# 2026



# LAFOURCHE PARISH HAZARD MITIGATION PLAN

# LAFOURCHE PARISH MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

Prepared for:

**Lafourche Parish** 



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Unincorporated Lafourche Parish
Town of Golden Meadow
Town of Lockport
City of Thibodaux

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The 2026 Lafourche Parish Hazard Mitigation Plan Update was written by the Stephenson Disaster Management Institute, Louisiana State University. Further comments should be directed to the Lafourche Parish Office of Homeland Security and Emergency Preparedness: 4876 Hwy 1, Raceland, LA 70394.

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#### 1. Introduction

Hazard Mitigation is defined as sustained actions taken to reduce or eliminate long-term risk from hazards and their effects. Hazard Mitigation Planning is the process through which natural hazards that threaten communities are identified, likely impacts of those hazards are determined, mitigation goals are set, and appropriate strategies that would lessen the impacts are determined, prioritized, and implemented.

In that regard, this plan (a) documents the Lafourche Parish Hazard Mitigation Plan Update (HMPU) process; (b) identifies natural hazards and risks within the parish; and (c) identifies the parish's hazard mitigation strategy to make Lafourche Parish and its jurisdictions less vulnerable and more disaster resilient. It also includes mitigation project scoping to further identify scopes of work, funding sources, and implementation timing requirements of proposed selected mitigation projects. Information in the plan will be used to help guide and coordinate mitigation and local policy decisions affecting future land use.

The Lafourche Parish Hazard Mitigation Plan is a multi-jurisdictional plan that includes the following jurisdictions which participated in the planning process:

- Lafourche Parish
- Town of Golden Meadow
- Town of Lockport
- City of Thibodaux

The Federal Emergency Management Agency (FEMA), now under the Department of Homeland Security, has made reducing losses from natural disasters one of its primary goals. The Hazard Mitigation Plan (HMP) and subsequent implementation of recommended projects, measures, and policies is the primary means to achieving these goals. Mitigation planning and project implementation has become even more significant in a post-Katrina/Rita, Gustav/Ike, and Laura/Delta environment in south Louisiana.

This Hazard Mitigation Plan is a comprehensive plan for disaster resiliency in Lafourche Parish. The parish is subject to natural hazards that threaten life and health and have caused extensive property damage. To better understand these hazards and their impacts on people and property, and to identify ways to reduce those impacts, the parish's Office of Homeland Security and Emergency Preparedness undertook this Natural Hazards Mitigation Plan. "Hazard mitigation" does not mean that all hazards are stopped or prevented. It does not suggest complete elimination of the damage or disruption caused by such incidents. Natural forces are powerful and most natural hazards are well beyond our ability to control. Mitigation does not mean quick fixes. It is a long-term approach to reduce hazard vulnerability. As defined by FEMA, "hazard mitigation" means any sustained action taken to reduce or eliminate the long-term risk to life and property from a hazard event.

Every community faces different hazards, and every community has different resources and interests to bring to bear on its problems. Because there are many ways to deal with natural hazards and many agencies that can help, there is no one solution for managing or mitigating their effects. Planning is one of the best ways to correct these shortcomings and produce a program of activities that will best mitigate the impact of local hazards and meet other local needs. A well-prepared plan will ensure that all possible activities are reviewed and implemented so that the problem is addressed by the most appropriate and efficient solutions. It can also ensure that activities are coordinated with each other and with other goals and programs, preventing conflicts and reducing the costs of implementing each individual activity.

Under the Disaster Mitigation Act of 2000 (42 USC 5165), a mitigation plan is a requirement for Federal mitigation funds. Therefore, a mitigation plan will both guide the best use of mitigation funding and meet the prerequisite for obtaining such funds from FEMA. FEMA also recognizes plans through its Community Rating System (CRS), a program that reduces flood insurance premiums in participating communities. This program is further described in Section Three: Capability Assessment.

This plan identifies activities that can be undertaken by both the public and the private sectors to reduce safety hazards, health hazards, and property damage caused by natural hazards. It fulfills the Federal mitigation planning requirements, qualifies for CRS credit, and provides Lafourche Parish and its communities with a blueprint for reducing the impacts of these natural hazards on people and property.

### Geography, Population and Economy Geography

Lafourche Parish, established in 1807, is located in southeastern Louisiana and is part of the Houma—Thibodaux metropolitan area. Its name, *Lafourche*, meaning "the fork" in French, refers to Bayou Lafourche, the parish's primary waterway. Bayou Lafourche runs approximately 106 miles from Donaldsonville to the Gulf of America, providing historical transportation, drinking water, and economic resources for communities along its path. The parish contains extensive low-lying coastal plains, wetlands, and marshes, making it susceptible to flooding, coastal erosion, land subsidence, and storm surge. The parish encompasses approximately 1,469 square miles and is bordered by Terrebonne Parish to the west, Assumption Parish to the northwest, St. John the Baptist and St. James Parishes to the north, St. Charles and Jefferson Parishes to the east, and the Gulf of America to the south.



Figure 1-1: Location of Lafourche Parish in the State of Louisiana



Figure 1-2: Incorporated Jurisdictions within Lafourche Parish

The geography of Lafourche Parish mainly consists of marshes, sandy ridges, lakes, bayous, and natural levees. Lafourche Parish is bisected by Bayou Lafourche, resulting in two separate portions of the parish, although there are approximately two dozen crossings along the length of the bayou. The largest concentration of urban development is found along Highways 1 and 308, which flank Bayou Lafourche to the east and west respectively. Coincidentally, this is also the area with the highest natural elevation in the parish.

Approximately 90% of the total land area of Lafourche Parish is located within FEMA's 100-year floodplain. The only significant area outside the 100-year floodplain is the area along Bayou Lafourche from the northwestern parish boundary to the Town of Lockport. This area includes Highways 1 and 308 from the parish boundary to their respective intersections with Hwy 90, as well as the large majority of the City of Thibodaux.

Lafourche Parish weather is typically warm and humid. Variations in daily temperature are determined by distance from the Gulf of America and, to a much lesser degree, by differences in elevation. The average annual temperature for the state as a whole is 64°F. January is typically the coldest month for Louisiana, averaging approximately 50°F, while July is typically the warmest at an average of 82°F. Winter months are usually mild with cold spells of short duration. For Lafourche Parish in particular, the summer months are usually quite warm, with an average daily maximum temperature in July and August of 91°F. Winters are typically mild. Snowfall averages less than one inch per year. Average annual rainfall for the area is 71 inches. Lafourche Parish is susceptible to the normal weather dangers, such as tornados and floods, but due to its adjacency to the Gulf of America, the parish is extremely susceptible to tropical cyclones. Hurricane season lasts from June 1st to November 30th, with most hurricanes forming in August, September, and October.

Lafourche Parish is located in Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) Region 3 (*Figure 1-3*).

As noted above, Lafourche Parish is located in the southeastern region of Louisiana.



Figure 1-3: Louisiana Homeland Security Regions

#### **Population**

The population of Lafourche Parish is estimated at 95,342 (2024 Estimate) with a population percent change from April 1, 2010 – July 1, 2024 of 1.02%.

Table 1-1: Lafourche Parish Population (Source: US Census)

Variables	2010 Census	2020 Census	2023 Estimate	Percent Change 2010 - 2023
<b>Total Population</b>	96,318	97,557	95,342	-1.01%
Population Density (Pop/Sq. Mi.)	90.2	91.4	89.3	-1.0%
Total Households	38,824	41,960	41,960	8.08%
Persons Per Household	2.48	2.33	2.27	-8.46%

Table 1-2: Lafourche Parish Business Patterns (Source: US Census, CBP)

	O3 CETISUS, CBF)		
Business Description	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)
Agriculture, forestry, fishing and hunting	5	14	567
Mining, quarrying, and oil and gas extraction	46	2,503	215,574
Utilities	5	56	4,295
Construction	141	1,832	124,309
Manufacturing	50	1,811	103,482
Wholesale trade	59	1,004	54,947
Retail trade	280	3,789	96,249
Transportation and warehousing	137	4,041	298,658
Information	15	202	11,066
Finance and insurance	145	813	50,535
Real estate and rental and leasing	61	222	10,612
Professional, scientific, and technical services	165	898	42,447
Management of companies and enterprises	10	375	33,534
Administrative and support and waste management and remediation services	63	957	27,214
Educational services	14	175	3,913
Health care and social assistance	180	4,400	216,292
Arts, entertainment, and recreation	29	370	5,787
Accommodation and food services	169	2,521	37,510
Other services (except public administration)	121	692	24,295
Industries not classified	3	2	48

#### **Hazard Mitigation**

To fully understand hazard mitigation efforts in Lafourche Parish and throughout Louisiana, it is first crucial to understand how hazard mitigation relates to the broader concept of emergency management. In the early 1980s, the newly-created Federal Emergency Management Agency (FEMA) was charged with developing a structure for how the federal, state, and local governments would respond to disasters. FEMA developed the *four phases of emergency management*, an approach which can be applied to all disasters. The four phases are as follows:

Hazard Mitigation—described by FEMA and the Disaster Mitigation Act of 2000 (DMA 2000) as "any sustained action taken to reduce or eliminate long-term risk to life and property from a hazard event." The goal of mitigation is to save lives and reduce property damage. Besides significantly aiding in the obviously desirous goal of saving human lives, mitigation can reduce the enormous cost of disasters to property owners and all levels of government. In addition, mitigation can protect critical community facilities and minimize community disruption, helping communities return to usual daily living in the aftermath of disaster. Examples of mitigation involve a range of activities and actions including the following: land-use planning, adoption and enforcement of building codes, and construction projects (e.g., flood proofing homes through elevation, or acquisition or relocation away from floodplains).

- **Emergency Preparedness**—includes plans and preparations made to save lives and property and to facilitate response operations in advance of a disaster event.
- **Disaster Response**—includes actions taken to provide emergency assistance, save lives, minimize property damage, and speed recovery immediately following a disaster.
- **Disaster Recovery**—includes actions taken to return to a normal or improved operating condition following a disaster.

Figure 1-4 illustrates the basic relationship between these phases of emergency management. While hazard mitigation may occur both before and after a disaster event, it is significantly more effective when implemented before an event occurs. This is one of the key elements of this plan and its overall strategy: reduce risk before disaster strikes in order to minimize the need for post-disaster response and recovery.

As *Figure 1-4* demonstrates, mitigation relies on updating in the wake of disaster. This can give the appearance that mitigation is only reactive rather than proactive. In reality, post-disaster revision is a vital component of improving mitigation. Each hazardous event affords an opportunity to reduce the consequences of future occurrences.

Unfortunately, this cycle can be painful for a community. For instance, the risks of disasters that could create catastrophic incidents in Louisiana were thought to be relatively wellunderstood prior to 2005. However, the impact of the 2005 hurricane season on the Gulf Coast region of the United States prompted a new level of planning and engagement related to disaster response, recovery, and hazard mitigation. Hurricanes Katrina and Rita hit three weeks apart and together caused astonishing damage to human life and to property. The two storms highlighted a hurricane season that spawned 28 storms—unparalleled in American history. The 2005 hurricane season confirmed Louisiana's extreme exposure to natural disasters and both the positive effects and the concerns resulting from engineered floodprotection solutions. More recently, the historically impactful 2020 hurricane season reinforced the need for proper planning and mitigation strategies.



Figure 1-4: The Four Phases of Emergency Management and their Relation to Future Hazard Mitigation

The catastrophic tropical events of 2005 and 2020, coupled with the unprecedented flooding events of 2016 have had profound impacts on emergency management and hazard mitigation throughout Louisiana. As detailed later in this document, significant funding has been made available to the State of Louisiana and its parishes for the purpose of hazard mitigation planning. The storms also raised awareness of the importance of hazard mitigation among decision-makers and the general population, which has been particularly important since natural hazards will likely be increasing in frequency, magnitude, and impact in the coming years due to climate change.

#### **General Strategy**

During the last update to the Louisiana State Hazard Mitigation Plan, the State Hazard Mitigation Team (SHMT) began a long-term effort to better integrate key components of all plans with hazard mitigation implications in Louisiana to ensure that the programs, policies, recommendations, and implementation strategies are internally consistent. As each of these documents has been adopted by various agencies within the state, the SHMT has worked to incorporate this information into the decision process.

Part of the ongoing integration process is that the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) encourages the parishes and the local communities with independent hazard mitigation plans to utilize the same plan format and methodologies as the State Hazard Mitigation Plan in order to create continuity of information from local to state mitigation plans and programs.

The 2026 Lafourche Parish Hazard Mitigation Plan (HMP) maintains much of the information from the 2021 plan version, but it now incorporates the order and methodologies of the 2024 Louisiana State Hazard Mitigation Plan.

The sections in the 2021 Lafourche Parish HMP were as follows:

• Section One Introduction

Section Two Hazard Identification and Parish-Wide Risk Assessment

Section Three
 Section Four
 Appendix A
 Appendix B
 Appendix C
 Appendix D
 Capability Assessment
 Mitigation Strategy
 Planning Process
 Plan Maintenance
 Essential Facilities
 Plan Adoption

• Appendix E State Required Worksheets

This plan update also coheres with the Plain Writing Act of 2010, which requires federal agencies to use clear communication that is accessible, consistent, understandable, and useful to the public. While the State of Louisiana and its political subdivisions are not required to meet such standards, the Act aligns with best practices in hazard mitigation. Since successful hazard mitigation relies on full implementation and cooperation at all levels of government and community, a successful hazard mitigation plan must also be easily used at all of these levels. Nevertheless, the Lafourche Parish Hazard Mitigation Planning Committee recognized the benefits from the successful analysis and mitigation planning executed in previous plan updates, as well as improvements to be made in the 2026 update. This plan update remains coherent with those documents, retaining language and content when needed, deleting it when appropriate, and augmenting it when constructive.

#### 2026 Plan Update

This 2026 plan update proceeds with the previous goals of the Lafourche Parish Hazard Mitigation Plan. The current goals are as follows:

- **1.** Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.
- 2. Enhance public awareness and understanding of disaster preparedness.
- **3.** Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).
- **4.** Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards

This plan update makes a number of textual changes throughout, but the most obvious changes are data related and structural edits. First, the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information's (NCEI) Storm Events Database was used in the analysis, which provides historical hazard data from 1950 to 2025. The planning committee was also instrumental in providing detailed data where appropriate to more accurately reflect hazard impacts on the parish and jurisdictions. Furthermore, all of the sections were updated to reflect the most current information and the most current vision of the plan update. The most significant changes are the newly developed hazard profiles and risk assessments, as well as the removal of much repetition between sections from the previous plan updates.

The 2026 plan update is organized in the same format as the 2021 update, with one minor change to this 2026 update as outlined below. The decision to change the title of Appendix C from Essential Facilities to Critical Facilities was made to better align with FEMA preferred terminology.

Section One Introduction

• Section Two Hazard Identification and Parish-Wide Risk Assessment

Section Three Capability Assessment
 Section Four Mitigation Strategies
 Appendix A Planning Process
 Appendix B Plan Maintenance
 Appendix C Critical Facilities

Appendix D Plan Adoption

• Appendix E State Required Worksheets

Appendix F Floodplain Management Activity 510

Table 1-3: 2026 Plan Update Crosswalk

Plan Update Crosswalk				
2021 Update	2026 Update			
Section 1: Introduction	Section 1: Introduction			
Section 2: Hazard Identification and Parish-Wide Risk Assessment	Section 2: Hazard Identification and Parish-Wide Risk Assessment			
Section 3: Capability Assessment	Section 3: Capability Assessment			
Section 4: Mitigation Strategy	Section 4: Mitigation Strategy			
Appendix A: Planning Process	Appendix A: Planning Process			
Appendix B: Plan Maintenance	Appendix B: Plan Maintenance			
Appendix C: Essential Facilities	Appendix C: Critical Facilities			
Appendix D: Plan Adoptions	Appendix D: Plan Adoptions			
Appendix E: State Required Worksheets	Appendix E: State Required Worksheets			

Despite numerous changes in this plan update, the plan remains consistent in its emphasis on the types of hazards that pose the most risk to loss of life, injury, and property in Lafourche Parish and its communities. The extent of this risk is dictated primarily by its geographic location. Most significantly, Lafourche Parish remains at high risk of water inundation from various sources, including flooding and tropical cyclone activity. The entire parish is also at high risk of damages from high winds and wind-borne debris. The 2020 and 2021 hurricane seasons were felt heavily in all parts of Lafourche Parish. Other hazards threaten the parish and/or its communities, although not to such great degrees and not in such widespread ways. In all cases, the relative social vulnerability of areas threatened and affected plays a significant role in how governmental agencies and their partners (local, parish, state and federal) prepare for and respond to disasters.

Mitigation efforts related to particular hazards are highly individualized by jurisdiction. Flexibility in response and planning is essential. The most important step forward to improve hazard management capability is to improve coordination and information sharing between the various levels of government regarding hazards.

#### 2. Hazard Identification and Parish-Wide Risk Assessment

#### Overview

The risk assessment identifies and assesses a large variety of threats and hazards that impact the parish to identify a strategy for mitigation. Having identified the categories of hazards, emergencies, disasters, and catastrophes, this section describes the risks associated with each identified hazard of concern. Each section (1) defines the hazard, (2) explains how each hazard is measured, (3) provides the hazard's geographic extent, (4) analyzes the previous occurrences, (5) evaluates each hazard's future likelihood of occurrence, and (6) identifies the worst-case scenario for each hazard.

The following steps were used to define the risk of each hazard:

- Profile and describe each hazard
  - Geographic areas most affected by the hazard
  - o Previous occurrences and detailed description of events occurring in the last 5 years
  - Occurrence probability/frequency estimates
  - Worst-case scenarios
- Determine exposure to each hazard
  - Exposure was determined by overlaying hazard maps with an inventory of structures, facilities, and systems to determine which of them would be exposed to each hazard
  - Vulnerability analysis for people and infrastructure

The primary source for historical data used throughout the risk assessment is the National Centers for Environmental Information (NCEI) Storm Events Database, which provides natural hazard event data from 1950 to the present. In staying consistent with climatological studies, the NCEI Storm Events Database was evaluated for the past 30 years (1996 – 2025) to determine the future probability and frequency of a hazard occurring when data were available.

#### **Data Limitations**

Throughout the planning process, every effort was made to use the best available data. Much of the historic natural-hazard occurrence information was obtained through the National Oceanic and Atmospheric Administration's (NOAA) NCEI. The NCEI Storm Events Database contains data from January 1950 to the present (i.e., within the past few months); however, there are some issues with events recorded prior to 1996. From the years 1950 to 1954, the NCEI Storm Events Database only contained information on tornado events, until thunderstorm wind and hail events were added to the database for the time period between 1955 and 1992. All event types identified in the National Weather Service (NWS) Directive 10-1605 (48 in total) are recorded from 1996 to the present. For these hazards, only 30 years (1996 – 2025) worth of data was evaluated to determine the future probability and frequency of a hazard occurring. Additionally, property damage and crop damage estimates from the NCEI Storm Events Database are a "best guess" based on all available data at the time of the event publication.

The NCEI Storm Events Database does not record all events, only occurrences that have sufficient intensity to cause loss of life, injuries, significant property damage, and/or disruption to commerce. Even then, there are events that may not be covered due to changes in data collection and processing procedures over time. Also, events such as tornadoes or hailstorms rely heavily on eye-witness accounts, which creates a reporting bias in urban areas. The inception of Doppler radar in 1980 significantly decreased this bias, especially for tornado events, but records prior to 1980 are not as detailed or complete as post-1980 records.

The Storm Prediction Center (SPC) National Severe Weather Database browser examines convective/thunderstorm-related winds only and does not include wind data from hurricanes or non-thunderstorm wind damage. This data contains measured and estimated wind gusts, including wind damage, without estimated wind speeds. For many observations, this results in several thunderstorm wind events with no estimated or actual wind speed estimates.

The vulnerability estimates provided herein use the best data currently available, and the methodologies applied result in an approximation of risk. These estimates may be used to understand the relative risk from hazards and potential losses. However, uncertainties are inherent in any loss estimation methodology, arising in part from incomplete scientific knowledge concerning hazards and their effects on the built environment, as well as approximations and simplifications that are necessary for a comprehensive analysis.

#### **Identifying Hazards**

Several emergency management and hazard mitigation documents at the state and local levels were reviewed to identify a comprehensive list of hazards that may impact the parish. These documents addressed a wide range of hazards, including natural, technological, and human-caused. The two main documents referenced in finalizing the parish's comprehensive hazard list were the 2021 Hazard Mitigation Plan for the parish and the state of Louisiana's 2024 Hazard Mitigation Plan. Typically, unless otherwise noted in the plan, all hazards previously identified in the parish's 2021 Hazard Mitigation Plan and all hazards in the state of Louisiana's 2024 Hazard Mitigation Plan identified as medium or high risk by the state are profiled in the risk assessment. The table below provides a comprehensive list of the hazards selected based on the above criteria.

Table 2-1: Hazard Profile Summa	ry	٠.
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Hazard	Profiled in Previous Plan	Profiled in the 2026 Update
Coastal Hazards	X	X
Flooding	X	Х
Sinkholes	X	Х
Thunderstorms – Hail	X	X
Thunderstorms – Lightning	X	X
Thunderstorms – Winds	X	Х
Tornadoes	X	X
Tropical Cyclones	X	X

#### Historical Context and Previous Occurrences

The following table and figures display past disaster declaration occurrences and provide background on the type of natural disasters that have affected the parish in the past.

Table 2-2: Disaster Declarations in Lafourche Parish.

(Source: FEMA Disaster Declarations Summary: Open Government Database)

Godice. I Elini Bisaster Declarations Summary. Open Government Butabase,					
Disaster Number	Year	Туре	Declaration		
DR-208-LA	1965	DR	HURRICANE BETSY		
DR-374-LA	1973	DR	SEVERE STORMS & FLOODING		
DR-448-LA	1974	DR	HURRICANE CARMEN		
EM-3031-LA	1977	EM	DROUGHT & FREEZING		
DR-616-LA	1980	DR	SEVERE STORMS & FLOODING		
DR-752-LA	1986	DR	HURRICANE JUAN		
DR-902-LA	1991	DR	SEVERE STORMS & FLOODING		
DR-904-LA	1991	DR	SEVERE STORMS, TORNADOES & FLOODING		
DR-956-LA	1992	DR	HURRICANE ANDREW		
DR-1049-LA	1995	DR	SEVERE STORMS AND FLOODING		
DR-1246-LA	1998	DR	HURRICANE GEORGES/TS FRANCES		
DR-1380-LA	2001	DR	TROPICAL STORM ALLISON		
DR-1435-LA	2002	DR	TROPICAL STORM ISIDORE		

Disaster					
Number	Year	Туре	Declaration		
DR-1437-LA	2003	DR	HURRICANE LILI		
EM-3172-LA	2003	EM	LOSS OF SPACE SHUTTLE COLUMBIA		
DR-1548-LA	2004	DR	HURRICANE IVAN		
DR-1601-LA	2005	DR	TROPICAL STORM CINDY		
EM-3212-LA	2005	EM	HURRICANE KATRINA		
DR-1603-LA	2005	DR	HURRICANE KATRINA		
EM-3260-LA	2005	EM	HURRICANE RITA		
DR-1607-LA	2005	DR	HURRICANE RITA		
EM-3289-LA	2008	EM	HURRICANE GUSTAV		
DR-1786-LA	2008	DR	HURRICANE GUSTAV		
DR-1792-LA	2008	DR	HURRICANE IKE		
EM-3322-LA	2011	EM	FLOODING		
DR-4015-LA	2011	DR	FLOODING		
DR-4041-LA	2012	DR	TROPICAL STORM LEE		
EM-3347-LA	2012	EM	TROPICAL STORM ISAAC		
DR-4080-LA	2012	DR	HURRICANE ISAAC		
DR-4263-LA	2016	DR	SEVERE STORMS AND FLOODING		
EM-3392-LA	2018	EM	TROPICAL STORM NATE		
DR-4345-LA	2018	DR	TROPICAL STORM HARVEY		
EM-3416-LA	2019	EM	TROPICAL STORM BARRY		
DR-4458-LA	2019	DR	HURRICANE BARRY		
EM-3459-LA	2020	EM	COVID-19		
DR-4484-LA	2020	DR	COVID-19 PANDEMIC		
EM-3527-LA	2020	EM	TROPICAL STORM CRISTOBAL		
EM-3538-LA	2020	EM	TROPICAL STORMS LAURA AND MARCO		
DR-4559-LA	2020	DR	HURRICANE LAURA		
EM-3543-LA	2020	EM	HURRICANE SALLY		
EM-3547-LA	2021	EM	HURRICANE DELTA		
DR-4570-LA	2021	DR	HURRICANE DELTA		
EM-3549-LA	2021	EM	TROPICAL STORM ZETA		
DR-4577-LA	2021	DR	HURRICANE ZETA		
EM-3556-LA	2021	EM	SEVERE WINTER STORM		
DR-4590-LA	2021	DR	SEVERE WINTER STORMS		
DR-4606-LA	2021	DR	SEVERE STORMS, TORNADOES, AND FLOODING		
EM-3568-LA	2021	EM	TROPICAL STORM IDA		
DR-4611-LA	2021	DR	HURRICANE IDA		
EM-3574-LA	2021	EM	TROPICAL STORM NICHOLAS		
EM-3614-LA	2024	EM	TROPICAL STORM FRANCINE		
DR-4817-LA	2024	DR	HURRICANE FRANCINE		

#### Probability of Future Threats and Hazards

The probability of each occurring hazard in the parish and the incorporated jurisdictions is estimated in the table based on data analyzed in the Risk Assessment. For further explanation of these calculations, please refer to the Probability section of each corresponding hazard profile in the risk assessment.

HAZARD MITIGATION PLAN

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	Probability					
Hazard	Unincorporated Lafourche Parish (LP)	Golden Meadow	Lockport	Thibodaux		
Coastal Hazards	100%	100%	100%	100%		
Flooding	50%	7%	7%	27%		
Sinkholes	< 1%	< 1%	< 1%	< 1%		
Thunderstorms – Hail	93%	93%	93%	93%		
Thunderstorms – Lightning	20%	20%	20%	20%		
Thunderstorms – Winds	100%	100%	100%	100%		
Tornadoes	63%	63%	63%	63%		

95%

95%

95%

95%

Table 2-3: Probability of Future Hazard Reoccurrence.

#### Assessing Vulnerability Overview

**Tropical Cyclones** 

The purpose of assessing vulnerability is to quantify and/or qualify exposure and determine how various threats and hazards impact life, property, the environment, and critical operations of the parish. Vulnerability can be defined as the manifestation of the inherent states of the system (e.g., physical, technical, organizational, cultural) that can be exploited to adversely affect (cause harm or damage to) that system. For example, identifying areas within the parish that suffer disproportional damage compared to other areas, or overall exposure of the entire parish to flooding. Identifying and understanding vulnerability to each threat and hazard provides a strong foundation for developing and pursuing mitigation actions.

The vulnerability analysis builds upon the information provided in the risk assessment by assessing the potential impact and amount of damage that each hazard has on the parish. To complete the analysis, the best available data were collected from a variety of sources, including local, state, and federal agencies, and multiple analyses were performed qualitatively and quantitatively. The estimates provided in the vulnerability analysis should be used to understand the relative risk from each hazard and the potential losses that may be incurred; however, uncertainties are inherent in any loss estimation methodology, arising in part from incomplete scientific knowledge concerning specific hazards and their effects on the built environment, as well as incomplete datasets and from approximations and simplifications that are necessary to provide a meaningful and complete analysis. Further, most datasets used in this assessment contain relatively short periods of records, which increases the uncertainty of any statistically based analysis.

#### Vulnerability Analysis Methodology

To direct the vulnerability analysis effort for the parish, two distinct methodologies were applied. The first includes a quantitative analysis that relies upon the best available data and technology, while the second methodology includes a qualitative analysis that relies more on local knowledge and rational decision-making. Upon completion, the methodologies are combined to create a vulnerability analysis that allows for some degree of quality control and assurance. The quantitative assessment focuses on potential hazard loss estimates, while the qualitative assessment is comprised of a scoring system built around values assigned by the Planning Team as to the likelihood of occurrence, spatial extent, and potential impact of each hazard.

#### Quantitative Methodology

The quantitative methodology consists of utilizing Hazus, a geographic information system (GIS)-based loss estimation software available from the Federal Emergency Management Agency (FEMA), as well as a detailed GIS-based approach independent of the Hazus software. These two GIS-based studies together help form a quantitative vulnerability analysis. GIS technology allows for the identification and analysis of potentially at-risk community assets such as people and infrastructure. This analysis was completed for hazards that can be spatially defined in a meaningful manner (i.e., hazards with an official and scientifically determined geographic extent) and for which GIS data were readily available.

Additionally, the National Risk Index developed by FEMA was utilized to determine the composite risk to 18 natural hazards, including avalanche, coastal flooding, cold wave, drought, earthquake, hail, heat wave, hurricane, ice storm, landslide, lightning, riverine flooding, strong wind, tornado, tsunami, volcanic activity, wildfire, and winter weather. Historic loss ratio, expected annual loss, and overall risk factor for any of the above hazards which are profiled in this plan are provided in the vulnerability analysis to provide further context on the risk associated to the hazard. Expected annual loss and the risk factor are calculated using the following formulas:

Expected Annual Loss = Exposure \* Annualized Frequency \* Historic Loss Ratio

Risk Index = Expected Annual Loss \* Social Vulnerability / Community Resilience

#### Qualitative Methodology

The qualitative assessment relies less on technology, but more on historical and anecdotal data regarding expected hazard impacts. The qualitative assessment completed for the parish is based on the Priority Risk Index (PRI). The purpose of the PRI is to prioritize all potential hazards, and then group them into three categories of high, moderate, or low risk to identify and prioritize mitigation opportunities.

The PRI is a good practice to use when prioritizing hazards because it provides a standardized numerical value for hazards to be compared. Adapted PRI scores were calculated using five categories:

- Probability
- Impact
- Spatial Extent
- Warning Time
- Duration

Each degree of risk is assigned a value (1-4) and a weighting factor. To calculate the Risk Factor for a given hazard, the assigned risk value for each category is multiplied by the weighted factor, and the sum of all five categories is totaled together for a final score. The highest possible Risk Factor is a 4.0.

Risk Factor = [(Probability \* 0.25) + (Impact \* 0.25) + (Spatial Extent \* 0.20) + (Warning Time \*0.15) + (Duration \* 0.15)]

#### Priority Risk Index and Hazard Risk

Hazard risk is determined by calculating the Risk Factor for each hazard impacting the parish. A summary of the PRI is found in the table on the following page. The conclusions drawn from the qualitative and quantitative assessments are fitted into three categories based on High, Moderate, or Low designations. Hazards identified as high risk have a risk factor of 2.5 or greater. Risk factors ranging from 2.0 to 2.4 are deemed moderate risk hazards while hazards with risk factors less than 2.0 are considered low risk.

2-6

Table 2-4: Summary of the Priority Risk Index.

PRI	Degree of Risk				
Category	Level	Criteria	Index Value	Weighting Factor	
	Unlikely	Less than 1% annual probability	1		
Probability	Possible Between 1 and 10% annual probability			25%	
Probability	Likely	Between 10 and 100% probability		23/6	
	Highly Likely	100% annual probability	4		
Impact	Minor	Very few injuries, if any. Only minor property damage and minimal disruption on quality of life. Temporary shutdown of critical facilities.	1		
	Minor injuries only. More than 10% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than one day.		2		
	Critical	Multiple deaths/injuries possible. More than 25% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for more than a week.	3	25%	
	High number of deaths/injuries possible.  More than 50% of property in affected area damaged or destroyed. Complete shutdown of critical facilities for 30 days or more.		4		
	Negligible	Less than 1% of area affected	1		
Spatial	Small	nall Between 1 and 10% of area affected		20%	
Extent	Moderate	Between 10 and 50% of area affected	3	2070	
	Large	Between 50 and 100% of area affected	4		
	More than 24 hours	Self-explanatory	1		
Warning Time	12 to 24 hours Self-explanatory		2	15%	
	6 to 12 hours	ours Self-explanatory		13/0	
	Less than 6 hours	Self-explanatory	4		
	Less than 6 hours	Self-explanatory	1		
Duration	Less than 24 hours Self-explanatory		2	15%	
	Less than one week Self-explanatory		3	13/0	
	More than one week Self-explanatory				

Table 2-5: Associated Risk Factor with PRI Value Range.

Risk Factor	PRI Range		
High Risk	2.5 to 4.0		
Moderate Risk	2.0 to 2.4		
Low Risk	0 to 1.9		

#### Vulnerability Analysis (NRI & PRI)

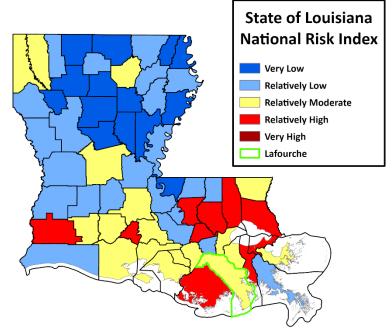
The first table is the overall risk associated with each threat and hazard with 2.5 or above deemed high risk, 2.0 to 2.4 deemed medium risk, and less than 2.0 deemed low risk. The final table summarizes the composite risk of 18 natural hazards outlined previously on the parish by expected annual loss, social vulnerability, community resilience, and overall risk rating.

	Probability	Impact	Spatial Extent	Warning Time	Duration	Overall Risk
Coastal Hazards	4	2	4	1	2	2.75
Flooding	3	4	3	4	3	3.4
Sinkholes	1	2	2	1	4	1.9
Thunderstorms – Hail	3	2	3	3	1	2.45
Thunderstorms – Lightning	3	2	2	3	1	2.25
Thunderstorms – Winds	4	2	3	3	1	2.7
Tornadoes	3	3	2	4	3	2.95
Tropical Cyclones	3	4	4	1	4	3.3

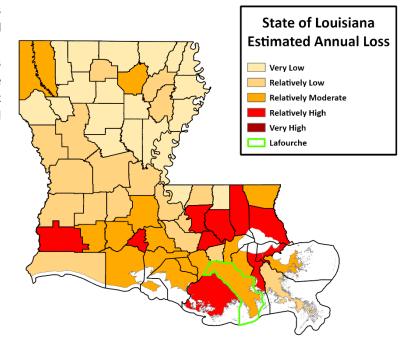
Table 2-7: National Risk Index (NRI) Summarization of Risk to Eighteen Natural Hazards for the Parish. (Source: National Risk Index)

Expected Annual Loss	Social Vulnerability	<b>Community Resilience</b>	Overall Risk Rating
Relatively Moderate	Very High	Very High	Relatively Moderate

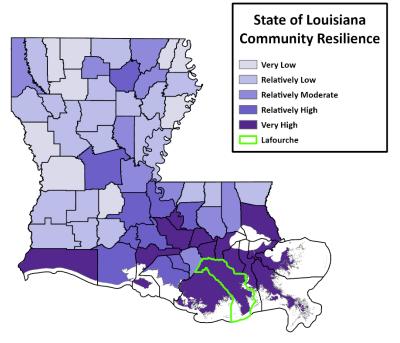
Lafourche Parish has a Community Risk Index Rating of "Relatively Moderate," when compared to the rest of the United States. The parish has a community risk index score of **94.40/100.00**. When compared to the state of Louisiana, the parish has a risk index score of **82.80/100.00**. The natural hazards that contributed to a higher overall risk index score include tornadoes and hurricanes.



Lafourche Parish has an Expected Annual Loss rating of 'Relatively Moderate' for natural hazards compared to the rest of the United States. The parish has an Expected Annual Loss rating of **94.00/100.00**. When compared to the state of Louisiana, the parish has a risk index score of **84.40/100.00**. Again, the natural hazards that account for the most expected annual loss are tornadoes and hurricanes.

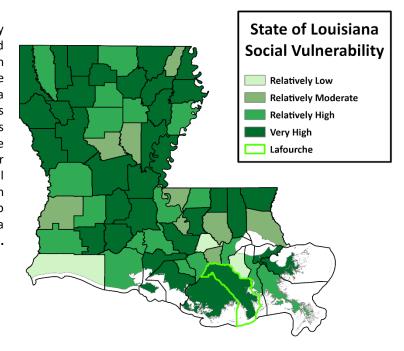


Lafourche Parish has a Community Resilience rating of "Very High" when compared to the rest of the United States. A "Very High" Community Resilience Rating indicates that Lafourche Parish has an advanced ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from "disruptions" when compared to the rest of the US. These Community Resilience values measured via the University of South Carolina's Hazard and Vulnerability Research Institute Baseline Resilience Indicators for Communities (HVRI BRIC). Some indicators include human welleconomic/financial infrastructure, governance, community capacity, natural resources, and overall environmental conditions. Based on the aforementioned factors



characteristics, Lafourche Parish has a Community Resilience rating of **91.34/100.00** when compared to the entire US. When compared to the state of Louisiana, Lafourche Parish has a Community Resilience rating of **85.90/100.00**.

Lafourche Parish has a Social Vulnerability Rating of "Relatively High" when compared to the rest of the United States. When communities have a Relatively Moderate or High Social Vulnerability rating, the area may be susceptible to adverse impacts brought about by natural hazards. Factors regarding social vulnerability include poverty, lack of transportation, persons per household, etc. The parish has a Social Vulnerability rating of 80.33/100.00 when compared to the US. When compared to the state of Louisiana, the parish has a Social Vulnerability rating of 50.00/100.00.



#### Population and Development Trends

The future population and number of buildings can be estimated using U.S. Census Bureau housing and population data. The tables below and on the following pages show population and housing unit estimates from 2010 to 2023:

Table 2-8: Population Growth Rate for the Parish.

Total Population	Lafourche Parish (LP)	Unincorporated LP	Golden Meadow	Lockport	Thibodaux
1-Apr-10	96,318	77,073	2,101	2,578	14,566
1-Apr-20	97,557	77,358	1,761	2,490	15,948
1-Jul-23	95,342	74,885	1,791	2,874	15,792
Population Growth between 2010 – 2020	1.3%	0.4%	-16.2%	-3.4%	9.5%
Average Annual Growth Rate between 2010 – 2020	0.1%	0.0%	-1.75%	-0.35%	0.9%
Population Growth between 2020 – 2023	-2.3%	-3.2%	1.7%	15.4%	-1.0%
Average Annual Growth Rate between 2020 – 2023	-0.77%	-1.08%	0.56%	4.9%	-0.33%

Table 2-9: Housing Growth Rate for the Parish.

Total Housing Units	Lafourche Parish (LP)	Unincorporated LP	Golden Meadow	Lockport	Thibodaux
1-Apr-10	38,824	30,453	959	1,088	6,324
1-Apr-20	41,960	33,288	883	1,412	6,377
1-Jul-23	41,960	32,608	941	1,101	7,310
Housing Growth between 2010 – 2020	8.1%	9.3%	-7.9%	29.8%	0.8%
Average Annual Growth Rate between 2010 – 2020	0.8%	0.9%	-0.8%	2.6%	0.1%
Housing Growth between 2020 – 2023	0.0%	-2.0%	6.6%	-22.0%	14.6%
Average Annual Growth Rate between 2020 – 2023	0.0%	-0.7%	2.1%	-8%	4.7%

Since the previous plan update in 2021, the population has decreased while housing development has increased in Golden meadow and Thibodaux and decreased in Unincorporated Lafourche Parish and Lockport. Lafourche Parish and its communities will continue to be vigilant in offsetting any new development around the parish with appropriate mitigative actions. Initiatives such as active floodplain management have regulated the development of flood prone areas to continue supporting and encouraging safer communities within Lafourche Parish. The development that has occurred since 2021 has not in any knowing way altered the parish's vulnerability to natural hazards. Lafourche Parish will continue to monitor the rise of development and ensure that any new planning project is within the limitations of this hazard mitigation plan and for the best interest of the public, especially socially vulnerable populations.

Population and development trends can vary across the parish. The figures below and on the following pages outline the diverse populations of the parish and each jurisdiction, along with the social vulnerability.



Figure 2-1: At Risk Population Profile for Lafourche Parish



Figure 2-2: At Risk Population Profile for Golden Meadow



Figure 2-3: At Risk Population Profile for Lockport



Figure 2-4: At Risk Population Profile for Thibodaux

### Inventory of Assets for the Entire Parish

As part of the Risk Assessment, the planning team identified essential facilities throughout the parish. Within the entire planning area, there is an estimated value of \$8,372,537,000 in structures throughout the parish. The table below provides the total estimated value for each type of structure by occupancy.

Table 2-10: Estimated Total of Potential Losses throughout the Parish.

