



BEAUREGARD PARISH MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN



BEAUREGARD PARISH MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

Prepared for:

Beauregard Parish



Prepared by:

Stephenson Disaster Management Institute

Mr. Brant Mitchell, CEM

Mr. Chris Rippetoe, CFM

Dr. Joseph B. Harris, PhD

Mr. Jason Martin

Louisiana State University – Louisiana Digital Media Center
Baton Rouge, LA 70803



******THIS PAGE LEFT INTENTIONALLY BLANK******



ACKNOWLEDGMENTS

This 2026 Beauregard Parish Hazard Mitigation Plan Update was coordinated by the Beauregard Parish Hazard Mitigation Plan Update Planning Committee, in collaboration with community stakeholders and the general public. The participating jurisdictions are made up of the following communities:

**Unincorporated Beauregard Parish
City of DeRidder
Town of Merryville**

Special thanks is directed to all of those who assisted in contributing their expertise and feedback on this document, especially the Beauregard Parish Office of Homeland Security and Emergency Management. These combined efforts have made this project possible. The Beauregard Parish Planning Committee consists of the following individuals, who are credited in the creation of this document:

Aaron Moreno	BPF #3
Adam Williams	DeRidder Public Works
Amy Michiels	GOHSEP
Andrea Couch	Beauregard Public Works
Anthony Rodriguez	Town of Merryville
Ashley Alford	Town of Merryville
Chris Rippetoe	LSU-SDMI
Cindy Brister, Police Chief	Merryville Police Department
Craig Richard	DeRidder Police Dept.
Daniel Cambell	Town of Merryville
Darren Hall	DeRidder Police Dept.
Daryl Binford	Beau. Fire Dist #3
Devon Goodwin	Beau. Fire Dist #1
Dianna Nichols	Beauregard Parish Police Jury
Eric Stracener	Beau. Fire Dist #4
George Lee Glass	Grace Church
Glen Mears	BPOHSEP
Jared Morton	Beauregard Sheriff Office
Jason Martin	LSU-SDMI
Ken Harlow	DeRidder Fire
Lance Grant	BPSO
Lee Williams	BPF #3
Lennie Lafleur	GOHSEP
Lucus Reynolds	Beau. Fire Dist #2
Mark Herford	Beauregard Sheriff Office
Michael Guimbellott	Water District #3
Michael Harris	City DeRidder
Michael Worthen	Beauregard Public Works
Mike Harper	Beauregard Police Jury
Mike Lutrell	Beauregard Electric
Paula Rose	Water District #2

Rev. Laraine Waughtal

First United Methodist

Sara Sellers

BPOHSEP

Scott Greenmun

BPOHSEP

Tracy Adams

DeRidder Parks and Recreation

Will Martin

Beauregard Sheriff Office

The 2026 Beauregard Parish Hazard Mitigation Plan Update was written by the Stephenson Disaster Management Institute, Louisiana State University. Further comments should be directed to the Beauregard Parish Office of Homeland Security and Emergency Preparedness: 120 South Stewart St., DeRidder, LA 70634.

Contents

1. Introduction	1-1
Geography, Population and Economy	1-2
Geography.....	1-2
Population	1-4
Economy.....	1-4
Hazard Mitigation	1-5
General Strategy	1-6
2026 Plan Update.....	1-7
2. Hazard Identification and Parish-Wide Risk Assessment	2-1
Overview	2-1
Data Limitations	2-1
Identifying Hazards	2-2
Historical Context and Previous Occurrences.....	2-2
Probability of Future Threats and Hazards	2-4
Assessing Vulnerability Overview	2-4
Vulnerability Analysis Methodology	2-4
Qualitative Methodology	2-5
Priority Risk Index and Hazard Risk.....	2-6
Vulnerability Analysis (NRI & PRI)	2-7
Population and Development Trends	2-7
Inventory of Assets for the Entire Parish	2-10
Critical Facilities of the Parish	2-10
Land Use.....	2-14
Hazard Profile, Risk Assessment, and Vulnerability Analysis.....	2-16
Drought	2-16
Excessive Heat.....	2-20
Flooding.....	2-24
Sinkholes	2-37
Solar Flares.....	2-40
Thunderstorms (Hail, Lightning, & Thunderstorm Wind)	2-44
Tornadoes	2-57
Tropical Cyclones	2-63
Wildfires	2-74
Winter Weather	2-85

3. Capability Assessment	3-1
Policies, Plans and Programs	3-1
Building Codes, Permitting, Land Use Planning and Ordinances	3-2
Administration, Technical, and Financial	3-2
Education and Outreach	3-3
Flood Insurance and Community Rating System	3-4
NFIP Worksheets.....	3-6
4. Mitigation Strategy.....	4-1
Introduction	4-1
Goals	4-1
2026 Mitigation Actions and Update on Previous Plan Actions	4-2
Beauregard Parish Mitigation Actions	4-3
City of DeRidder Mitigation Actions	4-18
Town of Merryville Mitigation Actions	4-35
Action Prioritization	4-51
Appendix A: Planning Process.....	A-1
Purpose	A-1
The Beauregard Parish Hazard Mitigation Plan Update	A-1
Planning	A-2
Coordination	A-2
Neighboring Community, Local and Regional Planning Process Involvement	A-3
Program Integration.....	A-4
Meeting Documentation and Public Outreach Activities	A-5
Meeting #1: Hazard Mitigation Plan Update Kick-Off.....	A-5
Meeting #2: Hazard Mitigation Plan Update Initial Planning Committee Meeting.....	A-5
Meeting #3: Hazard Mitigation Plan Update Mitigation Action Workshop.....	A-6
Meeting #4: Hazard Mitigation Plan Update Planning Committee Risk Assessment Review	A-7
Meeting #5: Hazard Mitigation Plan Update Public Meeting	A-8
Outreach Activity #1: Public Opinion Survey	A-11
Outreach Activity #2: Public Meeting Activity - Incident Questionnaire	A-11
Outreach Activity #3: 2026 Beauregard Parish Hazard Mitigation Plan Public Review	A-11
Appendix B: Plan Maintenance.....	B-1
Purpose	B-1
Implementing, Monitoring, Evaluating, and Updating the Plan	B-1
Responsible Parties	B-1

Methods for Monitoring and Evaluating the Plan and Plan Evaluation Criteria.....	B-1
2026 Plan Version Plan Method and Schedule Evaluation	B-3
Incorporation into Existing Planning Programs	B-3
Continued Public Participation	B-4
Appendix C: Critical Facilities.....	C-1
Critical Facilities within the Beauregard Parish Planning Area	C-1
Appendix D: Plan Adoption	D-1
FEMA Approval Letter	D-1
GOHSEP Approval Letter	D-2
Beauregard Parish.....	D-3
City of DeRidder	D-4
Town of Merryville	D-5
Appendix E: State Required Worksheets.....	E-1
Mitigation Planning Team	E-1
Capability Assessment	E-3
Unincorporated Beauregard Parish	E-3
City of DeRidder	E-6
Town of Merryville	E-9
Building Inventory	E-12
Vulnerable Populations.....	E-18
National Flood Insurance Program (NFIP)	E-20

******THIS PAGE LEFT INTENTIONALLY BLANK******

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

- Unincorporated Beauregard Parish
- City of DeRidder
- Town of Merryville

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 Beauregard 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 Beauregard Parish and its communities with a blueprint for reducing the impacts of these natural hazards on people and property.

Geography, Population and Economy

Geography

Beauregard Parish is located in southwestern Louisiana, bordering Texas to the west. The parish covers about 1,170 square miles, making it one of the larger parishes in the state. Its landscape is mostly piney woods and rolling uplands, part of the West Gulf Coastal Plain, with sandy soils that support extensive timber production—the parish is known for its forestry industry.

The parish seat, DeRidder, lies near the geographic center and serves as the main population and economic hub. Major highways such as U.S. Highway 171 and U.S. Highway 190 cross the parish, linking it to Lake Charles, Alexandria, and eastern Texas.

Waterways include the Sabine River, which forms the western boundary with Texas, and several creeks and bayous that drain into the Calcasieu River basin. Floodplains are limited compared to Louisiana's coastal parishes, but low-lying areas near rivers and bayous can be subject to localized flooding.

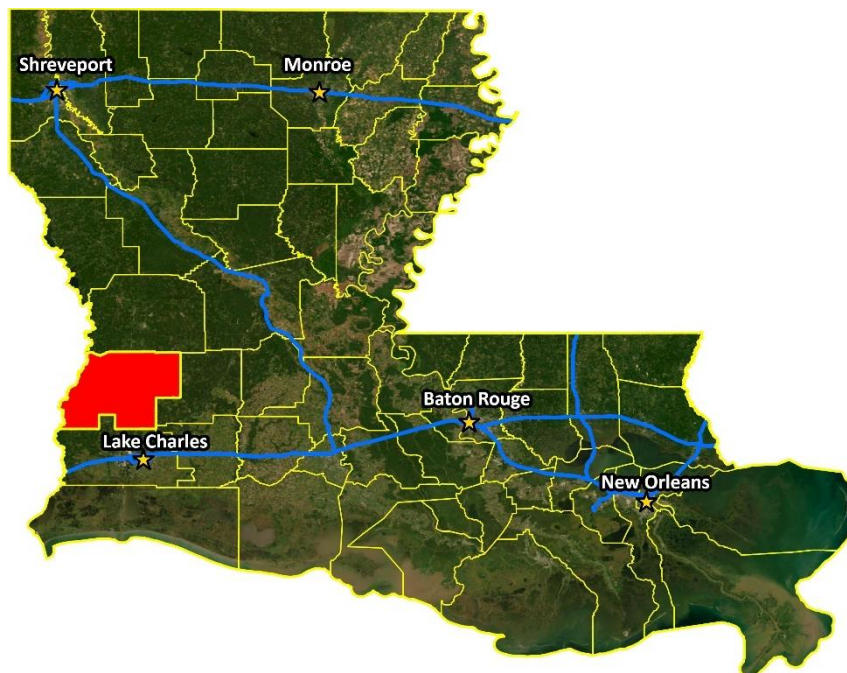


Figure 1-1: Location of Beauregard Parish in the State of Louisiana

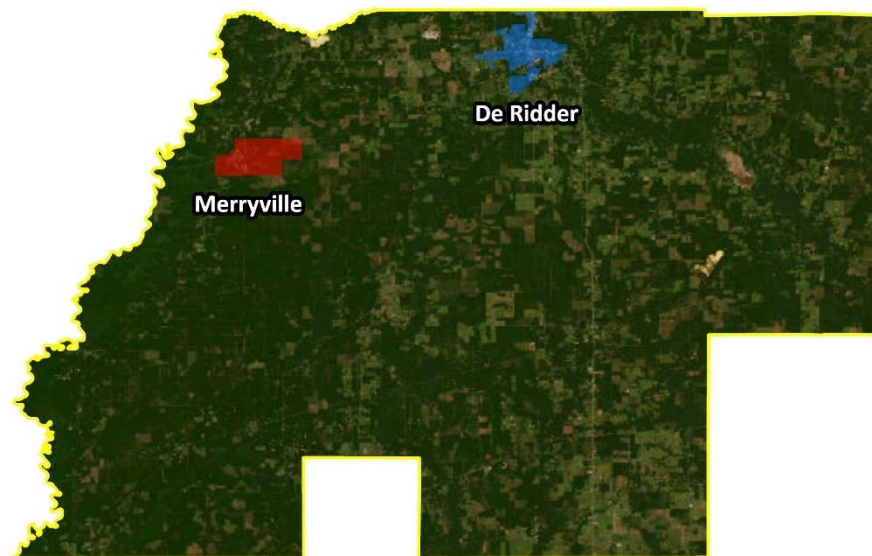


Figure 1-2: Incorporated Jurisdictions within Beauregard Parish

Beauregard Parish's weather is typically warm and humid and the area experiences a humid subtropical climate (Cfa, Koppen Classification). Beauregard's climate is heavily influenced by its proximity to the Gulf of America which contributes to high humidity levels and above average rainfall totals throughout the year.

Summers in Beauregard can be extreme; they are typically long and hot with the average daily high temperatures exceeding 90 °F. During the peak summer months of July and August excessive heat events and strong thunderstorms are common. Winters, on the other hand, are relatively short lived. While the parish has experienced winter weather events, it is very uncommon for temperatures in the parish to dip below freezing. The average daily high temperatures during Beauregard's winter months (December – February) range from upper 50s to mid 60s.

Beauregard Parish receives an annual average of 62 inches of rain a year, 24 inches higher than the national average. Due to the parish's proximity to the Gulf of America, Lafayette is extremely susceptible to tropical cyclone activity. Hurricane season lasts from June 1st to November 31st, with the most and strongest hurricanes forming during the months of August and September.

Beauregard Parish is located in Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) Region 5 (*Figure 1-3*).

As noted above, Beauregard Parish is located in the south-western region of Louisiana.

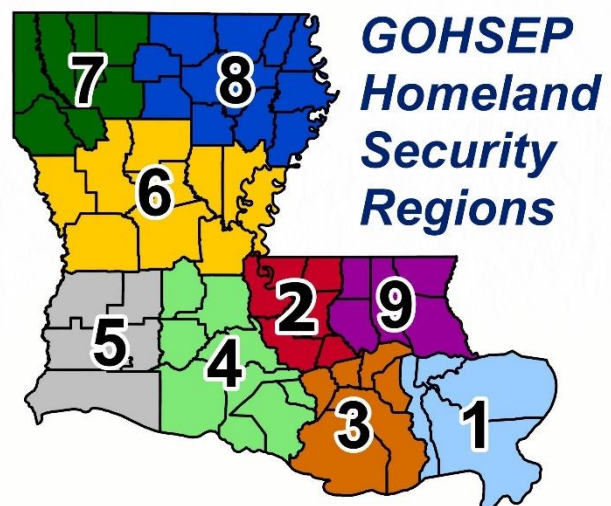


Figure 1-3: Louisiana Homeland Security Regions

Population

According to the US Census, the population of Beauregard Parish is estimated at 36,646 (2023 Estimate) with a population percent change from April 1, 2010 – July 1, 2023 of 2.78%.

*Table 1-1: Beauregard Parish Population
(Source: US Census)*

Variables	2010 Census	2020 Census	2023 Estimate	Percent Change 2010 - 2023
Total Population	35,654	36,549	36,646	2.78%
Population Density (Pop/Sq. Mi.)	30.8	31.6	31.7	2.92%
Total Housing Units	15,040	15,567	15,968	6.17%
Persons Per Household	3.07	2.75	2.56	-16.61%

Economy

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

Business Description	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)
Agriculture, forestry, fishing and hunting	33	258	11,860
Mining, quarrying, and oil and gas extraction	6	48	3,168
Utilities	4	108	9,505
Construction	56	239	10,903
Manufacturing	13	844	73,225
Wholesale trade	13	83	4,153
Retail trade	106	1,221	30,211
Transportation and warehousing	37	142	8,771
Information	4	16	1,148
Finance and insurance	50	684	39,321
Real estate and rental and leasing	26	50	2,476
Professional, scientific, and technical services	46	272	11,834
Administrative and support and waste management and remediation services	20	132	4,645
Educational services	5	17	208
Health care and social assistance	63	1,209	41,793
Arts, entertainment, and recreation	3	27	420
Accommodation and food services	45	836	11,403
Other services (except public administration)	75	412	8,432

Hazard Mitigation

To fully understand hazard mitigation efforts in Beauregard 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 well-understood 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 flood-protection solutions. More recently, the historically impactful 2020 hurricane season reinforced the need for proper planning and mitigation strategies.



