

# SECTION 9. JURISDICTIONAL ANNEXES

# 9.5 City of Fulshear

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

## 9.5.1 Hazard Mitigation Planning Team

The City of Fulshear identified 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 Fulshear departments, including the Public Works Director. The Fulshear Police Department 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 9.5-1. Hazard Mitigation Planning Team** 

Pr	imary Po	oint of Contact		Alternate Point of Contact	
Name/Title:	Felix V	argas/Sergeant	Name/Title:	Kenny Seymour/Chief	
Address:		V. Cross Creek Bend Ln ar, TX 77441	Address:	6639 W. Cross Creek Bend Ln Fulshear, TX 77441	
Phone Number:	281-34	6-8822	Phone Number:	281-346-8888	
Email:	fvarga	s@fulsheartexas.gov	Email:	kseymour@fulsheartexas.gov	
NFIP Floodplain Ad	lministra	ator			
Name/Title:	Sharor	Valiante/Public Works Director			
Address:	30603	Rm 1093, Simonton, TX 77476			
Phone Number:	281-34	6-8814			
Email:	svalian	te@fulsheartexas.gov			
Additional Contribu	utors:				
Name/Title:		Sgt. Felix Vargas, Emergency Ma	anagement Coordin	ator	
Method of Participa	ticipation: Answered worksheets and provided input				
Name/Title:		Sharon Valiante, Public Works Director			
Method of Participa	ation:	Answered worksheets and provided input			
Name/Title:		Zach Goodlander, Assistant City	Manager		
Method of Participa	ation:	Answered worksheets and prov	ided input		

<sup>\*</sup>Information received from https://www.texasflood.org/flood-basics/fpa.html





## 9.5.2 Municipal Profile

The City of Fulshear is in northwest Fort Bend County and borders the Weston Lakes and Brazos River. Located 38.1 miles west of Houston, the City of Fulshear is known for its high per capita income and educational attainment. The City of Fulshear has a total area of 8.2 square miles and is a beautiful landscape that ranges from rolling terrain to grassy prairie land and lowlands.

According to the American Community Survey, the 2021 population for the City of Fulshear was 17,259. Data from the 2021 ACS indicates that 4.5 percent of the population is 5 years of age or younger and 7.6 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.

#### 9.5.3 Jurisdictional Capability Assessment and Integration

The City of Fulshear 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 Fulshear 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 Fulshear. The comment field provides information as to how the capability integrates hazard mitigation and risk reduction.

Table 9.5-2. Planning, Legal, and Regulatory Capability and Integration

Codes, Ordinances, & Regulations	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	
Building Code	Yes	International Residential Building Code	Local	Code Enforcement	
How does this reduce risk?  The City of Fulshear adopted the International 2003 Residential Building Code, the International 2003 Fire Code.					



	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
Zoning/Land Use Code	Yes	Zoning Ordinance	Local	Planning and Zoning Commission
How does this reduce risk?				
Subdivision Ordinance	Yes	Article IV – Subdivision Regulations	Local	Planning and Zoning Commission
How does this reduce risk?	1			
alternative to those who want to develop wi environments, minimize adverse effects, and of functional and safe traffic circulation patte pedestrians. Provide access for public safety community and facilitate future development adequately furnished with necessary public s	l become asset: erns, while enco vehicles, relate it. Ensure all su	s to the City's urban and natura ouraging effective economic m the development of various tr	al environment. To environment of vehicates of land to the tend of the tend to	The development cles, bicycles, and ne existing
Site Plan Ordinance	Yes	Division VII-3. — Administrative Applications — Section 28-7-19. Site Plan	Local	Planning and Zoning Commission
How does this reduce risk?  The purpose of a site plan is to ensure that a				
this CDO and, if applicable, with the approve Stormwater Management Ordinance	Yes	Chapter 32 – Streets, Sidewalks, and Other Public Places - Sec. 32-51. – Erosion and stormwater measures	Local	City Council
How does this reduce risk?		measures		
Post-Disaster Recovery/ Reconstruction Ordinance	No	-	-	-
How does this reduce risk?				
Real Estate Disclosure	No	-	-	-
How does this reduce risk?				
Growth Management	Yes	City Comprehensive Plan	Local	Comprehensiv Plan Advisory Committee
How does this reduce risk?  The City of Fulshear Comprehensive Plan add term financial implications for municipal governessed by the specially with regard to tax base balance and the specially with regard to tax base balance and the specially with regard to tax base balance and the special spe	ernment of ong	going growth trends and emerg	ing developmen	t patterns,

The City of Fulshear Comprehensive Plan addresses the growth capacity of the City. The growth capacity focuses on the long-term financial implications for municipal government of ongoing growth trends and emerging development patterns, especially with regard to tax base balance and expansion. The City will continue its partnering approach to coordinated public/private investment in essential mobility and utility infrastructure and in recreational and other community amenities for the benefit of all Fulshear residents. The City will continue to monitor opportunities to weave green spaces and elements into the community's growing and redeveloping areas to meet the need for more parks, trails, and preserved open spaces desired by residents. The City will ensure that land development steers clear of floodplain areas unless there is compliance with stringent floodplain management and low-impact development practices. The City will maintain strong relationships with area school district leadership, recognizing that quality public schools and safe and attractive campuses are essential to community confidence and pride and for continuing to draw new families to the City.





	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
Flood Damage Prevention Ordinance	Yes	Chapter 22 – Floods – Article II. – Flood Damage Prevention	Local	Floodplain Manager

#### How does this reduce risk?

It is the purpose of this ordinance to promote the public health, safety, and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- Protect human life and health
- Minimize expenditure of public money for costly flood control projects
- Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public
- Minimize prolonged business interruptions
- Minimize damage to public facilities and utilities such as water and gas mains; electric, telephone, and sewer lines; and streets and bridges located in floodplains
- Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas

Ensure that potential buyers are notified that property is in a flood area **Wellhead Protection** How does this reduce risk?