Occupancy	Lafourche Parish (LP)	Unincorporated LP	Golden Meadow	Lockport	Thibodaux
Agricultural	\$25,376,000	\$21,784,000	\$779,000	\$0	\$2,813,000
Commercial	\$1,042,279,000	\$616,171,000	\$25,932,000	\$24,029,000	\$376,147,000
Government	\$44,096,000	\$24,037,000	\$791,000	\$32,000	\$19,236,000
Industrial	\$33,291,000	-\$85,838,000	\$4,043,000	\$3,946,000	\$111,140,000
Religion	\$111,491,000	\$70,282,000	\$3,990,000	\$8,041,000	\$29,178,000
Residential	\$7,023,379,000	\$5,481,733,000	\$164,214,000	\$162,864,000	\$1,214,568,000
Education	\$92,625,000	\$32,569,000	\$7,042,000	\$7,098,000	\$45,916,000
Total	\$8,372,537,000	\$6,160,738,000	\$206,791,000	\$206,010,000	\$1,798,998,000

#### Critical Facilities of the Parish

The following figures show the locations and names of the essential facilities within the parish:

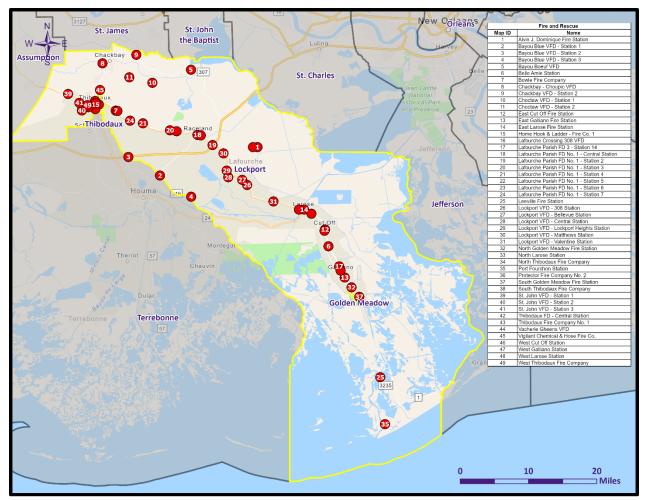


Figure 2-5: Fire and Rescue Facilities in the Parish.

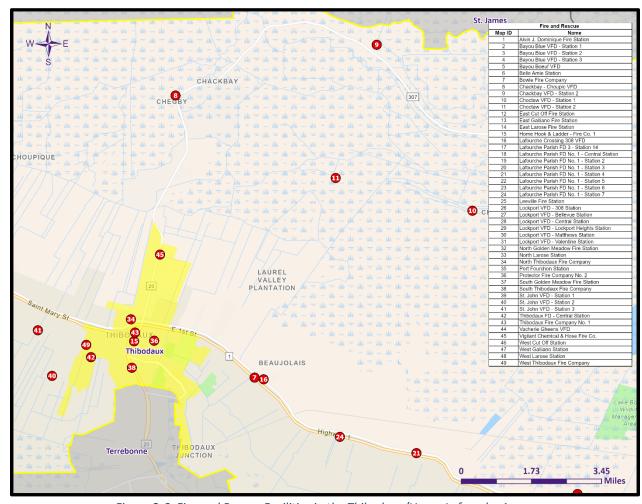


Figure 2-6: Fire and Rescue Facilities in the Thibodaux/Upper Lafourche Area

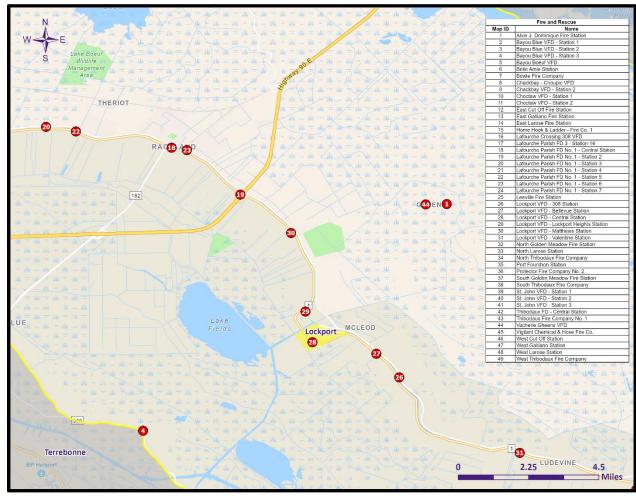


Figure 2-7: Fire and Rescue Facilities in the Lockport/Middle Lafourche Area

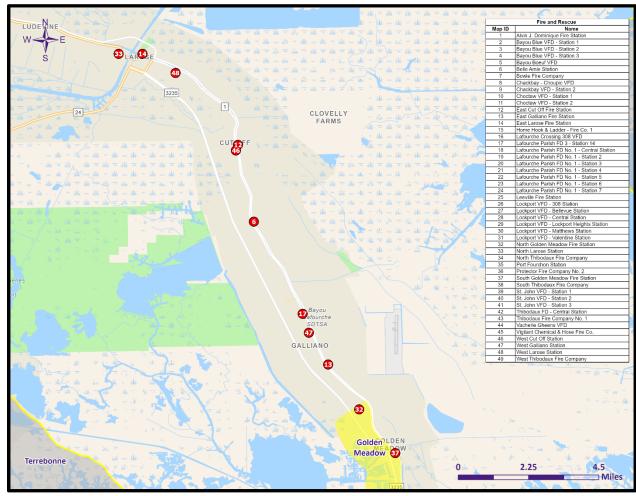


Figure 2-8: Fire and Rescue Facilities in the Golden Meadow/Lower Lafourche Area

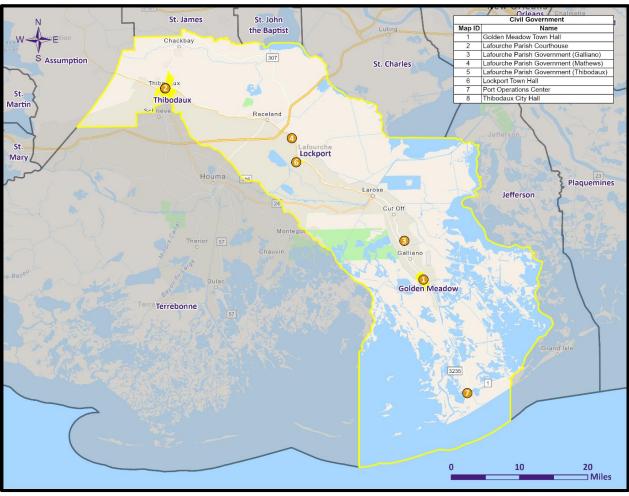


Figure 2-9: Government Buildings in the Parish.

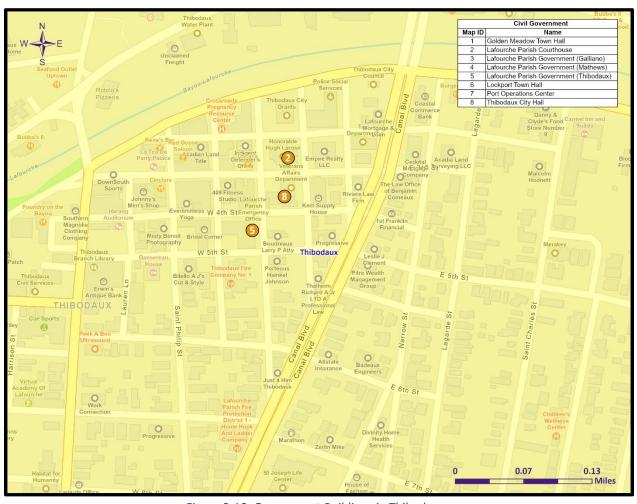


Figure 2-10: Government Buildings in Thibodaux

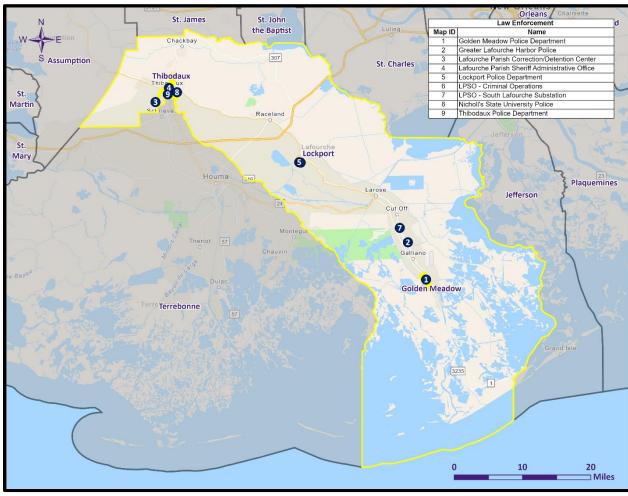


Figure 2-11: Law Enforcement in the Parish.

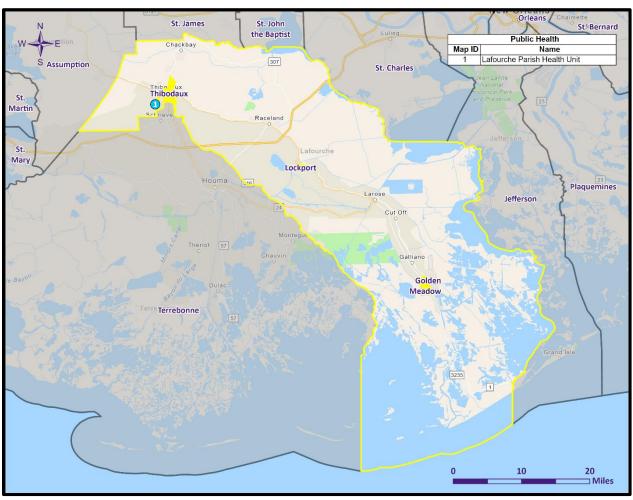


Figure 2-12: Public Health Facilities in the Parish.

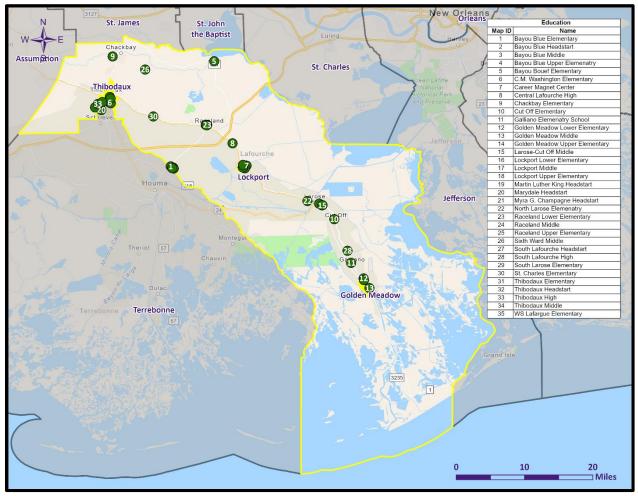


Figure 2-13: Educational Facilities in the Parish.

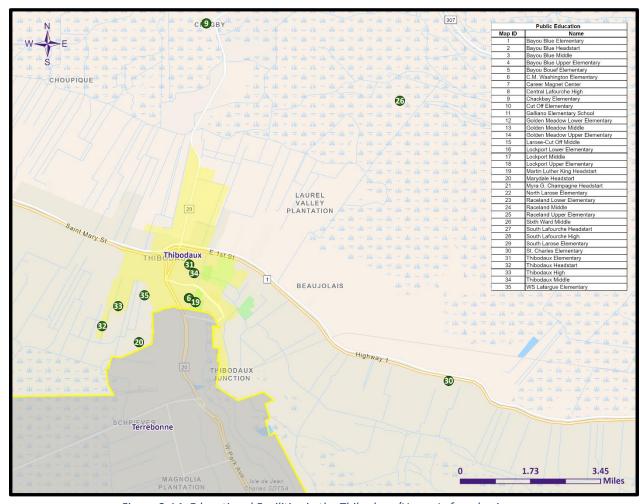


Figure 2-14: Educational Facilities in the Thibodaux/Upper Lafourche Area

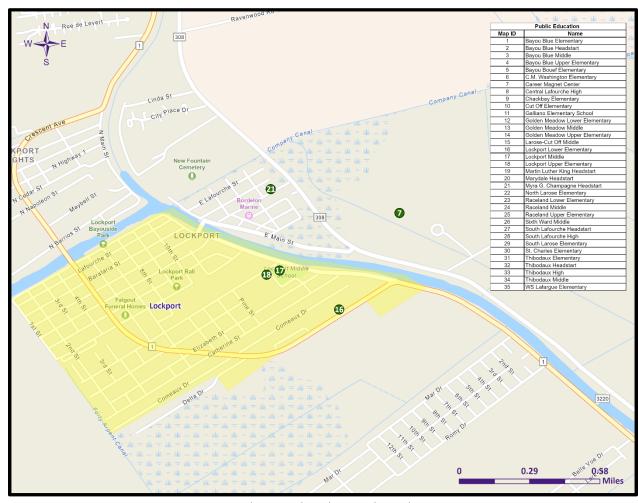


Figure 2-15: Educational Facilities in the Lockport Area.

# Land Use

The Parish Land Use table is provided below. Residential, commercial, and industrial areas account for only 8% of the parish's land use. Wetlands make up the largest area at 223,334 acres, accounting for 56% of parish land. At 102,961 acres, agricultural land accounts for 26% of parish lands, while 37,220 acres of open water areas account for 9% of parish lands. The parish also consists of 3,815 forested acres, accounting for 1% of all parish lands.

Table 2-11: Parish Land Use. (Source: USGS Land Use Map)

Land Use	Acres	Percentage
Agricultural Land, Cropland, and Pasture	102,961	26%
Wetlands	223,334	56%
Forest Land (Not including forested wetlands)	3,815	1%
Urban/Development	31,446	8%
Water	37,220	9%

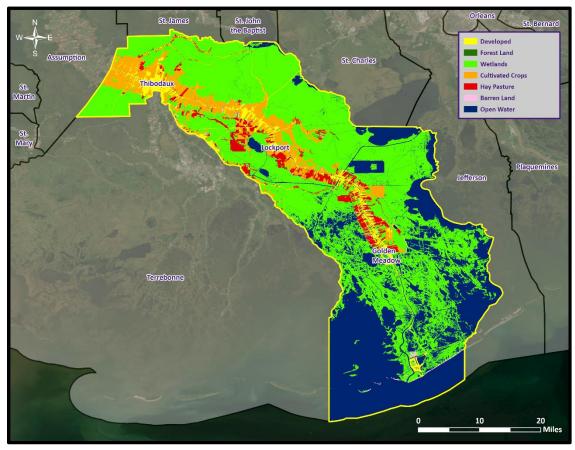


Figure 2-16: Parish Land Use Map. (Source: USGS Land Use Map)

# Hazard Profile, Risk Assessment, and Vulnerability Analysis Coastal Hazards

## Profile

Coastal land loss is the loss of land (especially beach, shoreline, or dune material) by natural and/or human influences. Coastal land loss occurs through various means, including erosion, subsidence (the sinking of land over time as a result of natural and/or human-caused actions), saltwater intrusion, coastal storms, littoral drift, changing currents, manmade canals, rates of accretion, and sea level rise. The effects of these processes are difficult to differentiate because of their complexity and because they often occur simultaneously, with one influencing each of the others.

Some of the worst recent contributors to coastal land loss in the state are the tropical cyclones of the past decade. Two storms that stand out in this regard are Hurricanes Katrina and Rita. These powerful cyclones completely covered large tracts of land in a very brief period, permanently altering the landscape. The disastrous legacy of these storms concentrated already ongoing efforts to combat coastal land loss. For the purposes of this risk assessment, coastal land loss is considered in terms of two of the most dominant factors: sea level rise and subsidence.

Sea level rise and subsidence impact Louisiana in a similar manner—again making it difficult to separate impacts. Together, rising sea level and subsidence—known together as relative sea level rise—can accelerate coastal erosion and wetland loss, exacerbate flooding, and increase the extent and frequency of storm impacts. According to NOAA, global sea level rise refers to the upward trend currently observed in the average global sea level. Local sea level rise is the level that the sea rises relative to a specific location (or, benchmark) at the coastline. The most prominent causes of sea level rise are thermal expansion, tectonic actions (such as sea floor spreading), and the melting of the Earth's glacial ice caps.

The current U.S. Environmental Protection Agency (EPA) estimate of global sea level rise is 10–12 in. per century, while future sea level rise could be within the range of 1–4 ft. by 2100. According to the U.S. Geological Survey (USGS), the Mississippi Delta plain is subject to the highest rate of relative sea level rise of any region in the nation largely due to rapid geologic subsidence.

Subsidence results from a number of factors including:

- Compaction/consolidation of shallow strata caused by the weight of sediment deposits, soil oxidation, and aquifer draw-down (shallow component)
- Gas/oil/resource extraction (shallow & intermediate component)
- Consolidation of deeper strata (intermediate components)
- Tectonic effects (deep component)

For the most part, subsidence is a slow-acting process with effects that are not as evident as hazards associated with discrete events. Although the impacts of subsidence can be readily seen in coastal parishes over the course of decades, subsidence is a "creeping" hazard. The highest rate of subsidence is occurring at the Mississippi River Delta (estimated at greater than 3.5 ft./century). Subsidence rates tend to decrease inland, and they also vary across the coast.

Overall, subsidence creates three distinct problems in Louisiana:

- By lowering elevations in coastal Louisiana, subsidence accelerates the effects of saltwater intrusion and other factors that contribute to land loss.
- By lowering elevations, subsidence may make structures more vulnerable to flooding.
- By destabilizing elevations, subsidence undermines the accuracy of surveying benchmarks (including those
  affecting levee heights, coastal restoration programs, surge modeling, BFEs, and other engineering inputs),
  which can contribute to additional flooding problems if construction occurs at lower elevations than
  anticipated or planned.

## Risk Assessment

## Geographic Extent

Historic areas of coastal land loss and gain and subsidence rates have been quantified for the parish using data from the U.S. Geologic Survey and Louisiana Coastal Protection and Restoration Authority (CPRA). Since 1932, the average annual land loss in Louisiana is 35 square miles, while the average annual land gain has been 3 square miles for a net loss of 32 square miles per year. Land loss is occurring throughout the entire area of the Parish. Subsidence is also occurring throughout the parish further exacerbating land loss.

## **Previous Occurrences**

Coastal land loss is an ongoing process, including discrete (hurricanes) and continuous (subsidence, sea level rise) processes. While historic flood loss data undoubtedly include the effects of coastal land loss, specific previous occurrences have not been identified as a source of direct disaster damage in Louisiana. Rather, the effects of the underlying flood or hurricane storm surge hazard are recorded. Land loss is a significant hazard, however, and the assessment of the added flood impacts caused by land loss is quantified in the following sections. The southern and western portions of the parish can expect to experience subsidence rates of approximately 35 mm annually, while the northern portions of the parish can expect subsidence rates of approximately 15 mm annually.

## **Probability**

Subsidence, sea level rise, and coastal land loss are ongoing hazards. Based on historical subsidence rates and land loss/gain trends, the probability of future land loss in the parish is 100% certain, but actual rates of subsidence and land loss/gain vary along the coast based on various meteorological, geological, and human-influenced dynamics (e.g., water/resource extraction, canal dredging, saltwater intrusion, marsh restoration projects, etc.).

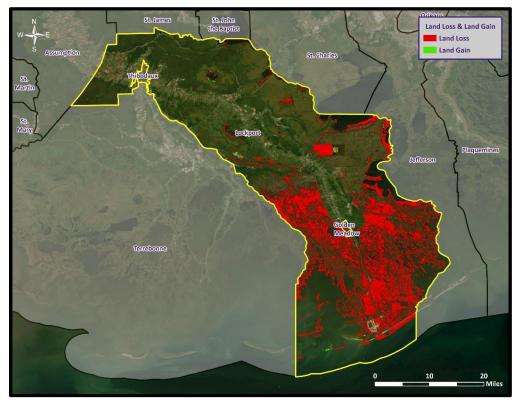


Figure 2-17: Historical Areas of Land Loss and Gain Between 1950 and 2020.

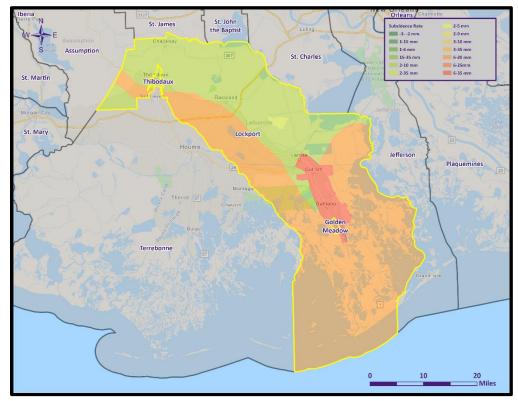


Figure 2-18: Maximum Annual Subsidence Rates Based on Subsidence Zones in Coastal Louisiana.

# Climate Change Impacts

Climate change has a significant impact on coastal hazards especially the state of Louisiana as increased coastal erosion due to sea level rise will increase as higher sea levels push against the shoreline of Louisiana. Loss of land will occur in low-lying areas and areas below sea level. Saltwater intrusion into freshwater aquifers will occur as sea levels rise impacting drinking water supplies and agriculture in the state and parish.

## Future Hazard Impacts

Future development in coastal areas can exacerbate existing hazards such as sea level rise and subsidence by increasing vulnerability through urbanization disrupting natural coastal buffers and altering sediment processes. Population growth in coastal areas can also intensify coastal hazards due to increased urbanization, infrastructure demands, and land-use changes.

## Vulnerability Analysis

## Estimated Impact and Potential Loss

To determine the estimated potential losses, the methodology implemented in the 2024 Louisiana State Plan Update was used. In the state plan, two parameters were considered to estimate the projected increase in coastal flood losses from storm surge scenarios – global sea level rise and subsidence. A timeframe of 10 years was used for evaluation of future effects of sea level rise and subsidence for comparison with current conditions. The NOAA Sea, Lake and Overland Surges from Hurricanes (SLOSH) model was used to estimate the maximum of maximum (MOM) storm surge elevations for a Category 1 hurricane at mean tide along the coast of Louisiana. The MOM scenario is not designed to describe the storm surge that would result from a particular event, but rather evaluates the impacts of multiple hurricane scenarios with varying forward speeds and storm track trajectories to create the maximum storm surge elevation surface that would occur given the simultaneous occurrence of all hurricane events for a given category.

There are many global sea level rise scenarios from which to select; however, within a 10-year timeframe, methods that predict accelerating sea level rise rates do not deviate significantly from straight line methods. Therefore, a

linear sea level rise projection for the sea level rise occurring in 10 years (SLR2024) using a linear global sea level rise rate of 3.1 mm/year was used (IPCC, 2007), which is also in accordance with the CPRA Coastal Master Plan. This resulted in an increase of 0.1 feet, which was applied to the NOAA MOM storm surge elevation results over the model output domain.

$$SLR_{2024} = 0.0031 \frac{m}{year} \times 10 \ years$$

$$SLR_{2024} = 0.031 \, meters = 0.10 \, ft \, in \, 2024$$

To estimate the effects of subsidence, the elevation profile for southern Louisiana was separated into sections based on subsidence zones. The 20th percentile values for subsidence were used, in accordance with the CPRA Master Plan, and subtracted from the digital elevation model (DEM) for each zone and re-joined to create a final subsided ground elevation layer. The following figure shows the annual dollar amount of subsidence and land loss on the parish based on the above model.

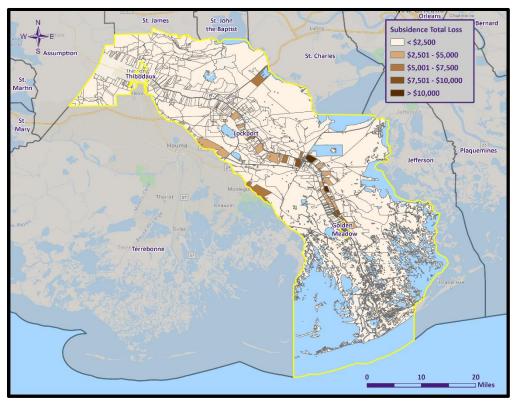


Figure 2-19: Total Losses Due to Subsidence in Lafourche Parish.

The following table shows the current and future exposure potential based on the Hazus inventory database.

Table 2-12: Estimated Annual Losses for Coastal Land Loss in Lafourche Parish. (Source: Hazus)

Estimated Annual Potential Losses				
Lafourche Parish Golden Meadow Lockport Thibodaux				
\$106,400	\$385,200	\$193,100	\$0	

# Vulnerable Population

Coastal land loss can impact all demographics and age groups. Buildings located within highly vulnerable coastal land loss areas could be eventually permanently shut down and forced to relocate. Long-term sheltering and permanent relocation could be a concern for communities that are at the highest risk for future coastal land loss. The total population within the parish that is susceptible to the effects of coastal land loss are shown in the following table.

Table 2-13: Number of People Susceptible to Coastal Land Loss in Lafourche Parish.

Number of People Exposed to Coastal Land Loss						
Community # in Community # in Hazard Area % in Hazard Area						
Unincorporated LP	74,885	45,731	61.1%			
Golden Meadow	1,791	1,279	71.4%			
Lockport	2,874	1,467	51.5%			
Thibodaux	15,792	0	0%			

The Hazus Flood Model was used to identify populations vulnerable to coastal land loss throughout the parish in the table below:

Table 2-14: Population Vulnerable to Coastal Land Loss in Lafourche Parish.

Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	45,731	61.1%
Persons Under 5 years	2,378	5.2%
Persons Under 18 years	10,289	22.5%
Persons 65 Years and Over	5,712	12.5%
White	33,841	74.0%
Minority	11,890	26.0%

Table 2-15: Population Vulnerable to Coastal Land Loss in Golden Meadow.

Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	1,279	71.4%
Persons Under 5 years	42	3.3%
Persons Under 18 years	231	18.1%
Persons 65 Years and Over	226	17.7%
White	1,196	93.5%
Minority	83	6.5%

Table 2-16: Population Vulnerable to Coastal Land Loss in Lockport.

Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	1,467	51.5%
Persons Under 5 years	97	6.6%
Persons Under 18 years	420	28.6%
Persons 65 Years and Over	315	21.5%
White	1,209	82.4%
Minority	258	17.6%

Vulnerability Score

Table 2-17: Vulnerability Score for Coastal Hazards in Lafourche Parish.

Coastal Hazards Vulnerability Score						
Probability Impact Spatial Extent Warning Time Duration Risk Fact					Risk Factor	
Risk Level	4	2	4	1	2	2.75

# Flooding

## Profile

A flood is the overflow of water onto land that is usually not inundated. The National Flood Insurance Program defines a flood as:

A general and temporary condition of partial or complete inundation of two or more acres of normally dry land area or of two or more properties from overflow of inland or tidal waves, unusual and rapid accumulation or runoff of surface waters from any source, mudflow, or collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels that result in a flood as defined above.

Factors influencing the type and severity of flooding include natural variables such as precipitation, topography, vegetation, soil texture, and seasonality, as well as anthropogenic factors such as urbanization (extent of impervious surfaces), land use (agricultural and forestry tend to remove native vegetation and accelerate soil erosion), and the presence of flood-control structures such as levees and dams.

Extreme precipitation, produced from mid-latitude cyclones, thunderstorms, or hurricanes, is often the major initiating condition for flooding. During the cooler months, slow-moving frontal weather systems produce heavy rainfalls, while the summer and autumn seasons produce major precipitation in isolated thunderstorm occurrences (often on warm afternoons) that may lead to localized flooding. During these warmer seasons, floods are overwhelmingly of the flash flood variety, as opposed to the slower- developing river floods caused by heavy stream flow during the cooler months.

Six specific types of flooding are of main concern: riverine, flash, ponding, backwater, urban, and coastal.

- Riverine flooding occurs along a river or smaller stream. It is the result of runoff from heavy rainfall or intensive snow or ice melt. The speed with which riverine flood levels rise and fall depends not only on the amount of rainfall, but even more on the capacity of the river itself, as well as the shape and land cover of its drainage basin. The smaller the river, the faster that water levels rise and fall. For example, the Mississippi River levels rise and fall slowly due to its large capacity. Generally, elongated and intensely developed drainage basins will reach faster peak discharges and faster falls than circular-shaped and forested basins of the same area.
- **Flash flooding** occurs when locally intense precipitation inundates an area in a short amount of time, resulting in local stream flow and drainage capacity being overwhelmed.
- **Ponding** occurs when concave areas (e.g., parking lots, roads, and clay-lined natural low areas) collect water and are unable to drain.
- **Backwater flooding** occurs when water slowly rises from a normally unexpected direction where protection has not been provided.
- Urban flooding is similar to flash flooding but is specific to urbanized areas. It takes place when stormwater drainage systems cannot keep pace with heavy precipitation, and water accumulates on the surface. Most urban flooding is caused by slow-moving thunderstorms or torrential rainfall.
- Coastal flooding can appear similar to any of the other flood types, depending on its cause. It occurs
  when normally dry coastal land is flooded by seawater, but may be caused by direct inundation
  (when the sea level exceeds the elevation of the land), overtopping of a natural or artificial barrier,
  or the breaching of a natural or artificial barrier (i.e., when the barrier is broken down by the
  seawater). Coastal flooding is typically caused by storm surge, tsunamis, or gradual sea level rise.

Based on stream gauge levels and precipitation forecasts, the NWS posts flood statements, watches, and warnings. The NWS issues the following weather statements with regard to flooding:

- Flood Categories
  - o Minor Flooding: Minimal or no property damage, but possibly some public threat.
  - Moderate Flooding: Some inundation of structures and roads near streams. Some evacuations of people and/or transfer of property to higher elevations.
  - Major Flooding: Extensive inundation of structures and roads. Significant evacuations of people and/or transfer of property to higher elevations.
  - Record Flooding: Flooding that equals or exceeds the highest stage or discharge at a given site during the period of record keeping.
- Flood Warning
  - o Issued along larger streams when there is a serious threat to life or property.
- Flood Watch
  - o Issued when current and developing hydrometeorological conditions are such that there is a threat of flooding, but the occurrence is neither certain nor imminent.

Floods are measured mainly by probability of occurrence. A 10-year flood occurrence, for example, is an occurrence of small magnitude (in terms of stream flow or precipitation) but with a relatively high annual probability of recurrence (10%). A 100-year flood occurrence is larger in magnitude, but it has a smaller chance of recurrence (1%). A 500-year flood is significantly larger than both a 100-year occurrence and a 10-year occurrence, but it has a lower probability than both to occur in any given year (0.2%). It is important to understand that an X-year flood occurrence does not mean an occurrence of that magnitude occurs only once in X years. Instead, it means that on average, we can expect a flood occurrence of that magnitude to occur once every X years. Given that such statistical probability terms are inherently difficult for the general population to understand, the Association of State Floodplain Managers (ASFPM) promotes the use of more tangible expressions of flood probability. As such, the ASFPM also expresses the 100-year flood occurrence as having a 25% chance of occurring over the life of a 30-year mortgage.

The 100-year flood occurrence is of particular significance since it is the regulatory standard that determines the obligation (or lack thereof) to purchase flood insurance. Flood insurance premiums are set depending on the flood zone, as modeled by National Flood Insurance Program (NFIP) Rate Maps. The NFIP and FEMA suggest insurance rates based on Special Flood Hazard Areas (SFHAs), as diagrammed in the following figure.

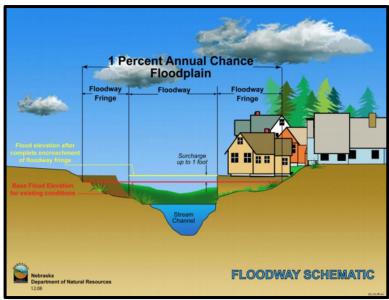


Figure 2-20: Schematic of 100-Year Floodplain.

The Special Flood Hazard Area (SFHA) extends to the end of the floodway fringe
(Source: Nebraska Department of Natural Resources)

A SFHA is the land area covered by the floodwaters of the base flood (red line in the previous figure), where the NFIP's floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. Flood zones for the parish and incorporated jurisdictions are shown in the following figures.

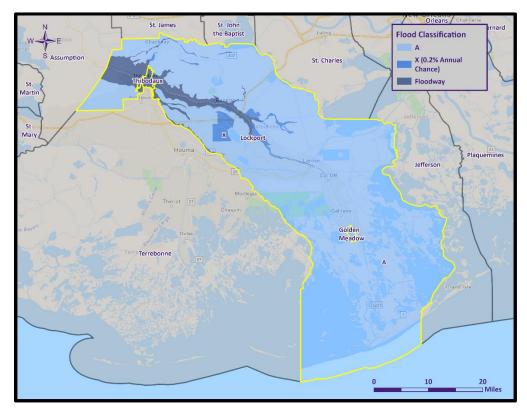


Figure 2-21: Flood Zones Across the Entirety of Lafourche Parish

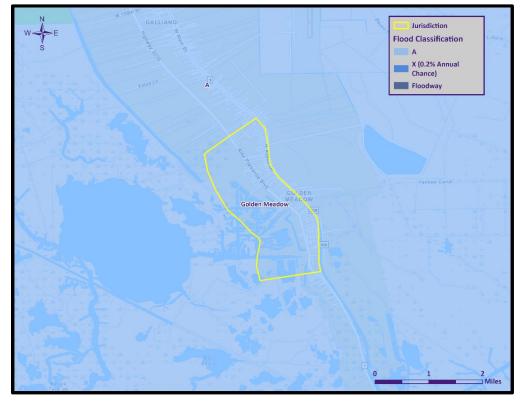


Figure 2-22: Flood Zones Across Golden Meadow



Figure 2-23: Flood Zones Across Lockport

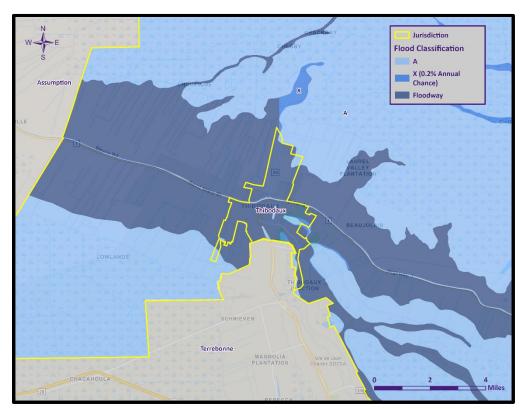


Figure 2-24: Flood Zones Across Thibodaux

# Property Damage

The depth and velocity of flood waters are the major variables in determining property damage. Flood velocity is important because the faster water moves, the more pressure it puts on a structure and the more it will erode

stream banks and scour the earth around a building's foundation. In some situations, deep and fast-moving waters can push a building off its foundation. Structural damage can also be caused by the weight of standing water (hydrostatic pressure).

Another threat to property from a flood is called "soaking". When soaked, many materials change their composition or shape. Wet wood will swell, and if dried too quickly, will crack, split, or warp. Plywood can come apart and gypsum wallboard can deteriorate if it is bumped before it has time to completely dry. The longer these materials are saturated, the more moisture, sediment, and pollutants they absorb. Soaking can also cause extensive damage to household goods. Wooden furniture may become warped, making it unusable, while other furnishings, such as books, carpeting, mattresses, and upholstery, usually are not salvageable. Electrical appliances and gasoline engines will flood, making them worthless until they are professionally dried and cleaned.

Many buildings that have succumbed to flood waters may look sound and unharmed after a flood, but water has the potential to cause severe property damage. Any structure that experiences a flood should be stripped, cleaned, and allowed to dry before being reconstructed. This can be an extremely expensive and time-consuming effort.

## Repetitive Loss Properties

Repetitive loss structures are structures covered by a contract for flood insurance made available under the NFIP that:

- Have incurred flood-related damage on two occasions, in which the cost of the repair, on average, equaled or exceeded 25 percent of the market value of the structure at the time of each such flood event; and
- b. At the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

Severe repetitive loss (SRL) is defined by the Flood Insurance Reform Act of 2004 and updated in the Biggert-Waters Flood Insurance Reform Act of 2012. For a property to be designated SRL, the following criteria must be met:

- a. It is covered under a contract for flood insurance made available under the NFIP; and
- b. It has incurred flood-related damage -
  - For which four or more separate claims payments have been made under flood insurance coverage, with the amount of each claim exceeding \$5,000 and with the cumulative amount of such claims' payments exceeding \$20,000; or
  - 2) For which at least two separate claims payments have been made under such coverage, with the cumulative amount of such claims exceeding the market value of the insured structure.

Figures regarding repetitive loss structures for the parish are provided in the table below:

Jurisdiction	Number of Structures	Residential	Commercial	Government	Total Claims	Total Claims Paid	Average Claim Paid
Unincorporated LP	261	247	14	0	725	\$15,434,859	\$21,289
Golden Meadow	126	86	40	0	462	\$18,836,701	\$40,772
Lockport	42	42	0	0	118	\$2,034,604	\$17,242
Thibodaux	115	113	2	0	329	\$5,997,099	\$18,228
Total	544	488	56	0	1,634	\$42,303,263	\$25,889

Table 2-18: Repetitive Loss Structures for the Parish.

The 544 repetitive loss structures were geocoded in order to provide an overview of where the repetitive loss structures are located throughout the parish. The figures on the following page show the approximate locations of the structures and where the highest concentration of repetitive loss structures is located. Through the repetitive

loss maps, it is clear that the primary concentration of repetitive loss structures is focused in the incorporated areas of Thibodaux, Golden Meadow and the unincorporated areas of Cut Off and Larose .

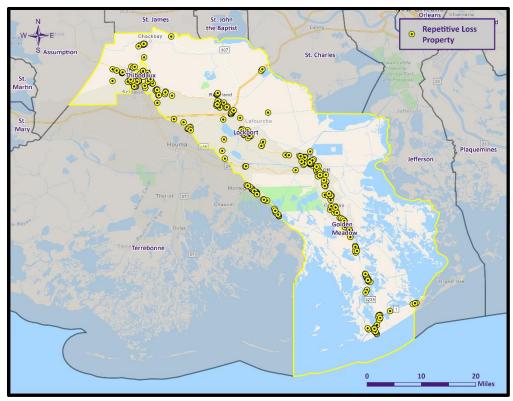


Figure 2-25: Repetitive Loss Properties in the Parish.

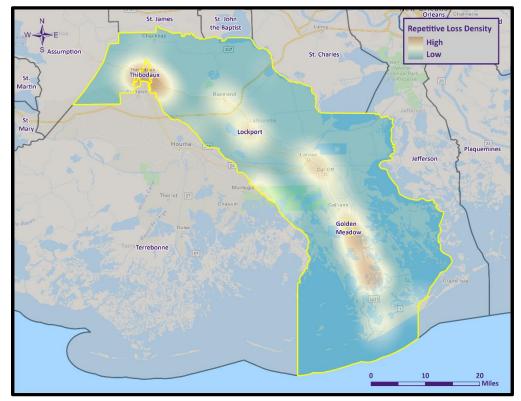


Figure 2-26: Repetitive Loss Property Densities in the Parish.

## National Flood Insurance Program

Flood insurance statistics indicate that the Parish has 7,452 flood insurance policies with the NFIP, with total annual premiums of \$7,750,479. The parish and all its incorporated jurisdictions participate in the NFIP. The parish and its jurisdictions will continue to adopt and enforce floodplain management requirements, including regulating new construction Special Flood Hazard Areas, making substantial improvement and/or damage determinations, or determining the necessary permits required of owners to bring a substantially improved/damaged structure back into compliance. The parish and its jurisdictions will continue to monitor activities including local requests for new map updates. Flood insurance statistics and additional NFIP participation details for the parish is provided in the tables to follow.

Location	No. of Insured Structures	Total Insurance Coverage Value	Annual Premiums Paid	No. of Insurance Claims Filed Since 1978	Total Loss Payments
Unincorporated LP	6,765	\$1,779,316,000	\$6,989,769	5,401	\$91,425,978
Golden Meadow	162	\$37,996,000	\$154,529	325	\$2,912,544
Lockport	147	\$29,381,000	\$364,620	187	\$6,125,646
Thibodaux	378	\$117,492,000	\$241,561	351	\$2,187,163
Total	7,452	\$1,964,185,000	\$7,750,479	6,264	\$102,651,331

Table 2-19: Summary of NFIP Policies for the Parish.

Table 2-20: Summary of Community Flood Maps for the Parish.

CID	Community Name	Initial FHBM Identified	Initial FIRM Identified	Adopted Date	Current Effective Map Date	Date Joined the NFIP	Tribal
225202	Lafourche Parish	5/8/1971	7/1/1974	5/4/1992	5/4/1992	4/17/1985	No
225196	Golden Meadow	11/20/1970	9/11/1970	7/11/1975	7/11/1975	11/20/1970	No
220254	Lockport	1/10/1975	8/15/1980	8/15/1980	8/15/1980	8/15/1980	No
220111	Thibodaux	2/12/1974	2/7/1978	12/15/1989	12/15/1989	2/7/1978	No

According to the Community Rating System (CRS) list of eligible communities, Lafourche Parish and the incorporated jurisdictions of Golden Meadow, Lockport, and Thibodaux are not active participants in the CRS program.

# Threat to People

Just as with property damage, depth and velocity are major factors in determining the threat posed to people by flooding. It takes very little depth or velocity for flood waters to become dangerous. A car will float in less than two feet of moving water, and can be swept downstream into deeper waters, trapping passengers within the vehicle. Victims of floods have often put themselves in perilous situations by entering flood waters that they believe to be safe, or by ignoring travel advisories.

Major health concerns are also associated with floods. Flood waters can transport materials such as dirt, oil, animal waste, and chemicals (e.g., farm, lawn, and industrial) that may cause illnesses of various degrees when coming in contact with humans. Flood water can also infiltrate sewer lines and inundate wastewater treatment plants, causing sewage to back up and creating a breeding ground for dangerous bacteria. This infiltration may also cause water supplies to become contaminated and undrinkable.

## Elevations in the Parish

The digital elevation model (DEM) for the parish is instructive in visualizing where the low-lying and high-risk areas are for the parish. The DEM shows that the areas located in the middle and northern parts of the parish are the highest elevations of the parish. These areas are at or near 0 to 2 feet (NAVD88) in elevation. The elevations in Golden Meadow are at or below 0 feet (NAVD88) in elevation while the incorporated areas of Lockport and Thibodaux are at approximately 4 feet (NAVD88) in elevation.