Figure 1-4: The Preparedness Cycle
(Source: GOHSEP, LA)

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 Beauregard 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 Beauregard Parish HMP were as follows:

- Section One Introduction
- Section Two Hazard Identification and Parish-Wide Risk Assessment
- Section Three Capability Assessment
- Section Four Mitigation Strategy
- Appendix A Planning Process
- Appendix B Plan Maintenance
- Appendix C Essential Facilities
- Appendix D 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 Beauregard 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 Beauregard Parish Hazard Mitigation Plan. The current goals are as follows:

1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact.
2. Improve data collection, use, and sharing to reduce the impacts of hazards.
3. Improve capabilities and coordination to plan and implement hazard mitigation projects.
4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.

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

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 Beauregard Parish and its communities. The extent of this risk is dictated primarily by its geographic location. Most significantly, Beauregard 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 2016 flooding events, along with the 2020 hurricane season were both felt heavily in all parts of Beauregard Parish. More recently, the devastating wildfires in 2023 became the most destructive fire event in the state's history. 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
 - 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. The table below provides a comprehensive list of the hazards selected based on the above criteria.

Table 2-1: Hazard Profile Summary.

Hazard	Profiled in Previous Plan	Profiled in the 2026 Update
Drought	X	X
Excessive Heat	X	X
Flooding	X	X
Sinkholes	X	X
Solar Flares		X
Thunderstorms – Hail	X	X
Thunderstorms – Lightning	X	X
Thunderstorms – Winds	X	X
Tornadoes	X	X
Tropical Cyclones	X	X
Wildfires	X	X
Winter Weather	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 Beauregard Parish.
(Source: FEMA Disaster Declarations Summary: Open Government Database)*

Disaster Number	Year	Type	Declaration
DR-675-LA	1983	DR	SEVERE STORMS AND FLOODING
DR-829-LA	1989	DR	SEVERE STORMS & FLOODING
DR-833-LA	1989	DR	SEVERE STORMS & TORNADOES
DR-835-LA	1989	DR	TROPICAL STORM ALLISON
DR-902-LA	1991	DR	SEVERE STORMS & FLOODING
DR-904-LA	1991	DR	SEVERE STORMS, TORNADOES & FLOODING
FM-2337-LA	2000	FM	LA-WESTERN LOUISIANA FIRE COMPLEX-9/8/00
DR-1380-LA	2001	DR	TROPICAL STORM ALLISON

Disaster Number	Year	Type	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
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
DR-1668-LA	2007	DR	SEVERE STORMS AND FLOODING
EM-3289-LA	2008	EM	HURRICANE GUSTAV
DR-1786-LA	2008	DR	HURRICANE GUSTAV
DR-1792-LA	2008	DR	HURRICANE IKE
DR-1863-LA	2010	DR	SEVERE STORMS, TORNADOES, AND FLOODING
DR-4080-LA	2012	DR	HURRICANE ISAAC
DR-4263-LA	2016	DR	SEVERE STORMS AND FLOODING
EM-3382-LA	2017	EM	TROPICAL STORM HARVEY
DR-4345-LA	2018	DR	TROPICAL STORM HARVEY
EM-3416-LA	2019	EM	TROPICAL STORM 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
EM-3568-LA	2021	EM	TROPICAL STORM IDA
DR-4611-LA	2021	DR	HURRICANE IDA
EM-3574-LA	2021	EM	TROPICAL STORM NICHOLAS
FM-5482-LA	2023	FM	TIGER ISLAND FIRE
EM-3614-LA	2024	EM	TROPICAL STORM 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.

Table 2-3: Probability of Future Hazard Reoccurrence.

Hazard	Probability		
	Unincorporated Beauregard Parish	DeRidder	Merryville
Drought	17%	17%	17%
Excessive Heat	3%	3%	3%
Flooding	90%	67%	10%
Sinkholes	< 1%	< 1%	< 1%
Solar Flares	< 1%	< 1%	< 1%
Thunderstorms – Hail	100%	100%	100%
Thunderstorms – Lightning	13%	13%	13%
Thunderstorms – Winds	100%	100%	100%
Tornadoes	100%	100%	100%
Tropical Cyclones	36	36%	36%
Wildfires	7%	7%	7%
Winter Weather	50%	50%	50%

Assessing Vulnerability Overview

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:

$$\text{Expected Annual Loss} = \text{Exposure} * \text{Annualized Frequency} * \text{Historic Loss Ratio}$$

$$\text{Risk Index} = \text{Expected Annual Loss} * \text{Social Vulnerability} / \text{Community Resilience}$$

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.

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

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 following table. 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.

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

PRI Category	Degree of Risk			Assigned Weighting Factor
	Level	Criteria	Index Value	
Probability	Unlikely	Less than 1% annual probability	1	25%
	Possible	Between 1 and 10% annual probability	2	
	Likely	Between 10 and 100% probability	3	
	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	25%
	Limited	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	
	Catastrophic	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	
Spatial Extent	Negligible	Less than 1% of area affected	1	20%
	Small	Between 1 and 10% of area affected	2	
	Moderate	Between 10 and 50% of area affected	3	
	Large	Between 50 and 100% of area affected	4	
Warning Time	More than 24 hours	Self-explanatory	1	15%
	12 to 24 hours	Self-explanatory	2	
	6 to 12 hours	Self-explanatory	3	
	Less than 6 hours	Self-explanatory	4	
Duration	Less than 6 hours	Self-explanatory	1	15%
	Less than 24 hours	Self-explanatory	2	
	Less than one week	Self-explanatory	3	
	More than one week	Self-explanatory	4	

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.

Table 2-6: PRI Vulnerability Analysis for the Parish.

	Probability	Impact	Spatial Extent	Warning Time	Duration	Overall Risk
Drought	3	2	2	4	2	2.55
Excessive Heat	2	3	4	4	2	2.95
Flooding	4	4	3	4	3	3.65
Sinkholes	1	2	2	1	4	1.9
Solar Flares	1	4	4	1	3	2.65
Thunderstorms – Hail	4	2	3	3	1	2.7
Thunderstorms – Lightning	3	2	2	3	1	2.25
Thunderstorms – Winds	4	2	3	3	1	2.7
Tornadoes	4	3	2	4	3	3.2
Tropical Cyclones	3	4	4	1	4	3.3
Wildfires	2	3	4	1	2	2.5
Winter Weather	3	4	4	1	2	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	Community Resilience	Overall Risk Rating
Relatively Low	Relatively Moderate	Relatively Low	Relatively Low

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	Beauregard Parish (BP)	Unincorporated BP	DeRidder	Merryville
1-Apr-10	35,654	23,973	10,578	1,103
1-Apr-20	36,549	26,000	9,582	967
1-Jul-23	36,646	25,878	9,812	956
Population Growth between 2010 – 2020	2.5%	8.5%	-9.4%	-12.3%
Average Annual Growth Rate between 2010 – 2020	0.3%	0.8%	-0.9%	-1.3%
Population Growth between 2020 – 2023	0.3%	-0.5%	2.4%	-1.1%
Average Annual Growth Rate between 2010 – 2023	0.09%	-0.16%	0.80%	-0.38%

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

Total Housing Units	Beauregard Parish (BP)	Unincorporated BP	DeRidder	Merryville
1-Apr-10	15,040	9,920	4,634	486
1-Apr-20	15,567	10,427	4,639	501
1-Jul-23	15,968	10,748	4,656	564
Housing Growth between 2010 – 2020	3.5%	5.1%	0.1%	3.1%
Average Annual Growth Rate between 2010 – 2020	0.3%	0.5%	0.0%	0.3%
Housing Growth between 2020 – 2023	2.6%	3.1%	0.4%	12.6%
Average Annual Growth Rate between 2010 – 2023	0.9%	1.0%	0.1%	4.2%

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

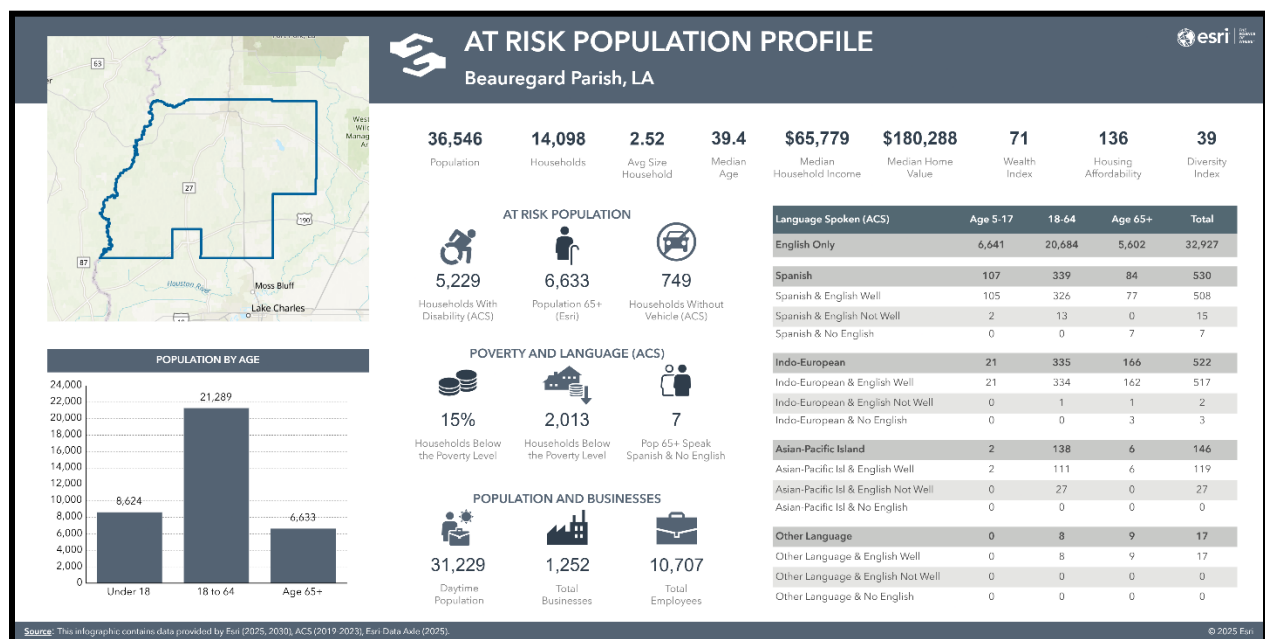


Figure 2-1: At-Risk Population Profile for Beauregard Parish.
(Source: ESRI, American Community Survey)

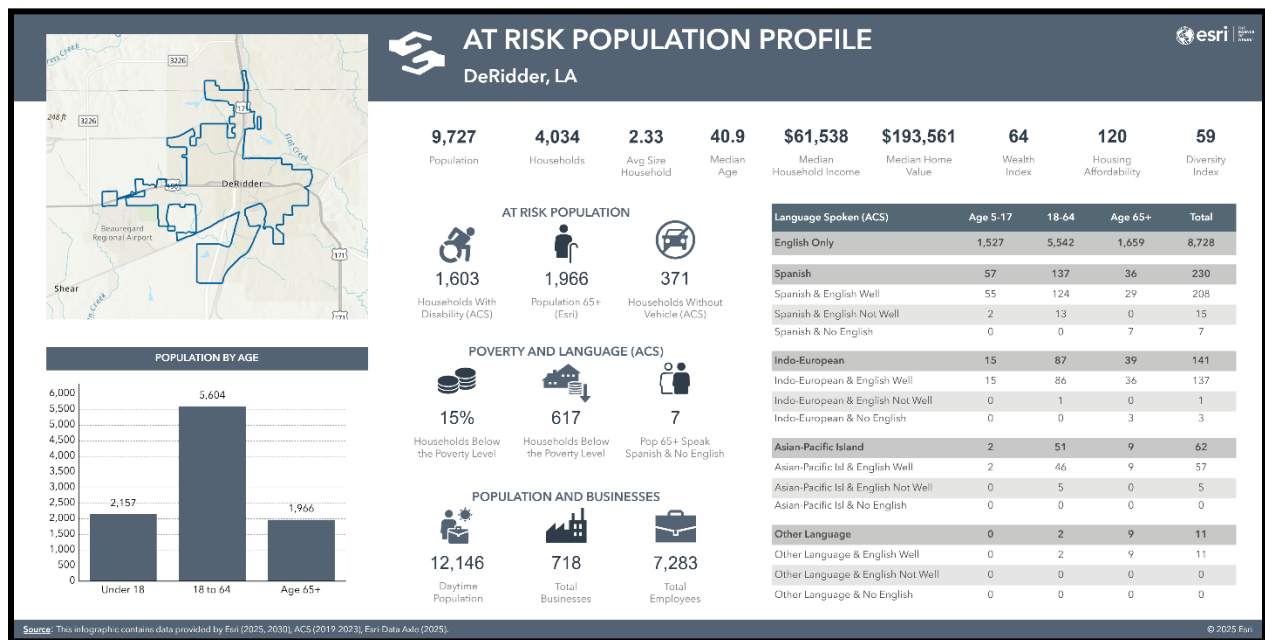


Figure 2-2: At-Risk Population Profile for DeRidder.
(Source: ESRI, American Community Survey)

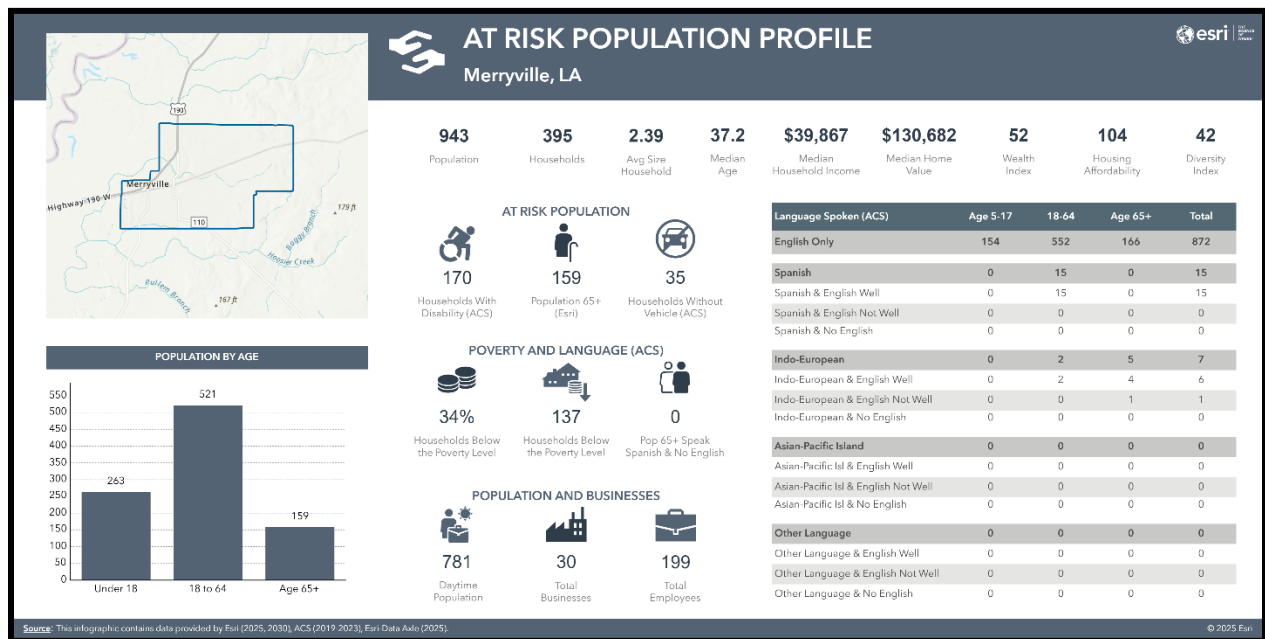


Figure 2-3: At-Risk Population Profile for Merryville.
(Source: ESRI, American Community Survey)