Emergency Management Ordinance	Yes	Chapter 12 – Civil Emergencies	Local	Emergency Management Director
How does this reduce risk?				

This plan keeps City staff and emergency operations staff prepared to act in an efficient and effective manner when addressing hazardous situations, thus reducing the impact from the risk.

Climate Change Ordinance	No	-	-	-
How does this reduce risk?				
Other	No	-	-	-
Planning Documents				

Planning Documents				
Comprehensive/Master Plan	Yes	Fulshear Texas Comprehensive Plan	Local	Planning Department

#### How does this reduce risk?

The Fulshear Comprehensive Plan is intended to guide future development, redevelopment, and community enhancement efforts over the next 20 years. It serves as a framework for thoughtful community discussion on the real and perceived challenges currently facing Fulshear and the opportunities that will shape its future. Through long-range planning efforts, the community can accommodate its projected growth and revitalization in a manner that preserves its history, culture, and overall quality of life for current and future residents.

Capital Improvement Plan	Yes	Fulshear Capital	Local	Public Works
	163	Improvement Plan	Local	Fublic Works

#### How does this reduce risk?

The Fulshear Capital Improvement Plan is intended to provide for a comprehensive outlook for capital projects that would qualify and help mitigate drainage hazards in areas of the City that are vulnerable to high levels of inundation. It serves as a foundational tool that is revisited each year to incorporate the recommendations of the City's Master Drainage Plan and to program those improvements that are needed.

Disaster Debris Management Plan	Yes	Fort Bend County	County	Public Works

#### How does this reduce risk?

The City of Fulshear is one of the participants in the Fort Bend County Debris Management Plan. In addition, the City of Fulshear has obtained a contract for emergency debris removal when necessary. In the event Fort Bend County cannot provide debris management, the City is able to provide for debris management in the event of an emergency situation.

Floodplain Management or Watershed	Yes	Fulshoor Managament	Local	Public Works
Plan	res	Fulshear Management	Local	Public Works



How does this reduce risk?  The City of Fulshear's Director of Public Work Each is consistently involved in reviewing and improvement of flood maps and floodplain maps.	d providing fee nanagement cr	dback to Fort Bend County and iteria.	FEMA for develo	ppment and	
Stormwater Management Plan	Yes	Fulshear Inspection	Local	Public Works	
How does this reduce risk?  The City of Fulshear regularly provides and prillicit discharges into waterways and streams that is approved by the City Engineer prior to stormwater run-off is contained during and proper Space Plan	. In addition, ea permitting an	ach development must provide d must implement prior to con	a stormwater m	anagement plan	
How does this reduce risk?					
This plan/Ordinance provides for an increase in the amount of open space as the size of residential lots decrease, thus					
reducing the risk of flooding or inundation from	om extreme ev	ents.			
Urban Water Management Plan	No	-	-	-	
How does this reduce risk?					
Habitat Conservation Plan	No	-	_	-	
How does this reduce risk?	INU	<u>-</u>	<del>-</del>	<u>-</u>	
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  How does this reduce risk?	No	-	-	-	
Agriculture Plan	No	-	-	-	
How does this reduce risk?					
Climate Action/ Resiliency/Sustainability	No	-	-	-	
Plan How does this reduce risk?					
Tourism Plan	No	_	_	_	
How does this reduce risk?	NO			-	
Business/ Downtown Development Plan	Yes	Fulshear Livable Centers Study Plan	Local	Development Services, Economic Development Services, Public Works	



	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
How does this reduce risk?	(105/110/	pian, date or pian,	reactal,	1100 p 0110110110
The Livable Centers Study Plan is a comprehe	ncive nlanning	tool that provides for a busine	ss/downtown de	welcoment
concept. This tool is used in the City's master				
working on three regional drainage projects				
Other	No	linitigation of detention require	ements in the do	wiitowii district.
	NO	-	-	-
Response/Recovery Planning				F
Comprehensive Emergency Management Plan	Yes	Comprehensive Emergency Management Plan	Local	Emergency Management Director
How does this reduce risk?				= 11 00001
A comprehensive emergency management p	lan was develo	ned and maintained. The plan	set forth the form	n of the
organization, establish and designate division				
officers and employees to carry out the prov				
the governor's division of emergency manage				
to the recommendations of the governor's di				~ .
agencies to perform the functions assigned b				
readiness at all times. The emergency manag		supplementary to the emergen	cy management	ordinance and
has the effect of law during the time of a disa				
Continuity of Operations Plan	No	-	-	-
How does this reduce risk?				
Strategic Recovery Planning Report	No	-	-	=
How does this reduce risk?				
Threat & Hazard Identification & Risk	No	-	-	-
Assessment (THIRA)				
How does this reduce risk?				
non does tims reader risk.				
Post-Disaster Recovery Plan	No		_	-
How does this reduce risk?	140			
now does this reduce risk:				
Dublic Heelth Dies	V	The Fout Board County	Carratur	EDITIC
Public Health Plan	Yes	The Fort Bend County	County	FBHHS
		Health and Human Services		
		Department (FBCHHS)		
		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.		
How does this reduce risk?				
How does this reduce risk? FBHHS has plans in place to prevent public he	ealth issues thr	ough regular inspections of reg	gulated facilities a	as well as prepare
FBHHS has plans in place to prevent public he		ough regular inspections of reg	gulated facilities a	as well as prepare
		ough regular inspections of reg	gulated facilities a	as well as prepare

# **Development and Permitting Capability**

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





**Table 9.5-3. 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	Development Services/Public Works
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.)	Yes	The City requires floodplain development permitting.
Do you have a buildable land inventory?  • If yes, please describe	No	
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 Fulshear and their current responsibilities that contribute to hazard mitigation.