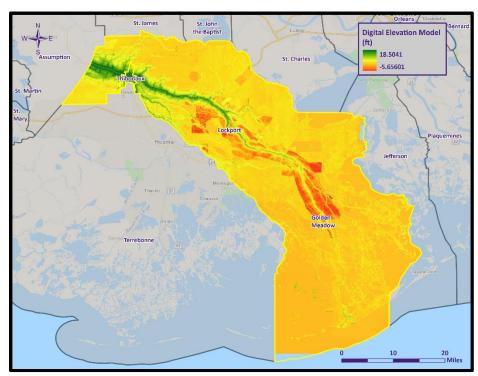


Figure 2-27: Elevation throughout the Parish.

# Risk Assessment Geographic Extent

Lafourche Parish has experienced significant flooding in its history and can expect more in the future. Lafourche Parish is susceptible to several different types of flooding due to its geographical location, including riverine, flash, and storm surge. The river, Bayou Lafourche, traverses the parish from north to south and separates the two watersheds that are located within Lafourche Parish. The area west of Bayou Lafourche is part of the Terrebonne watershed, and the area east of Bayou Lafourche is part of the Barataria watershed.

The worst-case scenarios for the unincorporated areas of Lafourche Parish are flood depths of approximately 8 feet. The interior portions of the parish, including the incorporated areas of Golden Meadow, Thibodaux, and Lockport can expect to experience flood depths of 5 to 7 feet.

## **Previous Occurrences**

The parish experienced 25 flooding occurrences between the years 1996 and 2025. Since the last update there have been five flood occurrences within the boundaries of the parish.

Date	Area	Type of Flood	Property Damage	Fatalities	Injuries
1/24/2024	THIBODAUX	Flash Flood	\$0	0	0
1/24/2024	NAQUIN	Flash Flood	\$0	0	0
1/24/2024	THIBODAUX	Flash Flood	\$0	0	0
1/24/2024	THIBODAUX	Flash Flood	\$20,000	0	0
9/11/2024	CHEGBY	Flash Flood	\$4,500,000	0	0

Table 2-21: Historical Flooding Events in the Parish since the Last Update.

## Probability

The annual return rate (frequency) for periods of flooding in the parish is 0.83, which means there is a 83% probability of a flooding event occurring in any given year. This translates to an average of one flooding event occurring every one to two years over the long term.

- Annual Return Rate (Frequency): 0.83, which represents the likelihood of an event happening in any given
  year.
- Average Interval Between Events: On average, one flooding event occurs approximately every 1.2 years, or about every one to two years. This is the inverse of the return rate (1 / 0.83 = 1.2 years)

The following table shows the probability and return frequency for each jurisdiction in the parish.

	Table 2 2217 militar 1700 at 1700 abilities joi 2 activation in the 1 arisin				
Jurisdiction	Annual Probability	Return Frequency			
Unincorporated LP	50%	1 event every 2 years			
Golden Meadow	7%	1 event every 15 years			
Lockport	7%	1 event every 15 years			
Thibodaux	27%	1 event every 3 to 4 years			

Table 2-22: Annual Flood Probabilities for Each Jurisdiction in the Parish.

# Climate Change Impacts

Atmospheric moisture, precipitation, and atmospheric circulation can be affected by climate change, since radiative forcing alters heating, which affects evaporation and sensible heating at the Earth's surface. This process alters the amount, frequency, intensity, duration, and type of precipitation, which is part of the hydrological cycle. The Intergovernmental Panel on Climate Change reports that over 105-year period (1901 – 2005) precipitation has increased 5 to 10%. Additionally, water resource managers observed the following:

- Historical hydrological patterns can no longer be solely relied upon to forecast the water future.
- Precipitation and runoff patterns are changing, increasing the uncertainty for water supply quality, flood management, and ecosystem functions.
- Extreme climatic events will become more frequent, necessitating improvement in flood protection and emergency response.

Climate change poses significant threats to both infrastructure and vulnerable populations in the context of flooding. Rising global temperatures have led to the intensification of extreme weather events, such as heavy rainfall and storms, which increase the frequency and severity of floods. Infrastructure, such as roads, bridges, and buildings, designed to withstand historical weather patterns, is now facing greater stress and damage due to the increased volume and intensity of floodwaters.

One of the most pressing impacts of climate change on infrastructure is the increased risk of damage and disruption to critical lifeline systems, such as water supply networks, energy grids, and transportation systems. Floods can compromise the integrity of these systems, leading to widespread power outages, disrupted water access, and road closures, hindering emergency response and recovery efforts. As floods become more frequent and severe, the cost of repairing and reinforcing infrastructure becomes a significant burden on governments and communities.

Furthermore, climate change disproportionately affects vulnerable populations, including low-income communities, the elderly, and those with limited mobility or access to resources. These communities often reside in flood-prone areas with inadequate infrastructure and limited capacity to adapt to changing conditions. Floods can exacerbate existing social inequalities, displacing vulnerable populations and exposing them to health risks, property loss, and economic hardship. Lack of access to timely information and limited evacuation resources can further endanger their lives during extreme flooding events.

Additionally, climate change can disrupt local economies in flood-affected regions. Agricultural lands can be damaged, leading to reduced crop yields and affecting livelihoods. Businesses, particularly those without insurance or financial resilience, may face bankruptcy due to flood-related losses. The overall economic impacts ripple beyond immediate flood-affected regions, affecting supply chains and markets globally.

Addressing the impacts of climate change on infrastructure and vulnerable populations requires a comprehensive approach. Building more resilient infrastructure, incorporating climate adaptation measures, and enforcing zoning regulations to prevent development in flood-prone areas are essential steps. Additionally, governments must prioritize support and resources for vulnerable communities, providing them with better access to early warning systems, evacuation plans, and social safety nets to cope with flood-related challenges. Long-term climate change mitigation efforts are also necessary to reduce the severity and frequency of floods, ultimately safeguarding both infrastructure and vulnerable populations from the detrimental effects of flooding.

## Future Hazard Impacts

Hazard impacts for flood were estimated for the years 2030 and 2035. Yearly population and housing rates were applied to parish inventory assets for composite floods. Based on a review of available information, it is assumed that population and housing units will increase within the parish from the present until 2035. A summary of estimated future impacts is shown in the table below. Dollar values are expressed in future costs and assume an annual rate of inflation of 1.02%

Table 2-23: Estimated Future Impacts, 2030 - 2035. (Source: Hazus, US Census Bureau)

Hazard / Impact	Total in Parish (2025)	Hazard Area (2025)	Hazard Area (2030)	Hazard Area (2035)
Flood Damage				
Structures	41,960	22,771	22,931	23,046
Value of Structures	\$8,372,537,000	\$4,543,678,933	\$4,912,445,296	\$5,194,035,762
# of People	97,557	51,741	52,104	52,365

## **Vulnerability Analysis**

The NRI includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the county and Census tract level. The following table provides an overview of each category at the county level for flooding.

Table 2-24: National Risk Index (NRI) Summarization of Riverine Flood Occurrences for the Parish (Source: National Risk Index)

(Comment of the Comment of the Comme		
Expected Annual Losses	Overall Risk Rating	
Relatively Low	Relatively Low	

Using the Hazus Flood Model, the 100-year flood scenario was analyzed to determine losses from this scenario. The following table shows the total economic losses that would result from a 100-year flood occurrence.

Table 2-25: Estimated Losses in the Parish from a 100-Year Flood Event
(Source: Hazus)

Jurisdiction	Estimated Loss	
Unincorporated LP	\$3,901,459,000	
Golden Meadow	\$157,360,000	
Lockport	\$62,528,000	
Thibodaux	\$1,618,000	

The Hazus Flood Model also provides a breakdown by jurisdiction for seven primary categories (Hazus occupancy) throughout the parish. The losses for each jurisdiction by sector are listed in the following tables:

Table 2-26: Estimated 100-year Flood Losses for the Unincorporated Area of the Parish by Sector. (Source: Hazus)

	Estimated Total Losses from 100-Year Flood
Unincorporated LP	Event
Agricultural	\$11,025,000
Commercial	\$574,893,000
Government	\$20,319,000
Industrial	\$136,717,000
Religious / Non-Profit	\$55,444,000
Residential	\$3,069,011,000
Schools	\$34,050,000
Total	\$3,901,459,000

Table 2-27: Estimated 100-year Flood Losses for Golden Meadow by Sector. (Source: Hazus)

Golden Meadow	Estimated Total Losses from 100-Year Flood Event	
Agricultural	\$612,000	
Commercial	\$22,223,000	
Government	\$570,000	
Industrial	\$3,112,000	
Religious / Non-Profit	\$2,404,000	
Residential	\$124,779,000	
Schools	\$3,660,000	
Total	\$157,360,000	

Table 2-28: Estimated 100-year Flood Losses for Lockport by Sector. (Source: Hazus)

Lockport	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$3,702,000
Government	\$0
Industrial	\$827,000
Religious / Non-Profit	\$1,040,000
Residential	\$56,516,000
Schools	\$443,000
Total	\$62,528,000

Table 2-29: Estimated 100-year Flood Losses for Thibodaux by Sector. (Source: Hazus)

(55.55)		
Thibodaux	Estimated Total Losses from 100-Year Flood Event	
Agricultural	\$12,000	
Commercial	\$79,000	
Government	\$38,000	
Industrial	\$91,000	
Religious / Non-Profit	\$33,000	
Residential	\$1,348,000	
Schools	\$17,000	
Total	\$1,618,000	

# Vulnerable Population

The total population within the parish that is susceptible to a flood hazard is shown in the table below:

Table 2-30: Vulnerable Populations Susceptible to a 100-year Flood Event. (Source: Hazus)

(553.1551.1555)			
Number of People Exposed to Flood Hazards			
Location # in Community # in Hazard Area % in Hazard Area			
Unincorporated LP	74,885	48,436	64.7%
Golden Meadow	1,791	1,791	100.0%
Lockport	2,874	1,243	43.2%
Thibodaux	15,792	301	1.9%

The Hazus Flood model was also extrapolated to provide an overview of the vulnerable populations throughout the jurisdictions in the following tables:

Table 2-31: Vulnerable Populations Susceptible to a 100-year Flood Event in the Parish. (Source: Hazus)

Unincorporated LP		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	48,436	64.7%
Persons Under 5 Years	2,519	5.2%
Persons Under 18 Years	10,898	22.5%
Persons 65 Years and Over	6,050	12.5%
White	35,843	74.0%
Minority	12,593	26.0%

Table 2-32: Vulnerable Populations Susceptible to a 100-year Flood Event in Golden Meadow. (Source: Hazus)

(Source: Huzus)			
Golden Meadow			
Category	Total Numbers	Percentage of People in Hazard Area	
Number in Hazard Area	1,791	100.0%	
Persons Under 5 Years	58	3.3%	
Persons Under 18 Years	319	18.1%	
Persons 65 Years and Over	312	17.7%	
White	1,647	93.5%	
Minority	114	6.5%	

Table 2-33: Vulnerable Populations Susceptible to a 100-year Flood Event in Lockport. (Source: Hazus)

1 2 2 2 2		
Lockport		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	1,243	43.2%
Persons Under 5 Years	82	6.6%
Persons Under 18 Years	355	28.6%
Persons 65 Years and Over	267	21.5%
White	1,024	82.4%
Minority	219	17.6%

Table 2-34: Vulnerable Populations Susceptible to a 100-year Flood Event in Thibodaux. (Source: Hazus)

Thibodaux		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	301	1.9%
Persons Under 5 Years	17	5.6%
Persons Under 18 Years	61	20.3%
Persons 65 Years and Over	52	17.4%
White	202	67.0%
Minority	99	33.0%

# Vulnerability Score

Table 2-35: Flooding Vulnerability Score for the Parish.

Flooding Vulnerability Score								
	Probability Impact Spatial Extent Warning Time Duration Risk Factor							
Risk Level	3	4	3	4	3	3.4		

## **Sinkholes**

## Profile

Sinkholes are areas of ground—varying in size from a few square feet to hundreds of acres and reaching in depth from 1 to more than 100 ft.—with no natural external surface drainage. Sinkholes are usually found in karst terrain—that is, areas where limestone, carbonate rock, salt beds, and other water-soluble rocks lie below the Earth's surface. Karst terrain is marked by the presence of other uncommon geologic features such as springs, caves, and dry streambeds that lose water into the ground. In general, sinkholes form gradually (in the case of cover subsidence sinkholes), but they can also occur suddenly (in the case of cover-collapse sinkholes).

Sinkhole formation is a very simple process. Whenever water is absorbed through soil, encounters water-soluble bedrock, and then begins to dissolve it, sinkholes start to form. The karst rock dissolves along cracks; as the fissures grow, soil and other particles fill the gaps, loosening the soil above the bedrock. As the soil sinks from the surface, a depression forms, which draws in more water, funneling it down to the water-soluble rock. The increase of water and soil in the rock pushes open the cracks, again drawing more soil and water into it. This positive feedback loop continues, unless clay plugs into the cracks in the bedrock, at which time a pond may form. A sudden cover-collapse sinkhole occurs when the topsoil above dissolving bedrock does not sink, but forms a bridge over the soil that is sinking beneath it. Underground soil continues to fill the bedrock fissures, until finally the soil bridge collapses and fills the void beneath it.

Both kinds of sinkholes can occur naturally or through human influence. While sinkholes tend to form naturally in karst areas, sinkholes can form in other geological areas that have been altered by humans such as mining, sewers, hydraulic fracture drilling, groundwater pumping, irrigation, or storage ponds. In all of these cases, and others, the cause for the sinkhole is that support for surface soil has been weakened or substantially removed.

In the United States, 20% of land in the United States is susceptible to sinkholes. Most of this area lies in Florida, Texas, Alabama, Missouri, Kentucky, Tennessee, and Pennsylvania. In Louisiana, most of the sinkholes are precipitated by the human-influenced collapse of salt dome caverns. The collapse of a salt dome is usually a slow process; however, it may occur suddenly and without any advance warning.

# Risk Assessment Geographic Extent

Currently, there are 16 identifiable salt domes that are either located within Lafourche Parish or within a two mile radius of one. The figure on the following page displays the locations of the salt domes with their relative location. As depicted in the figure, salt domes are located throughout the parish. While the majority of the salt domes are located in unincorporated areas of the parish, the Golden Meadow Salt Dome's two-mile buffer encompasses portions of the incorporated area of Golden Meadow. The incorporated areas of Lockport and Thibodaux are not susceptible to the impacts of sinkholes.

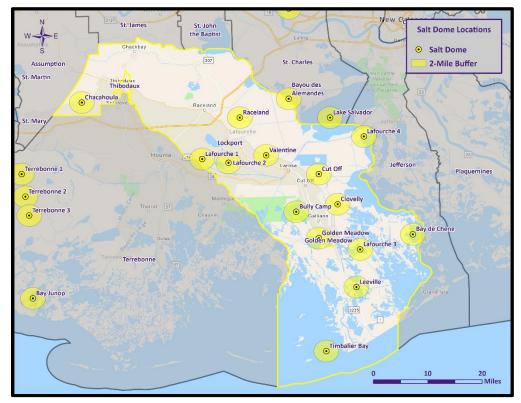


Figure 2-28: Salt Dome Locations in Lafourche Parish.

## **Previous Occurrences**

There have been no recorded incidents of sinkholes or salt dome collapses in the parish to date.

## Probability

Based on historical data for the past 30-years, there has been no incident of a sinkhole formation or salt dome collapse in Lafourche Parish. The annual chance of occurrence is calculated at less than 1%.

## Climate Change Impacts

Climate change is exerting significant impacts on the occurrence and behavior of sinkholes, geological formations characterized by ground collapse. Altered precipitation patterns, intensified by climate change, result in increased infiltration of water into the ground, eroding underground rock layers and forming voids that can lead to sinkhole formation. Rising sea levels, another consequence of climate change, contribute to the intrusion of saltwater into coastal aquifers, accelerating the dissolution of underground rocks and enhancing the likelihood of sinkhole development. Furthermore, shifting hydrological patterns and extreme weather events, both exacerbated by climate change, disrupt natural water movement and contribute to the instability of soil and rock formations, increasing the susceptibility of sinkhole formation. As climate change continues to reshape ecosystems and exacerbate these processes, adequate mitigation strategies, including improved urban planning, infrastructure design, and geological assessments, become essential to curbing the escalating impacts of sinkholes on both natural landscapes and human settlements.

## **Vulnerability Analysis**

Sinkholes can have profound and wide-ranging impacts on both natural environments and human communities. These sudden depressions in the Earth's surface can pose serious risks to infrastructure, causing damage to roads, buildings, and utility lines. The resulting economic losses can be substantial, affecting businesses, disrupting local economies, and straining resources for repairs and recovery. Human populations can be directly affected through displacement due to sinkhole-related damage, leading to temporary or permanent evacuations and upending lives. Public safety concerns also arise as sinkholes can appear with little warning, endangering individuals and vehicles.

The environmental consequences are also significant, altering local hydrology, groundwater flow, and potentially causing groundwater contamination if hazardous materials are exposed. As urbanization and climate change further interact with sinkhole dynamics, understanding and managing these impacts becomes increasingly crucial for sustainable development and community resilience.

## Estimated Impact and Potential Loss

The 16 salt dome locations were analyzed to determine the number of people and homes that are potentially susceptible to losses from a sinkhole materializing from the salt dome. Nine of the salt domes contained people or homes within them, with the other seven having no impact on people or homes. The following table is based on conducting a two-mile buffer around the center of the salt domes. The values were determined by querying the 2020 U.S. Census block data to determine the number of houses and people located within two miles of the salt dome. Critical facilities were also analyzed to determine if they fell within the two-mile buffer of the salt domes. The total value for all occupancy groups from Hazus was used to estimate a total loss of all facilities that were within two miles of the salt dome.

Table 2-36: Estimated Potential Losses from a Sinkhole Formation. (Source: U.S. 2020 Census Data and Hazus)

Salt Dome Name	Total Building Exposure	Critical Infrastructure Exposure		
Chacahoula	\$13,911,000	0	2	1
Lafourche1	\$136,212,000	1	1,161	436
Lafourche2	\$16,431,000	0	109	36
Raceland	\$31,998,000	2	508	181
Valentine	\$59,439,000	1	123	40
Cut Off	\$3,876,000	0	7	13
Golden Meadow	\$291,876,000	5	1,843	814
Leeville	\$26,131,000	0	19	28
Bully Camp	\$2,111,000	0	39	15

#### Vulnerable Population

Per the NCEI Storm Events Database, there have been no reported fatalities or injuries as a result of sinkholes. However, sinkholes pose particularly severe and disproportionate impacts on vulnerable populations, exacerbating existing social disparities. Low-income communities often lack the resources to adequately prepare for and recover from sinkhole-related events. These populations may reside in areas prone to sinkhole formation due to limited housing options or historical settlement patterns. When sinkholes occur, they can destroy homes, disrupt essential services, and force displacement, leaving vulnerable individuals without stable housing and access to necessary amenities. Additionally, marginalized communities might face barriers in receiving timely assistance and information, compounding the challenges they face in the aftermath of sinkhole incidents. Limited financial means can hinder the ability to rebuild or relocate, trapping vulnerable populations in unsafe environments.

# Vulnerability Score

Table 2-37: Vulnerability Score for Sinkholes in Lafourche Parish.

	rable 2 37. Vallerability Scote for Silikitoles in Eafourelle Farisin							
Sinkholes Vulnerability Score								
	Probability Impact Spatial Extent Warning Time Duration Risk Factor							
Risk Level	1	2	2	1	4	1.9		

# Thunderstorms (Hail, Lightning, & Thunderstorm Wind)

#### Overview

The term "thunderstorm" is usually used as a catch-all term for several kinds of storms. Here "thunderstorm" is defined to include any precipitation occurrence in which thunder is heard or lightning is seen. Thunderstorms are often accompanied by heavy rain and strong winds, and occasionally, depending on conditions, by hail or snow. Thunderstorms form when humid air masses are heated, which causes them to become convectively unstable. Consequently, the air masses rise. Upon rising, the air masses' water vapor condenses into liquid water and/or deposits directly into ice when they rise sufficiently to cool to the dew-point temperature.

Thunderstorms are classified into four main types (single-cell, multi-cell, squall line, and supercell) depending on the degree of atmospheric instability, the change in wind speed with height (called wind shear), and the degree to which the storm's internal dynamics are coordinated with those of adjacent storms. There is no such interaction for single-cell thunderstorms, but there is significant interaction with clusters of adjacent thunderstorms in multi-cell thunderstorms, and with a linear "chain" of adjacent storms in squall line thunderstorms. Though supercell storms have no significant interactions with other storms, they have very well-organized and self-sustaining internal dynamics, which allows them to be the longest-lived and most severe of all thunderstorms.

The life of a thunderstorm proceeds through three stages: the developing (or cumulus) stage, the mature stage, and the dissipation stage. During the developing stage, the unstable air mass is lifted as an updraft into the atmosphere. This sudden lift rapidly cools the moisture in the air mass, releasing latent heat as condensation and/or deposition occurs, which warms the surrounding environment, thus making it less dense than the surrounding air. This process intensifies the updraft and creates a localized lateral rush of air from all directions into the area beneath the thunderstorm to feed continued updrafts. At the mature stage, the rising air is accompanied by downdrafts caused by the shear of falling rain (if melted completely), or hail, freezing rain, sleet, or snow (if not melted completely). The dissipation stage is characterized by the dominating presence of the downdraft as the hot surface that gave the updrafts their buoyancy is cooled by precipitation. During the dissipation stage, the moisture in the air mass largely empties out.

The Storm Prediction Center, in conjunction with the National Weather Service (NWS), has the ability to issue advisory messages based on forecasts and observations. The following are the advisory messages that may be issued, along with definitions of each:

Severe Thunderstorm Watch: Issued to alert people to the possibility of a severe

thunderstorm developing in the area. Expected time frame for

these storms is three to six hours.

• Severe Thunderstorm Warning: Issued when severe thunderstorms are imminent. This

warning is highly localized and covers parts of one to several

counties.

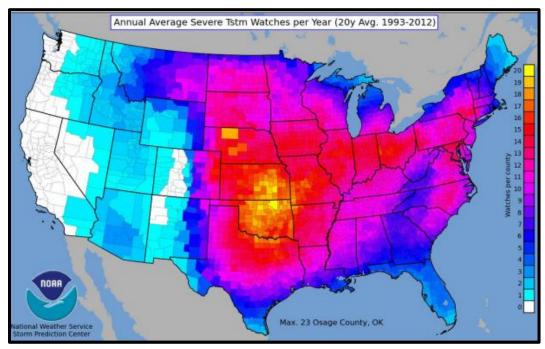


Figure 2-29: County-Level Severe Thunderstorm Watches Issued Per Year on Average.

A variety of hazards might be produced by thunderstorms, including lightning, hail, tornadoes or waterspouts, flash flooding, and high-speed winds called downbursts. Nevertheless, given the criteria, the National Oceanic and Atmospheric Administration (NOAA) characterize a thunderstorm as severe when it produces one or more of the following:

- Hail of one inch in diameter or larger
- Wind gusts to 58 mph or greater
- One or more tornadoes

Tornadoes and flooding hazards have been profiled individually within this report; therefore, for the purpose of thunderstorms, the sub-hazards of hail, high winds, and lightning will be profiled.

Thunderstorms occur throughout the United States at all times of the year, although the types and severity of these storms vary greatly depending on a wide variety of atmospheric conditions. Severe thunderstorms occur more frequently during the late spring and early summer and late summer and early fall when extreme variations exist between ground surface temperatures and upper atmospheric temperatures.

## Climate Change Impacts

The impact of climate change on thunderstorms is not well understood at this time. However, thunderstorms are complex, dynamic systems fueled by heat and moisture which can be measured with CAPE (convective available potential energy). It is predicted that CAPE will increase across the Eastern United States by the second half of the 21<sup>st</sup> century, meaning there is more energy to fuel severe thunderstorms. In this same time frame, there would be a small decrease in vertical wind shear, which helps produce long-lived severe storms. However, the increase in energy outweighs the decreasing shear to produce a net increase in environmental favorability for severe thunderstorms by the end of the century. Some climate models maintained by the Goddard Institute for Space Studies indicate that the number of severe thunderstorms will not change much, but the severe storms that do occur would have stronger winds and more intense precipitation.

Climate change is influencing the frequency and severity of thunderstorms, resulting in significant impacts on infrastructure and vulnerable populations. As global temperatures rise, the atmosphere becomes more energized,

leading to an increase in the intensity of thunderstorm activity. Thunderstorms bring heavy rainfall, strong winds, hail, and lightning, all of which can cause substantial damage to various types of infrastructure.

One of the most significant impacts of thunderstorms on infrastructure is the damage to power and communication lines. Strong winds and lightning strikes can lead to power outages, disrupting essential services and communication networks. This can have severe consequences for communities that rely on electricity for medical equipment, communication, and daily living. Additionally, damage to power infrastructure can result in economic losses due to business interruptions and increased repair costs.

Furthermore, heavy rainfall associated with thunderstorms can lead to flash flooding, overwhelming stormwater drainage systems and causing road and bridge damage. This not only disrupts transportation networks but also poses a safety hazard for motorists and pedestrians. Flooded roads can isolate communities and hinder emergency response efforts, leaving vulnerable populations at higher risk during and after thunderstorm events.

Vulnerable populations, such as low-income communities and the elderly, often lack access to resources and live in areas with inadequate infrastructure. They are disproportionately affected by the impacts of thunderstorms. For instance, substandard housing in flood-prone regions can suffer severe damage during storms, displacing already marginalized individuals and families. The elderly and people with limited mobility may face difficulties evacuating during severe weather events, putting their lives at risk.

Moreover, thunderstorms can lead to an increase in lightning-related accidents and wildfires. Lightning strikes can cause fires that spread rapidly, threatening communities and posing additional risks to vulnerable populations living in areas prone to wildfires. These events not only endanger lives but also strain emergency response resources and increase the financial burden on affected communities.

To address the impacts of climate change on infrastructure and vulnerable populations concerning thunderstorms, several measures are crucial. Investment in resilient infrastructure, such as strengthening power grids and stormwater drainage systems, can help mitigate damage and improve response capabilities. Additionally, raising awareness and providing resources to vulnerable communities can enhance preparedness and evacuation plans. Climate change mitigation efforts to reduce greenhouse gas emissions are also essential in curbing the intensification of thunderstorms, ultimately safeguarding both infrastructure and vulnerable populations from the adverse effects of these severe weather events.

#### Future Hazard Impacts

Population growth and development trends can influence thunderstorm dynamics in several ways. Urban heat islands generated by increased development can enhance local convection and thunderstorm activity. Urbanization can alter land cover, increasing impermeable surfaces that reduce natural drainage and potentially exacerbate localized flooding during thunderstorms. Increased human activity can also introduce aerosols and pollutants into the atmosphere which may influence cloud formation and precipitation patterns, possibly intensifying thunderstorm characteristics.

## Hail Profile

Hailstorms are severe thunderstorms in which balls or chunks of ice fall along with rain. Hailstorm densities and reports vary spatially across Louisiana. Hail initially develops in the upper atmosphere as ice crystals that are bounced about by high-velocity updraft winds. The ice crystals grow through deposition of water vapor onto their surface. They then fall partially to a level in the cloud where the temperature exceeds the freezing point, melt partially, and then get caught in another updraft whereupon re-freezing and deposition grows another concentric layer of ice. After several trips up and down the cloud, they develop enough weight to fall. The size of hailstones varies depending on the severity and size of the thunderstorm. Higher surface temperatures generally mean stronger updrafts, which allow more massive hailstones to be supported by updrafts, leaving them suspended longer. This longer suspension time results in larger hailstone sizes. The tables on the next page display the TORRO Hailstorm Intensity Scale, along with a spectrum of hailstone diameters and their everyday equivalents.

Table 2-38: TORRO Hailstorm Intensity Scale.

Intensity Category		Hail Diameter (mm)	Probable Kinetic Energy	Typical Damage Impacts
НО	Hard Hail	5	0 - 20	No damage
H1	Potentially Damaging	5 - 15	>20	Slight general damage to plant, crops
H2	Significant	10 - 20	>100	Significant damage to fruit, crops, vegetation
H3 Severe		20 - 30	>300	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	25 - 40	>500	Widespread glass damage, vehicle body work
H5 Destructive		30 - 50	>800	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6 Destructive		40 - 60		Bodywork of grounded aircraft dented; brick walls pitted
H7	Destructive	50 - 75		Severe roof damage, risk of serious injuries
Н8	Destructive	60 - 90		Severe damage to aircraft bodywork
Н9	Super Hailstorms 75 - 100		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open	
H10 Super Hailstorms		>100		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

Table 2-39: Spectrum of Hailstone Diameters and their Everyday Description. (Source: National Weather Service)

Spectrum of Hailstone Diameters			
Hail Diameter Size	Description		
1/4"	Pea		
1/2"	Plain M&M		
3/4"	Penny		
7/8"	Nickle		
1" (severe)	Quarter		
1 1/4"	Half Dollar		
1 1/2"	Ping Pong Ball / Walnut  Golf Ball  Hen Egg / Lime		
1 3/4"			
2"			
2 1/2"	Tennis Ball		
2 3/4"	Baseball		
3"	Teacup / Large Apple		
4"	Softball		
4 1/2"	Grapefruit		
4 3/4" – 5"	Computer CD-DVD		

Hailstorms can cause widespread damage to homes and other structures, automobiles, and crops. While the damage to individual structures or vehicles is often minor, the cumulative cost to communities, especially across large metropolitan areas, can be quite significant. Hailstorms can also be devastating to crops. Thus, the severity of hailstorms depends on the size of the hailstones, the length of time the storm lasts, and where it occurs. Hail rarely causes loss of life, although large hailstones can cause bodily injury.

## Lightning Profile

Lightning is defined by the National Weather Service as any and all of the various forms of visible electrical discharge caused by thunderstorms. Thunderstorms and lightning are usually (but not always) accompanied by rain. Cloud-to-ground lightning can kill or injure people by direct or indirect means. Objects can be struck directly, which may result in an explosion, burn, or total destruction. Damage may also be indirect which occurs when the current passes through or near an object.

Intra-cloud lightning is the most common type of discharge. This occurs between oppositely charged centers within the same cloud. Usually it transpires inside the cloud and looks from the outside of the cloud like a diffuse brightening that flickers. However, the flash may exit the boundary of the cloud, and a bright channel, similar to a cloud-to-ground flash, can be visible for many miles.

Cloud-to-ground lightning is the most damaging and dangerous type of lightning, though it is also less common. Most flashes originate near the lower-negative charged center and deliver negative charge to the earth. However, a large minority of flashes carry a positive charge to earth. These positive flashes often occur during the dissipating stage of a thunderstorm. Positive flashes are also more common as a percentage of total ground strikes during the winter months. This type of lightning is particularly dangerous for several reasons. It frequently strikes away from the rain core, either ahead or behind the thunderstorm. It can strike five to ten miles from the storm in areas that most people do not consider a threat. Positive lightning also has a longer duration, so fires are more easily ignited. When positive lightning strikes, it usually carries a high peak electrical current, which can potentially result in greater damage.

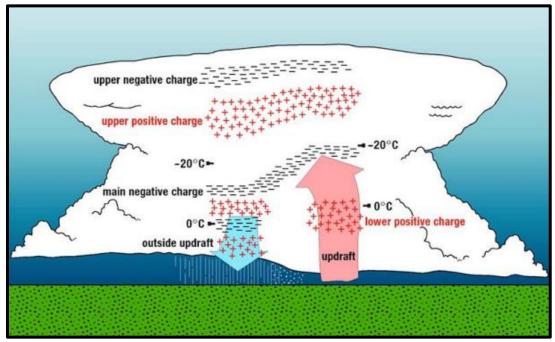


Figure 2-30: Charge Distribution in a Typical Storm Cloud. (Source: The National Severe Storms Laboratory)

Lightning continues to be one of the top three storm-related killers in the United States per FEMA, but if not fatal, it also has the ability to cause negative long-term health effects to the individual that is struck. The table on the next page outlines the lightning activity level and intensity scale:

LAL	Cloud and Storm Development	Lightning Strikes/15 Min
1	No thunderstorms.	-
2	Cumulus clouds are common but only a few reaches the towering cumulus stage. A single thunderstorm must be confirmed in the observation area. The clouds produce mainly virga, but light rain will occasionally reach the ground. Lightning is very infrequent.	1-8
3	Towering cumulus covers less than two-tenths of the sky. Thunderstorms are few, but two to three must occur within the observation. Light to moderate rain will reach the ground, and lightning is infrequent.	9-15
4	Towering cumulus covers two to three-tenths of the sky. Thunderstorms are scattered and more than three must occur within the observation area. Moderate rain is common, and lightning is frequent.	16-25
5	Towering cumulus and thunderstorms are numerous. They cover more than threetenths and occasionally obscure the sky. Rain is moderate to heavy and lightning is frequent.	>25
6	Similar to LAL 3 except thunderstorms are dry	

# Thunderstorm Wind Profile

In general, high winds occur in a number of different ways, with and without thunderstorms. Similar to hailstorms (and often associated with the same storm), high wind damage densities and reports resulting from severe thunderstorms vary spatially across Louisiana. The only high winds of present concern from the following table are thunderstorm winds and downbursts. Straight-line winds are common but are a relatively insignificant hazard (on land) compared to other high winds. Downslope winds are common, but relatively insignificant in Louisiana. Nor'easters are cyclonic low-pressure systems that have a minimal impact if any on Louisiana while hurricane winds have a significant impact on the state due to its location.

Table 2-41: High Winds Categorized by Source. (Source: Making Critical Facilities Safe from High Wind, FEMA)

High Wind Type	Description				
Straight-Line Winds	Wind blowing in straight line; usually associated with intense low-pressure area				
Downslope Winds	Wind blowing down the slope of a mountain; associated with temperature and pressure gradients				
Thunderstorm Winds	Wind blowing due to thunderstorms, and thus associated with temperature and pressure gradients				
Downbursts	Sudden wind blowing down due to downdraft in a thunderstorm; spreads out horizontally at the ground, possible forming horizontal vortex rings around the downdraft.				
Northeaster (Nor'easter) Winds	Wind blowing due to cyclonic storm off the east coast of North America; associated with temperature and pressure gradients between the Atlantic Ocean and land				
Hurricane Winds	Wind blowing in spirals, converging with increasing speed toward eye; associated with temperature and pressure gradients between the Atlantic Ocean, Gulf of Mexico, and land				
Tornado Winds	Violently rotating column of air from base of thunderstorm to the ground with rapidly decreasing winds at greater distances from center; associated with extreme temperature gradient				

Major damage directly caused by thunderstorm winds is relatively rare, while minor damage is common and pervasive, and most noticeable when it contributes to power outages. These power outages can have major negative

impacts such as increased tendency for traffic accidents, increased vulnerability to fire, food spoilage, and other losses that might be sustained by a loss of power. The following table presents the Beaufort Wind Scale, first developed in 1805 by Sir Francis Beaufort, which aids in determining relative force and wind speed based on the appearance of wind effects:

Table 2-42: Beaufort Wind Scale. (Source: NOAA's SPC)

	Beaufort Wind Scale					
Force	Wind WMO Appearance of Wind Effects on Land (MPH)					
			Calm, smoke rises vertically			
1	1-3	Light Air	Smoke drift indicates wind direction, still wind vanes			
2	4-7	Light Breeze	Wind felt on face, leaves rustle, vanes begin to move			
3	8-12	Gentle Breeze	Leaves and small twigs constantly moving, light flags extended			
4	13-17	Moderate Breeze	Dust, leaves, and loose paper lifted; small tree branches move			
5	18-24	Fresh Breeze	Small trees in leaf begin to sway			
6	25-30	Strong Breeze	Larger tree branches moving, whistling in wires			
7	31-38	Near Gale	Whole trees moving, resistance felt walking against wind			
8	39-46	Gale	Twigs breaking off trees, generally impedes progress			
9	47-54	Strong Gale	Slight structural damage occurs, slate blows off roofs			
10	55-63	Storm	Seldom experienced on land, trees broken or uprooted, "considerable structural damage"			
11	54-73	Violent Storm	N/A			
12	74+	Hurricane	N/A			

# Hail Risk Assessment

#### Geographic Extent

Because hailstorms are a climatologically based occurrence that can occur anywhere, the entire planning area is at risk for hailstorms. The worst-case scenario for hailstorms is hail up to 2 inches in diameter.

## **Previous Occurrences**

The parish experienced 28 hail occurrences between the years 1996 and 2025. Since the last update, there have been 9 hail occurrences within the boundaries of the parish that have been recorded by the NCEI storm events database. Below is a brief synopsis of those events.

Table 2-43: Historical Thunderstorm Hail Occurrences in Lafourche Parish since the Last Update.

			· <b>,</b> · · · · ·		
Date	Hail Size (inches)	Property Damage	Crop Damage	Fatalities	Injuries
4/13/2021	1	\$0	\$0	0	0
4/13/2021	1	\$0	\$0	0	0
4/7/2023	1	\$0	\$0	0	0
6/20/2023	3.5	\$0	\$0	0	0
6/20/2023	1.5	\$0	\$0	0	0
6/21/2023	1.25	\$0	\$0	0	0
6/21/2023	1.75	\$0	\$0	0	0
6/21/2023	1	\$0	\$0	0	0
5/22/2025	1	\$0	\$0	0	0

### **Probability**

The annual return rate (frequency) for hail occurrences in the parish is 0.93 (93% annual probability) or approximately one hail occurrence every one to two years.

- Annual Return Rate (Frequency): 0.93, which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one hail event occurs approximately every 1.07 years, or about every one to two years. This is the inverse of the return rate (1 / 0.93 = 1.07 years)

The figures below and on the following page display the density of hailstorm events and an overview of hailstorm size based on location.

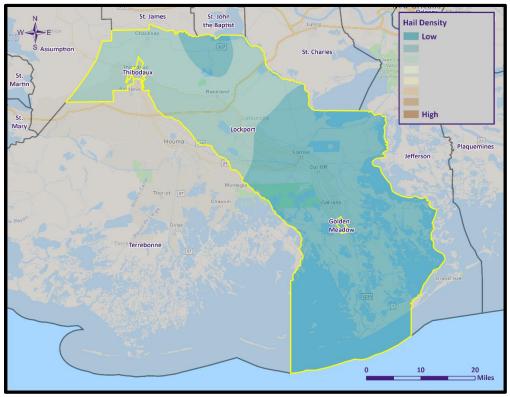


Figure 2-31: Density of Hailstorms in Lafourche Parish from 1950-2024.

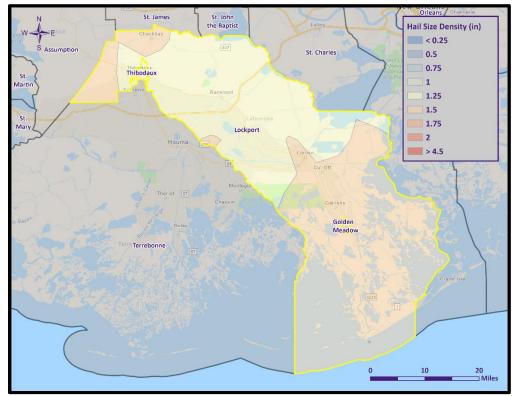


Figure 2-32: Hail Size Probability in Inches for Lafourche Parish.

### Lightning Risk Assessment

### Geographic Extent

Because lightning strikes are a climatologically based occurrence that can occur anywhere, the entire planning area is at risk from lightning strikes. The worst-case scenario for lightning incidents is a lightning activity level of 4, which is approximately 16 to 25 lightning strikes every 15 minutes.

### **Previous Occurrences**

The parish experienced six lightning occurrences between the years 1996 and 2025. Since the last update, there have been no significant lightning occurrences within the boundaries of the parish.

#### Probability

The annual return rate (frequency) for lightning occurrences in the parish is 0.2 (20% annual probability) or approximately one lightning occurrence every five years.

- Annual Return Rate (Frequency): 0.2, which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one lightning event occurs approximately every 5 years.
   This is the inverse of the return rate (1 / 0.2 = 5 years)

## Thunderstorm Wind Risk Assessment

## Geographic Extent

Because thunderstorm winds are a climatological-based occurrence that can occur anywhere, the entire planning area is at risk from thunderstorm wind. The worst-case scenario for thunderstorm wind occurrences is hail wind speeds of approximately 63 knots.

#### **Previous Occurrences**

5/7/2025

The parish experienced 73 thunderstorm wind occurrences between the years 1996 and 2025. Since the last update, there have been four thunderstorm wind occurrences within the boundaries of the parish.

Date	Magnitude (knots)	Property Damage	Crop Damage	Fatalities	Injuries
11/26/2022	50	\$1,000	\$0	0	0
4/16/2023	53	\$0	\$0	0	0
2/12/2024	52	\$0	\$0	0	0

\$0

\$0

0

Table 2-44: Historical Thunderstorm Wind Occurrences in Lafourche Parish since the Last Update.

## Probability

The annual return rate (frequency) for thunderstorm wind occurrences in the parish is 2.43 (100% annual probability) or approximately two to three thunderstorm wind occurrence every year.

- Annual Return Rate (Frequency): 2.43, which represents the likelihood of an event happening in any given
  year.
- Average Interval Between Events: On average, one to two wind events occur every year. This is the inverse of the return rate (1 / 2.43 = 0.41 years)

The figure on the following page displays the thunderstorm wind speed probability for the parish.