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 \$2,901,477,000 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	Beauregard Parish (BP)	Unincorporated BP	DeRidder	Merryville
Agricultural	\$14,465,000	\$10,245,000	\$4,122,000	\$98,000
Commercial	\$266,642,000	\$75,824,000	\$186,556,000	\$4,262,000
Government	\$27,311,000	\$15,643,000	\$11,384,000	\$284,000
Industrial	\$77,994,000	\$36,918,000	\$39,335,000	\$1,741,000
Religion	\$79,602,000	\$41,430,000	\$34,910,000	\$3,262,000
Residential	\$2,409,057,000	\$1,443,108,000	\$897,488,000	\$68,461,000
Education	\$26,406,000	\$12,483,000	\$13,809,000	\$114,000
Total	\$2,901,477,000	\$1,635,651,000	\$1,187,604,000	\$78,222,000

Critical Facilities of the Parish

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

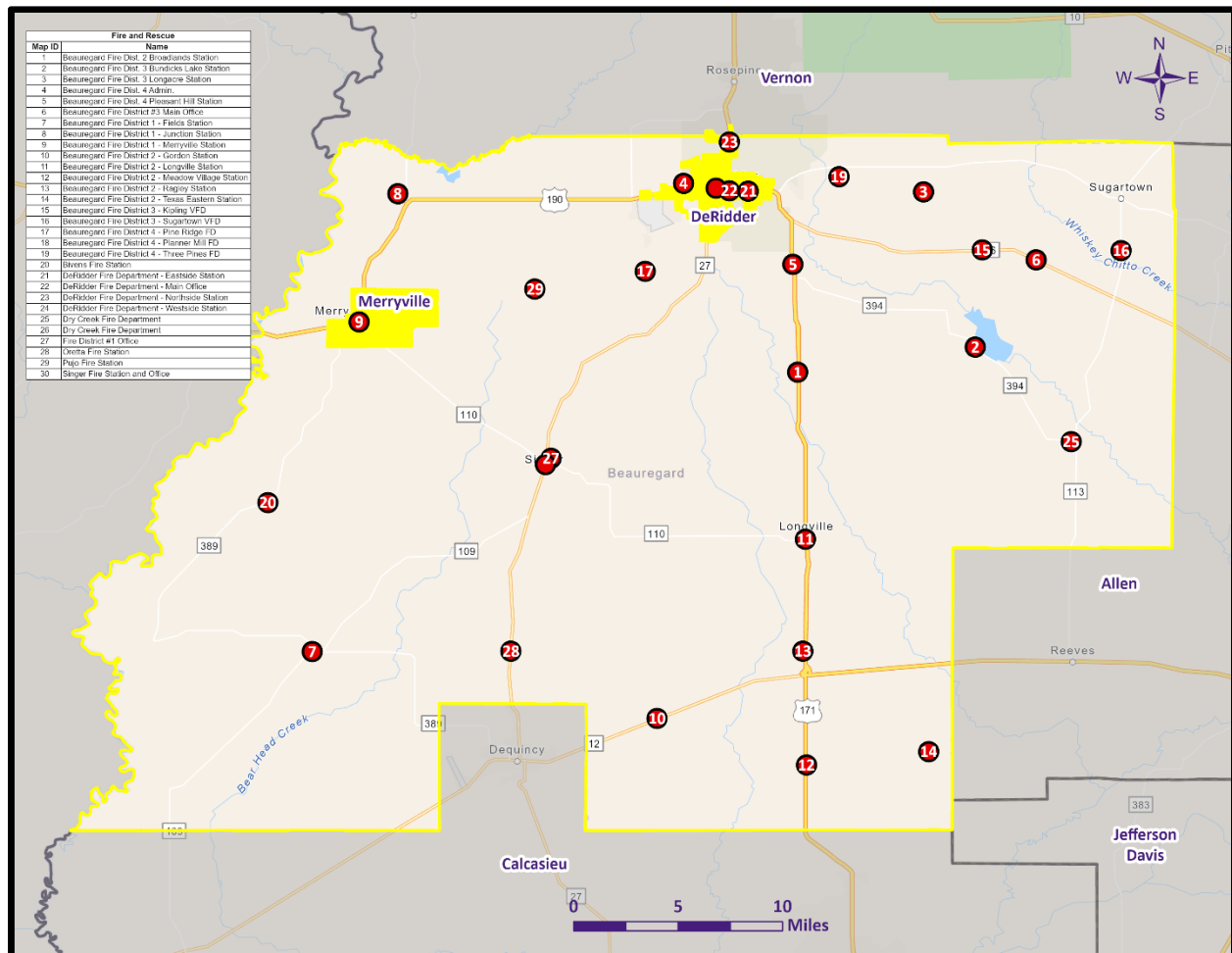


Figure 2-4: Fire and Rescue Facilities in the Parish.

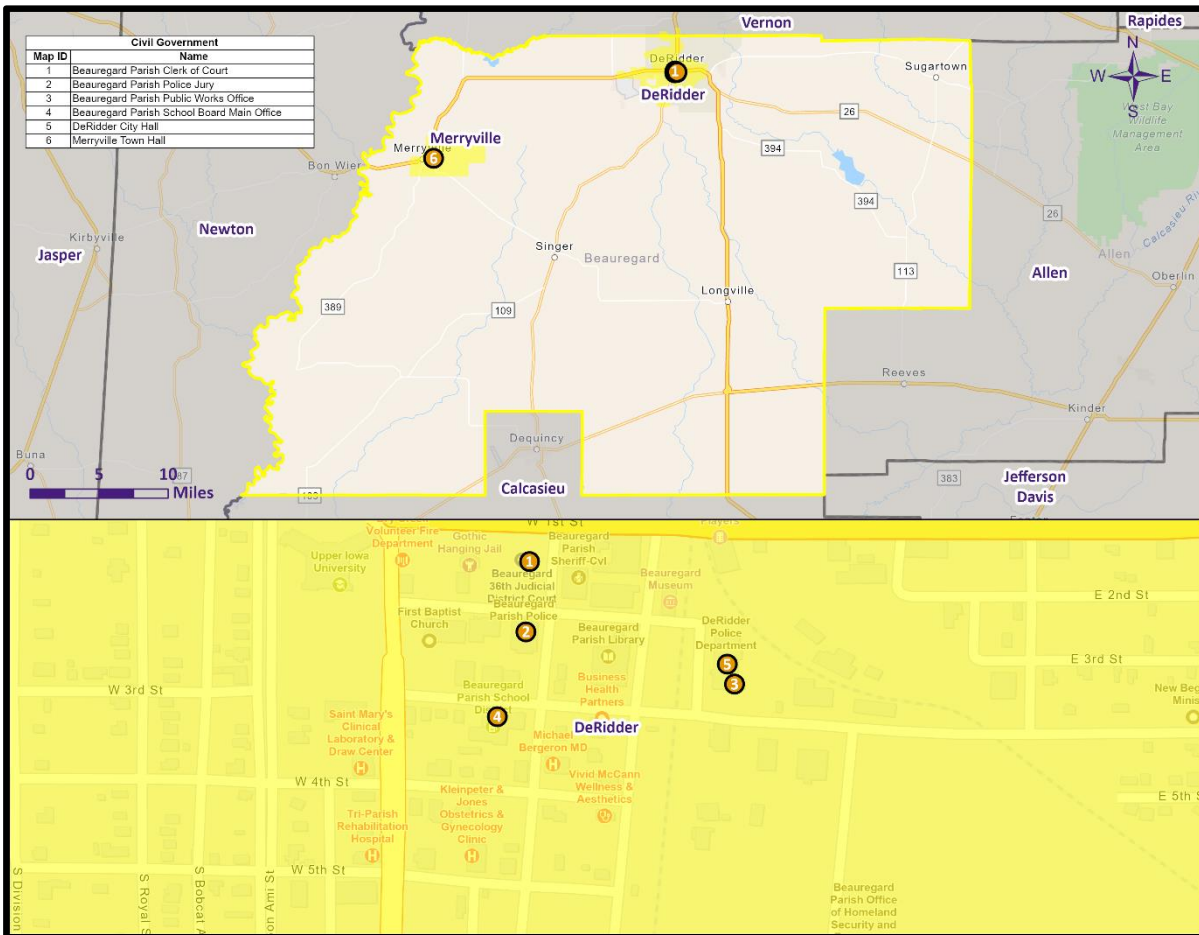


Figure 2-5: Government Buildings in the Parish.

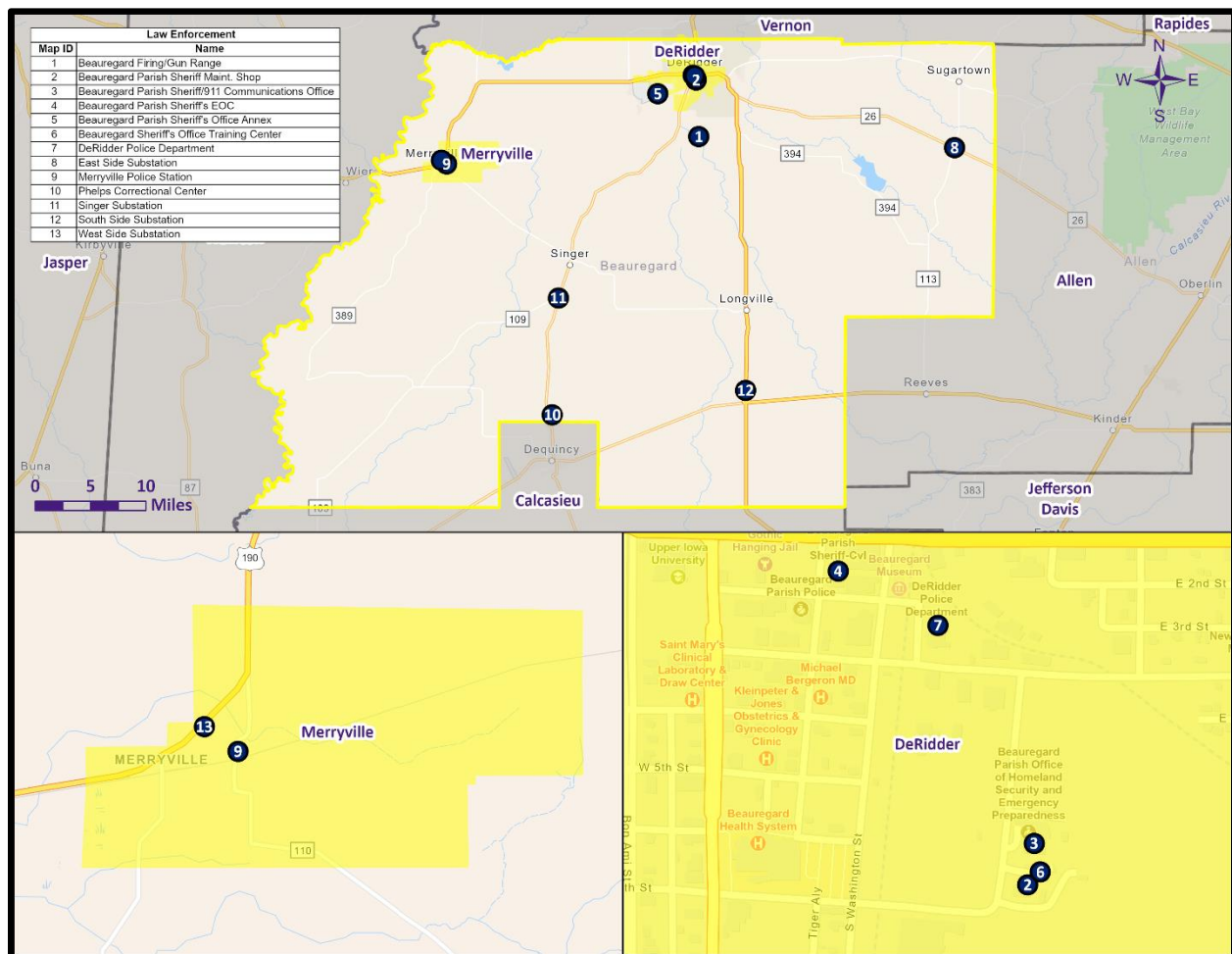


Figure 2-6: Law Enforcement in the Parish.

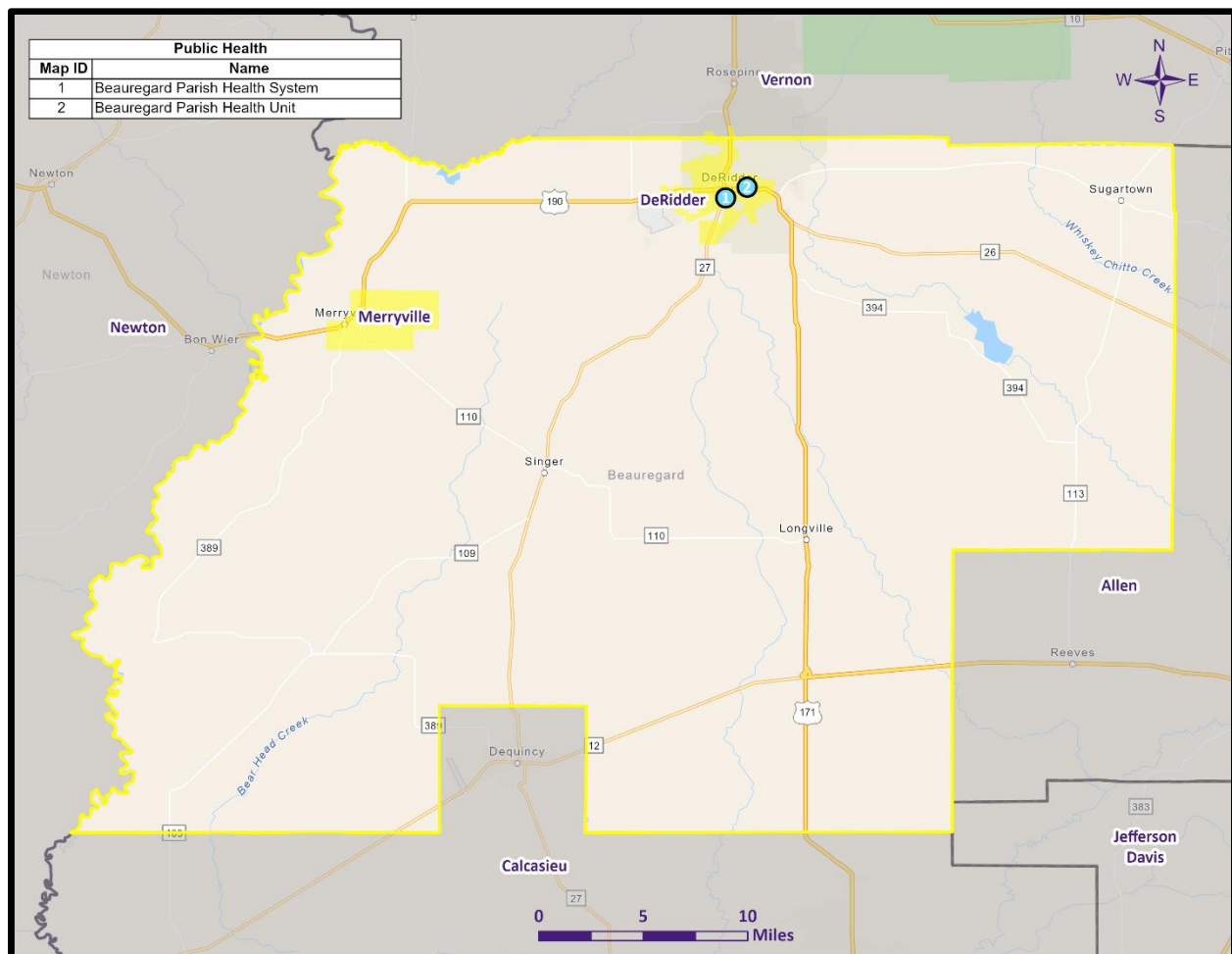


Figure 2-7: Public Health Facilities in the Parish.