**Table 9.5-4. Administrative and Technical Capabilities** 

Resources Administrative Capability	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Planning Board	Yes	The Planning Commission provides the City Council with recommendations regarding City ordinances, commercial building projects, and the development of parks and land planning projects. The Planning Commission is responsible for:  • Making studies and project plans for the improvement of the City with a view to its future development and possible extension so as to ensure orderly growth of the City with equitable interest to both the private and public sectors.  • Act with and assist the City Council in formulating and executing proper plans of municipal development.  • Investigate, consider, and recommend to the City Council prior to approval of same all of the preliminary and final plats of new subdivisions within the City or its extraterritorial jurisdiction and to perform all duties imposed upon City planning and zoning commissions by state statutes.  • Recommend plans to the City Council for improving, developing, expanding, and beautifying the parks, parkways, and waterways in or adjoining the City, and to cooperate with the City Council in developing, establishing, locating, improving, selecting, expanding, and maintaining public parks, parkways, playgrounds and places for public recreation.  • Investigate and consider the issues stemming from possible annexation and disannexation as may be required by City Council.



Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
		<ul> <li>Make recommendations to City Council concerning traffic regulation and control.</li> <li>Generally, investigate, consider, and recommend to the City Council all matters for the development and advancement of the City's physical layout and appearance.</li> <li>Perform such other duties as may from time to time be delegated to the planning and zoning commission by the City Council.</li> <li>The planning commission also act as the City's zoning commission.</li> </ul>
Zoning Board of Adjustment	Yes	See Planning Commission
Planning Department	Yes	The Planning Department is responsible for the following:  Plan and Plat reviews; recommendations to Planning and Zoning, Zoning Board of Adjustments, and Council related to hazard risks and reducing those risks.  Setting policy and standards Damage assessments Building inspections for code compliance Code Enforcement Environmental Health
Mitigation Planning Committee	No	-
Environmental Board/Commission	No	-
Open Space Board/Committee	No	-
Economic Development Commission/Committee	Yes	<ul> <li>Two boards (13 members) – Economic Development Strategic Plan</li> <li>Business/Commercial development</li> <li>Participates in CIP improvement projects related to drainage mitigation</li> <li>Seeks/encourages development with reduced risk hazards</li> </ul>
Public Works/Highway Department	Yes	The City of Fulshear's Public Works Department is responsible for the water distribution, wastewater/sanitary sewer collection and treatment, drainage, streets, public right-of-way, City Traffic Signals, City facilities and parks, Engineering and Capital Improvements, stormwater management, solid waste and metering operations. Over 100 miles of paved streets are continuously maintained, repaired, cleaned, and improved.
Construction/Building/Code Enforcement Department	Yes	The Code Compliance Department maintains Fulshear's status as a clean, livable City by ensuring property complies with rules set by City Council. Code Compliance is responsible for enforcing the City ordinances related to Housing, Signs, Litter, Illegal Dumping, Weeds and Commercial Property.
Emergency Management/Public Safety Department	Yes	Emergency Management is the public coordination of resources in response to a disaster or crisis with the aim of addressing threats to life-safety stemming from natural or human events. The City of Fulshear understands the value of emergency preparedness and coordinates closely with local, state, and federal agencies.
Warning Systems / Services (mass notification system, outdoor warning signals, etc.)	No	-



	A ! -   -   -	6
Resources	Available? (Yes/No)	Comments (available staff, responsibilities, support of hazard mitigation)
Resources	Yes	The Public Works Department staff provide a tree trimming and
Maintenance programs to reduce risk		stormwater management and maintenance program each year .
(stormwater maintenance, tree trimming,		The Department staff mow and maintain roadside ditches, trim
etc.)		right-of-way trees, perform stormwater inspections and routinely monitor creeks and waterways for water levels and debris
		buildup.
	Yes	The City maintains Interlocal Agreements with Fort Bend County
Mutual aid agreements		Road and Bridge and maintains mutual aid for
Human Resources Manual	Yes	hazardous/emergency situations with surrounding communities.
Other	No	-
Technical/Staffing Capability	_	
Planners or engineers with knowledge of	Yes	The City of Fulshear has a Panning Director, a Public Works
land development and land management		Director and a City Engineer routinely review and identify any
practices		land development concerns related to hazard mitigation and/or
'	.,	efforts to reduce natural hazard risks.
Engineers or professionals trained in	Yes	The City of Fulshear has a City Engineer, a Chief Building Official,
building or infrastructure construction practices		and a Director of Public Works that routinely review building and/or infrastructure plans.
'	Yes	Expertise in structural mitigation projects and compliance with
Planners or engineers with an		flood damage prevention ordinance. Attend advanced floodplain
understanding of natural hazards		management training.
Staff with expertise or training in	Yes	City Engineer – when necessary, performs cost-benefit analysis
benefit/cost analysis		for hazard mitigation requirements.
Professionals trained in conducting	Yes	Chief Building Official
damage assessments	.,	
Personnel skilled or trained in GIS and/or Hazards United States (HAZUS) – Multi-	Yes	GIS Specialist
Hazards (MH) applications		
Environmental scientist familiar with	No	-
natural hazards		
Surveyor(s)	No	-
	Yes	Assists with flood-related traffic control and evacuation planning.
Emergency manager		Management of City-level HMP updates. Attend advanced
	N-	floodplain management training.
Grant writer(s)	No	Consider the following:  Are data and maps from the HMP used to support
Grant Writer(s)		documentation in grant applications?
Resilience officer	No	-
Other (this could include stormwater	No	-
engineer, environmental specialist, etc.)		

## How do your administrative/technical capabilities contribute to risk reduction in your community?

The City of Fulshear has dedicated a large number of resources towards projects that will reduce risk in the event of a disaster. This includes a significant investment in drones, ordinances to influence development, major infrastructure projects, acquiring vehicle assets, and much more. The City is committed to a goal of being proactive and preventative with regard to disaster. Should something unfortunate occur, the City, with its resources, desires to be as well placed as it can to respond effectively. As an organization, the City also requires all staff to take four FEMA classes, with supervisory staff required to take additional classes.