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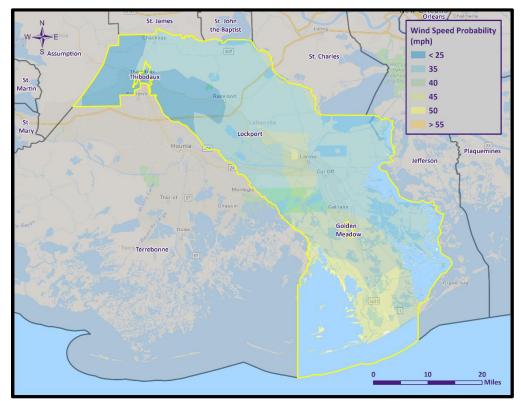


Figure 2-33: Thunderstorm High Wind Speed Probability in Miles Per Hour for Lafourche Parish.

### Hail Vulnerability Analysis

The NRI includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the county and Census tract level. The following table provides an overview of each category at the county level for hail.

Table 2-45: National Risk Index (NRI) Summarization of Hail Occurrences for Lafourche Parish.
(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Very Low	Very Low

### Estimated Impact and Potential Loss

Since 1996, there have been 28 significant hail occurrences per the NCEI Storm Events Database. The total property damage associated with these storms totaled approximately \$500. To estimate the potential losses on an annual basis, the total damages recorded were divided by the total number of years of available data in the NCEI Storm Events Database (1996 - 2025). This provides an annual estimated potential loss of \$17 and \$18 per event. The following table provides an estimate of potential property losses for Lafourche Parish:

Table 2-46: Estimated Annual Property Losses in Lafourche Parish resulting from Hail Damage.

Estimated Annual Potential Losses from Hail Damage				
Lafourche Parish Golden Meadow Lockport Thibodaux				
\$13	<\$1	\$1	\$3	

### Vulnerable Population

Per the NCEI Storm Events Database, there have been no reported injuries or fatalities as a result of hail.

### Vulnerability Score

Table 2-47: Vulnerability Score for Hail in Lafourche Parish.

Hail Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	3	2	3	3	1	2.45

### Lightning Vulnerability Analysis

The NRI includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the county and Census tract level. The following table provides an overview of each category at the county level for lightning.

Table 2-48: National Risk Index (NRI) Summarization of Lightning Occurrences for Lafourche Parish.

(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively High	Relatively High

### Estimated Impact and Potential Loss

Since 1996, there have been six significant lightning occurrences per the NCEI Storm Events Database. The total property damage associated with this storm totaled approximately \$245,000. To estimate the potential losses on an annual basis, the total damages recorded were divided by the total number of years of available data in the NCEI Storm Events Database (1996 – 2025). This provides an annual estimated potential loss of \$8,167 and \$40,833 per event. The following table provides an estimate of potential property losses for Lafourche Parish:

Table 2-49: Estimated Annual Property Losses in the Parish resulting from Lightning Damage.

Estimated Annual Potential Losses from Lightning Damage			
Lafourche Parish	<b>Golden Meadow</b>	Lockport	Thibodaux
\$6,417	\$151	\$246	\$1,353

### Vulnerable Population

Per the NCEI Storm Events Database, there have been two reported fatalities and one injury as a result of lightning.

### Vulnerability Score

Table 2-50: Vulnerability Score for Lightning in Lafourche Parish.

		Lig	htning Vulnerabili	ty Score		
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	3	2	2	3	1	2.25

### Thunderstorm Wind Vulnerability Analysis

The NRI includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the county and Census tract level. The table on the next page provides an overview of each category at the county level for thunderstorm wind.

Table 2-51: National Risk Index (NRI) Summarization of Thunderstorm Wind Occurrences for the Parish (Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively Low	Relatively Low

### Estimated Impact and Potential Loss

Since 1996, there have been 73 significant thunderstorm wind occurrences per the NCEI Storm Events Database. The total property damage associated with these storms totaled approximately \$586,700. To estimate the potential losses on an annual basis, the total damages recorded were divided by the total number of years of available data in the NCEI Storm Events Database (1996 - 2025). This provides an annual estimated potential loss of \$8,037 and \$19,557 per event. The following table provides an estimate of potential property losses for the Parish:

Table 2-52: Estimated Annual Property Losses in Lafourche Parish resulting from Thunderstorm Wind Damage.

Estimated Annual Potential Losses from Wind Damage				
Lafourche Parish Golden Meadow Lockport			Thibodaux	
\$15,367	\$361	\$590	\$3,239	

## Vulnerable Population

Per the NCEI Storm Events Database, there has been one reported fatality and no injuries as a result of thunderstorm winds.

## Vulnerability Score

Table 2-53: Vulnerability Score for Thunderstorm Wind in Lafourche Parish.

		Thund	erstorm Wind Vuln	erability Score		
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	4	2	3	3	1	2.7

### **Tornadoes**

### Profile

Tornadoes (also called twisters or cyclones) are rapidly rotating funnels of wind extending between storm clouds and the ground. For their size, tornadoes are the most severe storms, and 70% of the world's reported tornadoes occur within the continental United States, making them one of the most significant hazards Americans face. Tornadoes and waterspouts form during severe weather occurrences, such as thunderstorms and hurricanes, when cold air overrides a layer of warm air, causing the warm air to rise rapidly. This usually results in a counterclockwise rotation in the northern hemisphere. The updraft of air in tornadoes always rotates because of wind shear (differing speeds of moving air at various heights), and it can rotate in either a clockwise or counterclockwise direction; clockwise rotations (in the northern hemisphere) will sustain the system, at least until other forces cause it to die seconds to minutes later.

Since February 1, 2007, the Enhanced Fujita (EF) Scale has been used to classify tornado intensity. The EF Scale classifies tornadoes based on their damage pattern rather than wind speed; wind speed is then derived and estimated. This contrasts with the Saffir-Simpson scale used for hurricane classification, which is based on measured wind speed. The following table shows the EF scale in comparison with the original Fujita (F) Scale, which was used prior to February 1, 2007. When discussing past tornadoes, the scale used at the time of the hazard is used. Damage and adjustment between scales can be made using the following tables.

**Enhanced Fujita Scale** EF0 EF1 EF2 EF3 EF4 EF5 65-85 86-110 111-135 136-165 166-200 >200 Wind speed (mph) **Fujita Scale** F1 F2 F3 F4 F5 F0 113-157 207-260 <73 73-112 158-206 >261

Table 2-54: Comparison of the Enhanced Fujita (EF) Scale to the Fujita (F) Scale.

Table 2-55: F	Fuiita and	Enhanced	Fuiita	Tornado	Damage.	Scale
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Scale	Typical Damage
FO/EFO	Light damage. Some damage to chimneys; branches broken off trees; shallow-rooted trees pushed over; sign boards damaged.
F1/EF1	Moderate damage. Peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos blown off roads.
F2/EF2	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars overturned; light-object missiles generated; cars lifted off ground.
F3/EF3	Severe damage. Roofs and some walls torn of well-constructed houses; trains overturned; most trees in Brusly uprooted; heavy cars lifted off the ground and thrown.
F4/EF4	Devastating damage. Well-constructed houses leveled; structures with weak foundations blown away some distance; cars thrown, and large missiles generated.
F5/EF5	Incredible damage. Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 meters (109 yards); trees debarked; incredible phenomena will occur.

The National Weather Service (NWS) has the ability to issue advisory messages based on forecasts and observations. The following are the advisory messages that may be issued with definitions of each:

• *Tornado Watch*: Issued to alert people to the possibility of a tornado developing in the area.

A tornado has not been spotted but the conditions are favorable for tornadoes

to occur.

• **Tornado Warning**: Issued when a tornado has been spotted or when Doppler radar identifies a distinctive "hook-shaped" area within a thunderstorm line.

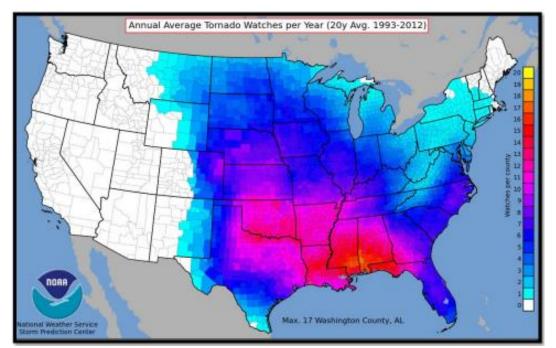


Figure 2-34: County-Level Tornado Watches Issued Per Year on Average (Source: NOAA SPC)

Structures within the direct path of a tornado vortex are often reduced to rubble. Structures adjacent to the tornado's path are often severely damaged by high winds flowing into the tornado vortex, known as inflow winds. It is here, adjacent to the tornado's path, that the building type and construction techniques are critical to the structure's survival. Although tornadoes strike at random, making all buildings vulnerable, mobile homes, homes with crawlspaces, and buildings with large spans are more likely to suffer damage.

The major health hazard from tornadoes is physical injury from flying debris or being in a collapsed building or mobile home. Within a building, flying debris or projectiles are generally stopped by interior walls. However, if a building has no partitions, any glass, brick, or other debris blown into the interior is life threatening. Following a tornado, damaged buildings are a potential health hazard due to instability, electrical system damage, and gas leaks. Sewage and water lines may also be damaged. Tornadoes have historically impacted all areas of Louisiana.

Peak tornado activity in Louisiana occurs during the spring, as it does in the rest of the United States. Nearly one-third of observed tornadoes in the United States occur during April. About half of those in Louisiana, including many of the strongest, occur between March and June. Fall and winter tornadoes are less frequent, but the distribution of tornadoes throughout the year is more uniform in Louisiana than in locations farther north.

### Risk Assessment

## Geographic Extent

Tornadoes occur sporadically throughout the parish and the occurrence of a tornado in the parish is highly unpredictable, making it impossible to forecast the exact time and locations of when a tornado will touch down or the path it will take. Because of this, the entire planning area is considered equally at risk for a tornadic incident. The worst-case scenario of a tornado occurrence is an EF4 tornado.

#### **Previous Occurrences**

The parish experienced 19 tornado occurrences between the years 1996 and 2025. Since the last update, there have been no tornado occurrences within the boundaries of the parish.

### Probability

The annual return rate (frequency) for tornado events in the parish is 0.63, which means there is a 63% probability of one event occurring every one to two years over the long term.

- Annual Return Rate (Frequency): 0.63 (63%), which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one tornado event is expected to occur approximately
  every 1.57 years, or approximately once every one to two years. This is the inverse of the return rate (1 /
  0.63 = 1.57 years)

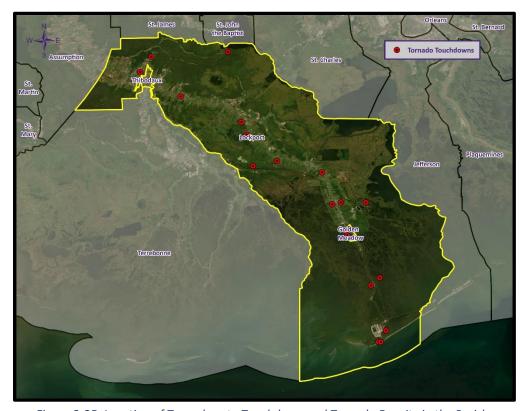


Figure 2-35: Location of Tornadoes to Touchdown and Tornado Density in the Parish (Source: NOAA/SPC Severe Weather Database)

### Climate Change Impacts

Similar to thunderstorms, the impacts of climate change on the occurrence and strength of tornadoes is not well understood at this time, but is an area of ongoing research. While only about 1% of thunderstorms will produce a tornado, preliminary research and climate models indicate that the environmental suitability for severe thunderstorms, and therefore tornadoes, could increase over the Eastern United States by the end of the century.

Climate change is contributing to the increasing frequency and intensity of tornadoes, leading to significant impacts on both infrastructure and vulnerable populations. As global temperatures rise, the atmosphere becomes more unstable, creating conditions favorable for the development of severe thunderstorms and tornadoes. Tornadoes are powerful and destructive, capable of causing widespread damage to various types of infrastructure.

One of the most significant impacts of tornadoes on infrastructure is the destruction of buildings and critical facilities. Tornadoes can flatten homes, schools, hospitals, and businesses, leaving communities devastated and in need of urgent assistance. The damage to infrastructure disrupts essential services, such as electricity, water supply, and communication networks, exacerbating the challenges faced by affected communities during recovery and rebuilding efforts.

Vulnerable populations are particularly at-risk during tornadoes. Low-income communities often live in substandard housing and lack access to proper storm shelters, leaving them more exposed to the destructive forces of tornadoes. Furthermore, elderly individuals and people with disabilities may struggle to seek shelter and escape the path of these fast-moving storms, increasing their vulnerability to injury or death. Tornadoes can also disproportionately affect marginalized communities due to limited access to emergency response services and resources.

Moreover, tornadoes can lead to economic hardships for vulnerable populations. Homes and properties are often uninsured or underinsured in these areas, leaving residents with significant financial burdens after tornadoes strike. As a result, vulnerable communities may face challenges in recovering and rebuilding their lives, perpetuating cycles of poverty and inequality.

To address the impacts of climate change on infrastructure and vulnerable populations concerning tornadoes, proactive measures are essential. Building tornado-resistant infrastructure and implementing better early warning systems can help minimize the damage caused by tornadoes. For vulnerable populations, providing accessible storm shelters and ensuring access to emergency resources and support are critical to saving lives and reducing the long-term impacts of tornadoes. Additionally, climate change mitigation efforts are crucial to addressing the root causes of tornado intensification, as reducing greenhouse gas emissions can help stabilize the climate and potentially mitigate the future increase in tornado frequency and severity.

### **Future Hazard Impacts**

Population growth and development trends can influence tornado impacts in several ways. As urban areas expand, there is a higher likelihood of tornadoes affecting densely populated regions, increasing the potential for damage and casualties. Urbanization also alters land cover, creating more obstacles and structures that can disrupt tornado paths and increase the likelihood of tornado-related damage to infrastructure. Additionally, changes in land use can affect atmospheric conditions, potentially influencing tornado formation and intensity.

### **Vulnerability Analysis**

The NRI includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the county and Census tract level. The following table provides an overview of each category at the county level for tornadoes.

Table 2-56: National Risk Index (NRI) Summarization of Tornado Occurrences for the Parish (Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively High	Relatively High

### Estimated Impact and Potential Loss

Since 1996, there have been 19 significant tornado occurrences per the NCEI Storm Events Database. The total property damage associated with these storms totaled approximately \$1,270,000. To estimate the potential losses on an annual basis, the total damages recorded were divided by the total number of years of available data in the NCEI Storm Events Database (1996 – 2025). This provides an annual estimated potential loss of \$42,333\$ and \$66,842\$ per event. The following table provides an estimate of potential property losses for the Parish:

Table 2-57: Estimated Annual Losses Due to Tornadoes in the Parish. (Source: Hazus)

Estimated Annual Potential Losses Due to Tornadoes			
Unincorporated LP	Golden Meadow	Lockport	Thibodaux
\$33,263	\$782	\$1,276	\$7,012

The following table presents an analysis of building exposure that is susceptible to tornadoes by general occupancy type for the parish, along with the percentage of building stock that are mobile homes.

Table 2-58: Building Exposure by General Occupancy Type for Tornadoes in the Parish. (Source: Hazus)

Building Exposure by General Occupancy Type for Tornadoes - Exposure Types (\$1,000)						
Residential	Commercial Industrial Agricultural Religion Government Education					
7,023,379	1,042,279	33,291	25,376	111,491	44,096	92,625

### Vulnerable Population

Per the NCEI Storm Events Database, there has been one reported fatality and 13 injuries as a result of tornadoes. In assessing the overall risk to the population, the most vulnerable population throughout the parish is those residing in manufactured housing. Approximately 14.4% of all housing in the Parish consists of manufactured housing. A map showing the density of mobile homes around Lafourche Parish can be found on the following page.

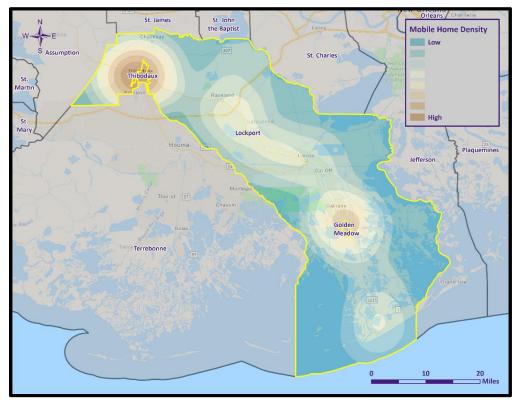


Figure 2-36: Density of Manufactured Homes in the Parish

## Vulnerability Score

Table 2-59: Tornado Vulnerability Score for the Parish.

	Tornado Vulnerability Score					
	Probability Impact Spatial Extent Warning Time Duration Risk Factor					
Risk Level	3	3	2	4	3	2.95

## **Tropical Cyclones**

### Profile

Hurricanes, typhoons, and cyclones are names for powerful tropical storms in which winds rotate around a closed circulation of low-pressure. In the Atlantic and eastern Pacific basins, they are known as hurricanes, in Asia (western Pacific), they are known as typhoons, and in Australia, they are called cyclones. In the Northern Hemisphere, hurricane winds rotate in a counterclockwise direction (clockwise in the Southern Hemisphere). The key energy source for a hurricane is the release of latent heat energy from condensation.

HAZARD MITIGATION PLAN

This energy is found where there is a deep layer of warm water to fuel the system. Conditions for hurricane formation include warm waters, rotational force from the earth's spin (Coriolis Effect), and the absence of vertical wind shear (stability in the lower atmosphere). Tropical disturbances that affect North America typically originate off the west coast of Africa. If the tropical disturbance lowers in pressure and starts to rotate around a low pressure center, it may turn into a tropical depression. Barometric pressure (measured in millibars or inches) continues to fall in the center as these storm systems develop in intensity. When sustained wind speeds reach 39 mph, the system becomes a tropical storm and is given a name by the National Hurricane Center. When sustained wind speeds reach 74 mph, it becomes a hurricane. Hurricanes are much larger and powerful storms with an average diameter of 350 miles. The start of the official Atlantic hurricane season is June 1<sup>st</sup> and ends November 30<sup>th</sup>. Peak hurricane season is August and September in the Northern Hemisphere, when water temperatures and evaporation rates are greatest. Associated with these storms are damaging winds, heavy precipitation, and tornadoes. Coastal areas are also vulnerable to storm surge, wind-driven waves, and tidal flooding, which can cause more destruction than cyclone winds.

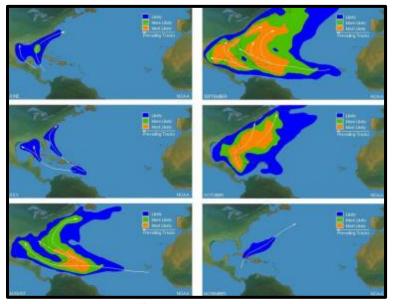


Figure 2-37: Areas of Likely Hurricane Formation and Tracking (Source: NOAA NHC)

Tropical cyclone intensity is classified by the Saffir-Simpson Scale, which categorizes hurricane intensity based upon maximum sustained wind speeds on a scale of one to five, with five being the most intense. Typically, higher category hurricanes have lower pressure and greater storm surge. Categories three, four, and five are classified as "major" hurricanes, and while hurricanes within this range comprise only 20 percent of total landfalls, they account for over 70 percent of the damage incurred in the United States. Hurricane (Category 1 or higher) return periods are shown the figure on the following page.

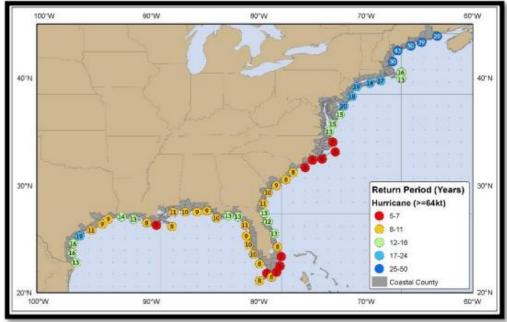


Figure 2-38: Hurricane Return Periods for the Atlantic Basin (USA) (Source: NOAA NHC)

Table 2-60: Saffir-Simpson Hurricane Wind Scale.

			Saffir-Simpson Hurricane Wind Scale
Category	Sustained Winds	Pressure	Types of Damage Due to Winds
Tropical Depression	<39 mph	N/A	N/A
Tropical Cyclone	39-73 mph	N/A	N/A
1	74-95 mph	>14.2 psi	Very dangerous winds will produce some damage. Well-constructed frame homes could have damage to roof, shingles, vinyl siding, and gutters. Large branches of trees will snap, and shallow-rooted trees may be toppled, especially after the soil becomes waterlogged. Extensive damage to power lines and poles will likely result in power outages that could last several days.
2	96-110 mph	14-14.2 psi	Extremely dangerous winds will cause extensive damage. Well-constructed frame homes could sustain major roof and siding damage. Many shallow-rooted trees will be snapped or uprooted, especially after the soil becomes waterlogged, and block numerous roads. Near total power loss is expected, with outages that could last from several days to weeks.
3	111-129 mph	13.7 -14 psi	Devastating damage will occur. Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, especially after the soil becomes waterlogged, blocking numerous roads. Electricity and water may be unavailable for several days to weeks after the storm passes.
4	130-156 mph	13.3-13.7 psi	Catastrophic damage will occur. Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted, especially after the soil becomes waterlogged, and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5	157 mph or higher	<13.7 psi	Catastrophic damage will occur. A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks to months.

Storm surge is an elevated water level that is pushed towards the shore by the force of strong winds that result in the piling up of water. The advancing surge combines with the normal tides, which in extreme cases can increase the normal water height over 20 feet. The storm surge arrives ahead of the storm's actual landfall and the more intense the hurricane is, the sooner the surge arrives. Water rise can be very rapid and can move far inland, posing a serious threat to those who have not yet evacuated flood-prone areas. Debris carried by the waves can also contribute to the devastation. As the storm approaches shore, the greatest storm surge will be to the north of the hurricane eye, in the right-front quadrant of the direction in which the hurricane is moving. Such a surge of high water topped by waves driven by hurricane force winds can be devastating to coastal regions, causing severe beach erosion and property damage along the immediate coast. Storm surge heights, and associated waves, are dependent upon the shape of the continental shelf (narrow or wide) and the depth of the ocean bottom (bathymetry). A narrow shelf, or one that drops steeply from the shoreline and subsequently produces deep water close to the shoreline, tends to produce a lower surge but higher and more powerful storm waves. While disassociated with the Saffir-Simpson Scale, storm surge remains the leading killer of residents along immediate coastal areas. Researchers at the Southern Regional Climate Center have indicated that hurricane strength at approximately 12-18 hours prior to landfall is a better indicator of storm surge strength (compared to wind speeds at landfall).

Many other associated hazards can occur during a hurricane, including heavy rains, flooding, high winds, and tornadoes. A general rule of thumb in coastal Louisiana is that the number of inches of rainfall to be expected from a tropical cyclone is approximately 100 divided by the forward velocity of the storm in mph; so, a fast-moving storm (20 mph) might be expected to drop five inches of rain while a slow-moving (5 mph) storm could produce totals of around 20 inches. However, no two storms are alike, and such generalizations have limited utility for planning purposes.

Hurricane Beulah, which struck Texas in 1967, spawned 115 confirmed tornadoes. In recent years, extensive coastal development has increased the storm surge resulting from these storms so much that this has become the greatest natural hazard threat to property and loss of life in the state. Storm surge is a temporary rise in sea level generally caused by reduced air pressure and strong onshore winds associated with a storm system near the coast. Although storm surge can technically occur at any time of the year in Louisiana, surges caused by hurricanes can be particularly deadly and destructive. Such storm surge events are often accompanied by large, destructive waves (exceeding ten meters in some places) that can inflict a high number of fatalities and economic losses. In 2005, Hurricane Katrina clearly demonstrated the destructive potential of this hazard, as it produced the highest modern-day storm surge levels in the State of Louisiana, reaching up to 18.7 feet near Alluvial City in St. Bernard Parish.

Property can be damaged by the various forces that accompany a tropical cyclone. High winds can directly impact structures in three ways: wind forces, flying debris, and pressure. By itself, the force of the wind can knock over trees, break tree limbs, and destroy loose items, such as television antennas and power lines. Many things can be moved by high winds. As winds increase, so does the pressure against stationary objects. Pressure against a wall rises with the square of the wind speed. For some structures, this force is enough to cause failure. The potential for damage to structures is increased when debris breaks the building "envelope" and allows the wind pressure to impact all surfaces (the building envelope includes all surfaces that make up the barrier between the indoors and the outdoors, such as the walls, foundation, doors, windows, and roof). Mobile homes and buildings in need of maintenance are most subject to wind damage. High winds mean bigger waves. Extended pounding by waves can demolish any poorly or improperly designed structures. The waves also erode sand beaches, roads, and foundations. When foundations are compromised, the building will collapse.

Nine out of ten deaths during hurricanes are caused by storm surge flooding. Falling tree limbs and flying debris caused by high winds have the ability to cause injury or death. Downed trees and damaged buildings are a potential health hazard due to instability, electrical system damage, broken pipelines, chemical releases, and gas leaks. Sewage and water lines may also be damaged. Saltwater and freshwater intrusions from storm surge send animals, such as snakes, into areas occupied by humans.

### Risk Assessment

## Geographic Extent

Hurricanes typically impact multiple regions and not one specific jurisdiction or campus. Because of this, all of the entire planning area is susceptible to the effects of hurricanes. Hurricanes are the single biggest threat to all of South Louisiana. With any single hurricane event having the potential to devastate multiple parishes at once, hurricanes are a significant threat to the entire parish planning area. The worst-case scenario for a hurricane event in the parish is a category 5 hurricane.

### **Previous Occurrences**

The parish has experienced 21 tropical cyclone occurrences between the years 2002 and 2025. Since the last update, there have been two tropical cyclone occurrences within the boundaries of the parish.

Date	Magnitude	Name	Property Damage	Crop Damage	Fatalities	Injuries
8/29/2021	Hurricane	Ida	\$750,000,000	\$0	0	0
9/11/2024	Hurricane	Francine	\$10,00,000	\$0	0	0

Table 2-61: Historical Tropical Cyclone Occurrences in the Parish since the Last Update.

#### Hurricane Ida (2021)

Ida formed from a combination of multiple low-latitude weather systems, starting with a tropical wave emerging from the coast of Africa on 14 August. This wave was weak and hard to track as it moved slowly westward through the monsoon trough environment over the eastern tropical Atlantic. The wave moved into the trade wind environment west of 45°W on 21 August, accompanied by an area of convection that was elongated from east to west, and this convection increased in coverage as the wave moved through the Windward Islands on 23 August. By 24 August, the wave was near Aruba, Bonaire, and Curacao, and it began to interact with a broad area of low pressure located along the northern coast of South America. This interaction resulted in a large area of pressures near or below 1006 mb by late that day, along with widespread heavy rains over portions of Venezuela. The next day, the convection became more concentrated near a vorticity maximum on the eastern side of a broad low-pressure area over the southwestern Caribbean Sea. The disturbance turned north-northwestward on 26 August on the southwestern side of the subtropical ridge, and the associated convection became better organized while the circulation became better defined. It is estimated that a tropical depression formed near 1200 UTC that day about 150 n mi southwest of Kingston, Jamaica.

The cyclone was moving north-northwestward at the time of genesis. A few hours later, it turned northwestward as it was steered by the flow on the southwestern side of the subtropical ridge, and this general motion continued for the next three days. The cyclone strengthened to a tropical storm 6 h after genesis, and slow strengthening continued as the center passed northeast of Grand Cayman Island early on 27 August. Rapid strengthening occurred after the center passed Grand Cayman, and Ida became a hurricane with 70-kt winds before the center reached the Isle of Youth, Cuba, at 1800 UTC 27 August. After crossing the Isle of Youth, the center made landfall in mainland Cuba near Playa Dayaniguas in the province of Pinar del Rio near 2325 UTC that day. Continuing northwestward, Ida's center subsequently emerged over the southeastern Gulf of America between 0100-0200 UTC 28 August. Passage over land and entrainment of dry air into the hurricane's southwestern quadrant halted intensification as Ida crossed Cuba, and little change in strength occurred during the first several hours after the hurricane reached the Gulf of America. However, during this time microwave satellite imagery and radar data from Cuba showed the central core reorganizing with the formation of a convective ring around the center. This, combined with the favorable conditions of light vertical wind shear (near 10 kt) and sea surface temperatures at or above 30°C, led to a second round of rapid strengthening that started at 1200 UTC 28 August and continued for the next 24 h. During this intensification phase, the maximum winds increased from 70 kt to 90 kt in the first 12 h, and then from 90 kt a peak of 130 kt in the next 12 h. Additionally, the central pressure fell from 986 to 929 mb. By the end of this rapid intensification period, Ida had moved northwestward to a position not far southwest of the Mouth of the Mississippi River. A continued northwestward motion brought the 15-n-mi-wide eye to the Louisiana coast at Port Fourchon at 1655 UTC 29 August. The maximum winds at landfall were 130 kt – category 4 on the Saffir-Simpson Hurricane Wind Scale – and the central pressure was near 931 mb. As best as can be determined, the 130-kt landfall intensity is equal to that of Hurricane Laura of August 2020 and the Last Island Hurricane of August 1856, with these three category 4 storms tied for the strongest on record to make landfall in Louisiana west of the Mouth of the Mississippi River.

Shortly after landfall, Ida turned north-northwestward, and this motion brought the eye across southeastern Louisiana between Houma and New Orleans. A continued north-northwestward motion early on 30 August brought the center just west of LaPlace and then between Baton Rouge and Hammond. The cyclone's intensity steadily decreased as it moved inland, and it weakened to a tropical storm before the center moved into southwestern Mississippi between 0600–1200 UTC that day. Ida then turned northeastward as it moved around the western end of the subtropical ridge, with the center passing just west of Jackson, Mississippi, around 1800 UTC. Soon thereafter, the cyclone weakened to a tropical depression as it moved into northeastern Mississippi. The system then accelerated northeastward across northwestern Alabama, central and eastern Tennessee, and portions of Kentucky and Virginia before reaching southern West Virginia near 1200 UTC 1 September. Ida began an extratropical transition as it moved through the Tennessee Valley, and the system became an extratropical low as it moved over West Virginia later that day.

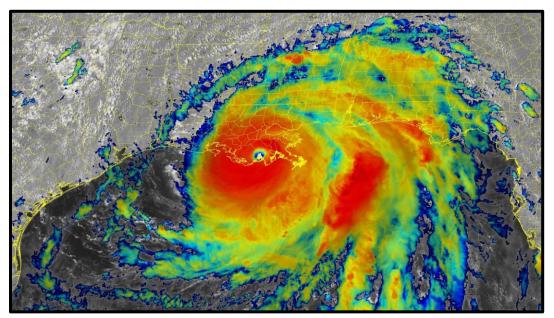


Figure 2-39: Hurricane Ida Rainbands in the Gulf Coast Area. (Source: NOAA)

In Lafourche Parish, the parish suffered extreme impacts as the eyewall raked much of the parish from Port Fourchon to Lockport as it moved inland. Nearly all buildings in the parish suffered some level of damage, with widespread catastrophic structural damage occurring across much of the parish. Numerous homes, businesses and public buildings lost significant portions of their roof structures, with some homes totally destroyed. Nearly every building in the fishing community of Leeville suffered catastrophic damage. There was also substantial damage to at least four major medical facilities in the parish, including at least one emergency room taking on water during the storm.

### Hurricane Francine (2024)

Hurricane Francine was a significant tropical cyclone that impacted the Gulf Coast in September 2024. Originating from a tropical wave off the West Coast of Africa on August 28, 2024, the system traversed the tropical Atlantic Ocean, reaching the Leeward Islands by September 1. Despite initial unfavorable conditions, it intensified as it moved across the Caribbean Sea, becoming a tropical storm on September 9 and a Category 2 hurricane by September 11.

On September 11, 2024, Hurricane Francine made landfall in Terrebonne Parish, Louisiana, with sustained winds of 100 mph (155 km/h). The storm caused widespread power outages, leaving over 400,000 utility customers in

Louisiana and Mississippi without electricity. Severe flooding occurred, particularly in New Orleans, where heavy rainfall led to flash floods and necessitated numerous water rescues. The storm also disrupted oil and natural gas production in the Gulf of America, with approximately 42% of crude oil and 53% of natural gas output shut-in. After landfall, Francine weakened rapidly, transitioning to a tropical depression by September 12 and dissipating by September 14. The storm's rapid intensification, from a tropical storm to a Category 2 hurricane within 24 hours, was noted as a concerning trend linked to climate change.

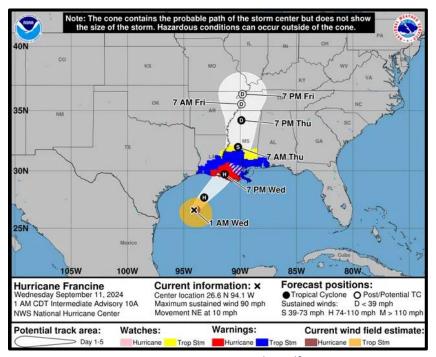


Figure 2-40: Hurricane Francine in the Gulf Coast Area. (Source: NOAA)

In Lafourche Parish, Francine's winds resulted in widespread damage to trees and powerlines, blocking numerous roads and causing damage to several homes and businesses. Around half of parish residents lost power during the storm.

#### Probability

The annual return rate (frequency) for hurricane events in the parish is 0.95, which means there is a 95% probability of a hurricane occurring in any given year. This translates to an average of one hurricane event occurring approximately every one to two years over the long term.

- Annual Return Rate (Frequency): 0.95 (95%), which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one hurricane event is expected to occur approximately every one to two years. This is the inverse of the return rate (1 /0.95 = 1.05 years)

#### Climate Change Impacts

Climate change has the potential to alter the prevalence and severity of extreme incidents such as hurricanes. Louisiana is expected to experience more days with temperatures above 95°F this century which means an increase in sea surface and ambient temperatures, alterations in the hydrological cycle, and an increase in seal level which collectively may increase the frequency of large storm incidents and impacts. Research indicates that the warming climate will increase the frequency of Category 4 and 5 hurricanes but decrease the frequency of less severe hurricane incidents by the end of the century. This increase in the frequency of Category 4 and 5 hurricanes will lead to an increase in damage to the built environment and increased negative effects on the economy and ecosystem.

Climate change is amplifying the impacts of hurricanes on both infrastructure and vulnerable populations, making them more frequent and severe. As ocean temperatures rise due to global warming, hurricanes have access to greater energy, leading to stronger and more destructive storms. The intensification of cyclones poses significant risks to infrastructure located in coastal regions.

One of the primary impacts of hurricanes on infrastructure is the damage caused by strong winds and storm surges. Cyclones can rip apart buildings, topple power lines, and uproot trees, leading to widespread destruction of homes, businesses, and public facilities. Coastal areas are particularly vulnerable to storm surges, which can inundate low-lying regions and cause severe flooding, damaging roads, bridges, and critical lifeline infrastructure such as water and sewage systems.

Vulnerable populations face disproportionate risks during hurricanes, especially in low-lying coastal communities. People with limited mobility, the elderly, and low-income households often lack resources and access to evacuation options, making them more susceptible to the devastating impacts of cyclones. Displacement, property damage, and loss of livelihoods are common consequences for vulnerable populations affected by cyclones, exacerbating existing social inequalities and pushing them further into hardship.

Moreover, hurricanes can have long-lasting effects on the mental and physical health of vulnerable populations. The trauma caused by experiencing such extreme weather events can lead to long-term psychological distress. Lack of access to healthcare and resources after cyclones can also result in a higher risk of waterborne diseases and malnutrition for vulnerable communities.

To mitigate the impacts of climate change on infrastructure and vulnerable populations concerning hurricanes, several actions are crucial. Investing in more resilient infrastructure that can withstand stronger storms and higher storm surges is essential to minimize damage and ensure the continuity of critical services. Enhancing early warning systems and evacuation plans can save lives and improve the preparedness of vulnerable populations. Additionally, providing social safety nets and support to vulnerable communities can aid in their recovery and reduce the long-term impacts of cyclones on their well-being. Mitigating climate change by reducing greenhouse gas emissions is also vital to curbing the intensification of hurricanes and protecting both infrastructure and vulnerable populations from their devastating effects.

### **Future Hazard Impacts**

Tropical cyclone impacts for flood and hurricanes were estimated for the years 2030 and 2035. Yearly population and housing decline rates were applied to parish inventory assets for composite floods and hurricanes. Based on a review of available information, it is assumed that population and housing units will decrease within the parish from the present until 2035. A summary of estimated future impacts is shown in the table below. Dollar values are expressed in future costs and assume an annual rate of inflation of 1.02%.

Table 2-62: Estimated Future Impacts, 2025 - 2035. (Source: Hazus, US Census Bureau)

Hazard / Impact	Total in Parish (2025)	Hazard Area (2025)	Hazard Area (2030)	Hazard Area (2035)
Hurricane Damage				
Structures	41,960	41,960	42,255	42,466
Value of Structures	\$8,372,537,000	\$8,372,537,000	\$9,052,054,645.54	\$9,570,935,188
# of People	95,342	95,342	96,011	96,492

### **Vulnerability Analysis**

The NRI includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the county and Census tract level. The following table provides an overview of each category at the county level for hurricanes.

Table 2-63: National Risk Index (NRI) Summarization of Hurricane Occurrences for the Parish (Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively High	Relatively High

### Estimated Impact and Potential Loss

Using Hazus 100-Year Hurricane Model, the 100-year hurricane scenario was analyzed to determine losses from this worst-case scenario. The following table shows the total economic losses that would result from this occurrence.

Table 2-64: Total Estimated Losses for a 100-Year Hurricane Event (Source: Hazus)

(Source: Mazas)			
Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event		
Unincorporated LP	\$333,410,337		
Golden Meadow	\$7,837,357		
Lockport	\$12,790,780		
Thibodaux	\$70,282,534		

Total losses from a 100-year hurricane event for the parish were compared with the total value of assets to determine the ratio of potential damage to total inventory in the table below.

Table 2-65: Ratio of Total Losses to Total Estimated Value of Assets for the Parish. (Source: Hazus)

Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event	Total Estimated Value of Assets	Ratio of Estimated Losses to Total Value
Unincorporated LP	\$333,410,337	\$6,160,738,000	5.4%
Golden Meadow	\$7,837,357	\$206,791,000	3.8%
Lockport	\$12,790,780	\$206,010,000	6.2%
Thibodaux	\$70,282,535	\$1,798,998,000	3.9%

Based on the Hazus Hurricane Model, estimated total losses for the parish are between 3.9% and 6.2% of the total estimated value of all assets.

The Hazus Hurricane Model also provides a breakdown for seven primary sectors (Hazus occupancy) throughout the parish. The losses for the parish by sector are listed in the table on the next page.