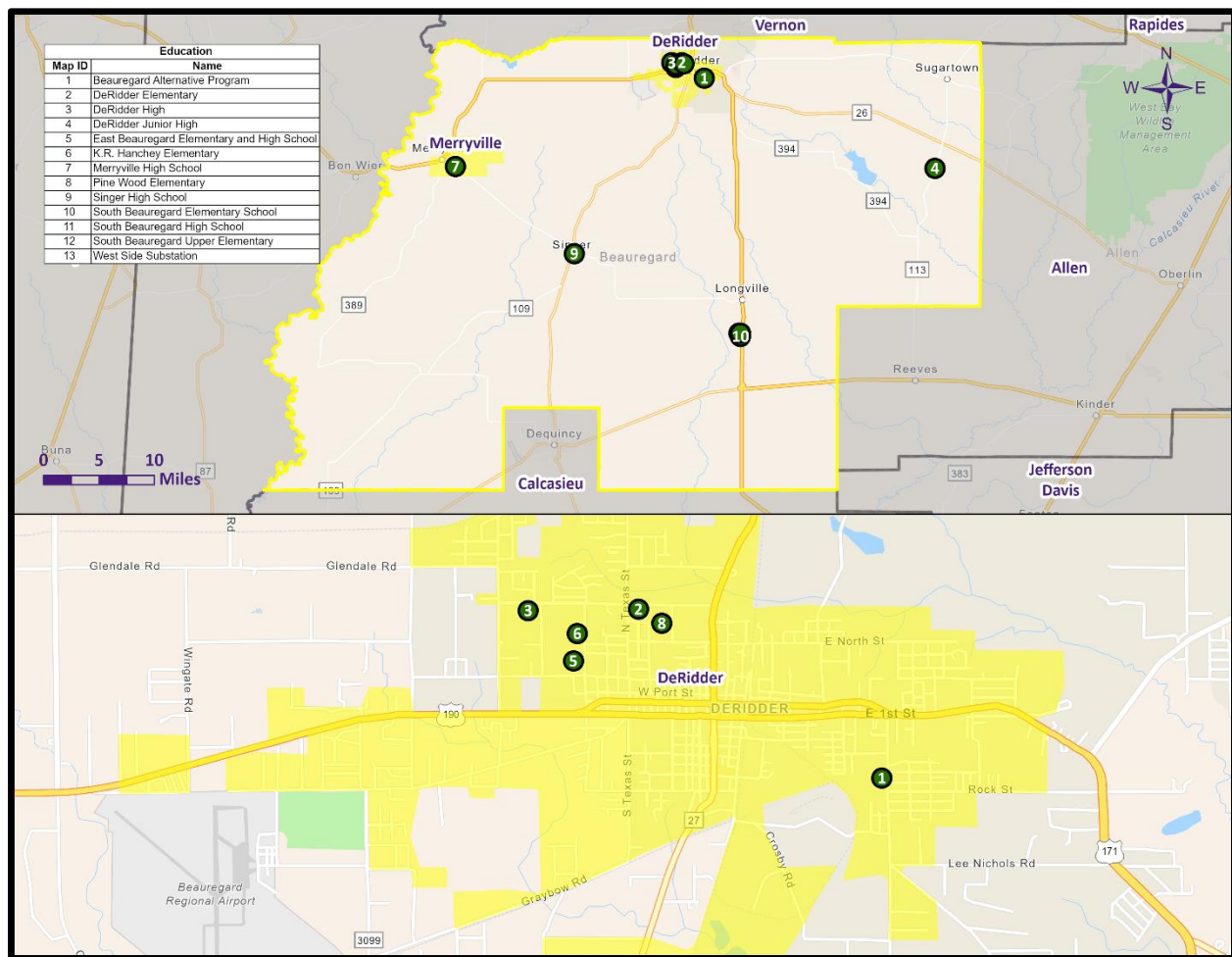


Figure 2-8: Educational Facilities in the Parish.

Land Use

The Parish Land Use table is provided on the following page. Residential, commercial, and industrial areas account for only 4% of the parish's land use. Forested areas are the largest category, accounting for 467,277 acres (63%) of parish land. At 164,689 acres, wetland areas account for 22% of parish land, while 76,065 acres of agricultural areas account for 10% of parish lands. The parish also consists of 4,290 acres of open water areas, 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	76,065	10%
Wetlands	164,689	22%
Forest Land (Not including forested wetlands)	467,277	63%
Urban/Development	33,746	4%
Water	4,290	1%

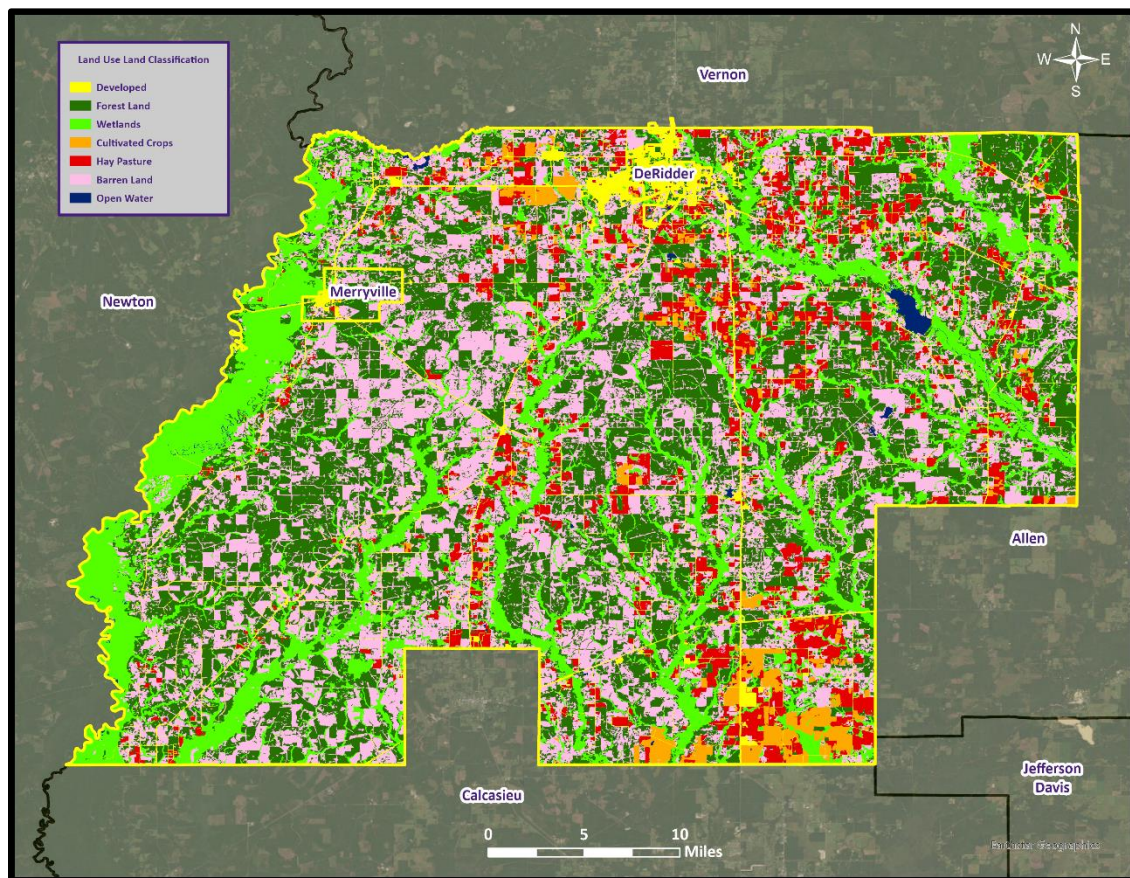


Figure 2-9: Parish Land Use Map.
(Source: USGS Land Use Map)

Hazard Profile, Risk Assessment, and Vulnerability Analysis

Drought

Profile

A drought is a deficiency in water availability over an extended period of time, caused by precipitation totals and soil water storages that do not satisfy the environmental demand for water, either by evaporation or transpiration through plant leaves. It is important to note that the lack of precipitation alone does not constitute drought; the season during which the precipitation is lacking has a major impact on whether drought occurs. For example, a week of no precipitation in July, when the solar energy to evaporate water and vegetation's need for water to carry on photosynthesis are both high, may trigger a drought, while a week of no precipitation in January may not initiate a drought.

Drought is a unique and insidious hazard. Unlike other natural hazards, no specific threshold of "dryness" exists for declaring a drought. In addition, the definition of drought depends on stakeholder needs. For instance, the onset (and demise) of agricultural drought is quick, as crops need water every few days; once they get rainfall, they improve. But hydrologic drought sets in (and is alleviated) only over longer time periods. A few dry days will not drain a reservoir, but a few rain showers cannot replenish it either. Moreover, different geographical regions define drought differently based on the deviation from local, normal precipitation. Drought can occur anywhere, triggered by changes in the local-to-regional-scale atmospheric circulation over an area, or by broader-scale circulation variations such as the expansion of semi-permanent oceanic high-pressure systems or the stalling of an upper-level atmospheric ridge in place over a region. The severity of a drought depends upon the degree and duration of moisture deficiency, as well as the size of the affected area. Periods of drought also tend to be associated with other hazards, such as wildfires and/or heat waves. Lastly, drought is a slow onset occurrence, causing less direct—but tremendous indirect—damage. Depletion of aquifers, crop loss, and livestock and wildlife mortality rates are examples of direct impacts. Since the groundwater found in aquifers is the source of about 38% of all county and city water supplied to households (and comprises 97% of the water for all rural populations that are not already supplied by cities and counties), droughts can potentially have direct, disastrous effects on human populations. The indirect consequences of drought, such as unemployment, reduced tax revenues, increased food prices, reduced outdoor recreation opportunities, higher energy costs as water levels in reservoirs decrease and consumption increases, and water rationing, are not often fully known. This complex web of impacts causes drought to affect people and economies well beyond the area physically experiencing the drought.

This hazard is often measured using the Palmer Drought Severity Index (PDSI, also known operationally as the Palmer Drought Index). The PDSI, first developed by Wayne Palmer in a 1965 paper for the U.S. Weather Bureau, measures drought through recent precipitation and temperature data with regard to a basic supply-and-demand model of soil moisture. It is most effective in long-term calculations. Three other indices used to measure drought are the Palmer Hydrologic Drought Index (PHDI), the Crop Moisture Index (CMI), which is derived from the PDSI, and the Keetch-Byram Drought Index (KBDI), created by John Keetch and George Byram in 1968 for the U.S. Forest Service. The KBDI is used mainly for predicting the likelihood of wildfire outbreaks. As a compromise, PDSI is used most often for droughts since it is a medium-response drought indicator. The objective of the PDSI is to provide measurements of moisture conditions that are standardized so that comparisons using the index can be made between locations and between months. The following tables display the range and Palmer classifications of the PDSI index, and the United States Drought Monitor Intensity scale.

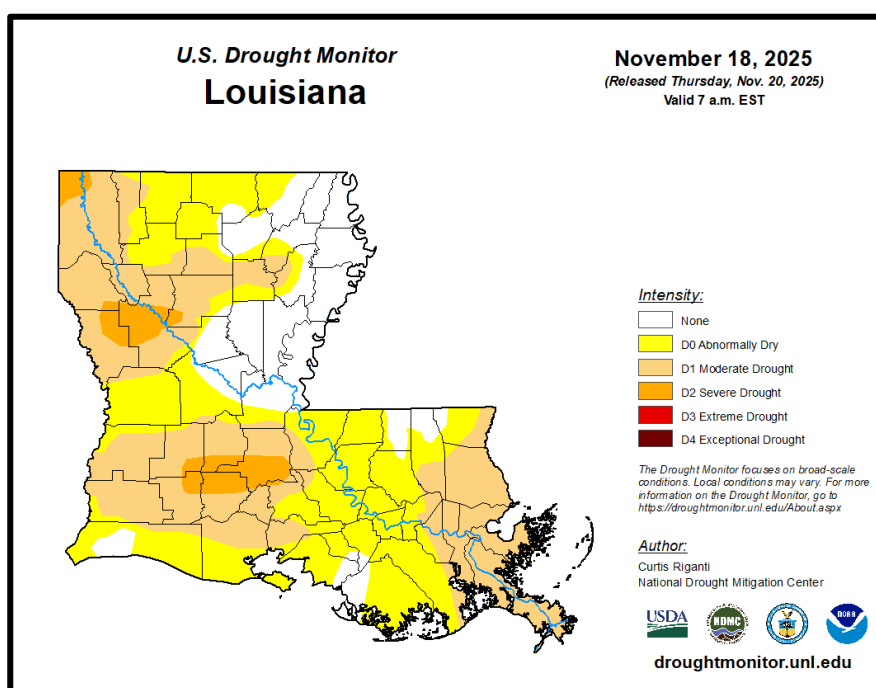
Table 2-12: Palmer Drought Severity Index Classification and Range.

Range	Palmer Classification
4.0 or more	Extremely Wet
3.0 to 3.99	Very Wet
2.0 to 2.99	Moderately Wet
1.0 to 1.99	Slightly Wet
0.5 to 0.99	Incipient Wet Spell
0.49 to -0.49	Near Normal
-0.5 to -0.99	Incipient Dry Spell
-1.0 to -1.99	Mild Drought
-2.0 to -2.99	Moderate Drought
-3.0 to -3.99	Severe Drought
-4.0 or less	Extreme Drought

Table 2-13: U.S. Drought Monitor Drought Intensity Scale.
(Source: National Drought Mitigation Center)

Range/Category	Description	PDSI Equivalent
D0	Abnormally Dry	-1.0 to -1.99
D1	Moderate Drought	-2.0 to -2.99
D2	Severe Drought	-3.0 to -3.99
D3	Extreme Drought	-4.0 to -4.99
D4	Exceptional Drought	-5.0 or less

The following figure displays the drought conditions in the state of Louisiana. Data compiled by the National Drought Mitigation Center indicates abnormally dry conditions exist in the northern portions of the parish and moderate drought conditions exist in the southern portions at the time this plan went to publication.

Figure 2-10: United States Drought Monitor for the State of Louisiana and its Parishes.
(Source: The National Drought Mitigation Center)

Risk Assessment

Geographic Extent

Drought typically impacts a region and not one specific parish or jurisdiction. While the entire planning area can experience drought, the major impact of a drought occurrence in the parish is on the agricultural community. The worst-case drought scenario for the parish and the jurisdictions of the parish would be an exceptional drought (D4).

Previous Occurrences

The parish experienced five drought occurrences between the years 1996 and 2025. Since the last update, there has been one drought occurrence within the boundaries of the parish. The following table provides a summary of the event.

*Table 2-14: Historical Drought Occurrences in the Parish since the last update.
(Source: National Centers for Environmental Information)*

Date	Crop Damage	Summary
11/2023	\$0	A prolonged drought that began earlier in the year peaked during the first week of November. Thunderstorms returned to Beauregard Parish by the 10th with more regular rains following after that date. Forest areas and crawfish suffered considerable die offs plus rice and hay yields were reduced, but specific dollar estimates are unknown at this time.