## **Fiscal Capability**

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



**Table 9.5-5. Fiscal Capabilities** 

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

**Table 9.5-6. Education and Outreach Capabilities** 

Outreach Resources	Available? (Yes/No)	Comment:
Public information officer or communications office	Yes	IT & Police Department provide a communications officer
Personnel skilled or trained in website development	No	-
Hazard mitigation information available on your website	Yes	Municode and Ordinances
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	Everbridge
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.	Yes	Facebook, Twitter, City Website, Everbridge, Doorknockers,



#### **Community Classifications**

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

**Table 9.5-7. 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	No	-	-

#### **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 9.5-8. Adaptive Capacity** 

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

## 9.5.4 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 Fulshear.

#### **Table 9.5-9. NFIP Summary**

Municipality	Policies in Force	Number of Paid Claims <sup>a</sup>	Amount of Paid Claims <sup>a</sup>	Number of NFIP RL Properties <sup>b</sup>	Number of NFIP SRL Properties <sup>b</sup>
Fulshear (C)	1316	39	\$1,306,218.55	4	N/A

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

RL Repetitive Loss
SRL Severe Repetitive Loss

## **Flood Vulnerability Summary**

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

# Table 9.5-10. 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?  Describe areas prone to flooding in your jurisdiction.  Do you maintain a list of properties that have been damaged by flooding?	The City of Fulshear has an area in the southern boundary of the City limits referred to as the Lower Bois D'Arc area. The area is characterized as a large acreage estate development with two distinct areas, however. The Penn and Lea Ln areas are 2-5 acre lots with shallow roadside ditches that outfall east to a drainage channel that makes its way to Flewellen and Jones Creeks. The other acreage estate areas border Bois D'Arc Road Redbird Lane and are impacted by their roadside ditch capacities that outfall into a shallow creek/slough that makes its way to Bessie's Creek.  The City's Public Works and Building Inspections maintain the listing of properties damaged by flooding.
<ul> <li>Do you maintain a list of property owners interested in flood mitigation?</li> <li>How many homeowners and/or business owners are interested in mitigation (elevation or acquisition)?</li> </ul>	The list of property owners interested in flood mitigation have received assistance from the City to gain mitigation funding.
Are any RiskMAP projects currently underway in your jurisdiction?  • If so, state what projects are underway.	No
<ul> <li>How do you make Substantial Damage determinations?</li> <li>How many were declared for recent flood events in your jurisdiction?</li> </ul>	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?	Elevated = 2; Funded through FEMA

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



NFIP Topic	Comments
<ul> <li>If there are mitigated properties, how were the projects funded?</li> </ul>	
Do your flood hazard maps adequately address the flood risk within your jurisdiction?  • If not, state why.	Yes
NFIP Compliance	
What local department is responsible for floodplain management?	Public Works
Are any certified floodplain managers on staff in your jurisdiction?	Not currently
Do you have access to resources to determine possible future flooding conditions from climate change?	Yes
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?	Yes, City Engineer and Director of Public Works would like to gain certifications as Floodplain Managers.
Provide an explanation of NFIP administration services you provide (e.g., permit review, GIS, education/outreach, inspections, engineering capability)	Permit review, GIS, education/outreach, inspections
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?	Currently we do not have any.
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed?  • If so, state the violations.	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact (CAC)?	
<ul> <li>What is the local law number or municipal code of your flood damage prevention ordinance?</li> <li>What is the date that your flood damage prevention ordinance was last amended?</li> </ul>	N/A
Does your floodplain management program meet or exceed minimum requirements?  • If exceeds, in what ways?	Meets
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?	Yes, the City Engineer performs site plan review. The City's Development Services Department Consolidated Development Ordinance includes height restrictions. The City has a Zoning Board of Adjustments that considers variances.
Does your community plan to join the CRS program or is your community interested in improving your CRS classification?	Yes, sometime in the future

# 9.5.5 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 9.5-11. Number of Building Permits for New Construction

Type of Development	2018	2019	2020	2021	2022		
Development	2010	2013	2020	2021	2022		
Number of Building Permits for New Construction Issued Since the previous HMP* (total/within regulatory floodplain)							



Type of Development	2018		2019		2	020	20	)21	2022		
		Within									
	Total	SFHA									
Single-Family	1201	N/A	1148	N/A	1853	N/A	2378	N/A	2163	N/A	
Multi-Family	0	N/A	2	N/A	2	N/A	2	N/A	1	N/A	
Other (commercial, mixed-use, etc.)	55	N/A	60	N/A	47	N/A	49	N/A	86	N/A	
Total Permits Issued	1256	N/A	1210	N/A	1902	N/A	2429	N/A	2250	N/A	

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

Note: Information for building permits in the SFHA were unavailable for this planning process.

Table 9.5-12. 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 Develop	Recent Major Development from 2018 to Present										
		Nor	e Identified								
Known or Anticipated Major Development in the Next Five (5) Years											
None Identified											

#### 9.5.6 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 Fulshear'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 Fulshear has significant exposure. The maps also show the location of potential new development, where available.

<sup>\*</sup> Only location-specific hazard zones or vulnerabilities identified.



Figure 9.5-1. City of Fulshear Hazard Area Extent and Location Map-Dam Inundation

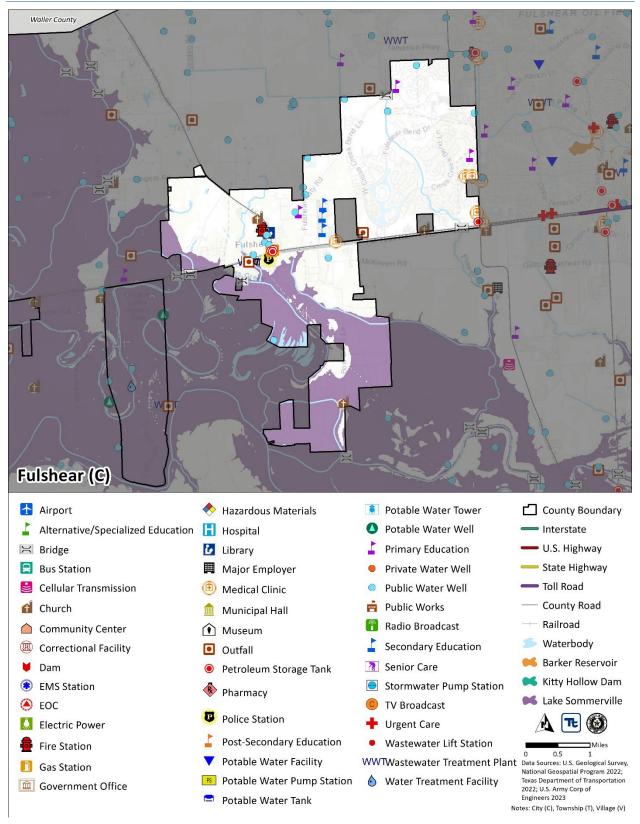




Figure 9.5-2. City of Fulshear Hazard Area Extent and Location Map-Expansive Soils