Table 2-66: Estimated Losses in Unincorporated Area of the Parish for a 100-Year Hurricane Event (Source: Hazus)

Unincorporated LP	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$4,095,788
Commercial	\$149,540,178
Government	\$7,869,282
Industrial	\$49,627,109
Religious / Non-Profit	\$9,830,534
Residential	\$101,158,683
Schools	\$11,288,763
Total	\$333,410,337

Table 2-67: Estimated Losses in Golden Meadow for a 100-Year Hurricane Event (Source: Hazus)

Golden Meadow	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$96,278
Commercial	\$3,515,187
Government	\$184,980
Industrial	\$1,166,567
Religious / Non-Profit	\$231,083
Residential	\$2,377,901
Schools	\$265,361
Total	\$7,837,357

Table 2-68: Estimated Losses in Lockport for a 100-Year Hurricane Event (Source: Hazus)

Lockport	Estimated Total Losses from 100-Year Hurricane Event		
Agricultural	\$157,129		
Commercial	\$5,736,881		
Government	\$301,893		
Industrial	\$1,903,869		
Religious / Non-Profit	\$377,133		
Residential	\$3,880,799		
Schools	\$433,076		
Total	\$12,790,780		

Table 2-69: Estimated Losses in Thibodaux for a 100-Year Hurricane Event (Source: Hazus)

Thibodaux	Estimated Total Losses from 100-Year Hurricane Event		
Agricultural	\$863,388		
Commercial	\$31,522,906		
Government	\$1,658,836 \$10,461,340		
Industrial			
Religious / Non-Profit	\$2,072,266		
Residential	\$21,324,140		
Schools	\$2,379,659		
Total	\$70,282,535		

The following figure displays the wind zones that affect the parish in relation to critical facilities throughout the parish:

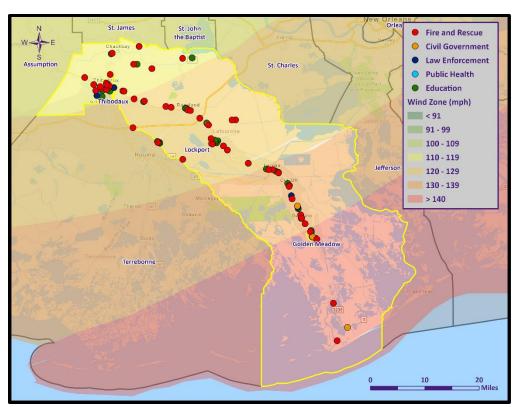


Figure 2-41: Winds Zones for the Parish in Relation to Critical Facilities

### Vulnerable Population

The total population within the parish that is susceptible to a hurricane hazard is shown in the table below:

Table 2-70: Number of People Susceptible to a 100-Year Hurricane Event in the Parish (Source: Hazus)

Number of People Exposed to Hurricane Hazards									
Location # in Community # in Hazard Area % in Hazard Area									
Unincorporated LP	74,885	74,885	100.0%						
Golden Meadow	1,791	1,791	100.0%						
Lockport	2,874	2,874	100.0%						
Thibodaux	15,792	15,792	100.0%						

The Hazus hurricane model was also extrapolated to provide an overview of vulnerable populations throughout the parish. These populations are illustrated in the following tables:

Table 2-71: Vulnerable Populations in Unincorporated Area of the Parish for a 100-Year Hurricane Event (Source: Hazus)

Unincorporated LP							
Category	Total Numbers	Percentage of People in Hazard Area					
Number in Hazard Area	74,885	100.0%					
Persons Under 5 Years	3,896	5.2%					
Persons Under 18 Years	16,856	22.5%					
Persons 65 Years and Over	9,357	12.5%					
White	55,437	74.0%					
Minority	19,478	26.0%					

Table 2-72: Vulnerable Populations in Golden Meadow for a 100-Year Hurricane Event (Source: Hazus)

Golden Meadow							
Category	Total Numbers	Percentage of People in Hazard Area					
Number in Hazard Area	1,791	100.0%					
Persons Under 5 Years	58	3.3%					
Persons Under 18 Years	319	18.1%					
Persons 65 Years and Over	312	17.7%					
White	1,647	93.5%					
Minority	114	6.5%					

Table 2-73: Vulnerable Populations in Lockport for a 100-Year Hurricane Event (Source: Hazus)

Lockport							
Category	Total Numbers	Percentage of People in Hazard Area					
Number in Hazard Area	2,874	100.0%					
Persons Under 5 Years	190	6.6%					
Persons Under 18 Years	822	28.6%					
Persons 65 Years and Over	618	21.5%					
White	2,368	82.4%					
Minority	506	17.6%					

Table 2-74: Vulnerable Populations in Thibodaux for a 100-Year Hurricane Event (Source: Hazus)

Thibodaux							
Category	Total Numbers	Percentage of People in Hazard Area					
Number in Hazard Area	15,792	100.0%					
Persons Under 5 Years	884	5.6%					
Persons Under 18 Years	3,206	20.3%					
Persons 65 Years and Over	2,748	17.4%					
White	10,581	67.0%					
Minority	5,211	33.0%					

## Vulnerability Score

Table 2-75: Tropical Cyclones Vulnerability Score for the Parish.

Tropical Cyclones Vulnerability Score									
	Probability Impact Spatial Extent Warning Time Duration Risk Factor								
Risk Level	3	4	4	1	4	3.3			

## 3. Capability Assessment

This section summarizes the results of efforts by each jurisdiction and other agency to develop policies, programs, and activities that directly or indirectly support hazard mitigation. It also provides information on resources and gaps in the parish's infrastructure, as well as relevant changes in its law since the last plan update, in order to suggest a mitigation strategy.

Through this assessment, Lafourche Parish and the incorporated jurisdictions are able to identify strengths that could be used to reduce losses and reduce risk throughout the communities. It also identifies areas where mitigation actions might be used to supplement current capabilities and create a more resilient community before, during, and after a hazard event.

## Policies, Plans and Programs

These capabilities are unique to the parish and jurisdictions, including planning, regulatory, administrative, technical, financial, and education and outreach resources. There are a number of mitigation-specific acts, plans, executive orders, and policies that lay out specific goals, objectives, and policy statements which already support or could support pre- and post-disaster hazard mitigation. Many of the ongoing plans and policies hold significant promise for hazard mitigation, and take an integrated and strategic look holistically at hazard mitigation in the Lafourche Parish planning area to propose ways to continually improve it. These tools are valuable instruments in pre- and post-disaster mitigation as they facilitate the implementation of mitigation activities through the current legal and regulatory framework. Examples of existing documents include the following:

Capability Assessment Worksheet - Lafourche Parish Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible **Planning and Regulatory** Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place Comments Plans Yes / No omprehensive / Master Plan No No No No Capital Improvements Plan Yes No No No Economic Development Plan Yes Local Emergency Operations Plan Yes No No Yes Continuity of Operations Plan Yes No No Yes Transportation Plan No Stormwater Management Plan Yes No Community Wildfire Protection Plan No No No No Other plans (redevelopment, recovery, coastal zone management) Yes No No No **Building Code, Permitting and Inspections** Yes Yes Yes Yes **Building Code** Building Code Effectiveness Grading Schedule (BCEGS) Score No No No Yes Fire Department ISO/PIAL rating Yes Yes Yes Yes Yes Yes Yes Site plan review requirements Yes **Land Use Planning and Ordinances** Zoning Ordinance No Yes Yes Yes Subdivision Ordinance Yes Yes No Yes Floodplain Ordinance Yes Yes Natural Hazard Specific Ordinance (stormwater, steep slope, No wildfire) Yes Yes Yes Flood Insurance Rate Maps Yes Yes Yes No Acquisition of land for open space and public recreation uses Yes No No Yes No Other No No

Table 3-1: Planning and Regulatory Capabilities

All jurisdictions within the Lafourche Parish planning area will work to expand their capabilities by adding to these plans, as well as work to create new plans that will address a long-term recovery and resiliency framework. In instances where there are no existing plans, there will be a concerted effort to explore opportunities to create new plans that will address long-term recovery and resiliency framework as parish and local resources allow.

### Building Codes, Permitting, Land Use Planning and Ordinances

Lafourche Parish Government provides oversight for building permits and codes, land use planning, and all parish ordinances.

As of the 2026 update, Lafourche Parish and the incorporated communities ensure that all adopted building codes are enforced and in compliance relating to the construction of any structure within the boundaries of the parish. Building permits are required prior to beginning any type of construction or renovation projects, installation of electrical wiring, plumbing or gas piping, moving manufactured/modular or portable buildings, and reroofing or demolitions.

The Lafourche Parish OHSEP is also responsible for enforcing the parish ordinances related to health and safety, property maintenance standards, and condemnation of unsafe structures.

The Lafourche Parish Government meets regularly to consider any proposed ordinance changes, and to take final actions on proposed changes.

While local capabilities for mitigation can vary from community to community, the jurisdictions within Lafourche Parish have a system in place to coordinate and share these capabilities through the OHSEP and through this Parish Hazard Mitigation Plan.

Some programs and policies, such as the above described, might use complementary tools to achieve a common end, but fail to coordinate with or support each other. Thus, coordination among local mitigation policies and programs is essential to hazard mitigation.

### Administration, Technical, and Financial

The jurisdictions within the Lafourche Parish planning area have administrative and technical capabilities in place that may be utilized in reducing hazard impacts or implementing hazard mitigation activities. Such capabilities include staff, skillset, and tools available in the community that may be accessed to implement mitigation activities and to effectively coordinate resources. The ability to access and coordinate these resources is also important. The table on the following page shows examples of resources in place.

**Administration and Technical** Identify whether your community has the following administrative and technical capabilities. For smaller jurisdictions without local staff resources, if there are public resources at the next higher level government that can provide technical assistance, indicate so in your comments Comments Administration Yes / No Planning Commission Yes Mitigation Planning Committee Yes Yes Yes Maintenance programs to reduce risk (tree trimming, clearing drainage systems) Yes Yes Yes Yes Chief Building Official Yes Yes Yes Yes Floodplain Administrator Yes Yes Yes No Emergency Manager Yes Yes Yes Yes Community Planner No No No Yes Civil Engineer No No GIS Coordinator No No No Yes Grant Writer Yes Yes Yes Yes N/A Other No No No Yes / No Warning Systems / Service Yes Yes (Reverse 911, outdoor warning signals) Yes Yes Hazard Data & Information No No No Yes Grant Writing Yes No Yes Yes Hazus Analysis No Yes No No

Table 3-2: Administration and Technical Capabilities

Financial capabilities are the resources that Lafourche Parish and its incorporated jurisdictions have access to or are eligible to use in order to fund mitigation actions. Costs associated with implementing the actions identified by the parish may vary from little to no cost actions, such as outreach efforts, or substantial action costs such acquisition of flood prone properties.

The following financial resources are available to fund mitigation actions in the Lafourche Parish planning area:

Financial Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation. Comments **Funding Resource** Capital Improvements project funding Yes Yes Yes Authority to levy taxes for specific purposes Yes Yes Yes Yes Yes Fees for water, sewer, gas, or electric services No Yes Yes Impact fees for new development No No No Yes Stormwater Utility Fee No No No No Community Development Block Grant (CDBG) Yes Yes Yes Yes Other Funding Programs Yes Yes Yes

Table 3-3: Financial Capabilities

### **Education and Outreach**

A key element in hazard mitigation is promoting a safer, more disaster resilient community through education and outreach activities and/or programs. Successful outreach programs provide data and information that improves overall quality and accuracy of important information for citizens to feel better prepared and educated with mitigation activities. These programs enable the individual communities and the parish as a whole to maximize opportunities for implementation of activities through greater acceptance and consensus of the community.

The jurisdictions within the Lafourche Parish planning area have existing education and outreach programs to implement mitigation activities, as well as communicate risk and hazard related information to its communities. The existing programs are as follows:

Education and Outreach							
Identify education and outreach programs and methods, already in place that could be used to implement mitigation activities and communicate hazard-related							
	info	ormation.					
Light Comments							
Program / Organization		Yes	/ No				
Local citizen groups or non-profit organizations focused on							
environmental protection, emergency preparedness, access and							
functional needs populations, etc.	No	No	No	Yes			
Ongoing public education or information program (responsible							
water use, fire safety, household preparedness, environmental							
education)	No	No	No	Yes			
Natural Disaster or safety related school program	No	No	No	No			
Storm Ready certification	No	No	No	Yes			
Firewise Communities certification	No	No	No	Yes			
Public/Private partnership initiatives addressing disaster-							
related issues	No	No	No	Yes			
Other	No	No	No	N/A			

Table 3-4: Education and Outreach Capabilities

As reflected with the above existing regulatory mechanisms, programs and resources within the parish, the jurisdictions within the Lafourche Parish planning area remain committed to expanding and improving on the existing capabilities within the parish. Communities will work together along with Lafourche Parish toward increased participation in funding opportunities and available mitigation programs. Should funding become available, the hiring of additional personnel to dedicate to hazard mitigation initiatives and programs, as well as increasing ordinances within the parish, will enhance and expand overall risk reduction for the entirety of Lafourche Parish.

## Flood Insurance and Community Rating System

Participation in the CRS strengthens local capabilities by lowering flood insurance premiums for jurisdictions that exceed NFIP minimum requirements. As noted in the CRS Eligible Communities List effective April 1, 2025 Lafourche Parish is rated a class 10. The incorporate jurisdictions of Golden Meadow, Lockport, and Thibodaux do not participate in the CRS program.

The Federal Emergency Management Agency's National Flood Insurance Program (NFIP) administers the Community Rating System (CRS). Under the CRS, flood insurance premiums for properties in participating communities are reduced to reflect the flood protection activities that are being implemented. This program can have a major influence on the design and implementation of flood mitigation activities, so a brief summary is provided here.

A community receives a CRS classification based upon the credit points it receives for its activities. It can undertake any mix of activities that reduce flood losses through better mapping, regulations, public information, flood damage reduction and/or flood warning and preparedness programs.

There are ten CRS classes: Class 1 requires the most credit points and gives the largest premium reduction; Class 10 receives no premium reduction (see *Figure 3-1*). A community that does not apply for the CRS or that does not obtain the minimum number of credit points is a class 10 community.

CLASS	DISCOUNT	CLASS	DISCOUNT
1	45%	6	20%
2	40%	7	15%
3	35%	8	10%
4	30%	9	5%
5	25%	10	-

SFHA (Zones A, AE, A1-A30, V, V1-V30, AO, and AH): Discount varies depending on class.

SFHA (Zones A99, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO): 10% discount for Classes 1-6; 5% discount for Classes 7-9.\*

Non-SFHA (Zones B, C, X, D): 10% discount for Classes 1-6; 5% discount for Classes 7-9.

Figure 3-1: CRS Discounts by Class (Source: FEMA)

As of April 2025, 318 communities in the State of Louisiana participate in the Federal Emergency Management Agency's National Flood Insurance Program (NFIP). Of these communities, 39 (or 12%) participate in the Community Rating System (CRS). Jefferson Parish, The City of Gretna in Jefferson Parish, and the City of Mandeville in St. Tammany Parish lead the state with a rating of Class 5, followed by three communities with a rating of Class 6: the City of Kenner in Jefferson Parish, the City of Slidell in St. Tammany Parish, and East Baton Rouge

Parish. Of the top fifty Louisiana communities, in terms of total flood insurance policies held by residents, 29 participate in the CRS. The remaining 21 communities present an outreach opportunity for encouraging participation in the CRS.

The CRS provides an incentive not just to start new mitigation programs, but to keep them going. There are two requirements that "encourage" a community to implement flood mitigation activities. Once the parish has obtained a CRS rating and is a participant, the parish will receive CRS credit for this plan when it is adopted. To retain that credit, though, the parish must submit an evaluation report on progress toward implementing this plan to FEMA by October 1 of each year. That report must be made available to the media and the public. Second, the parish must annually recertify to FEMA that it is continuing to implement its CRS credited activities. Failure to maintain the same level of involvement in flood protection can result in a loss of CRS credit points and a resulting increase in flood insurance rates to residents.

In 2011<sup>1</sup>, the National Flood Insurance Program (NFIP) completed a comprehensive review of the Community Rating System (CRS) that resulted in the release of a new CRS Coordinator's Manual. The changes to the 2013 CRS Coordinator's Manual are the result of a multi-year program evaluation that included input from a broad group of contributors to evaluate the CRS and refine the program to meet its stated goals. The changes helped to drive new achievements in the following six core flood loss reduction areas important to the NFIP: (1) reduce liabilities to the NFIP Fund; (2) improve disaster resiliency and sustainability of communities; (3) integrate a Whole Community approach to addressing emergency management; (4) promote natural and beneficial functions of floodplains; (5) increase understanding of risk, and; (6) strengthen adoption and enforcement of disaster-resistant building codes.

Since the revision of the 2013 Coordinator's Manual, FEMA released the 2017 CRS Coordinator's Manual which continued the evolution of the CRS program and its mission to reward communities that prioritize mindful floodplain regulations. As with the 2013 manual, the changes made in the 2017 manual impact each CRS community differently. Some communities see an increase in the points they receive since points for certain activities have increased (e.g., Activity 420 Open Space Preservation). Other communities receive fewer points for certain activities (e.g., Activity 320 Map Information Service). It is likely that some communities with marginal CRS Class 9 programs have to identify new CRS credits in order to remain in the CRS class. Most notably, as it relates to this hazard mitigation plan, more credit was made available for Activity 410 Floodplain Mapping.

Typically, CRS communities do not request credit for all the activities they are currently implementing unless it would earn enough credit to advance the community to a higher CRS Class. A community that finds itself losing CRS credit with the 2017 manual could likely identify activities deserving credit they had not previously received. Due to the changes in both activities and CRS points, community CRS coordinators should speak with their ISO/CRS Specialist to understand how the 2017 manual will impact their community and when.

<sup>&</sup>lt;sup>1</sup> https://www.fema.gov/national-flood-insurance-program-community-rating-system

In addition to the direct financial reward for participating in the Community Rating System, there are many other reasons to participate in the CRS. As FEMA staff often say, "If you are only interested in saving premium dollars, you're in the CRS for the wrong reason."

The other benefits that are more difficult to measure in dollars include:

- 1. The activities credited by the CRS provide direct benefits to residents, including:
  - Enhanced public safety
  - A reduction in damage to property and public infrastructure
  - Avoidance of economic disruption and losses
  - Reduction of human suffering
  - Protection of the environment
- 2. A community's flood programs will be better organized and more formal. Ad hoc activities, such as responding to drainage complaints rather than an inspection program, will be conducted on a sounder, more equitable basis.
- 3. A community can evaluate the effectiveness of its flood program against a nationally recognized benchmark.
- 4. Technical assistance in designing and implementing a number of activities is available at no charge from the Insurance Services Office.
- 5. The public information activities will build a knowledgeable constituency interested in supporting and improving flood protection measures.
- 6. A community would have an added incentive to maintain its flood programs over the years. The fact that its CRS status could be affected by the elimination of a flood related activity or a weakening of the regulatory requirements for new developments would be taken into account by the governing board when considering such actions.
- 7. Every time residents pay their insurance premiums, they are reminded that the community is working to protect them from flood losses, even during dry years.

### **NFIP Worksheets**

Parish NFIP worksheets can be found in *Appendix E: State Required Worksheets*.

## 4. Mitigation Strategy

### Introduction

The Hazard Mitigation Strategy for Lafourche Parish and its incorporated communities have a common guiding principle and is the demonstration of the parish's commitment to reduce risks from hazards. The strategy also serves as a guide for parish and local decision makers as they commit resources to reducing the effects of hazards.

Officials from all jurisdictions within the planning area confirmed the goals, objectives, actions and projects over the period of the hazard mitigation plan update process. The mitigation actions and projects in this 2026 HMP update are a product of analysis and review of the Lafourche Parish Hazard Mitigation Plan Planning Committee under the coordination of the Lafourche Parish Office of Homeland Security and Emergency Preparedness. The committee was presented a list of projects and actions, new and from the 2021 plan, for review from June 2025 – October 2025.

### Goals

The goals represent the guidelines that the parish and its communities want to achieve with this plan update. To help implement the strategy and adhere to the mission of the Hazard Mitigation Plan, the preceding section of the plan update was focused on identifying and quantifying the risks faced by the residents and property owners in Lafourche Parish from natural and manmade hazards. By articulating goals and objectives based on the previous plans, the risk assessment results, and intending to address those results, this section sets the stage for identifying, evaluating, and prioritizing feasible, cost effective, and environmentally sound actions to be promoted at the parish and municipal level – and to be undertaken by the state for its own property and assets. By doing so, Lafourche Parish can make progress toward reducing identified risks.

For the purposes of this plan update, goals and action items are defined as follows:

- **Goals** are general guidelines that explain what the parish wants to achieve. Goals are expressed as broad policy statements representing desired long-term results.
- **Action Items** are the specific steps (projects, policies, and programs) that advance a given goal. They are highly focused, specific, and measurable.

The current goals of the Lafourche Parish Hazard Mitigation Plan Update Planning Committee represent long-term commitments by the parish. After assessing these goals, the committee decided that the current remain valid.

The goals are as follows:

- **1.** Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.
- **2.** Enhance public awareness and understanding of disaster preparedness.
- **3.** Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).
- **4.** Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards

The Mitigation Action Plan focuses on actions to be taken by Lafourche Parish and its communities. All of the activities in the Mitigation Action Plan will be focused on helping the parish and its communities in developing and funding projects that are not only cost effective but also meet the other DMA 2000 criteria of environmental compatibility and technical feasibility.

The Hazard Mitigation Planning Committee reviewed and evaluated the potential action and project lists in which consideration was given to a variety of factors. Such factors include determining a project's eligibility for federal

mitigation grants as well as its ability to be funded. This process required evaluation of each project's engineering feasibility, cost effectiveness, and environmental and cultural factors.

## 2026 Mitigation Actions and Update on Previous Plan Actions

The Lafourche Parish Hazard Mitigation Planning Committee identified new actions that would reduce and/or prevent future damage within the Lafourche Parish. In that effort, the committee focused on a comprehensive range of specific mitigation actions. These actions were identified in thorough fashion by the consultant team and the committee by way of frequent and open communications and meetings held throughout the planning process. The addition of these new actions, coupled with any ongoing and/or carried over projects from their previous update, provide Lafourche Parish with a solid mitigation strategy through which risk and losses will be reduced throughout the parish and its communities.

As outlined in the Local Mitigation Planning Handbook the following are eligible types of mitigation actions:

- Local Plans and Regulations These actions include government authorities, policies, or codes that influence the way land and buildings are developed and built.
- **Structure and Infrastructure Projects** These actions involve modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area, and also includes projects to construct manmade structures to reduce the impact of hazards.
- **Natural System Protection** These actions minimize the damage and losses and also preserve or restore the functions of natural systems.
- **Education and Awareness Programs** These actions inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them.

Status updates for actions included in the previous plan can be found on the following pages. Additionally, new mitigation actions agreed upon by the parish and its jurisdictions are included.

# Lafourche Parish Mitigation Actions

Previous Action Update

Unincorporated Lafourche Parish Mitigation Action Sheet							
Jurisdiction- Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status	
LAF1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HGMP, Local	1-5 years	Lafourche Parish Government/ Lafourche Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Ongoing - Carried Over (See Lafourche Parish Mitigation Action 1)	
roofs have been in	d retrofit project at the Ward nstalled at the Mathews Gove ings as funding becomes avai	ernment Comp			•		
LAF2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.  Benefits: Relieves Parish or local government and property owners of the continual problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HGMP, FMA, Local	1-5 years	Lafourche Parish Government/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms, Tropical Cyclones	Not Started – Carried Over (See Lafourche Parish Mitigation Action 2)	
	Comments: The Parish has submitted funding applications for drainage improvements for Bayou Vista and West Thibodaux drainage areas.						
LAF3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HGMP, FMA, Local	1-5 years	Lafourche Parish Government/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms, Tropical Cyclones	Ongoing - Carried Over (See Lafourche Parish Mitigation Action 3)	
Comments: Utilizi additional 8 struc	ing Federal funding, the Paris tures in progress.	h has assisted	l in the elevation	of 12 residential s	structures with an		

		-				
LAF4: Safe	Construction of a safe	HGMP,	1-5 years	Lafourche	Flooding,	Ongoing -
Room Projects	room for first responders	Local		Parish	Thunderstorms,	Carried Over
	located in Lafourche			Government/	Tornadoes,	(See Lafourche
	Parish. Other locations			Lafourche	Tropical	Parish
	will be identified based			Parish OHSEP	Cyclones	Mitigation
	on funding availability.					Action 4)
Comments: Phase	ı ı I, Design of the Mathews Saj	fe Room is co	mplete, and the	Parish is awaiting	obligation of the	
Phase II, Construc	tion funding. Funding for Pha	se I, Design fo	or the Airport Saj	fe Room was recer	ntly approved.	
LAF5: Education	Enhance the public	HGMP,	1-5 years	Lafourche	Coastal	Ongoing
and Outreach	outreach programs for	FMA,		Parish	Hazards,	
	the parish and all	Local		Government/	Flooding,	
	communities by			Lafourche	Sinkholes,	
	increasing awareness of			Parish OHSEP	Thunderstorms,	
	risks and safety for				Tornadoes,	
	Coastal Hazards,				Tropical	
	Flooding, Sinkholes,				Cyclones,	
	Thunderstorms, Tornadoes, Tropical					
	Cyclones hazards as well					
	as providing information					
	on high risk areas.					
	Informing communities,					
	business and citizens on					
	proper mitigation efforts					
	and activities will create					
	resiliency within the					
	parish and its					
	communities.					
Comments: The Po	arish utilizes the Lafourche Po	rish website	and social media	as sources of pub	lic outreach.	
LAF6:	Procurement and	HGMP,	1-5 years	Lafourche	Flooding,	Completed
Generators for	Installation of generators	Local		Parish	Thunderstorms,	
continuity of	at public facilities to			Government/	Tornadoes,	
operations and	ensure continued			Lafourche	Tropical	
government	operations during and			Parish OHSEP	Cyclones	
Camananta Cana	after events.	al in a taille al ait	ablia farailitiaa			
LAF7: Lightning	rators have been procured an Procurement and	HGMP,	1-5 years	Lafourche	Thunderstorms	Deleted
Mitigation	Installation of Lightning	Local	1-5 years	Parish	munuerstorms	Deleteu
Wittigution	rods and surge	Local		Government/		
	protectors for public			Lafourche		
	buildings to preserve life			Parish OHSEP		
	and property			-		
LAF8: Warning	Update/upgrade public	HGMP,	1-5 years	Lafourche	Coastal	Ongoing
Systems	warning system	Local		Parish	Hazards,	
	components throughout			Government/	Flooding,	
	Lafourche Parish as			Lafourche	Sinkholes,	
	necessary. Install audible			Parish OHSEP	Thunderstorms,	
	and/or reverse 911				Tornadoes,	
	warning system(s)				Tropical	
					Cyclones	
	arish has a hazard warning sy					
LAF9: Potable	Create redundancy of	HGMP,	1-5 years	Lafourche	Coastal	Not Started –
Water	potable water supply to	Local		Parish	Hazards,	Carried Over
	critical facilities,			Government/	Flooding,	(See Lafourche
	especially hospitals, and			Lafourche	Sinkholes,	Parish
	provide protection of			Parish OHSEP	Thunderstorms,	Mitigation
	potable water supply by				Tornadoes,	Action 5)
	acquisition/installation of				Tropical	
	backflow preventers at				Cyclones	
	appropriate critical locations.					
	iocations.					

	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).  In the provides homeowners with the project Phase II Segment A			Lafourche Parish Government/ Lafourche Parish OHSEP  Parish promotes to  Lafourche Parish Government, Lafourche	Coastal Hazards, Flooding, Tropical Cyclones  The purchase of Flooding, Tropical Cyclones	Ongoing			
		Coalition, Inc; FEMA		OHSEP, Louisiana Department of Transportation & Development					
	A 1 Improvement Project Pha	_							
LAF12: LA 1 Improvement Project Phase II Segment B	LA 1 Improvement Project Phase II Segment B	USDOT Tiger Grant Program; RESTORE Act; OCS; FEMA	1-5 years	Lafourche Parish Government, Lafourche OHSEP, Louisiana Department of Transportation & Development	Flooding, Tropical Cyclones	In Progress			
	A I Improvement Project Phas to be completed by 2028.	e II Segment	B from Golden N	leadow to Leeville	is in progress				
LAF13: Drainage improvement projects	Widen drainage ditches and upgrade culverts	HMGP, FEMA, Local, Regional	1-5 years	Lafourche Parish Government, Public Works Director	Flooding, Tropical Cyclones	Deleted - Duplicate of LAF2 Action			
LAF14: Pump station improvements	Upgrade Pump station capacity; Ensure pump stations have adequate trash racks to ensure operation during flood events; Provide additional pump station protection inside levee systems	HMGP, Local, Regional	1-5 years	Lafourche Parish Government, Public Works Director	Flooding, Tropical Cyclones	Ongoing - Carried Over (See Lafourche Parish Mitigation Action 6)			
	<b>Comments:</b> The Parish has submitted funding applications for pump station improvements for several pump stations including Crest, Leighton, Morvant, Bayou Vista, and Butch Hill.								
LAF15: Elevation projects	Elevate roads with flood history; Elevate levee and floodwall heights to further protect from storm surge	HMGP, Local, Regional	1-5 years	Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclones	Not Started – Carried Over (See Lafourche Parish Mitigation Action 7)			
LAF16: Construct safe rooms	Construct safe rooms for all critical facilities and governmental facilities	HMGP	1-5 years	Lafourche Parish Government, Lafourche OHSEP	Tornadoes, Tropical Cyclones	Deleted - Duplicate of LAF4 Action			

LAF17: Mitigation outreach and education	Monitor agricultural activities and encourage smart farming practices to reduce soil compaction and acceleration of subsidence; Provide educational brochures to	Local	1-5 years	Lafourche Parish Government, Lafourche OHSEP	Coastal Hazards, Flooding, Sinkholes, Tornadoes, Tropical Cyclones	Deleted - Duplicate of LAF5 Action
	libraries, schools, and other public facilities including mitigation measures for all hazards; Establish a public outreach campaign to ensure all homeowners in floodplains are aware of the various types of coverage options under the NFIP; Establish a homeowner education program on flood mitigation measures					
LAF18:	Acquire all-hazard	HMGP,	1-5 years	Lafourche	Tornadoes,	Completed
Communication systems	warning system to ensure proper citizen	Local, Regional		Parish Government,	Tropical Cyclones	
upgrades	notification of tornadoes, hurricanes, and coastal/tropical storms			Lafourche OHSEP		
Comments: An all	-hazard warning system is in	place.				
LAF19: LA 1	LA 1 Improvement	LA Capital	1-5 years	Lafourche	Flooding,	In Progress
Improvement Project Phase II Segment C	Project Phase II Segment C	Outlay Program: LA Coalition, Inc; FEMA		Parish Government, Lafourche OHSEP, Louisiana Department of Transportation & Development	Tropical Cyclones	
	A I Improvement Project Phas to be completed by 2028.	e II Segment	C from Golden N	leadow to Leeville	is in progress	
LAF20: Wind hardening projects	Wind hardening of critical facilities and governmental facilities	HMGP	1-5 years	Lafourche Parish Government, Lafourche OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Ongoing
roofs have been in other public buildi	d retrofit project at the Ward estalled at the Mathews Gove ings as funding becomes avai	rnment Comp lable.	olex and Galliand	Complex, and wo	rk continues on	
LAF21: Increase sediment diversion	Increase sediment diversion	CPRA	1-5 years	Lafourche Parish Government, Zoning Department	Coastal Hazards	Not Started – Carried Over (See Lafourche Parish Mitigation Action 8)
LAF22: Drinking water protection projects	Locate and construct additional potable water intakes further north in the parish to provide drinking water during a saltwater intrusion event	Local	1-5 years	Lafourche Parish Government, Water District Department Heads	Coastal Hazards	Deleted - Duplicate of LAF9 Action

LAF23:       Ensure accurate survey points are located throughout the parish to monitoring       Local, Federal       1-5 years       Lafourche Parish Government, Lafourche OHSEP	Not Started –
of Hazards throughout the parish to monitoring throughout the parish to monitor continued subsidence Government, Lafourche OHSEP	Carried Over
monitoring monitor continued Lafourche OHSEP	(See Lafourche
subsidence OHSEP	Parish
	Mitigation
	Action 9)
LAF24: Each political subdivision No 1-5 years Lafourche Flooding,	Ongoing
Participate into join the CRSAdditionalParishTropical	
Community   Funding   Government,   Cyclones	
Rating System Lafourche	
(CRS) OHSEP	
Comments: The Parish participates in the Community Rating System (CRS).	
LAF25: Completion of Capital FEMA, 1-5 years Lafourche Coastal	Ongoing
LafourcheOutlay projects, includingLocalParishHazards,	
Parish Capital         additional drainage         Government,         Flooding,	
Outlay Projects improvements, Lafourche Sinkholes,	
infrastructure and OHSEP Tornadoes,	
building upgrades and Tropical	
improvements, pump  Cyclones	
station improvements,	
bulkhead improvements, and other unidentified	
capital outlay projects  Comments: The Parish continuously requests Capital Outlay funding for infrastructure projects, including airport	
comments: The Parish continuously requests capital Outlay Junaing for infrastructure projects, including disport corridor project, pump station replacement, water line improvements, and new Head Start facility.	
LAF26: Pumping   Elevate or flood proof   HMGP,   1-5 years   Lafourche   Flooding,	Ongoing
Station Projects   pump stations; upgrade   Federal   Parish   Tropical	
existing pump stations by Government, Cyclones	
installing block valves to Lafourche	
prevent/protect against OHSEP	
backwater	
Comments: The Parish has applied for funding to assist with the elevation of pump stations.	
LAF27: FloodAdopt new regulationsHMGP,1-5 yearsLafourcheFlooding,	Ongoing
Ordinances         reducing development         Federal         Parish         Tropical	
density in flood prone Government, Cyclones	
areas. Lafourche	
OHSEP	
Comments: The Parish has adopted Ordinances regarding the Provisions for Flood Hazard Reduction and	
updates regulations as necessary.	Completed
LAF28: Transfer     Acquire and install     HMGP     1-5 years     Lafourche     Coastal       Switch     transfer switches at     Parish     Hazards.	Completed
Switch     transfer switches at     Parish     Hazards,       Installation     critical facilities to allow     Government,     Flooding,	
for generator use during Government, Friodding,  Lafourche Sinkholes,	
and after emergency OHSEP Thunderstorms,	
events. This will allow for Tornadoes,	
continuity of operations Tropical	
at the parish and Cyclones	
municipal level.	
	Ongoing
municipal level.	
municipal level.  Comments: Transfer switches have been installed at critical faculties.  LAF29: Map and Assess  Develop a database of current community  HMGP  1-5 Years  Lafourche Parish  Hazards,	
municipal level.  Comments: Transfer switches have been installed at critical faculties.  LAF29: Map and Assess current community vulnerability to vulnerability to erosion.  Municipal level.  HMGP 1-5 Years Lafourche Parish Hazards, Government, Tropical	
Comments: Transfer switches have been installed at critical faculties.       LAF29: Map and Assess Vulnerability to Erosion     Develop a database of current community vulnerability to erosion. Identify and map     HMGP     1-5 Years     Lafourche Parish Hazards, Government, Lafourche Cyclones	
Municipal level.   Comments: Transfer switches have been installed at critical faculties.	
municipal level.  Comments: Transfer switches have been installed at critical faculties.  LAF29: Map and Assess	
Municipal level.   Comments: Transfer switches have been installed at critical faculties.	
municipal level.  Comments: Transfer switches have been installed at critical faculties.  LAF29: Map and Assess Vulnerability to community Vulnerability to ldentify and map affected areas to provide better awareness to emergency management officials and community  municipal level.  HMGP 1-5 Years Lafourche Parish Hazards, Tropical Cyclones  OHSEP  OHSEP	
Municipal level.   Comments: Transfer switches have been installed at critical faculties.	

LAF30:	Heighten awareness	HMGP	1-5 years	Lafourche	Flooding,	Ongoing
Improvements	within the parish to current and future flood			Parish	Tropical	
to Flood Risk Assessment				Government, Lafourche	Cyclones	
Assessment	risks by developing and implementing			OHSEP		
	procedures for tracking			OTISEF		
	high water marks					
	following high water					
	events, incorporating GIS					
	to develop map areas					
	that are at risk, and by					
	developing and					
	maintaining a database					
	to track community					
	exposure to high water					
	and flood risk events.					
Comments: The I	Parish is working with a privat	e contractor t	o better utilize a	GIS system to ma	p at track at risk	
areas.						
LAF31:	Better protect structures	HMGP	1-5 years	Lafourche	Flooding,	Not Started –
Floodproofing	within the parish from			Parish	Tropical	Carried Over
of residential	flood damage by			Government,	Cyclones	(See Lafourche
and non	encouraging wet flood			Lafourche		Parish
residential	proofing of areas above			OHSEP		Mitigation
structures	BFE. Dry proof non-					Action 10)
	residential structures by					
	strengthening walls, seal					
	openings, and other					
	measures to keep water					
	out.					

**New Mitigation Actions** 

ew Mitigation Actions Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish			
Description			
Lafourche Parish Mitigation Action 1	Building Retrofits		
Lead Agency	Lafourche Parish Government		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, FMA, Local		
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>		
Priority	Medium		
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events.		
Type of Mitigation Action	Structure and Infrastructure Projects		
How Action Aligns with Risk Reduction	Reduces damage from high wind related events and helps assure that the public buildings can be used, occupied and operable during or after storms.		
Current Status of Action	Ongoing – Carried Over from 2021 Plan		
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones		

Additional Supporting Information: Since the previous plan update, a wind retrofit project at the Ward 6 Senior Center and Galliano Sheriff Substation is complete. New roofs have been installed at the Mathews Government Complex and Galliano Complex. Lafourche Parish will continue to pursue and target other structures over the next five years so for that reason, this project has been carried forward into this plan update.

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish		
	Description	
Lafourche Parish Mitigation Action 2	Drainage Improvements	
Lead Agency	Lafourche Parish Government	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>	
Priority	High	
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Flooding, Tropical Cyclones	

**Additional Supporting Information:** The Parish has submitted funding applications for drainage improvements for Bayou Vista and West Thibodaux drainage areas. Structural work has yet to be started so this action has been carried forward into this plan update

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish		
Description		
Lafourche Parish Mitigation Action 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	
Lead Agency	Lafourche Parish Government	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-10 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>	
Priority	High	
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	
Type of Mitigation Action	Structure and Infrastructure Projects, Local Plans and Regulations	
How Action Aligns with Risk Reduction	Reduces flooding risk of repetitive and severe repetitive loss structures.	
Current Status of Action	Ongoing – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards, Flooding, Tropical Cyclones	

**Additional Supporting Information:** Utilizing federal funding, Lafourche Parish has assisted in the elevation of 12 residential structures. Over the next five to ten years, the parish has target eight additional structures that need to be elevated. Due to the ongoing nature and need for continuation of elevations around the parish, this project has been carried forward into this plan update.

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish		
	Description	
Lafourche Parish Mitigation Action 4	Safe Room Projects	
Lead Agency	Lafourche Parish Government	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>	
Priority	Medium	
Action Description	Construction of a safe room for first responders located in the parish. Other locations will be identified based on funding availability.	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event	
Current Status of Action	Ongoing – Carried Over from 2021 Plan	
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	

**Additional Supporting Information:** While Phase I, designing the safe room in Mathews, LA, is complete, Phase II, the funding construction, is currently awaiting obligation. The design for a saferoom at the airport was recently approved as well. Being that no structural progress has been made and the parish plans on pursuing these safe room projects over the next five years, this project has been carried forward into this plan update.

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish		
	Description	
Lafourche Parish Mitigation Action 5	Potable Water	
Lead Agency	Lafourche Parish Government	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.	
Priority	Medium	
Action Description	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection	
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish		
	Description	
Lafourche Parish Mitigation Action 6	Pump Station Improvements	
Lead Agency	Lafourche Parish Government	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>	
Priority	High	
Action Description	Elevate or flood proof pump stations; upgrade existing pump stations by installing block valves to prevent/protect against backwater	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Investing in flood mitigation for pump stations allows for their continued operations during flooding events and prevents surrounding areas from being inundated by backwater flooding	
<b>Current Status of Action</b>	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Flooding, Tropical Cyclones	

**Additional Supporting Information:** Lafourche Parish has submitted funding applications for pump station improvements for several stations including Crest, Leighton, Morvant, Bayou Vista, and Butch Hill. Being that no funding has been awarded for these projects and the ongoing need to pursue more pump station projects across the parish, this action has been carried forward into this plan updated.