Probability

The annual return rate (frequency) for drought in the parish is 0.17, which means there is a 17% probability of a drought event occurring in any given year. This translates to an average of one drought event occurring approximately every five to six years over the long term.

- Annual Return Rate (Frequency): 0.17 (17%), which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one drought event is expected to occur approximately every 5.9 years. This is the inverse of the return rate ($1 / 0.17 = \sim 5.9$ years)

Climate Change Impacts

Climate change is expected to increase the number and intensity of droughts in the state of Louisiana. Drought can be caused by both a reduction in precipitation as well as by heat that results in increased evaporation. Changes in temperature and types of precipitation in the state of Louisiana will affect drought characteristics. An increase in rain and a decrease in winter weather events with increased temperatures will cause peak streamflow to occur earlier in the year. This change in the hydrologic cycle will have significant impacts on natural systems in Louisiana, including the intensity, duration, and frequency of droughts.

Future Hazard Impacts

Future development can exacerbate drought conditions by increasing demand for water resources through urbanization, industrialization, and agricultural expansion, potentially leading to water scarcity and increased competition for limited freshwater supplies. Similarly, population growth can intensify droughts by increasing demand for water resources for domestic, agricultural, and industrial purposes.

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 drought.

Table 2-15: National Risk Index (NRI) Summarization of Drought Occurrences for the Parish
(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively Low	Relatively Low

Estimated Impact and Potential Loss

The parish and the jurisdictions of the parish are vulnerable to drought by means of soil desiccation (drying out), which causes foundation damage to structures and buckling of roads. However, the main impact of a drought occurrence is on the agricultural community. The following table presents an analysis of agricultural exposure that is susceptible to drought by major crop type for the parish.

Table 2-16: Agricultural Exposure by Crop Type for Droughts in the Parish
(Source: LSU Ag Center 2024 Parish Totals)

Agricultural Exposure by Type for Drought			
Forestry	Hay	Fruits	Vegetables
\$46,663,936	\$14,175,040	\$4,315	\$5,273,686

Vulnerable Population

As mentioned previously, the main impact of drought is on the agricultural community and certain infrastructure. There is no direct impact on the populace of the parish. There have been no reported deaths or injuries as a result of drought within the parish.

Vulnerability Score

Table 2-17: Drought Vulnerability Score for the Parish.

Drought Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	3	2	2	4	2	2.55

Excessive Heat

Profile

There is no operational definition for defining heat or a heat wave. Heat waves are the consequence of the same weather pattern as drought, and therefore both hazards often occur concurrently. A heat wave is an extended period of oppressive and above normal temperatures over a given period of time. The World Meteorological Organization recommends the declaration of a heat wave when the daily maximum temperature exceeds the average maximum temperatures by 9 °F and lasts for a period of at least five days.

However, temperature alone is insufficient to describe the stress placed on humans (as well as flora and fauna) in hot weather. It is crucial to consider the effect of relative humidity since it is essential to the body's ability to perspire and cool. Once air temperature reaches 95 °F, perspiration becomes a very significant biophysical mechanism to ensure heat loss. Perspiration is ineffective as a cooling mechanism if the water cannot evaporate (i.e., sweating in high relative humidity is reduced as compared to during dry conditions). To communicate this relationship between temperature and humidity, the National Weather Service (NWS) developed the Heat Index (HI), which provides a warning system based on a combination of air temperature and relative humidity. The HI is presented in the following tables. The NWS devised the index for shady, light wind conditions, and thus advises that the HI value can be increased by as much as 15 °F if a person is in direct sunlight with strong, hot winds present.

Most heat disorders (e.g., sunburn, heat cramps, heat exhaustion, and heat stroke) occur because the victim has been overexposed to heat, or has over-exercised in relation to their age and physical condition. Other circumstances that can induce heat-related illnesses include stagnant atmospheric conditions and poor air quality. Seniors and children are most at risk from adverse heat effects. Extreme heat can also damage roads, bridges, pipelines, utilities, and railroads. High temperatures can be partially responsible for deflection of rails and related railroad accidents.

According to NOAA, extreme heat is the leading weather-related cause of death in the United States. And while heat-related deaths in Louisiana are not common, due in part to the consistency and predictability of high seasonal temperatures, they do occur and are still very intense and dangerous. Such deaths happen in a variety of circumstances, often in ways that are not easily categorized due to their unexpectedness. For instance, although exposure to heat is higher at the beach than usual, NOAA does not track heat-related deaths there because such deaths happen infrequently.

Table 2-18: Summary of Heat Index Risk Levels with Protective Measures
(Source: National Weather Service)

Heat Index	Risk Level	Protective Measures
Less than 91°F	Lower (Caution)	Basic heat safety and planning.
91°F to 103°F	Moderate	Implement precautions and heighten awareness.
103°F to 115°F	High	Additional precautions to protect workers
Greater than 115°F	Very High to Extreme	Triggers even more aggressive protective measures.

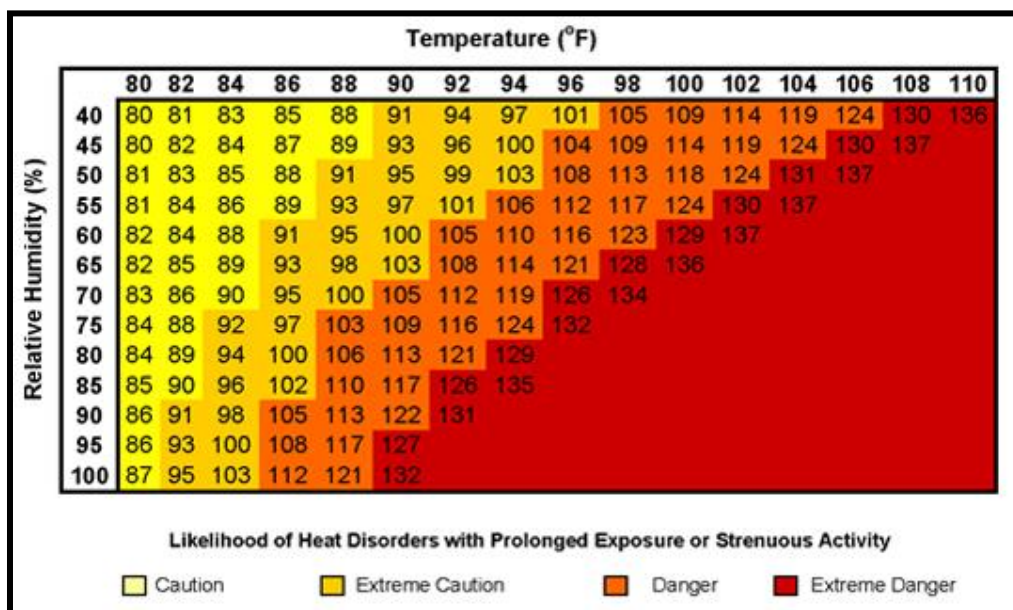


Figure 2-11: Heat Index Advisor based on Air Temperature (°F) and Relative Humidity
(Source: National Weather Service)

Risk Assessment

Geographic Extent

Extreme heat typically impacts a region and not one specific parish. Because extreme heat is a climatologically based hazard, it has the same probability of occurring in the parish as all of the adjacent parishes. The entire planning area of the parish is equally at risk for extreme heat. Based on historical data, the worst-case scenario for the parish involving extreme heat would be a high-risk level on the HI scale with temperatures ranging from 110°F to 113°F.

Previous Occurrences

Per the NCEI Storm Events Database, there has been one significant occurrence of excessive heat events in the parish since 1996 and since the last plan update. The following table provides a summary of the event.

Table 2-19: Historical Excessive Heat Occurrences in the Parish since the last update.
(Source: National Centers for Environmental Information)

Date	Crop Damage	Summary
9/1/2023	\$0	High temperatures of 97 to 105F continued through the first week of September across Central Louisiana until a cold front passed through. Apparent temperatures of 100 to 113F occurred during the afternoons.

Probability

The annual return rate (frequency) for extreme heat in the parish is 0.03, which means there is a 3% probability of an extreme heat event occurring in any given year. This translates to an average of one extreme heat event occurring approximately every 33 years over the long term.

- Annual Return Rate (Frequency): 0.03 (3%), which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one extreme heat event is expected to occur approximately every 33 years. This is the inverse of the return rate ($1 / 0.03 = \sim 33.3$ years)

Climate Change Impacts

Climate change has caused a rise in extreme heat events within Beauregard Parish and its jurisdictions, especially in urban areas that experience higher temperatures due to the urban heat island effect. Cities in Louisiana are experiencing, at a minimum, two more weeks of extreme heat (days over 95° F) than compared to 50 years ago. With the rise in extreme heat events, there will be several environmental and economic implications within the state of Louisiana including the disruption of the natural system such as agriculture, forestry, fishing, mining, manufacturing, transportation, and utilities.

Climate change is driving a relentless escalation in extreme heat events, reshaping the very fabric of our environment. Rising greenhouse gas emissions are enhancing the greenhouse effect, trapping heat within the atmosphere. Consequently, extreme heat occurrences have become more frequent, intense, and prolonged. Heatwaves, once sporadic, have transformed into enduring episodes, subjecting regions to temperatures that push the boundaries of historical records. Urban areas, already prone to heat island effects due to concrete and asphalt, are rendered even more stifling. These elevated temperatures pose an array of challenges to ecosystems, agriculture, infrastructure, and human health. Vulnerable populations bear the brunt, as their reduced capacity to adapt heightens the risks of heat-related illnesses, mortality, and displacement. In addition, elevated heat negatively impacts economies, straining energy demand, reducing worker productivity, and exacerbating health care costs.

Future Hazard Impacts

Population growth and future development can amplify extreme heat events by creating urban heat islands—areas where temperatures are higher than in surrounding rural areas due to human activities and infrastructure like buildings, roads, and reduced green spaces. As populations grow, urbanization increases, leading to more heat-absorbing surfaces and less evaporative cooling, which exacerbates heat retention. Energy demand also rises with development, increasing heat emissions from power generation and transportation, further contributing to local and regional heat intensification.

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 extreme heat.

Table 2-20: National Risk Index (NRI) Summarization of Extreme Heat 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 no significant extreme heat events that have resulted in property damage according to NCEI Storm Events Database.

Vulnerable Population

There have been no reported fatalities or injuries due to excessive heat in the parish. However, extreme heat poses a dire threat to vulnerable populations, magnifying existing disparities and triggering a cascade of health, social, and economic challenges. The elderly, children, low-income individuals, and those with underlying health conditions are particularly susceptible. Their compromised physiological resilience makes them more prone to heat-related illnesses, including life-threatening conditions like heat stroke. Mortality rates surge, disproportionately affecting the elderly, as soaring temperatures strain their already fragile health. Economic strain intensifies for low-income communities, unable to afford proper cooling measures, leading to discomfort and potential productivity losses. Inadequate housing exacerbates the issue, as substandard dwellings lack insulation and ventilation, turning homes into heat traps. Moreover, social isolation heightens vulnerability, as limited social connections hinder access to aid and cooler environments. The lack of resources, clean water, and medical care amplifies risks. Environmental injustices come to the fore, as marginalized neighborhoods, trapped in urban heat islands, experience even higher temperatures due to scant greenery. This extreme heat can induce migration and displacement, straining resources

and instigating social tensions. Utility disruptions during heatwaves further compromise their well-being, and overburdened healthcare systems struggle to cope with the influx of heat-related cases.

Vulnerability Score

Table 2-21: Excessive Heat Vulnerability Score for the Parish.

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

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
 - 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
 - Issued along larger streams when there is a serious threat to life or property.
- Flood Watch
 - 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.

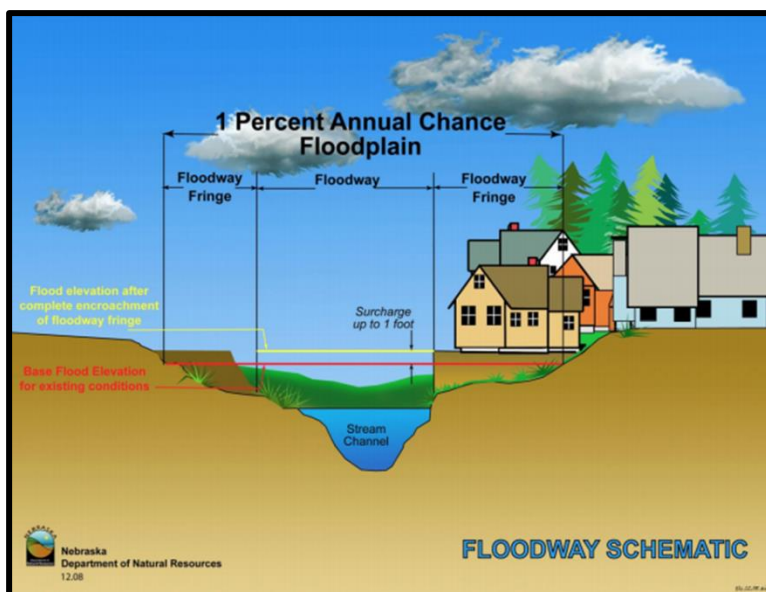


*Figure 2-12: Schematic of 100-Year Floodplain.
The Special Flood Hazard Area (SFHA) extends to the end of the floodway fringe
(Source: Nebraska Department of Natural Resources)*

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.