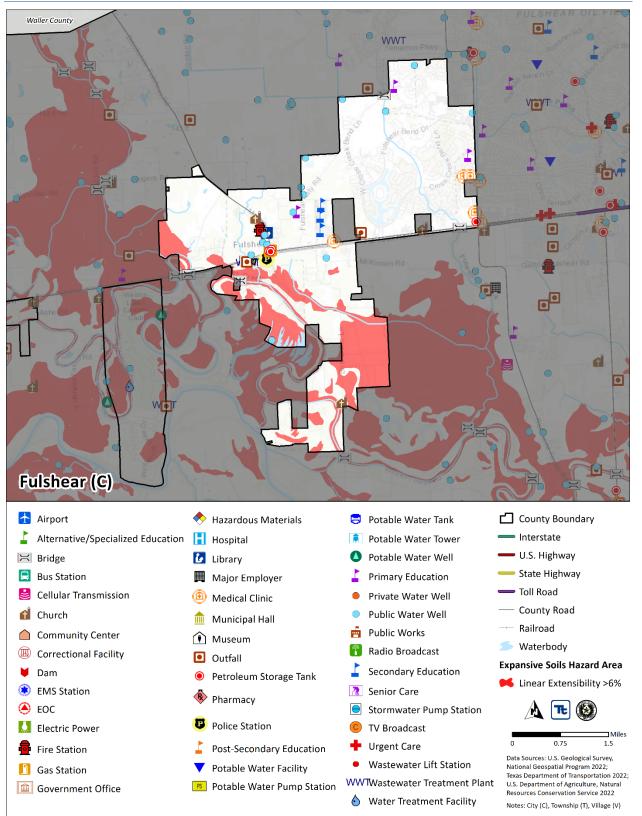




Figure 9.5-3. City of Fulshear Hazard Area Extent and Location Map-Flood

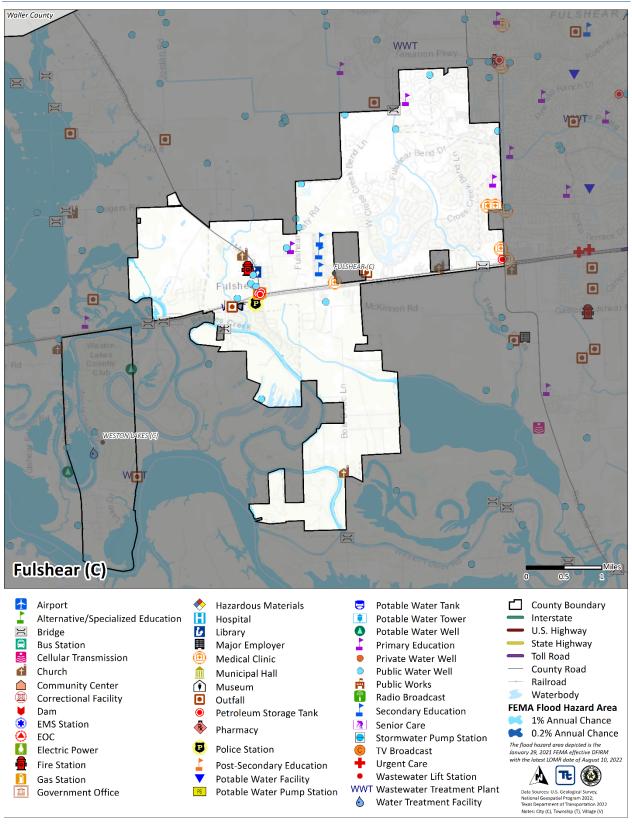




Figure 9.5-4. City of Fulshear Hazard Area Extent and Location Map-Inland Erosion