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish		
	Description	
Lafourche Parish Mitigation Action 7	Elevation Projects	
Lead Agency	Lafourche Parish Government	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ul><li>2. Enhance public awareness and understanding of disaster preparedness.</li><li>3. Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li></ul>	
Priority	High	
Action Description	Elevate roads with flood history; Elevate levee and floodwall heights to further protect from storm surge	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Elevation of roads and floodwalls will reduce the impact to flooding during hazard events and allow essential personnel to remain operable	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards, Flooding, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish		
	Description	
Lafourche Parish Mitigation Action 8	Increase Sediment Diversion	
Lead Agency	Lafourche Parish Government	
Supporting Agencies	Lafourche Parish OHSEP, Parish Engineer, Zoning Department	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local, CPRA	
Associated Goals	Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.	
Priority	High	
Action Description	Increase sediment diversion strategies throughout the parish	
Type of Mitigation Action	Local Plans and Regulations, Natural Resource Protection	
How Action Aligns with Risk Reduction	Continually assessing areas experiencing land loss allows for more strict guidance for development in these areas and identifies areas of highest vulnerability.	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards	

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish			
Description			
Lafourche Parish Mitigation Action 9	Implementation of Hazard Monitoring		
Lead Agency	Lafourche Parish Government		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, Local		
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>		
Priority	Medium		
Action Description	Ensure accurate survey points are located throughout the parish to monitor continued subsidence		
Type of Mitigation Action	Structure and Infrastructure Projects		
How Action Aligns with Risk Reduction	Monitoring subsidence rates will allow for the parish to identify areas that are most vulnerable		
Current Status of Action	Not Started – Carried Over from 2021 Plan		
Hazard Addressed	Coastal Hazards		

Implementation Key for Potential Hazard Mitigation Actions Lafourche Parish		
	Description	
Lafourche Parish Mitigation Action 10	Floodproofing of Residential and Non-residential Structures	
Lead Agency	Lafourche Parish Government	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>	
Priority	Medium	
Action Description	Better protect structures within the parish from flood damage by encouraging wet flood proofing of areas above BFE. Dry proof non-residential structures by strengthening walls, seal openings, and other measures to keep water out.	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Floodproofing structures in the area will reduce the impact from flooding hazard during and after events	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Flooding, Tropical Cyclones	

## Town of Golden Meadow Mitigation Actions

Previous Action Update

	Town of Golden Meadow Mitigation Action Sheet					
Jurisdiction- Specific Action	Project Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
GM1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HGMP, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 1)
	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.  Benefits: Relieves Parish or local government and property owners of the continual problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.			Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms, Tropical Cyclones	Ongoing
GM3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone	HGMP, FMA, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow
GM4: Safe Room Projects	construction of a safe room for first responders located in Golden Meadow. Other locations will be identified based on funding availability.	HGMP, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Mitigation Action 2)  Not Started - Carried Over (See Golden Meadow Mitigation Action 3)

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GM5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Coastal Hazards, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones hazards as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	HGMP, FMA, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Sinkholes, Thunderstorms Tornadoes, Tropical Cyclones,	Not Started - Carried Over (See Golden Meadow Mitigation Action 4)
GM6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HGMP, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Completed
Comments: Generat	ors have been procured and ir	nstalled at pu	blic facilities.			
GM7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HGMP, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Thunderstorms	Deleted
GM8: Warning Systems	Update/upgrade public warning system components throughout Golden Meadow as necessary. Install audible and/or reverse 911 warning system(s)	HGMP, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Sinkholes, Thunderstorms Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 5)
GM9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HGMP, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Sinkholes, Thunderstorms Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 6)
GM10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HGMP, FMA, Local	1-5 years	Town of Golden Meadow Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 7)

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GM11: Generator installation	Install generators at all critical facilities and governmental facilities	HMGP, Local, Regional	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Tornadoes, Tropical Cyclone	Deleted - Duplicate of GM6 Action
GM12: Mitigation education and outreach	Monitor agricultural activities and encourage smart farming practices to reduce soil compaction and acceleration of subsidence; Establish a public outreach campaign to ensure all homeowners in floodplains are aware of the various types of coverage options under the NFIP; Establish a homeowner education program on flood mitigation measures; Provide educational brochures to libraries, schools, and other public facilities including mitigation measures for all hazards	Local	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards, Flooding, Sinkholes, Tornadoes, Tropical Cyclones	Deleted - Duplicate of GM7 Action
GM13: Lafourche Parish Capital Outlay Projects	Completion of Capital Outlay projects, including additional drainage improvements, infrastructure and building upgrades and improvements, pump station improvements, bulkhead improvements, and other unidentified capital outlay projects	HMGP, FMA, Local	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards, Flooding, Sinkholes, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 8)
GM14: Participate in the Community Rating System (CRS)	Each political subdivision to join the CRS	No Additional Funding	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Ongoing
<b>Comments:</b> The Town does participate in the CRS. The Town is waiting on guidance from FEMA on any revisions to the ordinance that may be necessary.						
GM15: Implementation of land loss monitoring	Ensure accurate survey points are located throughout the parish to monitor continued subsidence	Local, Federal	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards	Not Started - Carried Over (See Golden Meadow Mitigation Action 9)

GM16: Wind	Wind harden critical	HMGP,	1-5 years	Mayor of	Thunderstorms,	Not
hardening projects	facilities and governmental facilities	Local, Regional		Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Tornadoes, Tropical Cyclones	Started - Carried Over (See Golden Meadow Mitigation Action 10)
GM17: Drainage improvement projects	Widen drainage ditches and upgrade culverts	HMGP, Local, Regional	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Deleted - Duplicate of GM2 Action
GM18: Elevation projects	Elevate levee and floodwall heights to further protect from storm surge	HMGP, Local, Regional	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 11)
GM19: Safe room construction	Construct safe rooms in critical facilities and governmental facilities	HMGP, Local	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Tornadoes, Tropical Cyclones	Deleted - Duplicate of GM4 Action
GM20: Flood Proofing Projects	Flood-proof critical structures within the parish to help promote continuation of critical services during a storm event	HMGP, Federal	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 12)
GM21: Pumping Station Projects	Elevate or flood proof pump stations; upgrade existing pump stations by installing block valves to prevent/protect against backwater	HMGP, Federal	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 13)
GM22: Flood Ordinances	Adopt new regulations reducing development density in flood prone areas.	HMGP, Federal	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 14)

GM23: Transfer switch installation	Acquire and install transfer switches at critical facilities to allow for generator use during and after emergency events. This will allow for continuity of operations at the parish and municipal level.	HMGP	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones	Completed
	switches have been installed					
GM24: Map and Assess Vulnerability to Erosion	Develop and maintain database of current community vulnerability to erosion. Utilize GIS to identify and map affected areas to provide better awareness of the hazard to emergency management officials and community members.	HMGP	1-5 Years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 15)
GM25: Improvements to Flood Risk Assessment	Heighten awareness within Golden Meadow to current and future flood risks by developing and implementing procedures for tracking high water marks following high water events, incorporating GIS to develop map areas that are at risk, and by developing and maintaining a database to track community exposure to high water and flood risk events.	HMGP	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 16)
GM26: Floodproofing of residential and non residential structures	Better protect structures within the Golden Meadow from flood damage by encouraging wet flood proofing of areas above BFE. Dry proof non-residential structures by strengthening walls, seal openings, and other measures to keep water out.	HMGP	1-5 years	Mayor of Golden Meadow, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Golden Meadow Mitigation Action 17)

New Mitigation Actions

Implementation Key for Potential Hazard Mitigation Actions  Town of Golden Meadow					
	Description				
Town of Golden Meadow Mitigation Action 1	Building Retrofits				
Lead Agency	Town of Golden Meadow Mayor's Office				
Supporting Agencies	Lafourche Parish OHSEP				
Timeline	1-5 years				
Cost Estimate	Unknown				
Possible Funding Source(S)	HMGP, FMA, Local				
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>				
Priority	Medium				
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events.				
Type of Mitigation Action	Structure and Infrastructure Projects				
How Action Aligns with Risk Reduction	Reduces damage from high wind related events and helps assure that the public buildings can be used, occupied and operable during or after storms.				
Current Status of Action	Not Started – Carried Over from 2021 Plan				
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones				

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow			
	Description		
Town of Golden Meadow Mitigation Action 2	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures		
Lead Agency	Town of Golden Meadow Mayor's Office		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, FMA, Local		
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>		
Priority	High		
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.		
Type of Mitigation Action	Structure and Infrastructure Projects, Local Plans and Regulations		
How Action Aligns with Risk Reduction	Reduces flooding risk of repetitive and severe repetitive loss structures.		
Current Status of Action	Not Started – Carried Over from 2021 Plan		
Hazard Addressed	Coastal Hazards, Flooding, Tropical Cyclones		

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow			
	Description		
Town of Golden Meadow Mitigation Action 3	Safe Room Projects		
Lead Agency	Town of Golden Meadow Mayor's Office		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, FMA, Local		
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>		
Priority	Medium		
Action Description	Construction of a safe room for first responders located in Golden Meadow. Other locations will be identified based on funding availability.		
Type of Mitigation Action	Structure and Infrastructure Projects		
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event		
Current Status of Action	Not Started – Carried Over from 2021 Plan		
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones		

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow			
	Description		
Town of Golden Meadow Mitigation Action 4	Education and Outreach		
Lead Agency	Town of Golden Meadow Mayor's Office		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, FMA, Local		
Associated Goals	2. Enhance public awareness and understanding of disaster preparedness.		
Priority	Medium		
Action Description	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Coastal Hazards, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones hazards as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.		
Type of Mitigation Action	Education and Awareness Programs		
How Action Aligns with Risk Reduction	Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.		
Current Status of Action	Not Started – Carried Over from 2021 Plan		
Hazard Addressed	Coastal Hazards, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones		

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow			
	Description		
Town of Golden Meadow Mitigation Action 5	Warning Systems		
Lead Agency	Town of Golden Meadow Mayor's Office		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, FMA, Local		
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> </ol>		
Priority	Medium		
Action Description	Update/upgrade public warning system components throughout Golden Meadow as necessary. Install audible and/or reverse 911 warning system(s)		
Type of Mitigation Action	Structure and Infrastructure Projects		
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event		
Current Status of Action	Not Started – Carried Over from 2021 Plan		
Hazard Addressed	Coastal Hazards, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones		

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow			
	Description		
Town of Golden Meadow Mitigation Action 6	Potable Water		
Lead Agency	Town of Golden Meadow Mayor's Office		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, FMA, Local		
Associated Goals	Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.		
Priority	Medium		
Action Description	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.		
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection		
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.		
Current Status of Action	Not Started – Carried Over from 2021 Plan		
Hazard Addressed	Coastal Hazards, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones		

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow			
	Description		
Town of Golden Meadow Mitigation Action 7	Promote Flood Insurance		
Lead Agency	Town of Golden Meadow Mayor's Office		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, FMA, Local		
Associated Goals	<ol> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>		
Priority	Medium		
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).		
Type of Mitigation Action	Education and Awareness Programs		
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events		
Current Status of Action	Not Started – Carried Over from 2021 Plan		
Hazard Addressed	Coastal Hazards, Flooding, Tropical Cyclones		

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow				
	Description			
Town of Golden Meadow Mitigation Action 8	Lafourche Capital Outlay Projects			
Lead Agency	Town of Golden Meadow Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	Medium			
Action Description	Completion of Capital Outlay projects, including additional drainage improvements, infrastructure and building upgrades and improvements, pump station improvements, bulkhead improvements, and other unidentified capital outlay projects			
Type of Mitigation Action	Structure and Infrastructure Projects			
How Action Aligns with Risk Reduction	Capital outlay projects will reduce the risk to damage and loss of property during hazard events			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow				
	Description			
Town of Golden Meadow Mitigation Action 9	Implementation of Land Loss Monitoring			
Lead Agency	Town of Golden Meadow Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	High			
Action Description	Ensure accurate survey points are located throughout the parish to monitor continued subsidence			
Type of Mitigation Action	Local Plans and Regulations, Education and Awareness Programs			
How Action Aligns with Risk Reduction	Continually assessing areas experiencing land loss allows for more strict guidance for development in these areas and identifies areas of highest vulnerability.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards			

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow					
Description					
Town of Golden Meadow Mitigation Action 10	Wind Hardening Projects				
Lead Agency	Town of Golden Meadow Mayor's Office				
Supporting Agencies	Lafourche Parish OHSEP				
Timeline	1-5 years				
Cost Estimate	Unknown				
Possible Funding Source(S)	HMGP, Local				
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>				
Priority	Medium				
Action Description	Wind harden critical facilities and governmental facilities				
Type of Mitigation Action	Structure and Infrastructure Projects				
How Action Aligns with Risk Reduction	Hardening structures against high winds will reduce the risk of damage or loss of property				
Current Status of Action	Not Started – Carried Over from 2021 Plan				
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones				

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow					
Description					
Town of Golden Meadow Mitigation Action 11	Elevation Projects				
Lead Agency	Town of Golden Meadow Mayor's Office				
Supporting Agencies	Lafourche Parish OHSEP				
Timeline	1-5 years				
Cost Estimate	Unknown				
Possible Funding Source(S)	HMGP, FMA, Local				
Associated Goals	3. Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).				
Priority	High				
Action Description	Elevate levee and floodwall heights to further protect from storm surge				
Type of Mitigation Action	Structure and Infrastructure Projects				
How Action Aligns with Risk Reduction	Elevating floodwalls will reduce the risk of failure and allow the community to be at a reduced risk of flooding or storm surge impacts				
Current Status of Action	Not Started – Carried Over from 2021 Plan				
Hazard Addressed	Flooding, Tropical Cyclones				

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow					
Description					
Town of Golden Meadow Mitigation Action 12	Flood Proofing Projects				
Lead Agency	Town of Golden Meadow Mayor's Office				
Supporting Agencies	Lafourche Parish OHSEP				
Timeline	1-5 years				
Cost Estimate	Unknown				
Possible Funding Source(S)	HMGP, FMA, Local				
Associated Goals	<ul> <li>3. Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>4. Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ul>				
Priority	High				
Action Description	Flood-proof critical structures within the parish to help promote continuation of critical services during a storm event				
Type of Mitigation Action	Structure and Infrastructure Projects				
How Action Aligns with Risk Reduction	Flood proofing critical facilities will allow essential personnel and their operations to remain operable and uninterrupted during hazard events				
Current Status of Action	Not Started – Carried Over from 2021 Plan				
Hazard Addressed	Flooding, Tropical Cyclones				

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow				
	Description			
Town of Golden Meadow Mitigation Action 13	Pump Station Projects			
Lead Agency	Town of Golden Meadow Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>			
Priority	High			
Action Description	Elevate or flood proof pump stations; upgrade existing pump stations by installing block valves to prevent/protect against backwater			
Type of Mitigation Action	Structure and Infrastructure Projects			
How Action Aligns with Risk Reduction	Investing in flood mitigation for pump stations allows for their continued operations during flooding events and prevents surrounding areas from being inundated by backwater flooding			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Flooding, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow					
Description					
Town of Golden Meadow Mitigation Action 14	Flood Ordinances				
Lead Agency	Town of Golden Meadow Mayor's Office				
Supporting Agencies	Lafourche Parish OHSEP				
Timeline	1-5 years				
Cost Estimate	Unknown				
Possible Funding Source(S)	HMGP, FMA, Local				
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>				
Priority	Medium				
Action Description	Adopt new regulations reducing development density in flood prone areas.				
Type of Mitigation Action	Structure and Infrastructure Projects				
How Action Aligns with Risk Reduction	Improving flood ordinances allows for stricter and more enhanced development guidelines that will help ensure that properties don't get flooded after landscape changes				
Current Status of Action	Not Started – Carried Over from 2021 Plan				
Hazard Addressed	Flooding, Tropical Cyclones				

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow				
	Description			
Town of Golden Meadow Mitigation Action 15	Map and Assess Vulnerability to Erosion			
Lead Agency	Town of Golden Meadow Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> </ol>			
Priority	Medium			
Action Description	Develop and maintain database of current community vulnerability to erosion. Utilize GIS to identify and map affected areas to provide better awareness of the hazard to emergency management officials and community members.			
Type of Mitigation Action	Local Plans and Regulations, Natural Systems Protection			
How Action Aligns with Risk Reduction	Mapping vulnerable areas will allow officials to identify areas that may be most at risk and allow for the prioritization of mitigation actions to be carried out in that area.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow				
	Description			
Town of Golden Meadow Mitigation Action 16	Improvements to Flood Risk Assessment			
Lead Agency	Town of Golden Meadow Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	High			
Action Description	Heighten awareness within Golden Meadow to current and future flood risks by developing and implementing procedures for tracking high water marks following high water events, incorporating GIS to develop map areas that are at risk, and by developing and maintaining a database to track community exposure to high water and flood risk events.			
Type of Mitigation Action	Local Plans and Regulations			
How Action Aligns with Risk Reduction	Improving flood mitigation and awareness around the community will allow for future develop and ordinance guidelines to be in place to combat ongoing flooding issues in troubled areas.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Flooding, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Golden Meadow				
	Description			
Town of Golden Meadow Mitigation Action 17	Floodproofing of Residential and Non-residential Structures			
Lead Agency	Town of Golden Meadow Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	Medium			
Action Description	Better protect structures within the Golden Meadow from flood damage by encouraging wet flood proofing of areas above BFE. Dry proof non-residential structures by strengthening walls, seal openings, and other measures to keep water out.			
Type of Mitigation Action	Structure and Infrastructure Projects			
How Action Aligns with Risk Reduction	Floodproofing structures in the area will reduce the impact from flooding hazard during and after events			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Flooding, Tropical Cyclones			

## Town of Lockport Mitigation Actions

Previous Action Update

	Town of Lockport Mitigation Action Sheet						
Jurisdiction- Specific Action	Project Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status	
LOCK1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HGMP, Local	1-5 years	Town of Lockport Mayor's Office/ Lafourche Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 1)	
LOCK2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HGMP, FMA, Local	1-5 years	Town of Lockport Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 2)	
LOCK3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition- demolition, acquisition- relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HGMP, FMA, Local	1-5 years	Town of Lockport Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 3)	
LOCK4: Safe Room Projects	Construction of a safe room for first responders located in Lockport. Other locations will be identified based on funding availability.	HGMP, Local	1-5 years	Town of Lockport Mayor's Office/ Lafourche Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 4)	

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LOCK5:	Enhance the public	HGMP,	1-5 years	Town of	Coastal	Not
Education and	outreach programs for	FMA,		Lockport	Hazards,	Started -
Outreach	the parish and all	Local		Mayor's	Flooding,	Carried
	communities by			Office/	Thunderstorms	Over (See
	increasing awareness of			Lafourche	Tornadoes,	Lockport
	risks and safety for			Parish OHSEP	Tropical	Mitigation
	Coastal Hazards,				Cyclones,	Action 5)
	Flooding,					
	Thunderstorms,					
	Tornadoes, Tropical					
	Cyclones hazards as					
	well as providing					
	information on high risk					
	areas. Informing					
	communities, business					
	and citizens on proper					
	mitigation efforts and					
	activities will create					
	resiliency within the parish and its					
	communities.					
LOCK6:	Procurement and	HGMP,	1-5 years	Town of	Flooding,	Completed
Generators for	Installation of	Local	20,00.3	Lockport	Thunderstorms,	JJ. Aproced
continuity of	generators at public			Mayor's	Tornadoes,	
operations and	facilities to ensure			Office/	Tropical	
government	continued operations			Lafourche	Cyclones	
	during and after events.			Parish OHSEP	,	
Comments: Genera	itors have been procured an	d installed at	public facilities.			
LOCK7: Lightning	Procurement and	HGMP,	1-5 years	Town of	Thunderstorms	Deleted
Mitigation	Installation of Lightning	Local	,	Lockport		
	rods and surge			Mayor's		
	protectors for public			Office/		
	buildings to preserve			Lafourche		
	life and property			Parish OHSEP		
LOCK8: Warning	Update/upgrade public	HGMP,	1-5 years	Town of	Coastal	Not
Systems	warning system	Local		Lockport	Hazards,	Started -
	components			Mayor's	Flooding,	Carried
	throughout Lockport as			Office/	Thunderstorms	Over (See
	necessary. Install			Lafourche	Tornadoes,	Lockport
	audible and/or reverse			Parish OHSEP	Tropical	Mitigation
LOCKS 2 : !!	911 warning system(s)	116145	4.5.	T	Cyclones	Action 6)
LOCK9: Potable	Create redundancy of	HGMP,	1-5 years	Town of	Coastal	Not
Water	potable water supply to	Local		Lockport	Hazards,	Started - Carried
	critical facilities,			Mayor's	Flooding,	
	especially hospitals, and provide protection of			Office/ Lafourche	Thunderstorms Tornadoes,	Over (See Lockport
	potable water supply by			Parish OHSEP	Tropical	Mitigation
	acquisition/installation			Falisii UNSEP	Cyclones	Action 7)
	of backflow preventers				Cyclottes	Action 7)
	at appropriate critical					
	locations.					
LOCK10:	Promote the purchase	HGMP,	1-5 years	Town of	Coastal	Not
Promote Flood	of flood insurance.	FMA,		Lockport	Hazards,	Started -
Insurance	Advertise the	Local		Mayor's	Flooding,	Carried
	availability, cost, and			Office/	Tropical	Over (See
	coverage of flood			Lafourche	Cyclones	Lockport
	insurance through the			Parish OHSEP		Mitigation
	National Flood					Action 8)
	Insurance Program					
	(NFIP).					

LOCK11: Drainage improvement projects	Widen drainage ditches and upgrade culverts	HMGP, Local, Regional	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclone	Deleted - Duplicate of LOCK2 Action
LOCK12: Mitigation education and outreach	Monitor agricultural activities and encourage smart farming practices to reduce soil compaction and acceleration of subsidence; Establish a public outreach campaign to ensure all homeowners in floodplains are aware of the various types of coverage options under the NFIP; Establish a homeowner education program on flood mitigation measures; Provide educational brochures to libraries, schools, and other public facilities including mitigation measures for all hazards	Local	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms Tornadoes, Tropical Cyclones	Deleted - Duplicate of LOCK5 Action
LOCK13: Implementation of land loss monitoring	Ensure accurate survey points are located throughout the parish to monitor continued subsidence	Local, Federal	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards	Not Started - Carried Over (See Lockport Mitigation Action 9)
LOCK14: Wind Hardening Projects	Wind harden critical facilities and governmental facilities	HMGP, Local, Regional	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 10)
LOCK15: Elevation Projects	Elevate, acquire, or pilot reconstruct all RL and SRL structures	HMGP	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Deleted - Duplicate of LOCK3 Action
LOCK16: Participate in the Community Rating System (CRS)	Each political subdivision to join the CRS	No Additional Funding	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 11)

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LOCK17: Lafourche Parish Capital Outlay Projects	Completion of Capital Outlay projects, including additional drainage improvements, infrastructure and building upgrades and improvements, bulkhead improvements, and other unidentified capital outlay projects	FEMA, Local	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 12)
LOCK18: Flood Proofing Projects	Flood-proof critical structures within the parish to help promote continuation of critical services during a storm event	HMGP, Federal	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 13)
LOCK19: Pumping Station Projects	Elevate or flood proof pump stations; upgrade existing pump stations by installing block valves to prevent/protect against backwater	HMGP, Federal	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 14)
LOCK20: Flood Ordinances	Adopt new regulations reducing development density in flood prone areas.	HMGP, Federal	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 15)
LOCK21: Transfer switch installation	Acquire and install transfer switches at critical facilities to allow for generator use during and after emergency events. This will allow for continuity of operations at the parish and municipal level.	HMGP	1-5 years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards, Flooding, Tornadoes, Tropical Cyclones	Completed
Comments: Transfe	er switches were installed at	critical facilit				
LOCK22: Map and Assess Vulnerability to Erosion	Develop and maintain database of current community vulnerability to erosion. Utilize GIS to identify and map affected areas to provide better awareness of the hazard to emergency management officials and community members.	HMGP	1-5 Years	Mayor of Lockport, Lafourche Parish Government, Lafourche Parish OHSEP	Coastal Hazards, Tropical Cyclones	Not Started - Carried Over (See Lockport Mitigation Action 16)

LOCK23:	Heighten awareness	HMGP	1-5 years	Mayor of	Flooding,	Not
Improvements to	within Lockport to			Lockport,	Tropical	Started -
Flood Risk	current and future flood			Lafourche	Cyclones	Carried
Assessment	risks by developing and			Parish		Over (See
	implementing			Government,		Lockport
	procedures for tracking			Lafourche		Mitigation
	high water marks			Parish OHSEP		Action 17)
	following high water					
	events, incorporating					
	GIS to develop map					
	areas that are at risk,					
	and by developing and					
	maintaining a database					
	to track community					
	exposure to high water					
	and flood risk events.					
LOCK24:	Better protect	HMGP	1-5 years	Mayor of	Flooding,	Not
Floodproofing of	structures within			Lockport,	Tropical	Started -
residential and	Lockport from flood			Lafourche	Cyclones	Carried
non residential	damage by encouraging			Parish		Over (See
structures	wet flood proofing of			Government,		Lockport
	areas above BFE. Dry			Lafourche		Mitigation
	proof non-residential			Parish OHSEP		Action 18)
	structures by					
	strengthening walls,					
	seal openings, and					
	other measures to keep					
	water out.					

**New Mitigation Actions** 

Implementation Key for Potential Hazard Mitigation Actions  Town of Lockport				
	Description			
Town of Lockport Mitigation Action 1	Building Retrofits			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	Medium			
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events.			
Type of Mitigation Action	Structure and Infrastructure Projects			
How Action Aligns with Risk Reduction	Reduces damage from high wind related events and helps assure that the public buildings can be used, occupied and operable during or after storms.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport				
	Description			
Town of Lockport Mitigation Action 2	Drainage Improvements			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>			
Priority	High			
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.			
Type of Mitigation Action	Structure and Infrastructure Projects			
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Flooding, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport				
	Description			
Town of Lockport Mitigation Action 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	High			
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.			
Type of Mitigation Action	Structure and Infrastructure Projects, Local Plans and Regulations			
How Action Aligns with Risk Reduction	Reduces flooding risk of repetitive and severe repetitive loss structures.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards, Flooding, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport				
	Description			
Town of Lockport Mitigation Action 4	Safe Room Projects			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	Medium			
Action Description	Construction of a safe room for first responders located in Lockport. Other locations will be identified based on funding availability.			
Type of Mitigation Action	Structure and Infrastructure Projects			
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport				
	Description			
Town of Lockport Mitigation Action 5	Education and Outreach			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	2. Enhance public awareness and understanding of disaster preparedness.			
Priority	Medium			
Action Description	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones hazards as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.			
Type of Mitigation Action	Education and Awareness Programs			
How Action Aligns with Risk Reduction	Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport				
	Description			
Town of Lockport Mitigation Action 6	Warning Systems			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> </ol>			
Priority	Medium			
Action Description	Update/upgrade public warning system components throughout Lockport as necessary. Install audible and/or reverse 911 warning system(s)			
Type of Mitigation Action	Structure and Infrastructure Projects			
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport				
	Description			
Town of Lockport Mitigation Action 7	Potable Water			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	Identify and pursue preventative structural and non-structural measures     that will reduce future damages from hazards.			
Priority	Medium			
Action Description	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.			
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection			
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport				
Description				
Town of Lockport Mitigation Action 8	Promote Flood Insurance			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>			
Priority	Medium			
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).			
Type of Mitigation Action	Education and Awareness Programs			
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards, Flooding, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport				
	Description			
Town of Lockport Mitigation Action 9	Implementation of Land Loss Monitoring			
Lead Agency	Town of Lockport Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	High			
Action Description	Ensure accurate survey points are located throughout the parish to monitor continued subsidence			
Type of Mitigation Action	Local Plans and Regulations, Education and Awareness Programs			
How Action Aligns with Risk Reduction	Continually assessing areas experiencing land loss allows for more strict guidance for development in these areas and identifies areas of highest vulnerability.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards			

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport						
Description						
Town of Lockport Mitigation Action 10	Wind Hardening Projects					
Lead Agency	Town of Lockport Mayor's Office					
Supporting Agencies	Lafourche Parish OHSEP					
Timeline	1-5 years					
Cost Estimate	Unknown					
Possible Funding Source(S)	HMGP, Local					
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>					
Priority	Medium					
Action Description	Wind harden critical facilities and governmental facilities					
Type of Mitigation Action	Structure and Infrastructure Projects					
How Action Aligns with Risk Reduction	Hardening structures against high winds will reduce the risk of damage or loss of property					
Current Status of Action	Not Started – Carried Over from 2021 Plan					
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones					

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport						
Description						
Town of Lockport Mitigation Action 11	Participate in the Community Rating System (CRS)					
Lead Agency	Town of Lockport Mayor's Office					
Supporting Agencies	Lafourche Parish OHSEP					
Timeline	1-5 years					
Cost Estimate	Unknown					
Possible Funding Source(S)	HMGP, FMA, Local					
Associated Goals	2. Enhance public awareness and understanding of disaster preparedness.					
Priority	Medium					
Action Description	Pursue the initiative of joining the CRS program to help lower flood insurance premiums for Lockport					
Type of Mitigation Action	Structure and Infrastructure Projects					
How Action Aligns with Risk Reduction	Involvement in the CRS program will help reduce flood insurance premiums for residents and allow the community to create new initiatives and strategies for combating flooding in the area					
Current Status of Action	Not Started – Carried Over from 2021 Plan					
Hazard Addressed	Flooding, Tropical Cyclones					

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport						
Description						
Town of Lockport Mitigation Action 12	Lafourche Capital Outlay Projects					
Lead Agency	Town of Lockport Mayor's Office					
Supporting Agencies	Lafourche Parish OHSEP					
Timeline	1-5 years					
Cost Estimate	Unknown					
Possible Funding Source(S)	HMGP, FMA, Local					
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>					
Priority	Medium					
Action Description	Completion of Capital Outlay projects, including additional drainage improvements, infrastructure and building upgrades and improvements, pump station improvements, bulkhead improvements, and other unidentified capital outlay projects					
Type of Mitigation Action	Structure and Infrastructure Projects					
How Action Aligns with Risk Reduction	Capital outlay projects will reduce the risk to damage and loss of property during hazard events					
Current Status of Action	Not Started – Carried Over from 2021 Plan					
Hazard Addressed	Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones					

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport						
Description						
Town of Lockport Mitigation Action 13	Flood Proofing Projects					
Lead Agency	Town of Lockport Mayor's Office					
Supporting Agencies	Lafourche Parish OHSEP					
Timeline	1-5 years					
Cost Estimate	Unknown					
Possible Funding Source(S)	HMGP, FMA, Local					
Associated Goals	<ul> <li>3. Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>4. Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ul>					
Priority	High					
Action Description	Flood-proof critical structures within the parish to help promote continuation of critical services during a storm event					
Type of Mitigation Action	Structure and Infrastructure Projects					
How Action Aligns with Risk Reduction	Flood proofing critical facilities will allow essential personnel and their operations to remain operable and uninterrupted during hazard events					
Current Status of Action	Not Started – Carried Over from 2021 Plan					
Hazard Addressed	Flooding, Tropical Cyclones					

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport					
Description					
Town of Lockport Mitigation Action 14	Pump Station Projects				
Lead Agency	Town of Lockport Mayor's Office				
Supporting Agencies	Lafourche Parish OHSEP				
Timeline	1-5 years				
Cost Estimate	Unknown				
Possible Funding Source(S)	HMGP, FMA, Local				
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>				
Priority	High				
Action Description	Elevate or flood proof pump stations; upgrade existing pump stations by installing block valves to prevent/protect against backwater				
Type of Mitigation Action	Structure and Infrastructure Projects				
How Action Aligns with Risk Reduction	Investing in flood mitigation for pump stations allows for their continued operations during flooding events and prevents surrounding areas from being inundated by backwater flooding				
Current Status of Action	Not Started – Carried Over from 2021 Plan				
Hazard Addressed	Flooding, Tropical Cyclones				

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport						
Description						
Town of Lockport Mitigation Action 15	Flood Ordinances					
Lead Agency	Town of Lockport Mayor's Office					
Supporting Agencies	Lafourche Parish OHSEP					
Timeline	1-5 years					
Cost Estimate	Unknown					
Possible Funding Source(S)	HMGP, FMA, Local					
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>					
Priority	Medium					
Action Description	Adopt new regulations reducing development density in flood prone areas.					
Type of Mitigation Action	Structure and Infrastructure Projects					
How Action Aligns with Risk Reduction	Improving flood ordinances allows for stricter and more enhanced development guidelines that will help ensure that properties don't get flooded after landscape changes					
Current Status of Action	Not Started – Carried Over from 2021 Plan					
Hazard Addressed	Flooding, Tropical Cyclones					

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport						
Description						
Town of Lockport Mitigation Action 16	Map and Assess Vulnerability to Erosion					
Lead Agency	Town of Lockport Mayor's Office					
Supporting Agencies	Lafourche Parish OHSEP					
Timeline	1-5 years					
Cost Estimate	Unknown					
Possible Funding Source(S)	HMGP, FMA, Local					
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> </ol>					
Priority	Medium					
Action Description	Develop and maintain database of current community vulnerability to erosion. Utilize GIS to identify and map affected areas to provide better awareness of the hazard to emergency management officials and community members.					
Type of Mitigation Action	Local Plans and Regulations, Natural Systems Protection					
How Action Aligns with Risk Reduction	Mapping vulnerable areas will allow officials to identify areas that may be most at risk and allow for the prioritization of mitigation actions to be carried out in that area.					
Current Status of Action	Not Started – Carried Over from 2021 Plan					
Hazard Addressed	Coastal Hazards, Tropical Cyclones					

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport						
<b>Description</b>						
Town of Lockport Mitigation Action 17	Improvements to Flood Risk Assessment					
Lead Agency	Town of Lockport Mayor's Office					
Supporting Agencies	Lafourche Parish OHSEP					
Timeline	1-5 years					
Cost Estimate	Unknown					
Possible Funding Source(S)	HMGP, FMA, Local					
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>					
Priority	High					
Action Description	Heighten awareness within Lockport to current and future flood risks by developing and implementing procedures for tracking high water marks following high water events, incorporating GIS to develop map areas that are at risk, and by developing and maintaining a database to track community exposure to high water and flood risk events.					
Type of Mitigation Action	Local Plans and Regulations					
How Action Aligns with Risk Reduction	Improving flood mitigation and awareness around the community will allow for future develop and ordinance guidelines to be in place to combat ongoing flooding issues in troubled areas.					
Current Status of Action	Not Started – Carried Over from 2021 Plan					
Hazard Addressed	Flooding, Tropical Cyclones					

Implementation Key for Potential Hazard Mitigation Actions Town of Lockport						
Description						
Town of Lockport Mitigation Action 18	Floodproofing of Residential and Non-residential Structures					
Lead Agency	Town of Lockport Mayor's Office					
Supporting Agencies	Lafourche Parish OHSEP					
Timeline	1-5 years					
Cost Estimate	Unknown					
Possible Funding Source(S)	HMGP, FMA, Local					
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>					
Priority	Medium					
Action Description	Better protect structures within the Lockport from flood damage by encouraging wet flood proofing of areas above BFE. Dry proof non-residential structures by strengthening walls, seal openings, and other measures to keep water out.					
Type of Mitigation Action	Structure and Infrastructure Projects					
How Action Aligns with Risk Reduction	Floodproofing structures in the area will reduce the impact from flooding hazard during and after events					
Current Status of Action	Not Started – Carried Over from 2021 Plan					
Hazard Addressed	Flooding, Tropical Cyclones					

## City of Thibodaux Mitigation Actions

Previous Action Update

City of Thibodaux Mitigation Action Sheet							
Jurisdiction- Specific Action	Action Description	Funding Source	Target Completio n Date	Responsible Party, Agency, or Department	Hazard	Status	
THIB1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HGMP, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Flooding, Thunderstorms , Tornadoes, Tropical Cyclones	Ongoing	
THIB2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.  Benefits: Relieves Parish or local government and property owners of the continual problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HGMP, FMA, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms , Tropical Cyclones	Ongoing	
THIB3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition- demolition, acquisition- relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HGMP, FMA, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms , Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 1)	
THIB4: Safe Room Projects	Construction of a safe room for first responders located in Thibodaux. Other locations will be identified based on funding availability.	HGMP, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Flooding, Thunderstorms , Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 2)	

THIB5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, hazards as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	HGMP, FMA, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms Tornadoes, Tropical Cyclones,	Not Started - Carried Over (See Thibodaux Mitigation Action 3)
THIB6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HGMP, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Flooding, Thunderstorms , Tornadoes, Tropical Cyclones	Ongoing
THIB7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HGMP, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Thunderstorms	Deleted
THIB8: Warning Systems	Update/upgrade public warning system components throughout Thibodaux as necessary. Install audible and/or reverse 911 warning system(s)	HGMP, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 4)
THIB9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HGMP, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Thunderstorms Tornadoes, Tropical Cyclones	Completed
THIB10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HGMP, FMA, Local	1-5 years	City of Thibodaux Mayor's Office/ Lafourche Parish OHSEP	Coastal Hazards, Flooding, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 5)

THIB11: Mitigation outreach and education	Monitor agricultural activities and encourage smart farming practices to reduce soil compaction and acceleration of subsidence; Establish a public outreach campaign to ensure all homeowners in floodplains are aware of the various types of coverage options under the NFIP; Establish a homeowner education program on flood mitigation measures; Provide educational brochures to libraries, schools, and other public facilities including mitigation measures for all hazards	Local	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Coastal Hazards, Flooding, Tornadoes, Tropical Cyclones	Deleted - Duplicate of THIB5 Action
THIB12: Elevation projects	Elevate, acquire, or pilot reconstruct all RL and SRL structures	HMGP	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclone	Deleted - Duplicate of THIB3 Action
THIB13: Lafourche Parish Capital Outlay Projects	Completion of Capital Outlay projects, including additional drainage improvements, infrastructure and building upgrades and improvements, pump station improvements, bulkhead improvements, and other unidentified capital outlay projects	FEMA, Local	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Coastal Hazards, Flooding, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 6)
THIB14: Implementation of land loss monitoring	Ensure accurate survey points are located throughout the parish to monitor continued subsidence	Local, Federal	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Coastal Hazards	Not Started - Carried Over (See Thibodaux Mitigation Action 7)
THIB15: Participate in Community Rating System (CRS)	Each political subdivision to join the CRS	No Additional Funding	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclones	Ongoing
THIB16: Implementation of land loss monitoring	Ensure accurate survey points are located throughout the parish to monitor continued subsidence	Local, Federal	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Coastal Hazards	Deleted - Duplicate of THIB14 Action

THIB17: Drainage improvement projects	Widen drainage ditches and upgrade culverts; South Canal Blvd. drainage project; Acadian Woods Subdivision drainage project; East 7th St. drainage project; St. Louis Canal Backflow Project	HMGP, Local, Regional	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclones	Deleted - Duplicate of THIB2 Action
THIB18: Wind hardening projects	Wind harden critical facilities and governmental facilities, including Public Works Office	HMGP	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 8)
THIB19: Safe room construction	Construct safe rooms for all critical facilities and governmental facilities	HMGP	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Tornadoes, Tropical Cyclones	Deleted - Duplicate of THIB4 Action
THIB20: Flood Proofing Projects	Flood-proof critical structures within Thibodaux to help promote continuation of critical services during a storm event	HMGP, Federal	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 9)
THIB21: Pumping Station Projects	Elevate or flood proof pump stations; upgrade existing pump stations by installing block valves to prevent/protect against backwater	HMGP, Federal	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 10)
THIB22: Flood Ordinances	Adopt new regulations reducing development density in flood prone areas within city limits.	HMGP, Federal	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 11)
THIB23: Transfer switch installation	Acquire and install transfer switches at critical facilities to allow for generator use during and after emergency events. This will allow for continuity of operations at the parish and municipal level.	HMGP	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Coastal Hazards, Flooding, Tornadoes, Tropical Cyclones	Ongoing

THIB24: Map and Assess Vulnerability to Erosion	Develop and maintain database of current community vulnerability to erosion. Utilize GIS to identify and map affected areas to provide better awareness of the hazard to emergency management officials and community members.	НМСР	1-5 Years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Coastal Hazards, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 12)
THIB25: Improvements to Flood Risk Assessment	Heighten awareness within the Thibodaux to current and future flood risks by developing and implementing procedures for tracking high water marks following high water events, incorporating GIS to develop map areas that are at risk, and by developing and maintaining a database to track community exposure to high water and flood risk events.	HMGP	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Thibodaux Mitigation Action 13)
THIB26: Floodproofing of residential and non residential structures	Better protect structures within the Thibodaux from flood damage by encouraging wet flood proofing of areas above BFE. Dry proof non-residential structures by strengthening walls, seal openings, and other measures to keep water out.	HMGP	1-5 years	Mayor of Thibodaux, Lafourche Parish Government, Lafourche OHSEP	Flooding, Tropical Cyclones	Ongoing

New Mitigation Actions

Implementation Key for Potential Hazard Mitigation Actions  City of Thibodaux		
	Description	
City of Thibodaux Mitigation Action 1	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>	
Priority	High	
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	
Type of Mitigation Action	Structure and Infrastructure Projects, Local Plans and Regulations	
How Action Aligns with Risk Reduction	Reduces flooding risk of repetitive and severe repetitive loss structures.	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards, Flooding, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
	Description	
City of Thibodaux Mitigation Action 2	Safe Room Projects	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>	
Priority	Medium	
Action Description	Construction of a safe room for first responders located in Thibodaux. Other locations will be identified based on funding availability.	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
	Description	
City of Thibodaux Mitigation Action 3	Education and Outreach	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	2. Enhance public awareness and understanding of disaster preparedness.	
Priority	Medium	
Action Description	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones hazards as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	
Type of Mitigation Action	Education and Awareness Programs	
How Action Aligns with Risk Reduction	Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
	Description	
City of Thibodaux Mitigation Action 4	Warning Systems	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> </ol>	
Priority	Medium	
Action Description	Update/upgrade public warning system components throughout Thibodaux as necessary. Install audible and/or reverse 911 warning system(s)	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
Description		
City of Thibodaux Mitigation Action 5	Promote Flood Insurance	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>	
Priority	Medium	
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	
Type of Mitigation Action	Education and Awareness Programs	
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards, Flooding, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
	Description	
City of Thibodaux Mitigation Action 6	Lafourche Capital Outlay Projects	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>	
Priority	Medium	
Action Description	Completion of Capital Outlay projects, including additional drainage improvements, infrastructure and building upgrades and improvements, pump station improvements, bulkhead improvements, and other unidentified capital outlay projects	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Capital outlay projects will reduce the risk to damage and loss of property during hazard events	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
	Description	
City of Thibodaux Mitigation Action 7	Implementation of Land Loss Monitoring	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>	
Priority	High	
Action Description	Ensure accurate survey points are located throughout the parish to monitor continued subsidence	
Type of Mitigation Action	Local Plans and Regulations, Education and Awareness Programs	
How Action Aligns with Risk Reduction	Continually assessing areas experiencing land loss allows for more strict guidance for development in these areas and identifies areas of highest vulnerability.	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Coastal Hazards	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
	Description	
City of Thibodaux Mitigation Action 8	Wind Hardening Projects	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>	
Priority	Medium	
Action Description	Wind harden critical facilities and governmental facilities	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Hardening structures against high winds will reduce the risk of damage or loss of property	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
Description		
City of Thibodaux Mitigation Action 9	Flood Proofing Projects	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ul> <li>3. Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>4. Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ul>	
Priority	High	
Action Description	Flood-proof critical structures within the parish to help promote continuation of critical services during a storm event	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Flood proofing critical facilities will allow essential personnel and their operations to remain operable and uninterrupted during hazard events	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Flooding, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux		
	Description	
City of Thibodaux Mitigation Action 10	Pump Station Projects	
Lead Agency	City of Thibodaux Mayor's Office	
Supporting Agencies	Lafourche Parish OHSEP	
Timeline	1-5 years	
Cost Estimate	Unknown	
Possible Funding Source(S)	HMGP, FMA, Local	
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> </ol>	
Priority	High	
Action Description	Elevate or flood proof pump stations; upgrade existing pump stations by installing block valves to prevent/protect against backwater	
Type of Mitigation Action	Structure and Infrastructure Projects	
How Action Aligns with Risk Reduction	Investing in flood mitigation for pump stations allows for their continued operations during flooding events and prevents surrounding areas from being inundated by backwater flooding	
Current Status of Action	Not Started – Carried Over from 2021 Plan	
Hazard Addressed	Flooding, Tropical Cyclones	

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux			
Description			
City of Thibodaux Mitigation Action 11	Flood Ordinances		
Lead Agency	City of Thibodaux Mayor's Office		
Supporting Agencies	Lafourche Parish OHSEP		
Timeline	1-5 years		
Cost Estimate	Unknown		
Possible Funding Source(S)	HMGP, FMA, Local		
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>		
Priority	Medium		
Action Description	Adopt new regulations reducing development density in flood prone areas.		
Type of Mitigation Action	Structure and Infrastructure Projects		
How Action Aligns with Risk Reduction	Improving flood ordinances allows for stricter and more enhanced development guidelines that will help ensure that properties don't get flooded after landscape changes		
Current Status of Action	Not Started – Carried Over from 2021 Plan		
Hazard Addressed	Flooding, Tropical Cyclones		

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux				
Description				
City of Thibodaux Mitigation Action 12	Map and Assess Vulnerability to Erosion			
Lead Agency	City of Thibodaux Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> </ol>			
Priority	Medium			
Action Description	Develop and maintain database of current community vulnerability to erosion. Utilize GIS to identify and map affected areas to provide better awareness of the hazard to emergency management officials and community members.			
Type of Mitigation Action	Local Plans and Regulations, Natural Systems Protection			
How Action Aligns with Risk Reduction	Mapping vulnerable areas will allow officials to identify areas that may be most at risk and allow for the prioritization of mitigation actions to be carried out in that area.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Coastal Hazards, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux				
Description				
City of Thibodaux Mitigation Action 13	Improvements to Flood Risk Assessment			
Lead Agency	City of Thibodaux Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Enhance public awareness and understanding of disaster preparedness.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	High			
Action Description	Heighten awareness within Thibodaux to current and future flood risks by developing and implementing procedures for tracking high water marks following high water events, incorporating GIS to develop map areas that are at risk, and by developing and maintaining a database to track community exposure to high water and flood risk events.			
Type of Mitigation Action	Local Plans and Regulations			
How Action Aligns with Risk Reduction	Improving flood mitigation and awareness around the community will allow for future develop and ordinance guidelines to be in place to combat ongoing flooding issues in troubled areas.			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Flooding, Tropical Cyclones			

Implementation Key for Potential Hazard Mitigation Actions City of Thibodaux				
Description				
City of Thibodaux Mitigation Action 14	Floodproofing of Residential and Non-residential Structures			
Lead Agency	City of Thibodaux Mayor's Office			
Supporting Agencies	Lafourche Parish OHSEP			
Timeline	1-5 years			
Cost Estimate	Unknown			
Possible Funding Source(S)	HMGP, FMA, Local			
Associated Goals	<ol> <li>Identify and pursue preventative structural and non-structural measures that will reduce future damages from hazards.</li> <li>Reduce repetitive flood losses in the parish by pursuing various mitigation measures (acquisitions, elevations, and flood-proofing).</li> <li>Facilitate sound development in the parish and municipalities so as to reduce or eliminate the potential impact of hazards</li> </ol>			
Priority	Medium			
Action Description	Better protect structures within the Thibodaux from flood damage by encouraging wet flood proofing of areas above BFE. Dry proof non-residential structures by strengthening walls, seal openings, and other measures to keep water out.			
Type of Mitigation Action	Structure and Infrastructure Projects			
How Action Aligns with Risk Reduction	Floodproofing structures in the area will reduce the impact from flooding hazard during and after events			
Current Status of Action	Not Started – Carried Over from 2021 Plan			
Hazard Addressed	Flooding, Tropical Cyclones			

#### **Action Prioritization**

During the prioritization process, the planning committee considered the costs and relative benefits of each new action. Costs can usually be listed in terms of dollars, although at times it involves staff time rather than the purchase of equipment or services that can be readily measured in dollars. In most cases, benefits, such as lives saved or future damage prevented, are hard to measure in dollars. Therefore, many projects were prioritized with these factors in mind. In addition, prioritization of the mitigation actions was performed based on the following economic criteria: i) whether the action can be performed with the existing parish resources; ii) whether the action requires additional funding from external sources; and iii) relative costs of the mitigation actions.