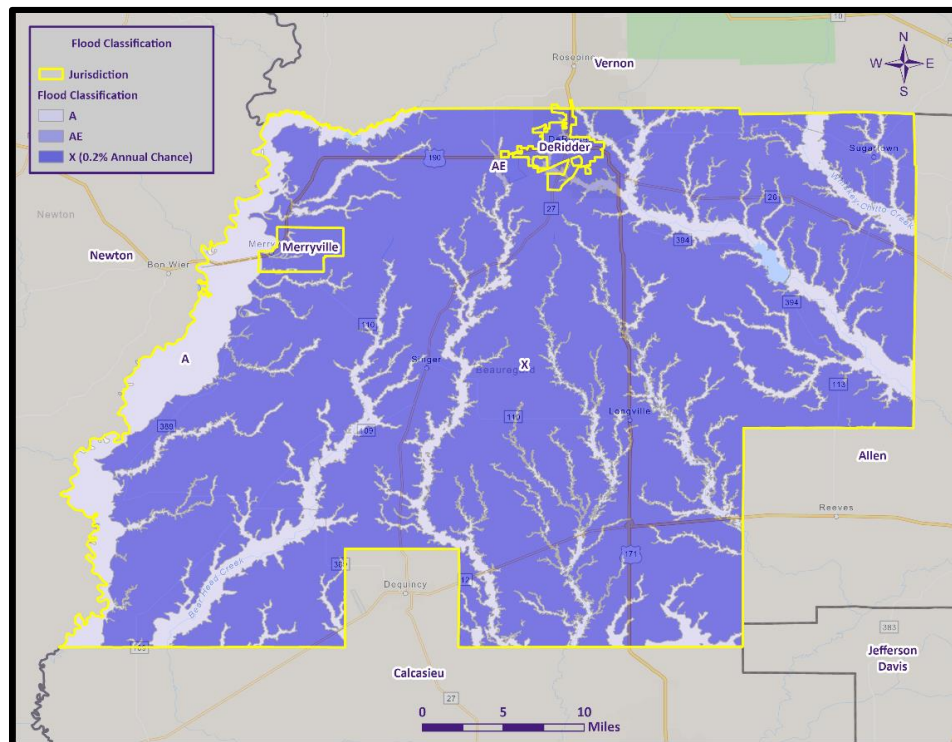


Figure 2-13: Flood Zones Across the Entirety of Beauregard Parish
(Source: FEMA Flood Map Service Center)

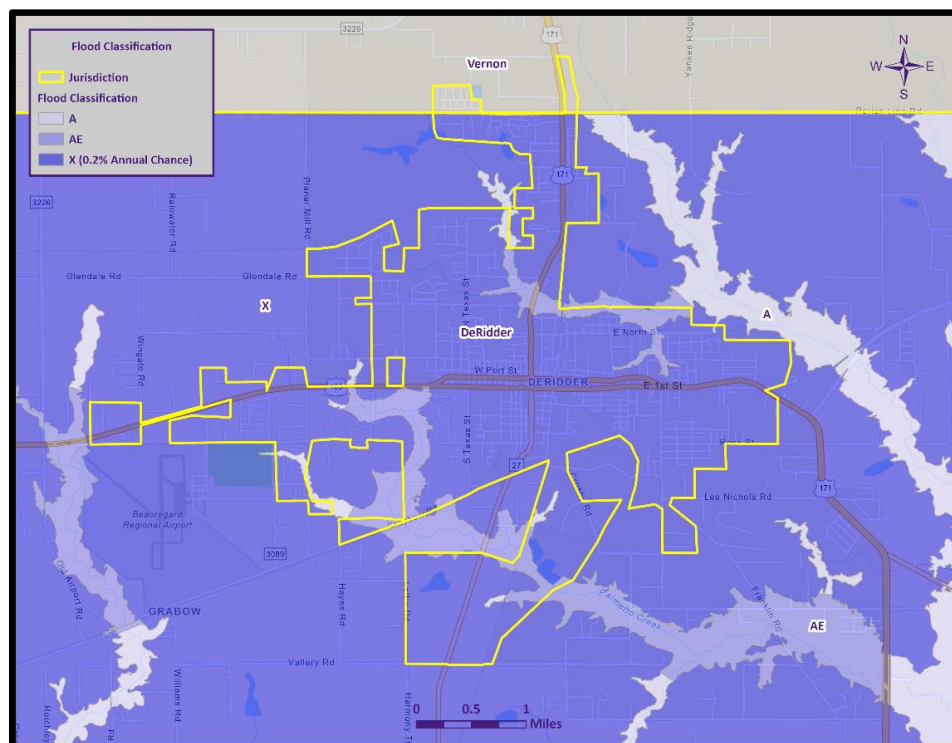


Figure 2-14: Flood Zones Across DeRidder
(Source: FEMA Flood Map Service Center)

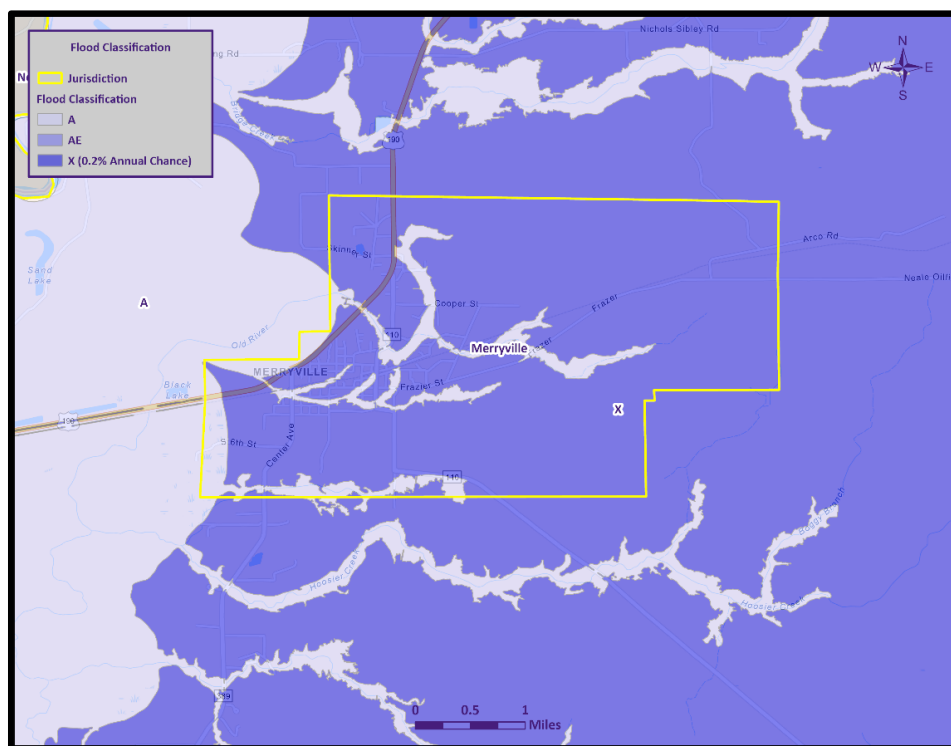


Figure 2-15: Flood Zones Across Merryville
(Source: FEMA Flood Map Service Center)

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
- 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 –
 - 1) 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:

Table 2-22: Repetitive Loss Structures for the Parish.

Jurisdiction	Number of Structures	Residential	Commercial	Government	Total Claims	Total Claims Paid	Average Claim Paid
Unincorporated Beauregard Parish	20	18	2	0	54	\$963,382	\$17,840
DeRidder	60	58	2	0	206	\$3,155,353	\$15,317
Merryville	12	12	0	0	32	\$739,411	\$23,106
Total	92	88	4	0	297	\$4,945,684	\$16,652

The 92 repetitive loss structures were geocoded in order to provide an overview of where the repetitive loss structures are located throughout the parish. The following figures show the approximate locations of the structures and where the highest concentration of repetitive loss structures is located. Through the repetitive loss map, it is clear the primary concentrated area of repetitive loss structures is focused in the incorporated area of DeRidder and in the eastern section of the unincorporated area of Beauregard Parish.

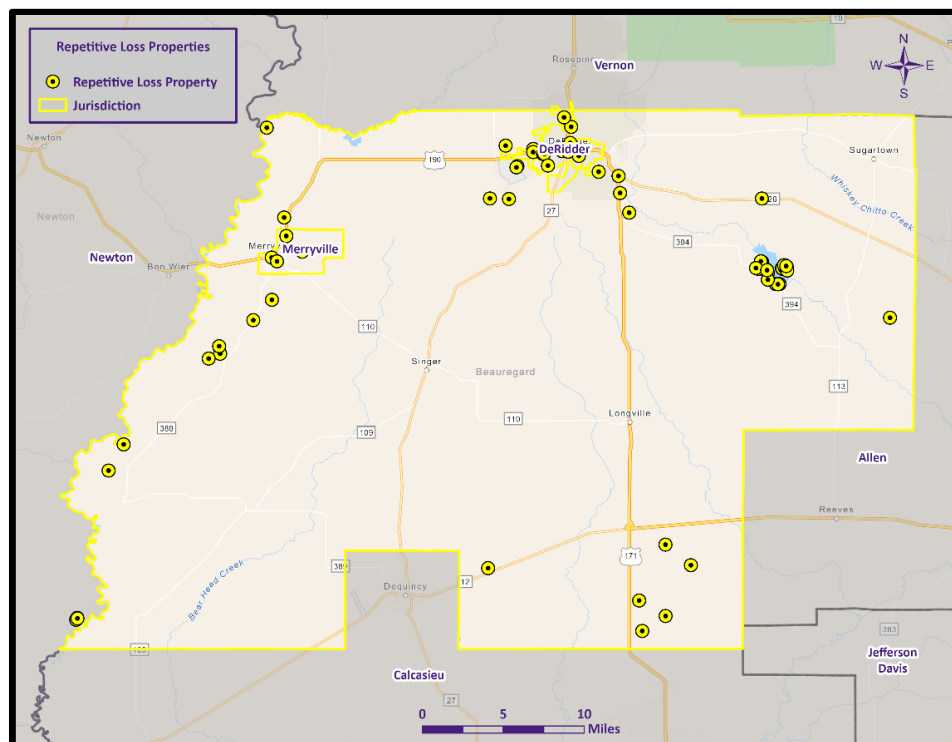


Figure 2-16: Repetitive Loss Properties in the Parish.

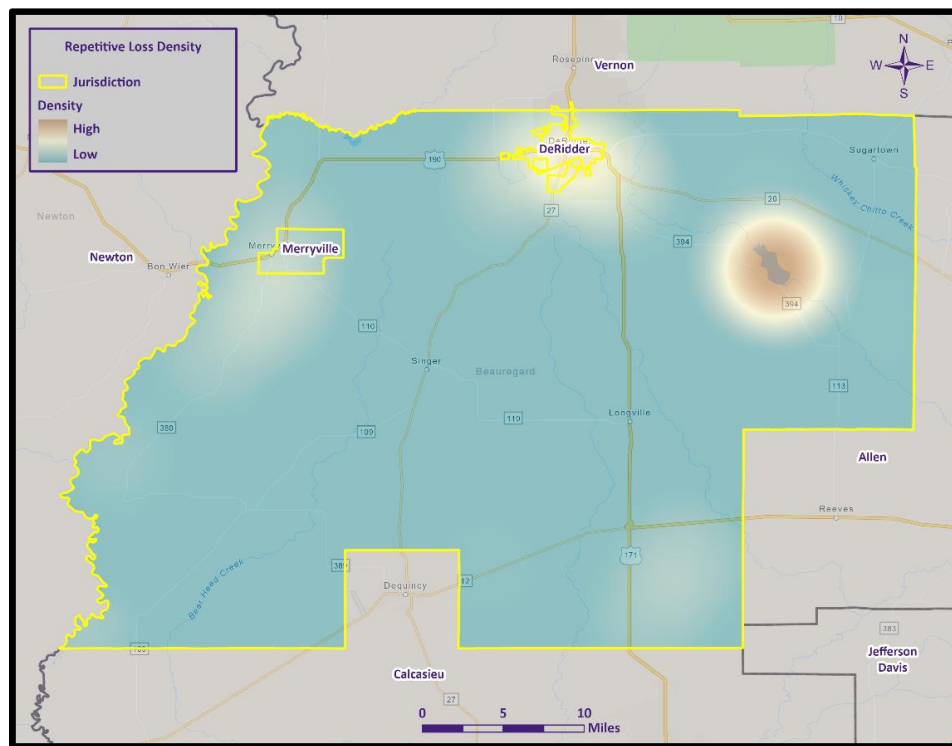


Figure 2-17: Repetitive Loss Property Densities in the Parish.

National Flood Insurance Program

Flood insurance statistics indicate that the Parish has 218 flood insurance policies with the NFIP, with total annual premiums of \$180,239. 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 are provided in the tables to follow.

Table 2-23: Summary of NFIP Policies for the Parish.
(Source: NFIP)

Location	No. of Insured Structures	Total Insurance Coverage Value	Annual Premiums Paid	No. of Insurance Claims Filed Since 1978	Total Loss Payments
Unincorporated Beauregard Parish	60	\$1,808,300	\$50,595	529	\$7,739,833
DeRidder	154	\$40,480,000	\$126,520	78	\$1,127,079
Merryville	4	\$680,000	\$3,124	5	\$118,983
Total	218	\$42,968,300	\$180,239	612	\$8,985,895

*Table 2-24: Summary of Community Flood Maps for the Parish.
(Source: FEMA Community Status Book)*

CID	Community Name	Initial FHBM Identified	Initial FIRM Identified	Adopted Date	Current Effective Map Date	Date Joined the NFIP	Tribal
220026B	Beauregard Parish	1/17/75	5/3/90	1/5/18	1/5/18	5/3/90	No
220027B	DeRidder	2/1/74	10/19/82	1/5/18	1/5/18	10/19/82	No
220028B	Merryville	5/24/74	2/1/87	1/5/18	1/5/18	2/1/87	No

While the City of DeRidder is listed on the list of eligible communities under the Community Ratings System, they are not an active participant and are denoted as such with a Class 10. The incorporated jurisdictions of Merryville and the unincorporated area of Beauregard Parish do not participate in the CRS program.

*Table 2-25: Summary of Community Flood Maps for the Parish.
(Source: FEMA Community Ratings System)*

CID	Community Name	CRS Entry Date	Current Effective Date	Current Class	% Discount for SFHA
220027B	DeRidder	10/1/1985	5/1/2015	10	0

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 average elevation of Beauregard Parish is 203 feet (NAVD88). The highest elevations in the parish are approximately 257 feet (NAVD88) in the DeRidder area. These higher elevations extend throughout the northern portions of the parish. The lowest portions of the parish average between seven and fifteen feet (NAVD88) with the lowest point of the parish nearing sea level. These areas are located along the western border of the parish and in the southern areas of the parish. The DEM for Beauregard Parish can be found on the following page.

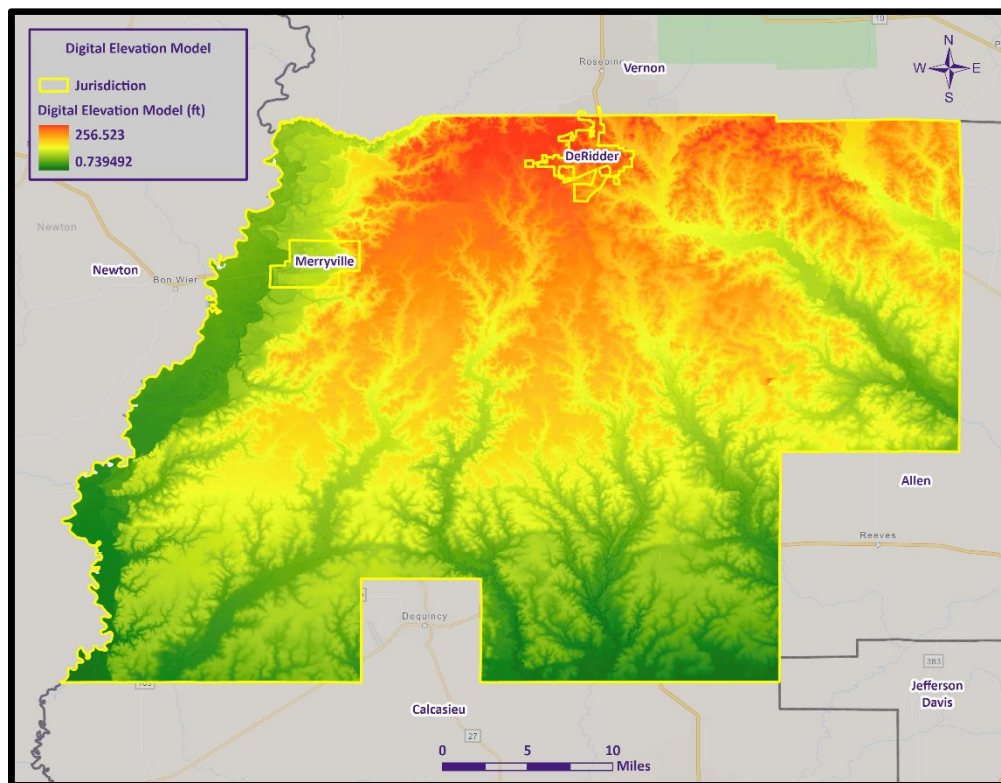


Figure 2-18: Elevation throughout the Parish.
(Source: USGS)

Risk Assessment

Geographic Extent

Beauregard Parish has experienced significant flooding in its history and can expect more in the future. Beauregard Parish is situated in the floodplain of the Sabine River in the west and along the shores of Bundick Lake in the north.