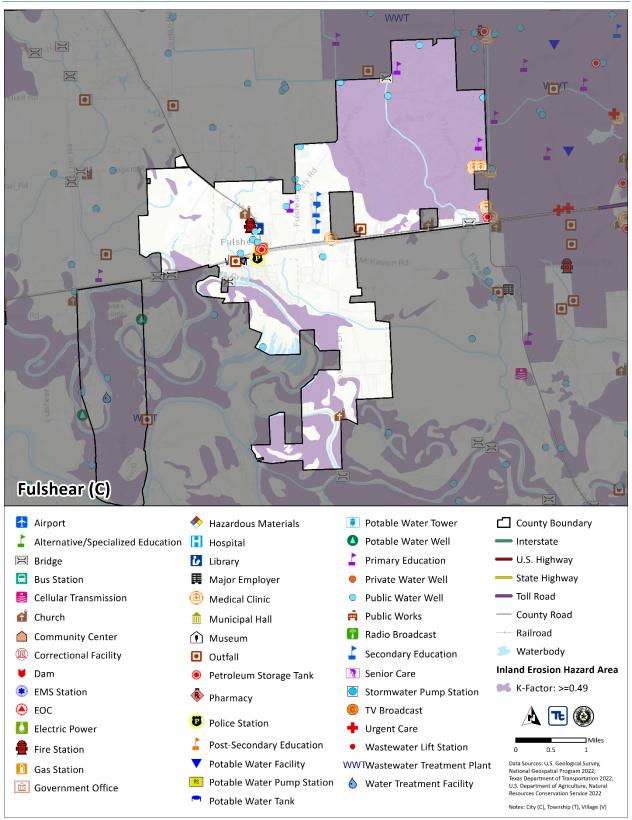
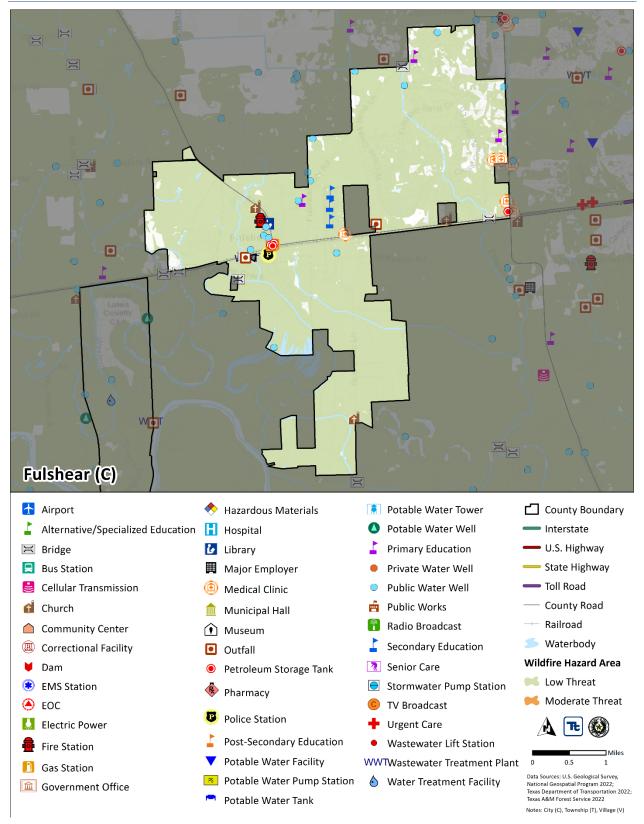




Figure 9.5-5. City of Fulshear Hazard Area Extent and Location Map-Wildfire





#### **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 Fulshear'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 Fulshear experienced during hazard events since the last hazard mitigation plan update. Information provided in the table below is based on reference material or local sources.

Table 9.5-13. Hazard Event History

Dates of Event	Event Type (Disaster Declaration if applicable)	County Designated?	Summary of Event	Municipal Summary of Damages and Losses
January 20, 2020 – continuing	EM-3458 – COVID-19; DR- 4485 – COVID- 19 Pandemic	Yes	COVID-19 pandemic	Employee manpower shortage and Disinfecting requirements
July 25-31, 2020	EM-3530 – Hurricane Hanna	Yes	Hurricane-force winds resulted in significant number of downed trees and utility lines.	None to report
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	
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.	None to report
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.	Electrical power loss, Water system boil water and City offices forced to close, temporary

Source: NOAA 2023; FEMA 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 Fulshear'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 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 Fulshear. The City of Fulshear 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.

**Table 9.5-14. Hazard Ranking Input** 

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

## Critical Facilities and Community Lifelines

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.



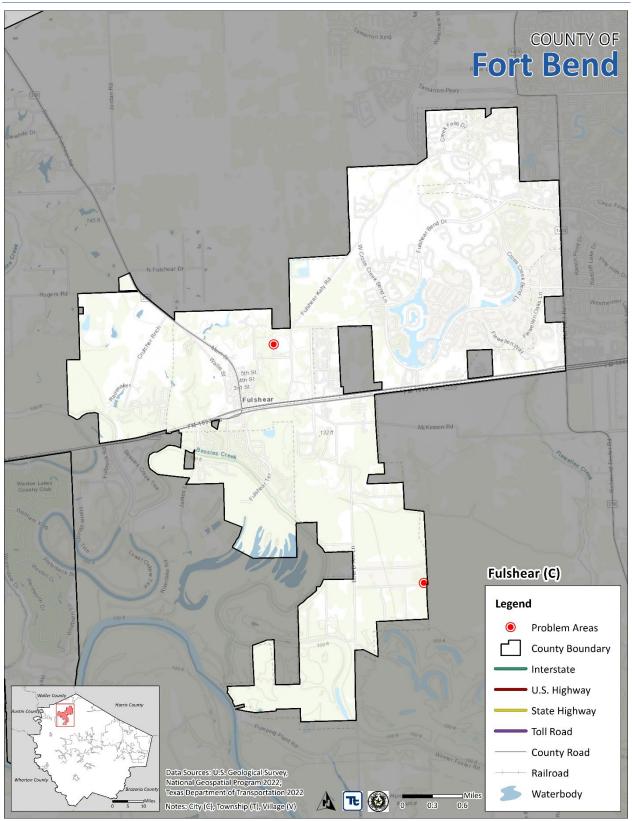
## Table 9.5-15. Number of Critical Facilities and Community Lifelines in Hazard Areas

	Chance Fl	t Annual ood Event d Area		e Wildfire d Area	Inland Erosion (K- Factor: >= 0.49) Hazard Area		Expansive Soils (Linear Extensibility >6%) Hazard Area		Barker Reservoir Dam Inundation Area		Lake Sommerville Dam Inundation Area		•	low Dam on Area
Jurisdiction	Critical Facilities	Lifelines	Critical Facilities	Lifelines	Critical Facilities	Lifelines	Critical Facilities	Lifelines	Critical Facilities	Lifelines	Critical Facilities	Lifelines	Critical Facilities	Lifelines
Fulshear (C)	1	1	0	0	13	12	3	3	0	0	5	4	0	0

Source: Source: Fort Bend County 2022; U.S. Department of Agriculture, Natural Resources Conservation Service 2022; U.S. Army Corp of Engineers 2023



Figure 9.5-6. City of Fulshear Extent and Location Map-Problem Areas





#### **Identified Issues**

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

- The City struggles to quickly and safely clear roads during the event of a severe winter storm.\*
- The City lacks a comprehensive hazard emergency communication system in public buildings.\*
- City residents are unaware of certain hazard-related issues that may affect their properties or a neighboring property.\*
- The City Water Plant No. 1 (5 Leyendecker Road) experiences issues caused by extreme weather, which causes pipe structures to crack and break, exposing chlorine/chemical feeds. This is a critical facility which affects water supply.\*
- The City experiences severe flooding and drainage issues among Lea/Penn Lane/Redbird Rd., which also affects houses and emergency access areas located nearby.\*
- The City has four repetitive loss and severe repetitive loss properties. Many of these structures were built without flood design standards. These properties require mitigation to prevent future losses and prevent loss of life and property damage.
- 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.