In all cases, the committee concluded that the benefits (in terms of reduced property damage, lives saved, health problems averted and/or economic harm prevented) outweighed the costs for the recommended action items.

The planning committee prioritized the possible activities that could be pursued. Planning committee members consulted appropriate agencies in order to assist with the prioritizations. The results were items that address the major hazards, are appropriate for those hazards, are cost-effective, and are affordable. The planning committee met internally for mitigation action meetings to review and approve mitigation actions for Lafourche Parish. The parameters of action prioritization were determined based on impact, feasibility, strategic fit, and funding. When these parameters were defined, the community then made the decision on whether to deem certain actions as low, medium or high priorities. The parameters below defines the criteria for each prioritization rating.

#### High

- Impact: Addresses significant or ongoing risk to life, property or infrastructure
- Feasibility: Implemented with existing capacity or minimal external support
- Strategic Fit: Strong alignment with community goals & regulatory requirements
- Funding: Requires minimal additional funding or has guaranteed financial support

#### Medium

- o Impact: Provides meaningful benefits but is less critical
- Feasibility: Feasible with moderate effort or interdepartmental coordination
- Strategic Fit: Supports goals but is not essential to core objectives
- Funding: May require new funding sources that are accessible but not guaranteed

#### Low

- o **Impact:** Limited or speculative long-term benefit
- o **Feasibility:** Difficult to implement or requires complex coordination
- Strategic Fit: Indirectly related to core planning goals
- Funding: Depends on substantial, uncertain or competitive external funding

Lafourche Parish and the incorporated jurisdictions will implement and administer the identified actions based off the proposed timeframes and priorities for each reflected in the portions of this section where actions are summarized. The inclusion of any specific action item in this document does not commit the parish to implementation. Each action item will be subject to availability of staff and funding. Certain items may require regulatory changes or other decisions that must be implemented through standard processes. This plan is intended to offer priorities based on an examination of hazards.

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# **Appendix A: Planning Process**

#### **Purpose**

The Hazard Mitigation Plan Update process prompts local jurisdictions to keep their hazard mitigation plan current and moving toward a more resilient community. The plan update builds on the research and planning efforts of previous plans while reviewing recent trends. The planning committee followed FEMA's hazard mitigation planning process per the FEMA Local Mitigation Planning Handbook. This planning process assured public involvement and the participation of interested agencies and private organizations. Documentation of the planning process for the updated plan is addressed in this section.

# The Lafourche Parish Hazard Mitigation Plan Update

The Lafourche Parish Hazard Mitigation Plan Update process began in March 2025 with a series of emails, phone calls, meetings, and collaborations between the contractor (SDMI) and a diverse group of participating agencies and stakeholders. Update activities were intended to give each participating agency and stakeholder the opportunity to shape the plan to best fit their community's mitigation goals. Community stakeholders and the general public were invited to attend and contribute information to the planning process during specific time periods or meetings.

The table below details the meeting schedule and purpose for the planning process:

Date	Meeting or Outreach	Location	Public Invited	Purpose
4/2/2025	Kick Off Meeting	Phone Conference	No	Discuss with the Parish OHSEP Director expectations and requirements of the project. Discuss meeting schedules, committee make up, and next steps.
7/23/2025	Initial Planning Committee Meeting	Mathews, LA	No	Discuss with Lafourche Parish Hazard Mitigation Planning Committee the process and expectations of plan participants. Discuss timeline and action items for parish and each jurisdiction.
10/1/2025	Planning Committee Risk Assessment Review	Mathews, LA	Yes	Presentation of Risk Assessment and profiled hazards to Planning Committee.
10/1/2025	Public Meeting	Mathews, LA	Yes	Presentation of Risk Assessment s and profiled hazards to public. Presentation also includes current mitigation project highlights within communities and public survey discussion.
Ongoing throughout the planning process	Public Opinion Survey	Online	Yes	This survey asked participants about public perceptions and opinions regarding natural hazards in Lafourche Parish. In addition, questions covered the methods and techniques preferred for reducing the risks and losses associated with these hazards.

## **Planning**

The plan update process consisted of several phases:

	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11
Plan Revision											
Data Collection											
Risk Assessment											
Public Input											
Mitigation Strategy											
Plan Review by											
GOHSEP and FEMA											
FEMA APA										_	
Plan Adoptions											
Final Plan Approval											

#### Coordination

The Lafourche Parish Office of Homeland Security and Emergency Preparedness (OHSEP) oversaw the coordination of the 2026 Hazard Mitigation Plan Update Planning Committee during the update process. The parish OHSEP was responsible for identifying members for the committee. Representatives of relevant local and parish government departments were invited for inclusion in the planning process via email from SDMI and the Lafourche Parish OHSEP Director. Lafourche Parish and their jurisdictions identified and reached out, via email, to representatives of non-profits, local businesses and organizations, and private organizations that provide for the betterment and benefit of populations identified as socially vulnerable and work directly with communities that are deemed as underserved so that they could be involved in the entirety of this plan update process and participate as key stakeholders. Some directors of organizations contacted included the Council on Aging, and the local American Red Cross chapter, but no response was received. SDMI is an organization under the Louisiana State University system, so this plan update received constant feedback from academic personnel on LSU's campus.

The Parish Director was responsible for inviting the planning committee and key stakeholders to scheduled meetings and activities via phone call and/or email. SDMI assisted the Parish Director with press releases and social media statements for notification to the media and general public for public meetings and public outreach activities.

SDMI was responsible for facilitating all meetings and outreach efforts during the update process.

#### Neighboring Community, Local and Regional Planning Process Involvement

From the outset of the planning process, the planning committee encouraged participation from a broad range of parish entities. The involvement of representatives from the city, state, and regional agencies provided diverse perspectives and mitigation ideas.

Formal participation in this plan includes but is not limited to the following activities:

- Participation in Hazard Mitigation planning meetings at the local and parish level
- Sharing local data and information with jurisdictions
- Incorporation of other planning documents, studies and efforts
- Action item development and action progress from 2021 update
- Risk Assessment review
- Plan document draft review
- Formal adoption of the Hazard Mitigation Plan

The Assumption Parish OHSEP Director was invited to attend the Initial Planning and Risk Assessment Meetings for Lafourche Parish in an effort to coordinate mitigation efforts where possible as neighboring communities. The Assumption Parish OHSEP Director was invited via email and phone call to participate in an effort to collaborate with neighboring communities. SDMI assisted Lafourche Parish with encouraging the collaboration with these neighboring communities via email by extending an invitation to the Lafourche Hazard Mitigation Plan Update Meetings.

As part of the coordination and planning process, the parish was provided the State Required Hazard Mitigation Plan Update Worksheet. The completed worksheets can be found in *Appendix E: State Required Worksheets*.

The 2026 Hazard Mitigation Plan Update Planning Committee consisted of representatives from the following parish, municipal or community stakeholders. Below is a detailed list of the 2026 HMPU Planning Committee:

	Lafourche Parish Hazard Mitigation Planning Committee				
Name	Title Agency		Email		
Chris Boudreaux	OEP Director	Lafourche Parish OHSEP	BoudreauxCL@lafourchegov.org		
Kristi Lumpkin	Grants and Economic Development Director	Lafourche Parish Government	lumpkinkm@lafourchegov.org		
Jennifer Smith	Floodplain Administrator	Lafourche Parish Government	smithjf@lafourchegov.net		
Barry Plaisance	Mayor	Town of Lockport	bplaisance@townoflockport.com		
Kyle Cressione	Emergency Preparedness Director	City of Thibodaux	kylec@ci.thibodaux.la.us		
<b>Kevin Clement</b>	Mayor	City of Thibodaux	kclement@ci.thibodaux.la.us		
Joey Bouziga	Mayor	Town of Golden Meadow	info@townofgoldenmeadow- la.gov		

#### **Program Integration**

Local governments are required to describe how their mitigation planning process is integrated with other ongoing local and area planning efforts. This subsection describes Lafourche Parish programs and planning.

A measure of integration and coordination is achieved through the HMPU participation of planning committee members and community stakeholders who administer programs such as: floodplain management under the National Flood Insurance Program (NFIP), Community Rating System, parish planning and zoning and building code enforcement.

Since the last update in 2021, Lafourche Parish has used the hazard mitigation plan as a reference point to various projects and mitigation strategies that take place throughout the planning area. Along with the mitigation actions outlined for each parish, Lafourche has used vulnerability statistics and integration strategies within the plan to help guide their mitigation practices. The strategies and practices in this plan update build upon the practices that have been used since the previous update. Those strategies and practices can be found in various sections throughout the risk assessment that address climate change, vulnerable populations, and future development trends. Furthermore, the parish has held and will continue to hold annual meetings to discuss any changes that have occurred within the parish that could alter the vulnerability of Lafourche, and how to combat any issues that have arisen within the means and regulations of the hazard mitigation plan.

Lafourche Parish will continue to integrate the requirements of this Hazard Mitigation Plan into other local planning mechanisms that are to be identified through future meetings of the parish, and through the five-year review process described in *Appendix B: Plan Maintenance*. The primary means for integrating mitigation strategies into other local planning mechanisms will be through the revision, update and implementation of any individual municipal plans that require specific planning and administrative tasks (e.g. risk assessment, plan amendments, ordinance revisions, capital improvement projects, etc.).

The members of the Lafourche Parish Hazard Mitigation Planning Committee will remain charged with ensuring that the goals and strategies of new and updated local planning documents for their communities or agencies are consistent with the goals and actions of the Hazard Mitigation Plan and will not contribute to increased hazard vulnerability in the parish. Existing plans, studies, and technical information were incorporated in the planning process. Examples include flood data from FEMA and the U. S. Geological Survey. Much of this data was incorporated into the Risk Assessment component of the plan relative to plotting historical events and the magnitude of damages that occurred. The parish's 2021 Hazard Mitigation Plan was also used in the planning process. Other existing data and plans used in the planning process include those listed below.

- Parish Emergency Operations Plan
- Stormwater Management Plan
- Flood Insurance Rate Maps
- State of Louisiana Hazard Mitigation Plan

Further information on the plans can be found in Section 3: Capability Assessment.

## Meeting Documentation and Public Outreach Activities

The following pages contain documentation of the meetings and public outreach activities conducted during this hazard mitigation plan update.

#### Meeting #1: Hazard Mitigation Plan Update Kick-Off

**Date:** April 2, 2025 **Location:** Conference Call

Purpose: Discuss with the Parish OHSEP Director expectations and requirements of the project. Discuss meeting

schedules, committee make up, and next steps.

**Public Invitation:** No **Meeting Invitees:** 

Lafourche Parish Hazard Mitigation Planning Committee				
Name	Title Agency			
Chris Boudreaux	Director	Lafourche Parish OHSEP		
Chris Rippetoe	Program Manager	LSU-SDMI		
Jason Martin	Emergency Management Analyst	LSU-SDMI		

# Meeting #2: Hazard Mitigation Plan Update Initial Planning Committee Meeting

**Date:** July 23, 2025 **Location:** Mathews, LA

**Purpose:** Discuss the expectations and requirements of the hazard mitigation plan update process and establish an

initial project timeline with the Parish's Hazard Mitigation Plan Planning Committee. Assign each

individual tasks related to the parish data collection for the plan update.

**Public Invitation:** No **Meeting Invitees:** 

Lafourche Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	
Chris Boudreaux	OEP Director	Lafourche Parish OHSEP	
Kristi Lumpkin	Grants and Economic Development Director	Lafourche Parish Government	
Jennifer Smith	Floodplain Administrator	Lafourche Parish Government	
Barry Plaisance	Mayor	Town of Lockport	
Kyle Cressione	Emergency Preparedness Director	City of Thibodaux	
Kevin Clement	Mayor	City of Thibodaux	
Joey Bouziga	Mayor	Town of Golden Meadow	

# Meeting #3: Hazard Mitigation Plan Update Planning Committee Risk Assessment Review

**Date:** October 1, 2025 **Location:** Mathews, LA

Purpose: Presentation of Risk Assessment hazards and maps to Planning Committee.

**Public Invitation:** No **Meeting Invitees:** 

Lafourche Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	
Chris Boudreaux	OEP Director	Lafourche Parish OHSEP	
Kristi Lumpkin	Grants and Economic Development Director	Lafourche Parish Government	
Jennifer Smith	Floodplain Administrator	Lafourche Parish Government	
Barry Plaisance	Mayor	Town of Lockport	
Kyle Cressione	Emergency Preparedness Director	City of Thibodaux	
Kevin Clement	Mayor	City of Thibodaux	
Joey Bouziga	Mayor	Town of Golden Meadow	

Meeting #4: Hazard Mitigation Plan Update Public Meeting

their jurisdictions, and with assistance from SDMI.

**Date:** October 1, 2025 **Location:** Mathews, LA

Purpose: The Public Meeting allowed the public and community stakeholders to participate and provide input into the hazard mitigation planning process. Presentation also included highlights of current mitigation projects highlights, as well as public survey discussion. The public meeting notice on the following page was presented to stakeholders as well as the general public, including those in underserved communities and those populations deemed as socially vulnerable. This notice was distributed via email as well as posted on the front door of the government complex and posted via social media. This public meeting was also open to many different representatives from private, local community-based organizations and businesses, and non-profits that provide for the betterment of socially vulnerable populations and those areas that have been deemed as underserved. The parish and jurisdictions involved in the plan update were in charge of identifying these specific organizations so that they may be invited to participate at this

public meeting and in the plan update process as a whole. This effort was carried out by Lafourche Parish,

Public Invitation: Yes
Meeting Invitees:

Lafourche Parish Hazard Mitigation Planning Committee				
Name	Title	Agency		
Chris Boudreaux	OEP Director	Lafourche Parish OHSEP		
Kristi Lumpkin	Grants and Economic Development Director	Lafourche Parish Government		
Jennifer Smith	Floodplain Administrator	Lafourche Parish Government		
Barry Plaisance	Mayor	Town of Lockport		
Kyle Cressione	Emergency Preparedness Director	City of Thibodaux		
<b>Kevin Clement</b>	Mayor	City of Thibodaux		
Joey Bouziga	Mayor	Town of Golden Meadow		

#### **Meeting Announcement:**

#### 2026 Lafourche Parish Hazard Mitigation Plan Update

#### **Public Meeting Announcement**

Lafourche Parish OHSEP, in partnership with The Louisiana Governor's Office of Homeland Security and Emergency Preparedness and the Stephenson Disaster Management Institute at LSU, is leading the process to update the Lafourche Parish Hazard Mitigation Plan. The plan describes the naturally occurring risks to the region and outlines strategies to reduce these risks to save lives, reduce property damage, and lessen the impact of future disasters.

Federal law requires communities to plan for disasters before they happen and after they occur. Communities must have an approved hazard mitigation plan in order to qualify for Hazard Mitigation Grant Program (HMGP) funding. These plans must show that proposed projects are based on careful planning that considers both the risks a community faces and the resources it has to address them. That is why your involvement is essential.

Are you passionate about building a more resilient future for your parish? Do you have questions about the natural hazards that threaten your community? Please join us on October 1, 2025, for a public meeting at 2:30 PM to learn more about the plan and share your input on the risks and vulnerabilities that most impact you and your community

The Lafourche Parish Hazard Mitigation Update Public Meeting is planned for:

Date: Wednesday, October 1, 2025

Time: 2:30pm

Location: Lafourche Parish Council Chambers

4876 Hwy 1, Raceland, LA

Residents of Lafourche Parish are asked to participate in a survey about public perceptions and opinions regarding natural hazards in the parish. The survey results will be used in the development of the plan. This short web-based survey can be found at the following link or by scanning the QR code:

https://lsu.qualtrics.com/jfe/form/SV\_7Xa8LBD6J5FXKTk



Lafourche Parish appreciates your input.

If you have questions, please contact Lafourche Parish OHSEP.

#### Outreach Activity #1: Public Opinion Survey

Date: Ongoing throughout planning process

**Location:** Web survey **Public Invitation:** Yes

An online public opinion survey of Lafourche Parish residents was conducted between April 2025 and October 2025. The survey was designed to capture public perceptions and opinions regarding natural hazards in Lafourche Parish. In addition, the survey collected information regarding the methods and techniques preferred by the respondents for reducing the risks and losses associated with local hazards.

This activity was created in an effort to confirm that the goals and action items developed by the Lafourche Parish Hazard Mitigation Plan Planning Committee are representative of the outlook of the community at large. However, because there were no responses to the survey, this public feedback could not be incorporated into the plan. The full Lafourche Parish survey can be found at the following link:

#### https://lsu.qualtrics.com/jfe/form/SV 7Xa8LBD6J5FXKTk

#### Outreach Activity #2: Public Meeting Activity - Incident Questionnaire

**Date:** October 1, 2025 **Location:** Public Meeting **Public Invitation:** Yes

An incident/issue questionnaire was provided at the public meeting in an effort to collect additional information from residents of Lafourche Parish regarding hazard events and their localized impacts. While the information collected via the questionnaire was to be integrated into this planning document, there were no questionnaires returned and subsequently no results could be collected. A copy of the incident questionnaire can be found on the next page.

#### Outreach Activity #3: 2026 Lafourche Parish Hazard Mitigation Plan Public Review

Date: Ongoing

Location: SDMI Hazard Mitigation Website

**Public Initiation:** Yes

After an initial review by the Lafourche Parish Planning Committee was completed, the 2026 Lafourche Parish Hazard Mitigation Plan was made available for public review and comment. The plan was hosted on SDMI's Hazard Mitigation website: <a href="https://hmplans.sdmi.lsu.edu/Home/Parish/lafourche">https://hmplans.sdmi.lsu.edu/Home/Parish/lafourche</a>

# LAFOURCHE PARISH PUBLIC OUTREACH

# PUBLIC ACTIVITY: INCIDENT/ ISSUE QUESTIONNAIRE

#### 1. HAZARD TYPE(S):

- A. COASTAL HAZARDS
- B. FLOODING
- C. SINKHOLES
- D. THUNDERSTORMS
- E. TORNADOES
- F. TROPICAL CYCLONES

#### 2. DESCRIBE INCIDENT OR ISSUE:

## 3. LOCATION:

- A. CITY:
- B. ADDRESS OR AREA:

#### 4.INTENSITY:

- A. DEPTH (FLOODING) OR SIZE (HAIL ETC.):
- B. WIND STRENGTH

#### 5. RECURRING OR ONE TIME:

- A. IF RECURRING, HOW OFTEN:
- 6. WHAT TYPE OF INTERRUPTIONS DOES/DIDTHE INCIDENT OR ISSUE CAUSE? (BUSINESS CLOSURE, DAMAGE, EVACUATION, ETC.)

7.HOW LONG WAS THE INTERRUPTION (HOURS, DAYS, WEEKS ETC.)

8. HOW COULD THIS HAZARD OR IMPACT BE PREVENTED, FIXED OR ALLEVIATED?

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# Appendix B: Plan Maintenance

## Purpose

The section of the Code of Federal Regulations (CFR) pertaining to Local Mitigation Plans lists five required components for each plan: a description of the planning process; risk assessments; mitigation strategies; a method and system for plan maintenance; and documentation of plan adoption. This section details the method and system for plan maintenance, following the CFR's guidelines that the Plan Update must include (1) "a section describing the method and schedule of monitoring, evaluating, and updating the mitigation plan within a five-year cycle," (2) "a process by which local governments incorporated the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans", and (3) "discussion on how the community will continue public participation in the plan maintenance process."

## Implementing, Monitoring, Evaluating, and Updating the Plan

The Lafourche Parish Hazard Mitigation Planning Committee will be responsible for implementing, monitoring, evaluating, and documenting the plan's progress throughout the year. Part of the plan maintenance process should include a system by which local governing bodies incorporate the HMP into the parish and jurisdictions' other plans where applicable. This process provides for continued public participation through the diverse resources of the parish to help in achieving the goals and objectives of the plan. Public participation will be achieved through availability of copies of HMP in parish public buildings and parish website. This section describes the update process as a whole, which includes the following:

- Responsible parties
- Methods to be used
- Evaluation criteria to be applied
- Scheduling for monitoring and evaluating the plan

## **Responsible Parties**

Lafourche Parish has developed a method to ensure that a regular review and update of this Hazard Mitigation Plan occurs. This will be the responsibility of the planning committee, which consists of representatives from governmental organizations, local businesses, and private citizens, who will be involved in the process of monitoring, evaluating and updating the plan. All committee members in this plan will remain active in the planning committee.

Although the people filling the positions may change from year to year, the parish and its stakeholders will have representatives on the planning committee. The future planning committee will continue to be comprised of the same job functions as currently evident in the planning committee. However, the decision of specific job duties will be left to the Parish OHSEP Director to be assigned as deemed appropriate.

#### Methods for Monitoring and Evaluating the Plan and Plan Evaluation Criteria

Lafourche Parish has developed a method to ensure implementation, monitoring, evaluating, and updating of the HMP occurs during the five-year cycle of the plan. Implementation will be accomplished through constant and transparent efforts to network and highlight the multi-objective, win-win benefits of each project proposed in the *Mitigation Strategy* section. These efforts include the routine actions of monitoring agendas, attending meetings, and promoting a safe and resilient community. The planning committee will seek to become a permanent body and will be responsible for monitoring, evaluating, and updating of the plan. The planning committee meeting will be held annually in order to monitor, evaluate, and update the plan. The Lafourche Parish OHSEP Director will be responsible for conducting the annual planning committee meetings.

The lead person of the agency responsible for the implementation of a specific mitigation action will submit a progress report to the Director at least thirty days prior to the planning committee meeting. The progress report will provide project status monitoring to include the following: whether the project has started; if not started, reason for not starting; if started, status of the project; if the project is completed, whether it has reduced/eliminated the

problem; and any changes recommended to improve the implementation of the project etc. In addition, the progress report will provide status monitoring on the plan evaluation, changes to the hazard profile, changes to the risk assessment, and public input on the Hazard Mitigation Plan updates and reviews.

Progress on the mitigation action items and projects will be reviewed during the annual planning committee meeting. The criteria that would be utilized in the project review will include the following:

- 1) Whether the action was implemented and reasons, if the action was not implemented
- 2) What were the results of the implemented action
- 3) Were the outcomes as expected, and reasons if the outcomes were not as expected
- 4) Did the results achieve the stated goals and objectives
- 5) Was the action cost-effective
- 6) What were the losses avoided after completion of the project
- 7) In case of a structural project, did it change the hazard profile

In addition to monitoring and evaluating the progress of the mitigation plan actions and projects, the mitigation plan is required to be maintained and monitored annually, and fully updated every five years. The annual maintenance, monitoring and evaluation of the plan will be conducted in the annual planning committee meeting. The planning committee will review each goal to determine their relevance to changing situations in the parish, as well as changes to state or federal policy, and to ensure that they are addressing current and expected conditions. The planning committee will evaluate if any change in hazard profile and risk in the parish occurred during the past year. In addition, the evaluation will include the following criteria in respect of plan implementation:

- 1) Any local staffing changes that would warrant inviting different members to the planning committee
- 2) Any new organizations that would be valuable in the planning process or project implementation need to be included in the planning committee
- 3) Any new or existing procedures that can be done more efficiently
- 4) Any additional ways to gain more diverse and widespread cooperation
- 5) Any different or additional funding sources available for mitigation planning and implementation

The HMP will be updated every five years to remain eligible for continued HMGP funding. The planning committee will be responsible for updating the HMP. The OHSEP Director will be the lead person for the HMP update. The HMP update process will commence at least one year prior to the expiration of the plan. The HMP will be updated after a major disaster if an annual evaluation of the plan indicates a substantial change in hazard profile and risk assessment in the parish.

Additionally, the public will be canvassed to solicit public input to continue Lafourche Parish's dedication to involving the public directly in review and updates of the Hazard Mitigation Plan. Meetings will be scheduled as needed by the plan administrator to provide a forum for which the public can express their concerns, opinions, and/or ideas about the plan. The plan administrator will be responsible for using parish resources to publicize the annual public meetings and maintain public involvement through the newspapers, radio, and public access television channels. Copies of the plan will be catalogued and kept at all appropriate agencies in the city government, as well as the SDMI website

The review by the planning committee and input from the public will determine whether a plan update is needed prior to the required five-year update.

Annual reports on the progress of actions, plan maintenance, monitoring, evaluation, incorporation into existing planning programs, and continued public involvement will be documented at each annual meeting of the committee and kept by the Parish OHSEP Director. The planning committee will work together as a team, with each member sharing responsibility for completing the monitoring, evaluation and updates. It is the responsibility of the Parish OHSEP Director for contacting committee members, organizing the meeting and providing public noticing for the meeting to solicit public input.

#### 2026 Plan Version Plan Method and Schedule Evaluation

For the current plan update, the previously approved plan's method and schedule were evaluated to determine if the elements and processes involved in the required 2026 update. Based on this analysis, the method and schedule were deemed to be acceptable, and nothing was changed for this update.

#### Incorporation into Existing Planning Programs

It is and has been the responsibility of the Lafourche Parish Hazard Mitigation Plan Planning Committee and participating jurisdictions to determine additional implementation procedures when appropriate. This may include integrating the requirements of the Lafourche Parish Hazard Mitigation Plan into each jurisdiction's planning documents, processes, or mechanisms as follows:

- Ordinances, Resolutions, Regulations
- Floodplain Ordinances
- Master Plans
- Capital Improvement Plans
- Economic Development Plans
- Emergency Operations Plans
- Continuity of Operations Plans
- Debris Removal Plan
- Stormwater Management Plan

Opportunities to integrate the requirements of this plan into other local planning mechanisms will continue to be identified through future meetings of the Lafourche Parish Hazard Mitigation Planning Committee and through the five-year review process described herein. The primary means for integrating mitigation strategies into other local planning mechanisms will be through the revision, update and implementation of each jurisdiction's individual plans that require specific planning and administrative tasks (e.g. risk assessment, plan amendments, ordinance revisions, capital improvement projects, etc.).

During the planning process for new and updated local planning documents at the parish and jurisdiction level, such as a risk assessment, comprehensive plan, capital improvements plan, or emergency operations plan, the jurisdictions will provide a copy of the Parish Hazard Mitigation Plan to the appropriate parties and recommend that all goals and strategies of new and updated local planning documents are consistent with and support the goals of the Parish Hazard Mitigation Plan and will not contribute to increased hazards.

Although it is recognized that there are many possible benefits to integrating components of this plan into other parish and jurisdiction planning mechanisms, the development and maintenance of this stand-alone Hazard Mitigation Plan is deemed by the planning committee to be the most effective and appropriate method to ensure implementation of Parish and local hazard mitigation actions.

On behalf of the Town of Golden Meadow, the Town of Lockport, and the City of Thibodaux, Lafourche Parish has the authority to incorporate the contents of the Hazard Mitigation Plan into the parish's existing regulatory mechanisms. Agreements are currently in place with jurisdictions to allow for the parish incorporation mechanisms to take place.

The following parish and local plans incorporate requirements of this HMP Update as follows through planning committee member and jurisdiction representation throughout the planning process as described above:

Unincorporated Lafourche Parish				
Plan/Ordinance/Action	Update Frequency	Lead Agency		
Comprehensive Master Plan	Updated as needed	Lafourche Parish Government		
Local Emergency Operations Plan	Updated as needed	Lafourche Parish OHSEP		
Continuity of Operations Plan	Updated as needed	Lafourche Parish OHSEP		
Stormwater Management Plan	Updated as needed	Lafourche Parish Government		
Building Code Enforcement	Updated as needed	Lafourche Parish Government		
Subdivision Ordinances	Updated as needed	Lafourche Parish Government		
Floodplain Ordinances	Updated as needed	Lafourche Parish Government		

Town of Golden Meadow					
Plan/Ordinance/Action Update Frequency Lead Agency					
Building Code Enforcement	Updated as needed	Town of Golden Meadow			
Zoning Ordinances	Updated as needed	Town of Golden Meadow			
Subdivision Ordinances	Updated as needed	Town of Golden Meadow			
Floodplain Ordinances	Updated as needed	Town of Golden Meadow			

Town of Lockport					
Plan/Ordinance/Action	Update Frequency	Lead Agency			
<b>Building Code Enforcement</b>	Updated as needed	Town of Lockport			
Zoning Ordinances	Updated as needed	Town of Lockport			
Subdivision Ordinances	Updated as needed	Town of Lockport			
Floodplain Ordinances	Updated as needed	Town of Lockport			

City of Thibodaux					
Plan/Ordinance/Action	Update Frequency	Lead Agency			
Comprehensive Master Plan	Updated as needed	Lafourche Parish Government			
Capital Improvements Plan	Updated as needed	Lafourche Parish Government			
Economic Development Plan	Updated as needed	Lafourche Parish Government			
Local Emergency Operations Plan	Updated as needed	Lafourche Parish OHSEP			
Continuity of Operations Plan	Updated as needed	Lafourche Parish OHSEP			
Building Code Enforcement	Updated as needed	City of Thibodaux			
Subdivision Ordinances	Updated as needed	City of Thibodaux			
Floodplain Ordinances	Updated as needed	City of Thibodaux			
Zoning Ordinances	Updated as needed	City of Thibodaux			

# **Continued Public Participation**

Public participation is an integral component of the mitigation planning process and will continue to be essential as this plan evolves over time. Significant changes or amendments to the plan require a public hearing prior to any adoption procedures. Other efforts to involve the public in the maintenance, evaluation, and revision process will be made as necessary. These efforts may include:

- Advertising meetings of the Mitigation Committee in the local newspaper, public bulletin boards, and/or city and county office buildings
- Designating willing and voluntary citizens and private sector representatives as official members of the Mitigation Committee
- Utilizing local media to update the public of any maintenance and/or periodic review activities taking place
- Utilizing city and Parish web sites to advertise any maintenance and/or periodic review activities taking place
- Keeping copies of the plan in appropriate public locations.

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# Appendix C: Critical Facilities

# Critical Facilities within the Lafourche Parish Planning Area

	Lafourche Parish Planning Area Critical Facilities						
Туре	Name	Coastal Hazards	Flooding	Sinkholes	Thunderstorms	Tornadoes	Tropical Cyclones
	Golden Meadow Town Hall	Х	Х	Х	Х	Х	Х
	Lafourche Parish Courthouse	Х	Х		Х	Х	Х
	Lafourche Parish Government (Galliano)	Х	Χ		Х	Х	Х
6:-:16	Lafourche Parish Government (Mathews)	Х	Χ		Х	Х	Х
Civil Government	Lafourche Parish Government (Thibodaux)	Х	Х		Х	Х	X
	Lockport Town Hall	Х	Х		Х	Х	X
	Port Operations Center	Х	Х		Х	Х	Х
	Thibodaux City Hall	Х	Х		Х	Х	Х
	Alvin J. Dominique Fire Station	Х	Х	Х	Х	Х	X
	Bayou Blue VFD - Station 1	Х	Х		Х	Х	X
	Bayou Blue VFD - Station 2	Х	Х		Х	Х	X
	Bayou Blue VFD - Station 3	Х	Х	Х	Х	Х	X
	Bayou Boeuf VFD	Х	Х		Х	Х	Х
	Belle Amie Station	Х	Х		Х	Х	X
	Bowie Fire Company	Х	Х		Х	Х	X
	Chackbay - Choupic VFD	Х	Х		Х	Х	X
	Chackbay VFD - Station 2	Х	Х		Х	Х	X
	Choctaw VFD - Station 1	Х	Х		Х	Х	X
	Choctaw VFD - Station 2	Х	Х		Х	Х	Х
	East Cut Off Fire Station	Х	Х		Х	Х	X
-: o can	East Galliano Fire Station	Х	Х		Х	Х	Х
Fire & SAR	East Larose Fire Station	Х	Х		Х	Х	Х
	Lafourche Crossing 308 VFD	Х	Х		Х	Х	X
	Lafourche Parish FD 3 - Station 14	Х	Х		Х	Х	Х
	Lafourche Parish FD No. 1 - Central Station	Х	Х		Х	Х	X
	Lafourche Parish FD No. 1 - Station 2	Х	Х		Х	Х	Х
	Lafourche Parish FD No. 1 - Station 3	Х	Х		Х	Х	X
	Lafourche Parish FD No. 1 - Station 4	Х	Х		Х	Х	Х
	Lafourche Parish FD No. 1 - Station 5	Х	Х		Х	Х	Х
	Lafourche Parish FD No. 1 - Station 6	Х	Х		Х	Х	Х
	Lafourche Parish FD No. 1 - Station 7	Х	Х		Х	Х	Х
	Leeville Fire Station	Х	Х		Х	Х	Х
	Lockport VFD - 308 Station	Х	Х		Х	Х	Х
	Lockport VFD - Bellevue Station	Х	Х		Х	Х	Х

	Lockport VFD - Central Station	Х	Х		Х	Х	Х
	Lockport VFD - Lockport Heights Station	Х	Х		Х	Х	Х
	Lockport VFD - Matthews Station	Х	Х		Х	Х	Х
	Lockport VFD - Valentine Station	Х	Х	Х	Х	Х	Х
	North Golden Meadow Fire Station	Х	Х	Х	Х	Х	Х
	North Larose Station	Х	Х		Х	Х	Х
	North Thibodaux Fire Company	Х	Х		Х	Х	X
	Port Fourchon Station	Х	Х		Х	Х	Х
	Protector Fire Company No. 2	Х	Х		Х	Х	Х
	South Golden Meadow Fire Station	Х	Х		Х	Х	Х
	South Thibodaux Fire Company	Х	Х		Х	Х	Х
	St. John VFD - Station 1	Х	Х		Х	Х	Х
	St. John VFD - Station 2	Х	Х		Х	Х	Х
	St. John VFD - Station 3	Х	Х		Х	Х	Х
	Thibodaux FD - Central Station	Х	Х		Х	Х	Х
	Thibodaux Fire Company No. 1	Х	Х		Х	Х	Х
	Vacherie Gheens VFD	Х	Х	Х	Х	Х	Х
	Vigilant Chemical & Hose Fire Co.	Х	Х		Х	Х	X
	West Cut Off Station	Х	Х		Х	Х	Х
	West Galliano Station	Х	Х		Х	Х	X
	West Larose Station	Х	Х		Х	Х	Х
	West Thibodaux Fire Company	Х	Х		Х	Х	Х
	Golden Meadow Police Department	Х	Х	Х	Χ	Х	Х
	Greater Lafourche Harbor Police	Х	Х		Χ	Х	Х
	Lafourche Parish Correction/Detention Center	Х	Х		Χ	Х	Х
	Lafourche Parish Sheriff Administrative Office	Х	Х		Χ	Χ	Х
Law Enforcement	Lockport Police Department	Х	Х		Χ	Х	Х
	LPSO - Criminal Operations	Х	Х		Χ	Χ	Х
	LPSO - South Lafourche Substation	Χ	Х		Χ	X	X
	Nicholl's State University Police	Χ	Х		Χ	X	Х
	Thibodaux Police Department	Х	Х		Х	X	Х
Public Health	Lafourche Parish Health Unit	Χ	Х		Χ	Χ	X
	Bayou Blue Elementary	Χ	Х		Х	Χ	X
	Bayou Blue Headstart	Χ	Х		Х	Х	Х
	Bayou Blue Middle	Х	Х		Х	Х	Х
	Bayou Blue Upper Elementary	Х	Х		Х	Х	Х
Education	Bayou Bouef Elementary	Х	Х		Х	Х	Х
	C.M. Washington Elementary	X	Х		X	Х	Х
	Career Magnet Center	Х	Х		Х	Х	Х
	Central Lafourche High	Х	Х		Χ	Х	Х
	Chackbay Elementary	Χ	Х		Χ	X	Χ

Cut Off Elementary	Х	Х	I I	Х	Х	Х
Galliano Elementary School	Χ	Х		Χ	Х	Х
Golden Meadow Lower Elementary	Χ	Х	Х	Χ	Х	Х
Golden Meadow Middle	Χ	Х		Χ	Х	Х
Golden Meadow Upper Elementary	Х	Х	Х	Х	Х	Х
Larose-Cut Off Middle	Χ	Х		Χ	Х	Х
Lockport Lower Elementary	Х	Х		Х	Х	Х
Lockport Middle	Х	Х		Х	Х	Х
Lockport Upper Elementary	Χ	Х		Χ	Х	Х
Martin Luther King Headstart	Х	Х		Х	Х	Х
Marydale Headstart	X	Х		Х	Х	Х
Myra G. Champagne Headstart	Х	Х		Х	Х	Х
North Larose Elementary	Х	Х		Х	Х	Х
Raceland Lower Elementary	Χ	Х		Х	Х	Х
Raceland Middle	Χ	Х		Х	Х	X
Raceland Upper Elementary	Χ	Х		Χ	Х	Х
Sixth Ward Middle	Χ	Х		Χ	Х	Х
South Lafourche Headstart	Χ	Х		Х	Х	X
South Lafourche High	Χ	Х		Χ	Х	Х
South Larose Elementary	Χ	Х		Х	Х	Х
St. Charles Elementary	Х	Х		Х	Х	Х
Thibodaux Elementary	Χ	Х		Χ	Х	Х
Thibodaux Headstart	Χ	Х		Χ	Х	Х
Thibodaux High	Χ	Х		Х	Х	X
Thibodaux Middle	Χ	Х		Χ	Х	Χ
WS Lafargue Elementary	Χ	Х		Χ	Х	X

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Appendix D: Plan Adoption

FEMA Approval Letter

\*\*\*THIS SECTION WILL BE UPDATED FOLLOWING FEMA'S APPROVAL OF THIS PLAN\*\*\*

GOHSEP Approval Letter

Unincorporated Lafourche Parish

Town of Golden Meadow

Town of Lockport

City of Thibodaux

# Appendix E: State Required Worksheets

During the planning process (Appendix A: Planning Process), the Hazard Mitigation Plan Update Planning Committee was provided state-required plan update process worksheets to be filled out. The worksheets were presented at the Initial Planning Meeting by SDMI as tools for assisting in the update of the Hazard Mitigation Plan, but also as a state requirement for the update. The plan update worksheets allowed for collection of information such as planning team members, community capabilities, community infrastructure, vulnerable populations and NFIP information. The following pages contain documentation of the state required worksheets.