Based on previous flood events, the worst-case scenarios are based on several different types of flooding events. The low-lying areas of the parish can expect flood depths of approximately four to six feet in flood depth, while the incorporated areas of Merryville can expect flood depths of approximately 5 feet. The incorporated area of DeRidder can expect flood depths of approximately two to four feet in low-lying areas.

Previous Occurrences

The parish experienced 45 flooding occurrences between the years 1996 and 2025. Since the last update, there have been six flood occurrences within the boundaries of the parish.

Table 2-26: Historical Flooding Events in the Parish since the last update.
(Source: National Centers for Environmental Information)

Date	Area	Type of Flood	Property Damage	Fatalities	Injuries
9/28/2021	DeRidder	Flash Flood	\$0	0	0
4/10/2024	DeRidder Arpt	Flash Flood	\$0	0	0
5/16/2024	DeRidder	Flash Flood	\$0	0	0
5/29/2024	Bancroft	Flash Flood	\$0	0	0
5/6/2025	Dry Creek	Flash Flood	\$25,000	0	0
5/6/2025	Fulton	Flash Flood	\$0	0	0

Probability

The annual return rate (frequency) for periods of flooding in the parish is 1.5, which means there is a 100% probability of a flooding event occurring in any given year. This translates to an average of one to two flooding events occurring every year over the long term.

- Annual Return Rate (Frequency): 1.5, which represents the likelihood of an event happening in any given year at 100%.
- Average Interval Between Events: On average, one to two flooding events occur approximately every year. This is the inverse of the return rate ($1 / 1.5 = \sim 0.67$ years)

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

Table 2-27: Annual Flood Probabilities for Each Jurisdiction in the Parish.

Jurisdiction	Annual Probability	Return Frequency
Unincorporated BP	90%	1 event every 1 to 2 years
DeRidder	67%	1 event every 1 to 2 years
Merryville	10%	1 event every 10 years

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 2-28: 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)
Flood Damage				
Structures	15,968	8,519	8,891	9,359
Value of Structures	\$2,956,239,833	\$1,563,710,989	\$1,716,955,934	\$1,920,800,862
# of People	36,646	19,401	19,487	19,591

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 2-29: National Risk Index (NRI) Summarization of Riverine Flood Occurrences for the Parish

(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively Moderate	Relatively Moderate

Estimated Impact and Potential Loss

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 2-30: Estimated Losses in the Parish from a 100-Year Flood Event

(Source: Hazus)

Jurisdiction	Estimated Loss
Unincorporated BP	\$285,015,000
DeRidder	\$40,246,000
Merryville	\$9,062,000

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 2-31: Estimated 100-year Flood Losses for Unincorporated Beauregard Parish by Sector.
(Source: Hazus)*

Unincorporated BP	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$2,208,000
Commercial	\$17,279,000
Government	\$4,759,000
Industrial	\$11,289,000
Religious / Non-Profit	\$16,271,000
Residential	\$231,161,000
Schools	\$2,048,000
Total	\$285,015,000

*Table 2-32: Estimated 100-year Flood Losses for DeRidder by Sector.
(Source: Hazus)*

DeRidder	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$279,000
Commercial	\$7,072,000
Government	\$563,000
Industrial	\$356,000
Religious / Non-Profit	\$1,681,000
Residential	\$30,249,000
Schools	\$46,000
Total	\$40,246,000

*Table 2-33: Estimated 100-year Flood Losses for Merryville by Sector.
(Source: Hazus)*

Merryville	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$1,056,000
Government	\$25,000
Industrial	\$176,000
Religious / Non-Profit	\$595,000
Residential	\$7,210,000
Schools	\$0
Total	\$9,062,000

Vulnerable Population

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

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

Number of People Exposed to Flood Hazards			
Location	# in Community	# in Hazard Area	% in Hazard Area
Unincorporated BP	25,878	16,984	65.6%
DeRidder	9,812	1,648	16.8%
Merryville	956	752	78.7%

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

*Table 2-35: Vulnerable Populations Susceptible to a 100-year Flood Event in the Parish.
(Source: Hazus)*

Unincorporated BP		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	16,984	65.6%
Persons Under 5 Years	1,155	6.8%
Persons Under 18 Years	4,297	25.3%
Persons 65 Years and Over	2,717	16.0%
White	13,604	80.1%
Minority	3,380	19.9%

*Table 2-36: Vulnerable Populations Susceptible to a 100-year Flood Event in DeRidder.
(Source: Hazus)*

DeRidder		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	1,648	16.8%
Persons Under 5 Years	107	6.5%
Persons Under 18 Years	376	22.8%
Persons 65 Years and Over	295	17.9%
White	877	53.2%
Minority	771	46.8%

*Table 2-37: Vulnerable Populations Susceptible to a 100-year Flood Event in Merryville.
(Source: Hazus)*

Merryville		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	752	78.7%
Persons Under 5 Years	49	6.5%
Persons Under 18 Years	170	22.6%
Persons 65 Years and Over	135	17.9%
White	596	79.3%
Minority	156	20.7%

Vulnerability Score

Table 2-38: Flooding Vulnerability Score for the Parish.

Flooding Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	4	4	3	4	3	3.65

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. Figure 1 illustrates the development of a cover subsidence sinkhole. 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 no identifiable salt dome locations in the parish. However, there is one salt dome whose two-mile buffer extends into the parish. The figure on the following page displays the locations of the salt dome with its relative location. The North Starks Salt Dome’s two-mile buffer extends into the southern unincorporated area of Beauregard Parish and does not impact any of the parish’s incorporated areas.

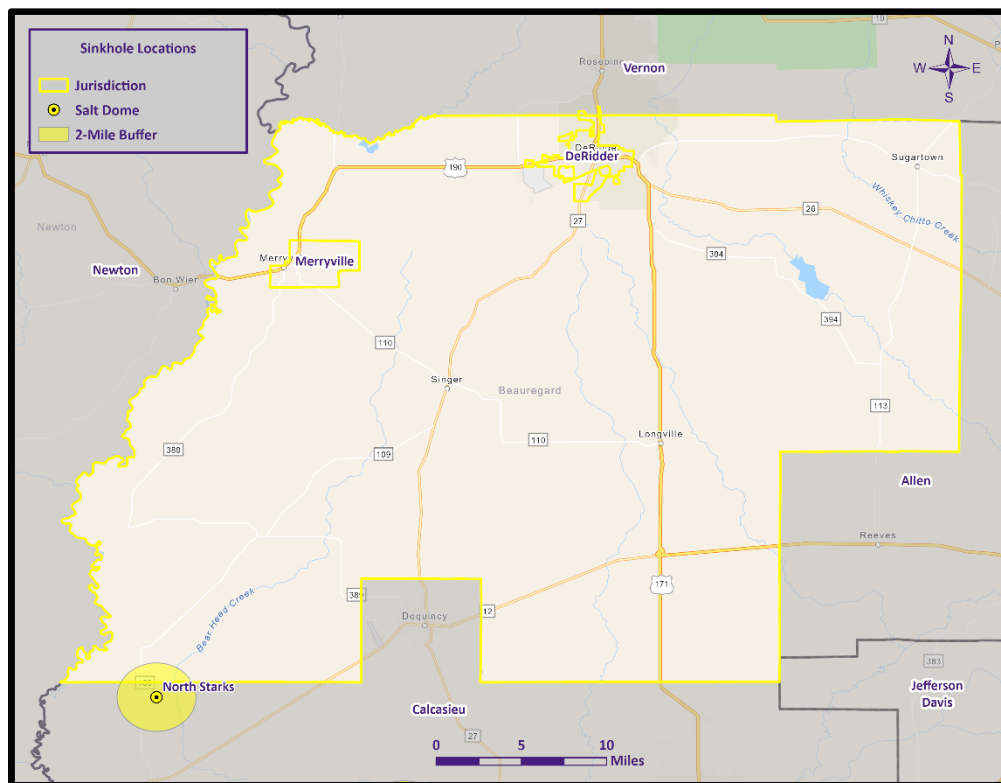


*Figure 2-19: Salt Dome Locations in Beauregard Parish.
(Source: Louisiana State Hazard Mitigation Plan)*

Previous Occurrences

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

Probability

The annual return rate (frequency) for sinkhole occurrences in the parish is approximately less than 0.01, which means there is approximately a less than 1% probability of a sinkhole occurring in any given year. This translates to an average of one sinkhole event occurring approximately every 100 years over the long term.

- Annual Return Rate (Frequency): < 0.01 ($< 1\%$), which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one sinkhole event is expected to occur approximately every 100 years. This is the inverse of the return rate ($1 / 0.01 = \sim 100$ years)

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 one salt dome location was analyzed to determine the number of people and homes that are potentially susceptible to losses from a sinkhole materializing from the salt dome. The following table is based on conducting a two-mile buffer around the center of the salt dome. 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 2-39: Estimated Potential Losses from a Sinkhole Formation.
(Source: U.S. 2020 Census Data and Hazus)*

Salt Dome Name	Total Building Exposure	Critical Infrastructure Exposure	Number of People Exposed	Number of Houses Exposed
North Starks	\$3,761,000	0	79	29

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 2-40: Vulnerability Score for Sinkholes in Beauregard Parish.

Sinkholes Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	1	2	2	1	4	1.9

Solar Flares

Profile

Solar flares are sudden, intense bursts of energy originating from the Sun's surface and outer atmosphere. These bursts release vast amounts of radiation across the electromagnetic spectrum, including X-rays, ultraviolet rays, and radio waves. Solar flares are capable of reaching from a few thousand kilometers to more than a million kilometers in size, and their effects can be felt throughout the entire solar system. A solar flare's intensity can vary, ranging from small, localized events to massive eruptions that release the energy equivalent to millions of nuclear explosions.

Solar flares are most commonly associated with areas of intense magnetic activity on the Sun's surface, particularly sunspots. Sunspots are dark, cooler regions on the Sun's surface where magnetic fields are particularly strong. These magnetic fields can become twisted and tangled, eventually leading to the release of energy in the form of a solar flare.

The process of solar flare formation begins when the Sun's magnetic fields become highly concentrated and unstable. These areas of high magnetic activity are often associated with sunspots. As the magnetic fields twist, they store an immense amount of energy. When these magnetic fields reconnect—either by breaking apart and reconnecting or by releasing pent-up energy—the energy is released in the form of a solar flare. The flare consists of a burst of electromagnetic radiation, which can travel to Earth and beyond, impacting both the space environment and terrestrial technology.

The size and intensity of a solar flare are determined by how much energy is released during this magnetic reconnection process. Smaller flares release only limited energy, while the most powerful flares—classified as X-class flares—can release enormous amounts of radiation, affecting satellite communications, GPS systems, and even power grids on Earth. These larger flares are often associated with Coronal Mass Ejections (CMEs), which are large clouds of charged particles that are ejected from the Sun into space.

Solar flares are classified according to their intensity, with categories ranging from A-class (the weakest) to X-class (the strongest). Within each class, solar flares are further subdivided into a series of numbers that indicate their relative strength. For instance, an X1 flare is weaker than an X10 flare, but both are still considered to be very strong events.

- **A-Class Flares:** These are the smallest solar flares, with minimal impact on Earth. They are often imperceptible and have little to no effect on communication systems or satellites.
- **B-Class Flares:** Slightly stronger than A-class flares, B-class events can have some influence on satellite communications and radio waves in Earth's upper atmosphere, though the impact is still limited.
- **C-Class Flares:** These flares are more significant and can interfere with satellite systems, GPS, and communication networks. The effects can be more pronounced, particularly for systems operating in space.
- **M-Class Flares:** These flares are moderate in size and can cause more significant disruptions to communication systems, particularly in high-latitude regions. These flares are often accompanied by solar radiation storms that could affect astronauts or spacecraft.
- **X-Class Flares:** These are the largest and most powerful solar flares, capable of causing widespread disturbances in satellite communications, power grids, and even posing a hazard to astronauts in space. X-class flares are associated with major geomagnetic storms on Earth, which can induce auroras and disrupt electrical systems.

When a solar flare occurs, the intense burst of electromagnetic radiation travels through space and reaches Earth within minutes. While the Earth's atmosphere shields life on the surface from the harmful radiation, the flare can still have significant effects on technological systems.

- **Satellite Disruptions:** Solar flares can damage or interfere with the operation of satellites by disturbing their electronics and communication systems. High-energy radiation can cause signal loss or degradation, and in some cases, can even damage the satellite's components permanently.

- GPS and Communications: Solar flares can disrupt radio communication, particularly on high-frequency bands used by aviation and maritime industries. These disruptions can lead to signal degradation, reduced navigational accuracy, and in some cases, total communication blackouts.
- Power Grid Disruptions: Strong solar flares, particularly those accompanied by CMEs, can induce geomagnetic storms that interact with the Earth's magnetic field. These storms can induce electrical currents in power lines and transformers, potentially damaging infrastructure, causing blackouts, and requiring costly repairs.

Solar flares are part of the Sun's natural behavior, and they tend to occur more frequently during periods of high solar activity. The Sun follows an approximately 11-year cycle of solar activity, known as the solar cycle. During the solar maximum, which is the peak of the cycle, sunspots are more numerous, and solar flares are more frequent and intense. During the solar minimum, sunspots are fewer, and solar flare activity is lower.

While solar flares are a natural phenomenon, they can also be influenced by human-made factors, such as the launch of spacecraft or nuclear tests that interact with Earth's magnetic field. However, these influences are relatively small compared to the natural variations caused by the Sun's internal magnetic processes.

The impact of solar flares is part of the broader phenomenon known as "space weather." This includes all forms of solar activity that influence the Earth's magnetosphere, ionosphere, and atmosphere. Solar flares are one of the primary drivers of space weather, and understanding them is critical for managing potential disruptions to modern technologies.

In regions near the poles, solar flares often trigger geomagnetic storms that can lead to the aurora borealis (Northern Lights) and aurora australis (Southern Lights), stunning displays of light caused by charged particles interacting with Earth's atmosphere. These auroras are a visible reminder of the powerful interactions between the Sun and Earth's space environment.

Risk Assessment

Geographic Extent

Solar flare effects are not confined to specific geographic locations but can affect the entire parish, depending on the strength and timing of solar flare events. However, the intensity of these impacts may vary by proximity to electrical infrastructure and satellite communication systems.

While the majority of the parish is potentially vulnerable to solar flare-induced disruptions, areas with significant high-tech infrastructure, including parts of the incorporated areas of DeRidder and Merryville, may experience more noticeable effects. These regions have more advanced communication systems and power grids, which can be more susceptible to solar flare-induced geomagnetic storms and radiation exposure.

Previous Occurrences

There have been no recorded incidents of direct solar flare-related disruptions specific to Beauregard Parish to date. While solar flares can influence satellite communication, GPS accuracy, and electrical infrastructure, no parish-level reports document significant impacts or interruptions resulting from solar activity. Any effects experienced in Beauregard Parish would have been minor, brief, and consistent with general regional or national space-weather events rather than localized occurrences.

Probability

The annual return rate (frequency) for solar flare occurrences in the parish is approximately less than 0.01, which means there is approximately a less than 1% probability of a solar flare occurring in any given year. This translates to an average of one solar flare event occurring approximately every 100 years over the long term.

- Annual Return Rate (Frequency): < 0.01 ($< 1\%$), which represents the likelihood of an event happening in any given year.