## 9.5.7 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.

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



**Table 9.5-16. Status of Previous Mitigation Actions** 

		What is the status? (e.g., In Progress, No Progress,	If you did not o	(i.e., there is still a need, th	e action be included in the 2023 HMP is is still a priority)?
Project	Responsible Party	Ongoing Capability, or Completed)  If in progress or completed, please  describe the funding source, cost  and who is implementing.	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.
Feasibility study to minimize increased flooding problems	City of Fulshear City Engineer; performed by Engineering Consultant	Complete, City-funded from CIP, \$217,000	No	-	-
Public awareness campaign on mitigation techniques	City of Fulshear EMC	Done on social media and flyers	No	-	-
Evacuation plans	City of Fulshear EMC	Fort Bend County model used	No	-	-
Wildfire hazard areas study	City of Fulshear/Simonton Fire Department	Outside agency, non-City department	No	-	-
Develop drought contingency plan	City of Fulshear Public Works, developed by Engineering Consultant	Complete, funded by Utility Fund; Adopted 2019	No	-	-
Public information plan	City of Fulshear IT/Communications Coordinator	Social Media platform for City website and Police Department website.	No	-	-
Cooling plan	City of Fulshear EMC	No progress	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. Develop maintenance plan for Enable Fort Bend.	City of Fulshear EMC	Fort Bend County plan used on cooling stations and locations	No	-	-
Pursue a contracted rate to a third party to supplement the City with ice removal services during ice events.	City of Fulshear City Hall	No progress	No	-	-
Upgrades for public facilities	City of Fulshear City Hall	New City Hall building and New Police Department building	No	-	-
Structural/engineering study of Fulshear public facilities	City of Fulshear Engineering Consultant	Complete; funded by City of Fulshear General Fund	No		-
Emergency communications - weather radio installation at public buildings	City of Fulshear EMC	No progress	Yes	-	-
Homeowner maintenance workshops, including expansive soil mitigation	City of Fulshear EMC	No progress	Yes	-	-



## **Additional Mitigation Efforts**

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

- Lea/Penn Lane Drainage Improvements Local roadside ditches regraded, and driveway culverts reset;
   funded by GLO \$415,000; project provided for improved drainage run-off flows; project implemented by the Public Works Department under the oversight of the City Engineer.
- North/South Drainage Channel Maintenance Lower Bois D'Arc area receiving channel improvements
  from Penn and Lea Lane Channel flow line reset, cleaned out and rip rap reinforced banks installed in a 90degree bend in channel. Funded by CIP = \$127,000.
- East Side Drainage Project The portion of the Fulshear Lake tributary from Huggins Road south to FM 1093 will be improved by widening and straightening the tributary, creating a maintenance berm. The tributary will be improved to the 100-year storm capacity. In conjunction with the Downtown East Side Storm Sewer Project (see #4). This project will add capacity to the City's downtown area east of FM 359. Funded by CIP = \$1,300,000 (design and construction).
- Downtown East Side Storm Sewer Project This project will establish a new storm sewer system east of FM 359 in Downtown Fulshear. A large drainage trunkline will be created and will flow to Fulshear Lakes Tributary (project #3). This trunkline will replace an existing line that is located under private property and will have increased capacity to assist in draining the east portion of Downtown Fulshear. Funded by CIP = \$1,900,000.
- Downtown West Side Storm Sewer Project This project will create a new drainage outfall on the west side of Downtown Fulshear, allowing current drainage to be redirected to Tributary #2 on the west side of Downtown. This project will ease drainage and detention issues for Downtown Fulshear west of FM 359. Funded by CIP = \$820,000 (design and construction).

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

None 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 9.5-17. Analysis of Mitigation Actions by Hazard and Category

	FEMA				CRS							
Hazard	LPR	SIP	NSP	EAP	PR	PP	PI	NR	SP	ES		
Dam/Levee Failure	-	-	-	Х	-	-	Х	-	-	Х		
Disease Outbreak	-	-	-	Х	ı	ı	Х	ı	ı	Х		
Drought	•	-	-	Х	ı	ı	Х	ı	ı	Х		
Extreme Temperature	-	Х	-	Х	-	Х	Х	-	Х	Х		



		FE	MA	CRS						
Hazard	LPR	SIP	NSP	EAP	PR	PP	ΡI	NR	SP	ES
Flood	-	Х	-	Х	1	Х	Х	1	Х	Х
Geologic Hazards	-	-	-	Х	-	-	Х	-	-	Х
Hurricane/Tropical Storm	-	Х	-	Х	-	-	Х	-	Х	Х
Severe Weather	-	Х	-	Х	-	Х	Х	-	Х	Х
Tornado	-	-	-	Х	-	-	Х	-	-	Х
Wildfire	-	-	-	Х	ı	-	Х	ı	ı	Х
Winter Weather	Х	Х	-	Х	Х	Х	Х	-	Х	Х

Note: Mitigation categories are described below the Mitigation Initiatives.