# Mitigation Planning Team

	Lafourche Parish Hazard Mitigation Planning Committee					
Name	Title	Agency	Email			
Chris Boudreaux	OEP Director	Lafourche Parish OHSEP	BoudreauxCL@lafourchegov.org			
Kristi Lumpkin	Grants and Economic Development Director	Lafourche Parish Government	lumpkinkm@lafourchegov.org			
Jennifer Smith	Floodplain Administrator	Lafourche Parish Government	smithjf@lafourchegov.net			
Barry Plaisance	Mayor	Town of Lockport	<u>bplaisance@townoflockport.com</u>			
Kyle Cressione	Emergency Preparedness Director	City of Thibodaux	kylec@ci.thibodaux.la.us			
Kevin Clement	Mayor	City of Thibodaux	kclement@ci.thibodaux.la.us			
Joey Bouziga	Mayor	Town of Golden Meadow	info@townofgoldenmeadow-la.gov			

# Capability Assessment Unincorporated Lafourche Parish

#### **Capability Assessment Worksheet - Unincorporated Lafourche Parish**

Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.

#### **Planning and Regulatory**

Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.

Plans	Yes / No	Comments		
Comprehensive / Master Plan	Yes			
Capital Improvements Plan	No			
Economic Development Plan	No			
Local Emergency Operations Plan	Yes			
Continuity of Operations Plan	Yes			
Transportation Plan	No			
Stormwater Management Plan	Yes			
Community Wildfire Protection Plan	No			
Other plans (redevelopment, recovery, coastal zone management)	Yes			
Building Code, Permitting and Inspections	Yes / No	Comments		
Building Code	Yes			
Building Code Effectiveness Grading Schedule (BCEGS) Score	No			
Fire Department ISO/PIAL rating	Yes	Rating Dist 1-5, Dist 2-5, Dist 3-5, Dist 4-2(Thibodaux) Dist 5-5, Dist 6-5, Dist 7-5 Dist 8-A-7, Dist 8-B-5, Dist 8-C-5, Dist 9-5		
Site plan review requirements	Yes			
Land Use Planning and Ordinances	Yes / No	Comments		
Zoning Ordinance	No			
Subdivision Ordinance	Yes			
Floodplain Ordinance	Yes			
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	Yes			
Flood Insurance Rate Maps	Yes			
Acquisition of land for open space and public recreation uses	Yes			
Other				
Administration and Technical				

#### Administration and Technical

Identify whether your community has the following administrative and technical capabilities. For smaller jurisdictions without local staff resources, if there are public resources at the next higher level government that can provide technical assistance, indicate so in your comments.

Administration	Yes / No	Comments
Planning Commission	Yes	
Mitigation Planning Committee	Yes	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	

Staff	Yes / No	Comments
Chief Building Official	Yes	5%
Floodplain Administrator	Yes	20%
Emergency Manager	Yes	5%
Community Planner	No	
Civil Engineer	No	We hire an Engineer When need for projects
GIS Coordinator	No	
Grant Writer	Yes	40%
Other	No	
Technical	Yes / No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Everbridge Calling system Alert FM
Hazard Data & Information	No	§ 3,
Grant Writing	Yes	
Hazus Analysis	No	
Other	No	
Financia	i	
Identify whether your jurisdiction has access to or is eligible to u	se the following fundi	ng resources for hazard mitigation.
Funding Resource	Yes / No	Comments
Capital Improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	
Fees for water, sewer, gas, or electric services	No	
Impact fees for new development	No	
Stormwater Utility Fee	No	
Community Development Block Grant (CDBG)	Yes	
Other Funding Programs	Yes	STATE OF LOUISIANA ELEVATION AND ACQUISITION PROGRAMS
Education and 0	Outreach	
Identify education and outreach programs and methods, already in place that could be use	d to implement mitiga	ation activities and communicate hazard-related information.
Program / Organization	Yes / No	Comments
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	No	
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	No	
Natural Disaster or safety related school program	No	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

# Town of Golden Meadow

# **Capability Assessment Worksheet - Golden Meadow**

Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities.

Please complete the tables and questions in the worksheet as completely as possible.

#### **Planning and Regulatory**

Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.

Plans	Yes / No	Comments		
Comprehensive / Master Plan	No			
Capital Improvements Plan	No			
Economic Development Plan	No			
Local Emergency Operations Plan	No			
Continuity of Operations Plan	No			
Transportation Plan	No			
Stormwater Management Plan	No			
Community Wildfire Protection Plan	No			
Other plans (redevelopment, recovery, coastal zone management)	No			
Building Code, Permitting and Inspections	Yes / No	Comments		
Building Code	Yes			
Building Code Effectiveness Grading Schedule (BCEGS) Score	No			
Fire Department ISO/PIAL rating	Yes			
Site plan review requirements	Yes			
Land Use Planning and Ordinances	Yes / No	Comments		
Zoning Ordinance	Yes			
Subdivision Ordinance	Yes			
Floodplain Ordinance	Yes			
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	Yes			
Flood Insurance Rate Maps	Yes			
Acquisition of land for open space and public recreation uses	No			
Other	No			
Administration and Tochnical				

#### **Administration and Technical**

Identify whether your community has the following administrative and technical capabilities. For smaller jurisdictions without local staff resources, if there are public resources at the next higher level government that can provide technical assistance, indicate so in your comments.

Administration	Yes / No	Comments
Planning Commission	Yes	
Mitigation Planning Committee	Yes	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	
Staff	Yes / No	Comments
Chief Building Official	Yes	If utilizing Lafourche Parish resources

Floodplain Administrator	Yes	
Emergency Manager	Yes	
Community Planner	No	
Civil Engineer	No	
GIS Coordinator	No	
Grant Writer	Yes	If utilizing Lafourche Parish resources
Other	No	
Technical	Yes / No	Comments
Warning Systems / Service		
(Reverse 911, outdoor warning signals)	Yes	
Hazard Data & Information	No	
Grant Writing	Yes	
Hazus Analysis	No	
Other	No	
Financial		
Identify whether your jurisdiction has access to or is eligible to use th	e following funding re	esources for hazard mitigation.
Funding Resource	Yes / No	Comments
Capital Improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	
Fees for water, sewer, gas, or electric services	Yes	
Impact fees for new development	No	
Stormwater Utility Fee	No	
Community Development Block Grant (CDBG)	Yes	
Other Funding Programs	Yes	
Education and Outro	each	
Identify education and outreach programs and methods, already in place that could be used information.	sed to implement mit	igation activities and communicate hazard-related
Program / Organization	Yes / No	Comments
Local citizen groups or non-profit organizations focused on environmental protection,		
emergency preparedness, access and functional needs populations, etc.	No	
Ongoing public education or information program (responsible water use, fire safety,		
household preparedness, environmental education)	No	
Natural Disaster or safety related school program	No	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

## Town of Lockport

## **Capability Assessment Worksheet - Lockport**

Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities.

Please complete the tables and questions in the worksheet as completely as possible.

#### **Planning and Regulatory**

Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.

Plans	Yes / No	Comments
Comprehensive / Master Plan	No	
Capital Improvements Plan	No	
Economic Development Plan	No	
Local Emergency Operations Plan	No	
Continuity of Operations Plan	No	
Transportation Plan	No	
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	No	
Building Code, Permitting and Inspections	Yes / No	Comments
Building Code	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes / No	Comments
Zoning Ordinance	Yes	
Subdivision Ordinance	No	
Floodplain Ordinance	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	Yes	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	No	
Other	No	
Administration as	ad Tochnical	

#### **Administration and Technical**

Identify whether your community has the following administrative and technical capabilities. For smaller jurisdictions without local staff resources, if there are public resources at the next higher level government that can provide technical assistance, indicate so in your comments.

Administration	Yes / No	Comments
Planning Commission	Yes	
Mitigation Planning Committee	Yes	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	
Staff	Yes / No	Comments
Chief Building Official	Yes	If utilizing Lafourche Parish resources
Floodplain Administrator	Yes	

Emergency Manager	Yes	
Community Planner	No	
Civil Engineer	No	
GIS Coordinator	No	
Grant Writer	Yes	If utilizing Lafourche Parish resources
Other	No	
Technical	Yes / No	Comments
Warning Systems / Service	1	
(Reverse 911, outdoor warning signals)	Yes	
Hazard Data & Information	No	
Grant Writing	Yes	
Hazus Analysis	No	
Other	No	
Financial		
Identify whether your jurisdiction has access to or is eligible to use t	ne following funding re	esources for hazard mitigation.
Funding Resource	Yes / No	Comments
Capital Improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	
Fees for water, sewer, gas, or electric services	Yes	
Impact fees for new development	No	
Stormwater Utility Fee	No	
Community Development Block Grant (CDBG)	Yes	
Other Funding Programs	Yes	
Education and Out	reach	
Identify education and outreach programs and methods, already in place that could be uninformation.	used to implement mit	igation activities and communicate hazard-related
Program / Organization	Yes / No	Comments
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	No	
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	No	
Natural Disaster or safety related school program	No	
Storm Ready certification	No	
Firewise Communities certification	No	
	<del></del>	

No

No

Public/Private partnership initiatives addressing disaster-related issues

Other

## City of Thibodaux

## **Capability Assessment Worksheet - Thibodaux**

Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities.

Please complete the tables and questions in the worksheet as completely as possible.

### **Planning and Regulatory**

Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.

Plans	Yes / No	Comments
Comprehensive / Master Plan	Yes	
Capital Improvements Plan	Yes	
Economic Development Plan	Yes	]
Local Emergency Operations Plan	Yes	Thibodaux uses a combination of city, parish and
Continuity of Operations Plan	Yes	South Central Planning Commission services for HM/strategic planning. Thibodaux maintains an
Transportation Plan	No	emergency operations plan.
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	No	
Building Code, Permitting and Inspections	Yes / No	Comments
Building Code	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	Yes	Thibodaux manages all building codes, fire ratings and strategic improvements in permitting and
Fire Department ISO/PIAL rating	Yes	inspections.
Site plan review requirements	Yes	inspections.
Land Use Planning and Ordinances	Yes / No	Comments
Zoning Ordinance	Yes	
Subdivision Ordinance	Yes	Thibodaux has a home rule charter that establishes
Floodplain Ordinance	Yes	a zoning ordinance, subdivision requirements and
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	the process for annexing land into the City.
Flood Insurance Rate Maps	No	Thibodaux does utilize Lafourche Parish for strategic
Acquisition of land for open space and public recreation uses	Yes	floodplain and water shed management.
Other	No	
A dustinistantion on	d Table day to all	

#### **Administration and Technical**

Identify whether your community has the following administrative and technical capabilities. For smaller jurisdictions without local staff resources, if there are public resources at the next higher level government that can provide technical assistance, indicate so in your comments.

Administration	Yes / No	Comments			
Planning Commission	Yes	Thibodaux has an established planning commission			
Mitigation Planning Committee	Yes	that focuses on services and mitigation. Thibodaux			
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	supervises all drainage and tree maintenance actions.			
Staff	Yes / No	Comments			

Chief Building Official	Yes	
Floodplain Administrator	No	Thibodaux does have a Chief Building Official,
Emergency Manager	Yes	Emergency Manager, Community Planner and Grant
Community Planner	Yes	Writer. Thibodaux contracts with multiple
Civil Engineer	Yes	engineering firms for engineering/GIS functions.
GIS Coordinator	Yes	Thibodaux utilizes Lafourche Parish for a floodplain
Grant Writer	Yes	administrator.
Other	N/A	
Other	IN/A	
Technical	Yes / No	Comments
		Comments
Technical		
Technical Warning Systems / Service	Yes / No	Comments  Thibodaux has direct response for 911 systems. Thibodaux manages all hazard data information,
Technical  Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes / No Yes	Thibodaux has direct response for 911 systems.
Technical  Warning Systems / Service (Reverse 911, outdoor warning signals)  Hazard Data & Information	Yes / No  Yes  Yes	Thibodaux has direct response for 911 systems. Thibodaux manages all hazard data information,
Technical  Warning Systems / Service (Reverse 911, outdoor warning signals)  Hazard Data & Information  Grant Writing	Yes / No  Yes  Yes  Yes  Yes	Thibodaux has direct response for 911 systems. Thibodaux manages all hazard data information, grant writing and hazard analysis programs

### **Financial**

Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.

Funding Resource	Yes / No	Comments					
Capital Improvements project funding	Yes						
Authority to levy taxes for specific purposes	Yes	Thibodaux manages all capital improvement					
Fees for water, sewer, gas, or electric services	Yes	projects funding. Thibodaux has the authority to levy taxes and establish fees for sewer, water and					
Impact fees for new development	Yes	gas services.					
Stormwater Utility Fee	No						
Community Development Block Grant (CDBG)	Yes	Thibodaux is an individual U.S. HUD entitlement city					
Other Funding Programs (Section 8)	Yes	with opportunity zones.					
Other Funding Programs (Section 8)	Yes	with opportunity zones.					

#### **Education and Outreach**

Identify education and outreach programs and methods, already in place that could be used to implement mitigation activities and communicate hazard-related information.

Program / Organization	Yes / No	Comments
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Yes	
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	Yes	Thibodaux has partnerships with numerous groups, non-profit organizations, faith based groups and non-governmental organizations. Thibodaux
Natural Disaster or safety related school program	No	manages all aspects of informational programs for
Storm Ready certification	Yes	residents, organizations and businesses in the city.
Firewise Communities certification	Yes	Thibodaux partners with the Lafourche Parish School
Public/Private partnership initiatives addressing disaster-related issues	Yes	Board for educational programs in the city.
Other	N/A	

# **Building Inventory**

	Lafourche Parish Owned Building Information									
	Unincorporated Lafourche Parish									
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type		
Alvin J. Dominique Fire Station	Fire & SAR	2273 Highway 654	Gheens	29.70299401	-90.47786134					
Bayou Blue Elementary	Education	1916 Bayou Blue Rd	Bayou Blue	29.64584039	-90.68558914	\$531,061.00	2019			
Bayou Blue Field Office (11)	Public Works	104 Myrtle Place	Houma	29.659303N	90.684999W					
Bayou Blue HeadStart	Education	197 Mazerac St	Bayou Blue	29.643003N	90.680193W	\$39,000.00	1995	Mod Trlr/Sheet Metal		
Bayou Blue Middle	Education	196 Mazerac St	Bayou Blue	29.641505N	90.679272W	\$10,000,000.00	2007	2010 New addition (13,228) Metal Stud/ BV/ CB		
Bayou Blue Upper Elementary	Education	115 Mazerac St.	Bayou Blue	29.64215675	-90.68240382					
Bayou Blue VFD - Station 1	Fire & SAR	1870 Bayou Blue Rd	Houma	29.64298189	-90.68437158					
Bayou Blue VFD - Station 2	Fire & SAR	3099 Bayou Blue Rd	Gray	29.68215116	-90.75115435					
Bayou Blue VFD - Station 3	Fire & SAR	109 Lake Long Rd	Houma	29.59817655	-90.61831777					
Bayou Bouef Elementary	Education	4138 Hwy 307	Thibodaux	29.868269N	90.593703W	126.400.00	1957			
C.M. Washington Elementary	Education	200 Iris St	Thibodaux	29.780887N	90.814747W					
Career Magnet Center	Education	6419 LA-308	Lockport	29.64764635	-90.5250156					
Central Lafourche High	Education	4820 Hwy 1	Raceland	29.694695N	90.554786W	\$31,896,240.00	1965	Mod Trlr/Sheet Metal		
Chackbay Elementary	Education	101 School Ln	Thibodaux	29.878351N	90.808516W					
Cut Off Elementary	Education	177 West 55th St	Cut Off	29.53399878	-90.33953565					
Department of Health and Hospitals	Public Health	1434 Tiger Drive	Thibodaux	29.771073N	90.843515W					
East Cut Off Station	Fire & SAR	14797 East Main	Cut Off	29.52881592	-90.33501668					
East Galliano Station	Fire & SAR	182 East Main	Gallaino	29.427274	-90.29334748					
East Larose Station	Fire & SAR	12595 East Main	Larose	29.57088306	-90.37920414					

Galliano Elementary	-1		0.111			4	1000	
School	Education	148 W 158th St	Galliano	29.44180492	-90.30354202	\$4,667,600.00	1960	
Galliano Field Office (D)	Public Works	128 West 97th St.	Cut Off	29.494282N	90.33064W			
Golden Meadow Lower Elementary	Education	118 Alcide St	Golden Meadow	29.409051N	90.277211W			
Golden Meadow Middle	Education	630 South Bayou Dr	Golden Meadow	29.388486N	90.264699W			
Golden Meadow Upper Elementary	Education	124 N. 3rd St.	Golden Meadow	29.405329N	90.276361W			
Greater Lafourche Harbor Police	Law Enforcement	16829 East Main St	Galliano	29.471124N	90.312827W			
Lafourche Parish FD 3 - Station 14	Fire & SAR	17462 West Main	Galliano	29.45073186	-90.30509599			
Lafourche Parish FD No. 1 - Central Station	Fire & SAR	112 St. Phillip St.	Raceland	29.72901705	-90.60514392			
Lafourche Parish FD No. 1 - Station 2	Fire & SAR	4470 Highway 1	Raceland	29.7073324	-90.57327503			
Lafourche Parish FD No. 1 - Station 3	Fire & SAR	2920 Highway 308	Raceland	29.73866576	-90.66317642			
Lafourche Parish FD No. 1 - Station 4	Fire & SAR	2002 Highway 308	Raceland	29.75318194	-90.72041922			
Lafourche Parish FD No. 1 - Station 5	Fire & SAR	3159 Highway 1	Raceland	29.73653229	-90.64940317			
Lafourche Parish FD No. 1 - Station 6	Fire & SAR	4406 Highway 308	Raceland	29.727869	-90.59802718			
Lafourche Parish Government (Galliano)	Civil Government	16241 East Main St.	Cut Off	29.474495N	90.313931W			
Lafourche Parish Government (Mathews)	Civil Government	4876 Hwy 1	Raceland	29.691632N	90.552090W		1986	Reinforced Masonry
Lafourche Parish Health Unit	Public Health	2535 Veterans Blvd	Thibodaux	29.7717N	90.845215W			
Lafourche Parish SO/Work Release	Law Enforcement	1156 Hwy 90 East	Raceland	29.740885N	90.556144W			
Larose-Cut Off Middle	Education	13356 West Main	Cut Off	29.563274N	90.364929W	\$4,728,052.00	1950	
Leeville Station	Fire & SAR	25754 Highway 1	Leeville	29.21609456	-90.21812843			
Library	Library	305 East 5th St.	Larose	29.574477N	90.377514W		2008	Reinforced Masonry

Lihuom	Librani	198 Mazerac St.	Hauma	29.642245N	00.67965134		2006	Reinforced
Library	Library		Houma	29.042245N	90.678651W		2006	Masonry
Library	Library	177 Recreation Drive	Raceland	29.733109N	90.603996W		2006	Reinforced Masonry
Library	Library	153 N. Leon Dr.	Gheens	29.705769N	90.487897W		2006	Wood
Library	Library	16241 E. Main Suite A	Cut Off	29.474266N	90.313807W		1980	Reinforced Masonry
Lockport Lower Elementary	Education	1421 Crescent Ave	Lockport	29.641907N	90.528607W			
Lockport Middle	Education	720 Main St	Lockport	29.644225N	90.532155W			
Lockport Upper Elementary	Education	201 School St	Lockport	29.643977N	90.532938W			
Lockport VFD - Matthews Station	Fire & SAR	20 Central Lafourche Dr.	Raceland	29.68963435	-90.54986638			
Mathews Office	Public Works	4876 Hwy. 1	Mathews	29.691632N	90.552090W			
Morgue	Civil Government	123 Texas St.	Raceland	29.734006N	90.607944W		1973	
North Larose Elementary	Education	175 Richardel Dr	Larose	29.572659N	90.396049W	\$6,029,150.00	1975	
North Larose Station	Fire & SAR	12084 Highway 1	Larose	29.57087599	-90.39022759			
Port Fourchon Station	Fire & SAR	412 A.J. Estay Rd	Port Fourchon	29.11672209	-90.20795474			
Port Operations Center	Civil Government	108 A.O. Rappelet Rd	Port Fourchon	29.152238N	90.180574W			
Raceland Field Office (B)	Public Works	129 Texas St.	Raceland	29.733813N	90.607763W			
Raceland Lower Elementary	Education	144 Bowie Rd	Raceland	29.7334791	-90.60847932	\$1,246,425.00	1959	
Raceland Middle	Education	3757 Hwy 308	Raceland	29.733909N	90.611498W	\$3,404,805.00	1954	
Raceland Upper Elementary	Education	4101 Hwy 308	Raceland	29.732864N	90.609713W	\$2,000,000.00	1957	
Region A Barn	Civil Government	2565 Veterans Blvd.		29.770461N	90.845933W		1973	
Region B Barn	Civil Government	129 Texas St.	Raceland	29.733813N	90.607763W		1973	
Region D Barn	Civil Government	128 W. 97th St.	Cut Off	29.494282N	90.33064W		1973	
Rev. Lloyd Wallace Community Center	Recreation	3603 Hwy. 308	Raceland	29.736135N	90.620237W		2013	Metal
Sheriff's Office	Law Enforcement	102 W. 91st St.	Galliano	29.501627N	90.329704W		1973	
Sixth Ward Middle	Education	1865 Choctaw Rd	Thibodaux	29.850929N	90.739757W			
South Lafourche Headstart	Education	13248 West Main St	Cut Off	29.566828N	90.371465W			
South Lafourche High	Education	16911 East Main St	Galliano	29.467385N	90.311203W	\$32,499,868.00	1965	

South Lafourche Sub- Station	Law Enforcement	101 West 91st St.	Galliano	29.501611N	90.329729W			
South Larose Elementary	Education	13360 West Main St	Larose	29.563599N	90.364127W	\$3,484,211.00	1950	
St. Charles Elementary	Education	1690 Hwy 1	Thibodaux	29.751535N	90.722455W			
Thibodaux Elementary	Education	700 East 7th St.	Thibodaux	29.792748N	90.814569W			
Thibodaux High	Education	1355 Tiger Dr	Thibodaux	29.778060N	90.839851W			
Thibodaux Middle	Education	742 Cardinal Dr	Thibodaux	29.7897031	-90.81284298			
<b>Tourist Commission</b>	Civil Government	4484 Hwy. 1	Raceland	29.706586N	90.572518W		1988	
Vacherie Gheens VFD	Fire & SAR	105 S. Leon Drive	Gheens	29.70277962	-90.48760653			
West Cut Off Station	Fire & SAR	14734 West Main	Cut Off	29.52618879	-90.33597543			
West Galliano Station	Fire & SAR	135 West 158th	Galliano	29.4419489	-90.30228069			
West Larose Station	Fire & SAR	161 West 25th	Larose	29.562026	-90.36394042			
WS Lafargue Elementary	Education	700 Plantation Rd	Thibodaux	29.781854N	90.830502W			
Martin Luther King Headstart	Education	1445 Martin Luther King Dr	Thibodaux	29.779480N	90.812399W	\$27,000	1993	Mod Trlr/Sheet Metal
Thibodaux Headstart	Education	2555 Veterans Blvd	Thibodaux	29.770921N	90.845539W	\$60,000	1998	Mod Trlr/Sheet Metal
Marydale Headstart	Education	102 Park Ave	Thibodaux	29.765219N	90.832476W	\$40,000	1994	Mod Trlr/Sheet Metal
Myra G. Champagne Headstart	Education	203 East Fontenelle St	Lockport	29.649076N	90.532685W	\$60,000	1998	Mod Trlr/Sheet Metal
			City of Th	ibodaux				
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Lafourche Parish FD No. 1 - Station 7	Fire & SAR	100 Bayou Vista Dr.	Thibodaux	29.75895029	-90.74765433			
Thibodaux Fire Company No. 1	Fire & SAR	503 St. Louis St	Thibodaux	29.79600052	-90.82038603			
Protector Fire Company No. 2	Fire & SAR	549 Tetreau St	Thibodaux	29.79306988	-90.81354395			
Fire Company No. 3	Fire & SAR	706 Canal Blvd	Thibodaux	29.79373359	-90.82026823			
Vigilant Chemical & Hose Fire Co.	Fire & SAR	921 North Canal Blvd	Thibodaux	29.82364896	-90.81152198			
North Thibodaux Fire Company	Fire & SAR	603 St. Patrick Highway	Thibodaux	29.8006914	-90.82182639			
South Thibodaux Fire Company	Fire & SAR	102 Lafaye St.	Thibodaux	29.78350542	-90.82152236			

		1					
West Thibodaux Fire Company	Fire & SAR	200 Notre Dame St.	Thibodaux	29.7916236	-90.83770649		
Bowie Fire Company	Fire & SAR	1075 Highway 1	Thibodaux	29.78001361	-90.77793409		
Thibodaux FD - Central Station	Fire & SAR	800 Parish Rd.	Thibodaux	29.78723089	-90.83603557		
Chackbay - Choupic VFD	Fire & SAR	100 Highway 304	Thibodaux	29.88010115	-90.80595203		
Chackbay VFD - Station 2	Fire & SAR	1532 Highway 20	Thibodaux	29.89814033	-90.73452801		
Choctaw VFD - Station 1	Fire & SAR	2854 Choctaw Rd	Thibodaux	29.83924189	-90.70056569		
Choctaw VFD - Station 2	Fire & SAR	1632 Choctaw Rd	Thibodaux	29.85084974	-90.74910302		
Bayou Boeuf VFD	Fire & SAR	3447 Highway 307	Thibodaux	29.86662602	-90.61895766		
St. John VFD - Station 1	Fire & SAR	2072 St. Mary St	Thibodaux	29.81548313	-90.87899202		
St. John VFD - Station 2	Fire & SAR	1905 Talbot Ave	Thibodaux	29.78062394	-90.84982998		
St. John VFD - Station 3	Fire & SAR	800 Parish Rd	Thibodaux	29.78714582	-90.83580339		
Lafourche Crossing 308 VFD	Fire & SAR	691 Highway 308	Thibodaux	29.77936368	-90.77469373		
Lafourche Parish Government (Main)	Civil Government	402 Green St	Thibodaux	29.796887N	90.820095W		
Lafourche Parish Sheriff - Admin Office	Law Enforcement	200 Canal Blvd	Thibodaux	29.797940N	90.818413W		
National Guard Armory	Civil Government	751 Goode St	Thibodaux	29.789096N	90.815751W		
Whitney Building	Civil Government	200 West 2nd St.	Thibodaux	29.798179N	90.819169W		
Lafourche Parish Correction/Detention Center	Law Enforcement	952 Hwy 3185	Thibodaux	29.767761N	90.846798W		
Nicholl's State University Police	Law Enforcement	906 East First St	Thibodaux	29.78879726	-90.80148783		
Library	Library	1887 Choctaw Rd.	Thibodaux	29.851007N	90.738707W		
Library	Library	314 St. Mary St.	Thibodaux	29.796228N	90.824926W		
Library	Library	705 W. 5th St.	Thibodaux	29.796134N	90.822233W		
Clerk of Court	Civil Government	311 Green St.	Thibodaux	29.797436N	90.8196W		
Sheriff's Office	Law Enforcement	200 Canal St.	Thibodaux	29.79799N	90.818535W		
Ward 6 Office	Civil Government	114 Choctaw Barn Rd.	Thibodaux	29.851208N	90.737258W		

Thibodaux Field Office (A)	Public Works	2565 Veterans Blvd.	Thibodaux	29.770499N	90.845979W			
Chackbay Field Office (6)	Public Works	122 Choctaw Barn Road	Thibodaux	29.851507N	90.737271W			
Thibodaux Main Office	Public Works	402 Green St.	Thibodaux	29.796875N	90.820117W			
Civil Service/Housing Community Development	Civil Government	112 SAINT MARY ST	Thibodaux	29.795873	-90.823207			
Thibodaux Public Works	Civil Government	1219 HENRY THIBODAUX ST	Thibodaux	29.785842	-90.815765			
Human Resources/Informatio n Technology	Civil Government	1233 CANAL BLVD	Thibodaux	29.787793	-90.822578			
City Court/Police Department	Civil Government	1309 CANAL BLVD	Thibodaux	29.784254	-90.820991			
MLK Parks and Recreation Community Center	Recreation	1445 M L KING DR	Thibodaux	29.78039	-90.812798			
Parks and Recreation	Recreation	151 PELTIER PARK DR	Thibodaux	29.788397	-90.80949			
Harang Auditorium	Recreation	310 N CANAL BLVD	Thibodaux	29.804745	-90.818988			
Thibodaux City Hall	Civil Government	310 W 2ND ST	Thibodaux	29.797247	-90.819663			
Waste Water Plant	Public Utilities	SEWER PLANT RD	Thibodaux	29.769572	-90.838464			
Water Plant	Public Utilities	110 E. BAYOU RD./HWY 308	Thibodaux	29.79974288	-90.81957034			
			Town of L	ockport				
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Lockport Heights Station	Fire Department	5511 Highway 1	Lockport	29-39.1987N	90-32.5857W			
Bellevue Station	Fire Department	7519 Highway 1	Lockport	29-38.0324N	90-30.6199W			
308 Station	Fire Department	8028 Highway 308	Lockport	29-37.3746N	90-29.9865W			
Valentine Station	Fire Department	10202Highway 1	Lockport	29-35.2825N	90-26.6470W			
Lockport Central	Fire Department	806 Crescent Ave	Lockport	29-38.3521N	90-32.4010W			
Town of Lockport Government	Governmental Building	710 Church St.	Lockport	29.640816N	90.542585W			
Personnel/Motor Pool	Public Safety	5200 Hwy 1	Lockport	29.673683N	90.540988W			
Communications Office	Public Safety	207 Main St	Lockport	29.647027N	90.538054W			
Criminal Operations Center	Public Safety	805 Crescent Ave	Lockport	29.639868N	90.539478W			_

Lockport Police Dept.	Public Safety	710 Church St.	Lockport	29.641093N	90.542821W			
Library	Library	720 Crescent Ave.	Lockport	29.851022N	90.738702W			
Region C Barn	Governmental Building	6236 Hwy. 308	Lockport	29.64864N	90.531326W			
Sheriff's Comm Bldg	Public Safety	1300 Lynn Ave.	Lockport	29.78487N	90.827857W			
Lockport Field Office	Public Works	6236 Hwy. 308	Lockport	29.64864N	90.531326W			
Lockport Town Office	Governmental Building	601 First Street	Lockport	29.639509	-90.545634			
		To	own of Gold	en Meadow				
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
North Golden Meadow Fire Station	Fire Department	2502 Norman Street	Golden Meadow	29.40650327	-90.27901658			
South Golden Meadow Fire Station	Fire Department	1003 South Bayou Dr	Golden Meadow	29.38635548	-90.26231151			
Golden Meadow Town Hall	Civil Government	107 Jervais Dr	Golden Meadow	29.392284N	90.273289W			
Golden Meadow Police Dept.	Law Enforcement	107 Jervais Dr	Golden Meadow	29.392331N	90.274010W			
Library	Library	1403 N. Bayou Drive	Golden Meadow	29.401639N	90.273666W			
Golden Meadow DMV	Civil Government	119 JERVIS DRIVE	Golden Meadow	29.392524N	90.272835W			
CIVIL DEFENSE BUILDING	EQUIPMENT STORAGE	119 WASHINGTON STREET	Golden Meadow	29.385413N	90.262151W			
PUMP STATION	Public Utilities	246 DURSETTE STREET	Golden Meadow	29.386531N	90.267599W			
OLD TOWN HALL	STORAGE	313 NORTH BAYOU DRIVE	Golden Meadow	29.393667N	90.269843W			
SENIOR CITIZEN CENTER	HOUSES THE SENIOR CITIZENS OF GM	145 ENA DRIVE	Golden Meadow	29.392591N	90.277215W			
SWIMMING POOL BATHHOUSE	BATHROOMS/SHOWERS FOR POOL	136 ENA DRIVE	Golden Meadow	29.3922733N	90.276669W			
SENIOR CITIZEN CERAMIC SHOP	SENIOR CITIZEN PROJECTS	147 ENA DRIVE	Golden Meadow	29.392591N	90.277215W			
WALKING TRAIL RESTROOM	RESTROOM FACILITY	177 ENA DRIVE	Golden Meadow	29.39429N	90.277545W			
PAVILION	COVER IN OAKRIDGE PARK	955 J. V. ALARIO DRIVE	Golden Meadow	29.396537N	90.279606W			
BASKETBALL PAVILION	COVERED BASKETBALL COURTS	988 J.V. ALARIO DRIVE	Golden Meadow	29.395384N	90.277488W			
TOOL HOUSE	TOOL STORAGE BUILDING	942 J.V. ALARIO DRIVE	Golden Meadow	29.394841N	90.277631W			

# **Vulnerable Populations**

Vulnerable Populations Worksheet - Lafourche Parish									
	All Hospitals (Private	or Public)							
Name	Address	City	Zip Code	Latitude	Longitude				
Ochsner St. Ann Hospital	4608 West 134 Pl	Cut Off	70345	29.456857N	90.311350W				
Lady of the Sea	West 134 Pl	Cut Off	70345	29.456857N	90.311350W				
Thibodaux Regional Medical Center	North Acadia Rd	Thibodaux	70301	29.780536N	90.805620W				
	Nursing Homes (Private or Public)								
Name	Address	City	Zip Code	Latitude	Longitude				
Lafourche Home for the Aged	1002 Tiger Dr.	Thibodaux	70301	29.789188N	90.836692W				
Audubon Guest Home	2110 Audubon Ave	Thibodaux	70301	29.781151N	90.809810W				
Thibodaux Healthcare Center	1300 Lafourche Dr.	Thibodaux	70301	29.806698N	90.822784W				
South Lafourche Nursing Home	146 E 28th St,	Cut Off	70345	29.550143N	90.341479W				
Broadway Nursing Home	7534 Hwy 1	Lockport	70374	29.632998N	90.510820W				
	Mobile Home Pa	arks							
Name	Address	City	Zip Code	Latitude	Longitude				
Abby Plantation Estates	n/a	Thibodaux	70301	29.814187	-90.833947				
Allemand's	Hwy. 1 & H20 Tower	Lockport	70374	29.64975	-90.547453				
Alma Trailer Park	n/a	Thibodaux	70301	29.809105	-90.867242				
Bayou Resort Campground	Hwy. 3235	Golden Meadow	70354	29.406188	-90.285077				
Bessie Dufrene Rentals	St. Louis Street	Raceland	n/a	n/a	n/a				
Big Blue Trailer Park	n/a	Gray	70359	29.679636	-90.743227				
Bobby Lynn's Marina & Marina South	n/a	Fourchon	70357	29.214497	-90.218375				
Boudreaux's Condos Town GM	Hwy. 3235	Golden Meadow	70357	29.391495	-90.271195				
Brien MHP	n/a	Bayou Blue	70364	29.648614	-90.690267				
Burgo Trailer Park	n/a	Thibodaux	70301	29.79973	-90.871664				
Cajun on the Bayou RV Park	Hwy. 90 East	Des Allemands	n/a	29.810643	-90.491042				
Catfish Lake Cabins & RVs	Hwy. 3235	Golden Meadow	70354	29.41432	-90.292132				
Cheramie Trailer Park	E. 179th St.	Golden Meadow	70357	29.389678	-90.262355				
Chloe Court MHP	n/a	Bayou Blue	n/a	n/a	n/a				
Civic Center	n/a	Thibodaux	70301	29.803527	-90.818086				
Cypress Court Trailer Park	n/a	Gray	70359	29.706054	-90.773134				
Dan Folse - Dantana RV Park	Hwy. 90 East	Des Allemands	n/a	29.809639	-90.493517				
Doublewide MHP	n/a	Galliano	70354	29.446274	-90.311436				

Drachenburg Trailer Park	n/a	Raceland	70394	29.731134	-90.610759
Earl Comardelle Trailer Park	Hwy. 654	Gheens	n/a	n/a	n/a
Eschette's Trailer Park	n/a	Bayou Blue	70364	29.603059	-90.645139
Grand Bayou	n/a	Chackbay	70301	29.903995	-90.775395
Iris St Trailer Park	204 Iris St.	Thibodaux	70301	29.7812701	-90.8175451
J&K Trailer Park	n/a	Galliano	70354	29.434632	-90.295169
Kajun Trailer Park	n/a	Gray	70359	29.680076	-90.747145
Kirlin Matherne Rentals	St. Louis Street	Raceland	n/a	n/a	n/a
Kirlin Matherne Rentals	St. Pierre Dr.	Larose	n/a	n/a	n/a
LA Leisure	Hwy. 3235	Galliano	70354	29.430422	-90.305644
Larose Civic Center - Kelly Grove RV Park	n/a	Larose	70373	29.575372	-90.375725
LuLu MHP	n/a	Gray	70359	29.717345	-90.778986
Lynn Ave Trailer Park	1731 Lynn Ave.	Thibodaux	70301	29.8033197	-90.8179774
Martin's Trailer Park	n/a	Bayou Blue	n/a	n/a	n/a
Marydale Subdivision	n/a	Thibodaux	70301	29.764712	-90.832925
Matherne's	Sandras St.	Larose	70373	29.563738	-90.392232
Nicholas Cheramie MH & RV Park	Hwy. 1	Fourchon	n/a	n/a	n/a
Oak Pointe	Hwy. 308	Raceland	n/a	n/a	n/a
Oak Terrace Trailer Park	501 Oak Ln.	Thibodaux	70301	29.79601	-90.838146
Olive St Trailer Park	636 Olive St.	Thibodaux	70301	29.7977815	-90.8316229
Pellegrin's Trailer Park	n/a	Bayou Blue	70364	29.638166	-90.67174
Port Fourchon Hotel/Marina/RV Park	n/a	Fourchon	70357	29.15482	-90.185476
R&R Rentals	East 69th Pl.	Cut Off	70345	29.49341	-90.342275
Roger's Trailer Park	Hwy. 308	Lockport	70374	29.61642	-90.493474
Shady Trailer Park	In back of Hospital Dr	Raceland	70394	29.706081	-90.591654
St. Charles Trailer Park	1274 St. Charles St.	Thibodaux	70301	29.7842081	-90.8211492
Vanacor's KOA Campground	Hwy. 90 East	Des Allemands	n/a	29.817855	-90.485531
Woodland Heights	n/a	Chackbay	70301	29.841963	-90.810582

# National Flood Insurance Program (NFIP)

National Flood Insurance Program (NFIP)								
	Unincorporated Lafourche Parish	Golden Meadow	Thibodaux	Lockport				
		nsurance Summary						
How many NFIP polices are in the community? What is the total premium and coverage?	# of Policies: 6,765; Total Premiums: \$6,989,769; Total Coverage: \$1,779,316,000	# of Policies: 162; Total Premiums: \$154,529; Total Coverage: \$37,996,000	# of Policies: 378; Total Premiums: \$364,620; Total Coverage: \$117,492,000	# of Policies: 147; Total Premiums: \$241,561; Total Coverage: \$29,381,000				
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	# of paid claims: 5,401; Total amount of paid claims: \$91,425,978; Substantial Damage: 912	# of paid claims: 325; Total amount of paid claims: \$2,912,544; Substantial Damage: 37	# of paid claims: 351; Total amount of paid claims: \$6,125,646; Substantial Damage: 25	# of paid claims: 187; Total amount of paid claims: \$2,187,163; Substantial Damage: 16				
How many structures are exposed to flood risk with in the community?  Describe any areas of flood risk with limited NFIP policy coverage.								
mineca in in policy coverage.		Staff Resources						
Is the Community FPA or NFIP Coordinator certified?  Is flood plain management an auxiliary								
function?  Provide an explanation of NFIP								
administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)								
What are the barriers to running an effective NFIP program in the community, if any?								
		Compliance History						
Is the community in good standing with the NFIP?	Yes	Yes	Yes	Yes				
Are there any outstanding compliance issues(i.e., current violations)?	No	No	No	No				
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact(CAC)?	CAV: 09/20/2022; CAC: 10/26/2021	CAV: 10/29/2014; CAC: 10/26/2021	CAV: 10/24/2018; CAC: 10/13/2021	CAV: 01/14/2009; CAC: 10/26/2021				
Is a CAV or CAC scheduled or needed? If so when?								
		Regulation						
When did the community enter the NFIP?	E= 07/24/1970; R= 04/17/1985	<b>E=</b> 09/11/1970; <b>R=</b> 11/20/1970	<b>E</b> = 05/30/1974; <b>R</b> = 02/07/1978	<b>E=</b> 08/22/1974; <b>R=</b> 08/15/1980				

Are the FIRMs digital or paper?				
When did the communities adopt the FIRM's	5/4/1992	7/11/1975	8/15/1980	12/15/1989
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Meets	Meets	Meets	Meets
	Comm	unity Rating System (CRS)		
Does the community participate in CRS?				
What is the community's CRS Class Ranking?				
Does the plan include CRS planning requirements?				