly.	< $5,000	High	LPR	ES, PR

**Mitigation initiative is related to a critical facility and/or community lifeline*

Notes: Not all acronyms and abbreviations defined below are included in the table.

Acronyms and Abbreviations:

CRS	*Community Rating System*
FEMA	*Federal Emergency Management Agency*
HMA	*Hazard Mitigation Assistance*
N/A	*Not applicable*
NFIP	*National Flood Insurance Program*

Potential FEMA HMA Funding Sources:

FMA	*Flood Mitigation Assistance Grant Program*
HMGP	*Hazard Mitigation Grant Program*
BRIC	*Building Resilient Infrastructure and Communities Program*

Timeline:

The time required for completion of the project upon implementation.

Cost:

The estimated cost for implementation.

Benefits:

A description of the estimated benefits, either quantitative and/or qualitative.

Mitigation Category:

- *Local Plans and Regulations (LPR)—These actions include government authorities, policies or codes that influence the way land and buildings are being developed and built.*
- *Structure and Infrastructure Project (SIP)—These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area. This could apply to public or private structures, as well as critical facilities and infrastructure. This type of action also involves projects to construct manmade structures to reduce the impact of hazards.*
- *Natural Systems Protection (NSP)—These are actions that minimize damage and losses, and also preserve or restore the functions of natural systems.*
- *Education and Awareness Programs (EAP)—These are actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. These actions may also include participation in national programs, such as StormReady and Firewise Communities.*

CRS Category:

- *Preventative Measures (PR)—Government, administrative or regulatory actions, or processes that influence the way land and buildings are developed and built. Examples include planning and zoning, floodplain local laws, capital improvement programs, open space preservation, and storm water management regulations.*
- *Property Protection (PP)—These actions include public activities to reduce hazard losses or actions that involve (1) modification of existing buildings or structures to protect them from a hazard or (2) removal of the structures from the hazard area. Examples include acquisition, elevation, relocation, structural retrofits, storm shutters, and shatter-resistant glass.*

- *Public Information (PI)—Actions to inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them. Such actions include outreach projects, real estate disclosure, hazard information centers, and educational programs for school-age children and adults.*
- *Natural Resource Protection (NR)—Actions that minimize hazard loss and also preserve or restore the functions of natural systems. These actions include sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.*
- *Structural Flood Control Projects (SP)—Actions that involve the construction of structures to reduce the impact of a hazard. Such structures include dams, setback levees, floodwalls, retaining walls, and safe rooms.*
- *Emergency Services (ES)—Actions that protect people and property during and immediately following a disaster or hazard event. Services include warning systems, emergency response services, and the protection of essential facilities.*

The prioritization criteria provided in Volume 1, Section 6 (Mitigation Strategy) identify 14 evaluation/prioritization criteria to complete the prioritization of mitigation initiatives. For each new mitigation action, a numeric rank is assigned (-1, 0, or 1) for each of the 14 evaluation criteria to assist with prioritizing actions as High, Medium, or Low. The table below provides a summary of the prioritization of all proposed mitigation initiatives for the HMP update.

Table 9.3-19. Summary of Prioritization of Actions

Project Number	Project Name	Life Safety	Property Protection	Cost-Effectiveness	Technical	Political	Legal	Fiscal	Environmental	Social	Administrative	Multi-Hazard	Timeline	Agency Champion	Other Community Objectives	Total	High / Medium / Low
2023-City of Beasley-001	Mitigation Education	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-City of Beasley-002	Develop a Continuity of Operations Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-City of Beasley-003	Future Conditions Resources	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-City of Beasley-004	Debris Management Plan	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-City of Beasley-005	City Hall Back-Up Power	1	1	1	1	1	1	0	0	1	1	1	1	0	0	10	High
2023-City of Beasley-006	Substantial Damage Management Plan	0	1	1	1	1	1	1	0	1	1	1	1	0	0	10	High

Note: Volume 1, Section 6 (Mitigation Strategy) conveys guidance on prioritizing mitigation actions. Low (0-4), Medium (5-8), High (9-14).