The table below summarizes the specific mitigation initiatives the City of Fulshear 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 9.5-18. Proposed Hazard Mitigation Initiatives** 

Project Number	Mitigation Initiative Name	Description of Problem and Solution	New or Existing Assets?	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 Fulshear- 001	Ice Removal Services	Problem: The City struggles to quickly and safely clear roads during the event of a severe winter storm.  Solution: The City will pursue a contracted rate to a third party to supplement the City with ice removal services during ice events.	New and Existing	Winter Weather	2,5	2 Years	City Administratio n	City	The City will have roads cleared in a timely fashion, which will prevent some car accidents from occurring.	Medium	High	LPR	PR
2023-City of Fulshear- 002	Weather Radio Installation	Problem: The City lacks a comprehensive hazard emergency communication system in public buildings.  Solution: The City will implement a weather radio installation at public buildings to be able to notify people of potential hazards.	New and Existing	Dam/Levee Failure, Disease Outbreak, Drought, Extreme Temperature, Flood, Geologic Hazards, Hurricane/Tropical Storm, Severe Weather, Tornado, Wildfire, Winter Weather	1, 2	3 Years	City Administratio n	FEMA, BRIC, HMGP, FMA, City	The City will have a more extensive emergency communicatio n system to protect the residents.		High	EAP	ES
High2023- City of Fulshear- 003	Mitigation Education	Problem: City residents are unaware of certain hazard-related issues that may affect their properties or a neighboring property.  Solution: The City will provide a class/seminar for home/business owners that provides them with Dolt-Yourself options for performing mitigation for the identified hazards of concern in their own homes and properties.	New and Existing	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	City residents will be more knowledgeable about hazards that affect their properties.	Low	High	EAP	PI



2023-City of Fulshear- 004	Mitigation Initiative Name Water Plant No. 1 Pipe Study	Description of Problem and Solution  Problem: The City Water Plant No. 1 (5 Leyendecker Road) experiences issues caused by extreme weather t causes pipe structures to crack and break exposing chlorine/chemical feeds. This is a critical facility which affects water supply.	New or Existing Assets? Existing	Hazard(s) to be Mitigated Extreme Temperatures, Winter Weather	Goals Met 2	Estimated Timeline 1 Year	Lead and Support Agencies City Engineer	Potential Funding Sources BRIC, FMA, HMGP, City	Estimated Benefits The Water Plant will no longer experience cracked pipe structures that expose	Estimated Costs	High Priority	는 Mitigation Category	dd 'd CRS Category
2023-City	Flood	Solution: The City will facilitate a study on the pipe structures and replace them with pipes and infrastructure that is able to withstand the extreme weather temperatures experienced by the Water Plant.  Problem: The City experiences	New	Flood, Severe Weather,	2	2 Years	City Engineer	BRIC,	chemical feeds.		High	SIP	РР
of Fulshear- 005	Study	severe flooding and drainage issues among Lea/Penn Lane/Redbird Rd which also affects houses and emergency access areas located nearby.  Solution: The City will conduct a flood study and implement a stormwater system that limits flooding in the area.	and Existing	Winter Weather		Zicais		FMA, HMGP, City	have less flooding incidents along Lea, Penn Lane and Redbird road which will help limit flooding to the houses and emergency access areas located nearby.				
2023-City of Fulshear- 006	Repetitive Loss Mitigation	Problem: The City has four repetitive loss and severe repetitive loss properties. Many of these structures were built without flood design standards. These properties require mitigation to prevent future losses and prevent loss of life and property damage.  Solution: The City will conduct outreach to the RL/SRL property	Existing	Flood, Hurricane/Tropical Storm, Severe Weather, Winter Weather	2	Less than 5 Years	NFIP Floodplain Administrator, supported by homeowners	HMGP, FMA, BRIC, local cost share by residents	Eliminates flood damage to homes and residents.	>\$500,000	High	SIP	SP



Project Number Mitiga	ve Description of Problem and e Solution	New or Existing Assets?	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
	owners and provide information on mitigation alternatives. After preferred mitigation measures are identified, collect required propertyowner information and develop a FEMA grant application and BCA to obtain funding to implement acquisition/purchase/moving/elevating residential homes in the floodprone areas that experience frequent flooding (high-risk areas).											
2023-City Substa of Dam. Fulshear- 007 ent P	tial <b>Problem:</b> The City does not have a ge Substantial Damage Management Plan in place, nor do they have a	Hurrica ne/Trop ical Storm, Severe Weathe r, Tornad	2, 4	Within 5 years to devel op the plan; ongoing to maint ain and updat e the plan	Floodplain Administr ator, Public Works, OEM, Constructi on Departme nt	City Budget	This plan will provide a process in making Substanti al Damage Determin ations and allow the municipa lity to make these determin ations and meet NFIP requirem ents more quickly.	< \$5,000	High	LPR	ES, PR	202 3- City of Bea sley - 006

<sup>\*</sup>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.

CRS	Community Rating System	FMA	Flood Mit	tigation Ass	sistance Grant Pr	ogram		The time required for completion of the project upon implementation.
FEMA	Federal Emergency Management Agency	HMGP	Hazard N	1itigation G	rant Program			Cost:
HMA	Hazard Mitigation Assistance	BRIC	Building	Resilient	Infrastructure	and	Communities	The estimated cost for implementation.
N/A	Not applicable	Program						Benefits:
NFIP	National Flood Insurance Program							A description of the estimated benefits, either quantitative and/or qualitative.

Timeline:

#### Mitigation Category:

Acronyms and Abbreviations:

- 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.

Potential FEMA HMA Funding Sources:

• 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 9.5-19. 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 Fulshear-001	Ice Removal Services	1	0	1	1	1	1	1	1	1	1	0	1	1	0	11	High



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 Fulshear-002	Weather Radio Installation	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of Fulshear-003	Mitigation Education	1	1	1	1	1	1	1	1	1	1	1	1	1	0	13	High
2023-City of Fulshear-004	Water Plant No. 1 Pipe Study	1	1	1	1	1	1	0	1	1	1	1	1	1	1	13	High
2023-City of Fulshear-005	Flood Study	1	1	1	1	1	1	1	1	1	1	1	1	1	1	14	High
2023-City of Fulshear-006	Repetitive Loss Mitigation	1	1	1	1	1	1	0	1	0	0	1	0	1	1	10	High
2023-City of Fulshear-007	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).