- Average Interval Between Events: On average, one solar flare event is expected to occur approximately every 100 years. This is the inverse of the return rate ($1 / 0.01 = \sim 100$ years)

Climate Change Impacts

Solar flares—intense bursts of radiation caused by the sudden release of magnetic energy on the Sun’s surface—are becoming increasingly significant as climate-related and technological vulnerabilities grow. Although solar flares themselves are not driven by climate change, their impacts on Earth are amplified as human infrastructure becomes more interconnected, electricity demand rises, and atmospheric conditions shift. Changes in the upper atmosphere, influenced by rising greenhouse gas concentrations, can affect how solar radiation interacts with Earth’s magnetic field, potentially modifying the severity of geomagnetic disturbances that reach the surface. Intensified space-weather events, particularly during peaks in the Sun’s activity cycle, pose heightened risks to power grids, communication networks, and satellite systems—systems that are increasingly critical for climate monitoring, emergency response, and global navigation.

The expanding reliance on renewable energy systems and long-distance transmission lines creates new pathways for solar flares to disrupt essential services. Aviation, especially at high latitudes, faces greater exposure to increased radiation levels during strong flare events, raising operational and safety concerns. As the Sun’s activity continues its natural cycles and human technological dependence grows, comprehensive mitigation strategies—such as hardening electrical infrastructure, improving space-weather forecasting, and enhancing satellite shielding—become essential. Proactive planning and investment will help reduce the cascading impacts that strong solar flares can impose on both technological systems and the societies that rely on them.

Vulnerability Analysis

Solar flares can have far-reaching and disruptive consequences for both technological systems and human societies. These intense bursts of solar radiation can interfere with satellite operations, damaging critical components and disrupting communication, navigation, and weather-monitoring services that modern life depends on. Power grids are particularly vulnerable; strong geomagnetic storms induced by solar flares can overload transformers, leading to widespread outages, costly repairs, and significant economic losses for industries reliant on continuous power. Aviation is also affected, especially on polar routes, where radiation exposure and communication blackouts can force flight rerouting, resulting in delays, increased fuel costs, and logistical complications.

Human populations may experience indirect disruptions through the failure of essential services such as telecommunications, GPS-based emergency response systems, and even financial networks that rely on satellite synchronization. Public safety concerns emerge when emergency communication systems or transportation networks are compromised, reducing the ability to respond quickly to crises. Environmental impacts can arise as well, including disturbances to the ionosphere that affect animal navigation and subtle shifts in atmospheric chemistry. As society becomes increasingly interconnected and reliant on space-based technologies, the importance of understanding and preparing for solar flares grows. Strengthening infrastructure, improving space-weather forecasting, and developing resilience strategies are essential steps in mitigating the escalating risks posed by intense solar activity.

Estimated Impact and Potential Loss

Solar flares have the potential to create widespread impacts across Beauregard Parish due to their ability to disrupt electrical, communication, and satellite-dependent systems. With a population of approximately 36,550 residents and around 16,300 housing units, a severe geomagnetic storm triggered by a major solar flare could affect virtually every household and business in the parish. Critical infrastructure—such as the parish’s electrical grid, telecommunications networks, and the Beauregard Regional Airport—would be highly vulnerable to disturbances in power transmission and electronic systems. The local economy, which includes manufacturing, forestry, agriculture, and industrial operations, would likely experience significant interruptions if power outages or communication failures occurred, halting production and disrupting transportation and supply chains.

The financial impact of a major solar event could be substantial. A multi-week disruption of services might result in millions of dollars in lost economic productivity, particularly within the manufacturing sector, which employs nearly two thousand workers. Repairing damaged electrical infrastructure—especially transformers or grid equipment affected by geomagnetically induced currents—could add tens of millions of dollars to recovery costs. Additional impacts could include airport operational delays, downtime for broadband and cellular services, and heightened emergency response demands.

Beyond the direct financial burdens, the broader societal effects would be felt throughout Beauregard Parish. Residents could face extended periods without reliable electricity or communication services, complicating medical care, emergency response, and daily living. The strain placed on local governments and utility providers to restore services or upgrade systems could shape long-term resilience planning and budget priorities. In summary, while the exact monetary loss is difficult to quantify without a detailed engineering analysis, a severe solar flare could affect every resident and household in Beauregard Parish, disrupt key infrastructure, and impose economic losses potentially reaching into the tens of millions of dollars, underscoring the importance of preparedness and infrastructure hardening.

Vulnerable Population

Vulnerable populations in Beauregard Parish may face heightened and disproportionate challenges during a major solar flare or geomagnetic storm event, even though such events have not historically resulted in direct injuries or fatalities. Solar flares primarily disrupt technological systems rather than cause physical harm, but the resulting power outages, communication failures, and interruptions to essential services can significantly affect those with limited resources. Low-income households, elderly residents, individuals with medical dependencies, and those living in rural or isolated areas are particularly susceptible to the consequences of prolonged disruptions. Many of these residents may lack access to backup power, reliable communication alternatives, or the financial means to secure emergency supplies and equipment needed to withstand extended outages.

In Beauregard Parish, where a substantial portion of the population lives in rural communities, reliance on electricity for heating, cooling, water pumping, and medical devices means that a significant solar event could create life-threatening conditions for the most vulnerable. People with chronic health conditions that require refrigerated medications, powered medical devices, or regular access to healthcare facilities would face heightened risks if power and communication systems were compromised. Additionally, limited internet and cellular coverage in some areas could impede the dissemination of timely information, making it difficult for marginalized residents to receive warnings, updates, or assistance. Those with lower incomes may struggle to recover from economic impacts associated with lost wages, food spoilage, or equipment damage caused by outages, prolonging hardship long after services are restored.

Vulnerability Score

Table 2-41: Vulnerability Score for Solar Flares in Beauregard Parish.

Solar Flares Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	1	4	4	1	3	2.65

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.

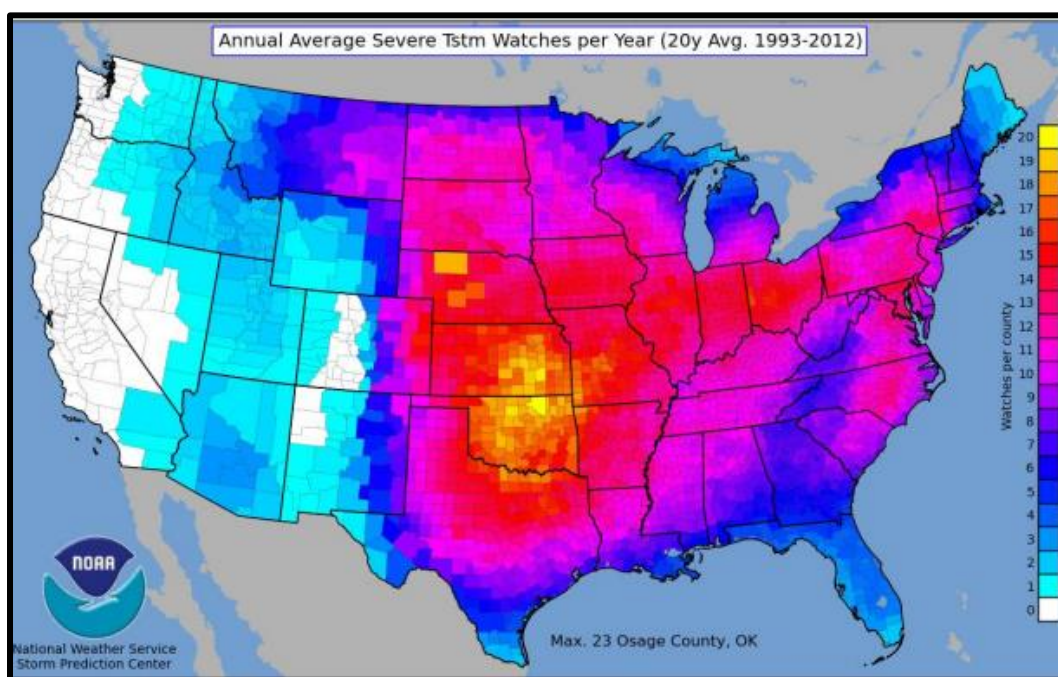


*Figure 2-20: County-Level Severe Thunderstorm Watches Issued Per Year on Average.
(Source: NOAA)*

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 21st 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 2-42: TORRO Hailstorm Intensity Scale.

Intensity Category		Hail Diameter (mm)	Probable Kinetic Energy	Typical Damage Impacts
H0	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
H8	Destructive	60 - 90		Severe damage to aircraft bodywork
H9	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 2-43: 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
1 3/4"	Golf Ball
2"	Hen Egg / Lime
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.

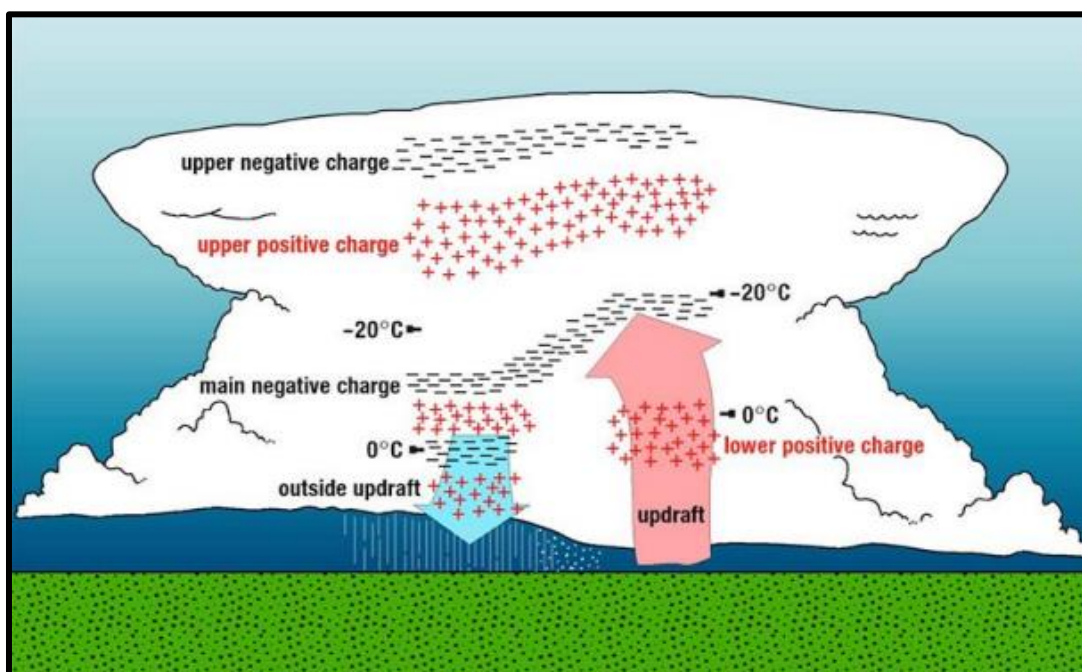


*Figure 2-21: Charge Distribution in a Typical Storm Cloud.
(Source: The National Severe Storms Laboratory)*

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 below outlines the lightning activity level and intensity scale:

Table 2-44: Lightning Activity Level (LAL) Grids.

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 three-tenths 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 2-45: 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 2-46: Beaufort Wind Scale.
(Source: NOAA's SPC)*

Beaufort Wind Scale			
Force	Wind (MPH)	WMO Classification	Appearance of Wind Effects on Land
			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 2.75 inches in diameter.

Previous Occurrences

The parish experienced 80 hail occurrences between the years 1996 and 2025. Since the last update, there have been 15 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 2-47: Historical Thunderstorm Hail Occurrences in Beauregard Parish since the last update.
(Source: National Centers for Environmental Information)*

Date	Hail Size (inches)	Property Damage	Crop Damage	Fatalities	Injuries
5/19/2019	1.25	\$0	\$0	0	0
5/19/2019	1.25	\$0	\$0	0	0
5/19/2019	1	\$0	\$0	0	0
2/5/2020	1	\$0	0	0	0
2/5/2020	1.25	\$0	\$0	0	0
5/5/2020	1	\$0	\$0	0	0
5/5/2020	1	\$0	\$0	0	0
5/8/2020	1	\$0	\$0	0	0

Date	Hail Size (inches)	Property Damage	Crop Damage	Fatalities	Injuries
5/26/2020	1.75	\$0	0	0	0
5/26/2020	1.75	\$0	0	0	0
5/26/2020	1	\$0	0	0	0
3/26/2023	1.5	\$0	0	0	0
3/26/2023	1.5	\$0	0	0	0
7/17/2023	1	\$0	0	0	0
5/12/2024	1.5	\$1,000	0	0	0

Probability

The annual return rate (frequency) for hail occurrences in the parish is 2.67 (100% annual probability) or approximately two to three hail occurrences every year.

- Annual Return Rate (Frequency): 2.67, which represents a 100% likelihood of an event happening in any given year.
- Average Interval Between Events: On average, two to three hail events occur approximately every year. This is the inverse of the return rate ($1 / 2.67 = 0.37$ years)

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

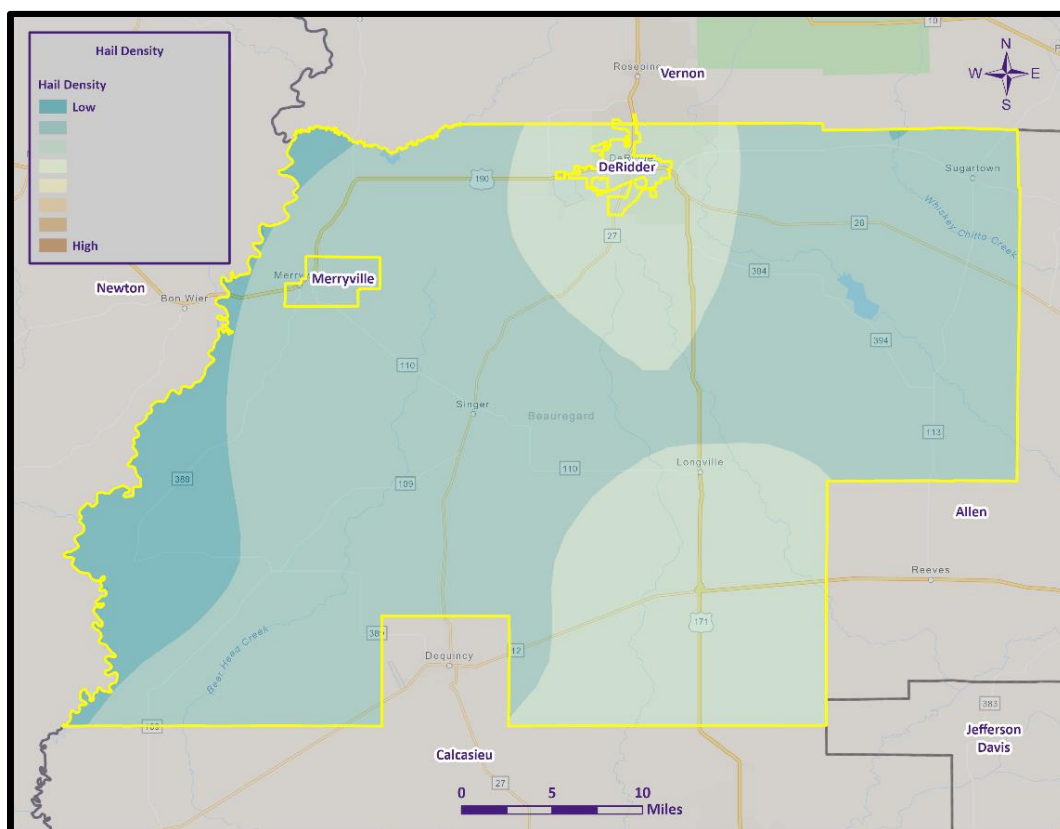


Figure 2-22: Density of Hailstorms by Diameter from 1950-2024.
(Source: National Weather Service)

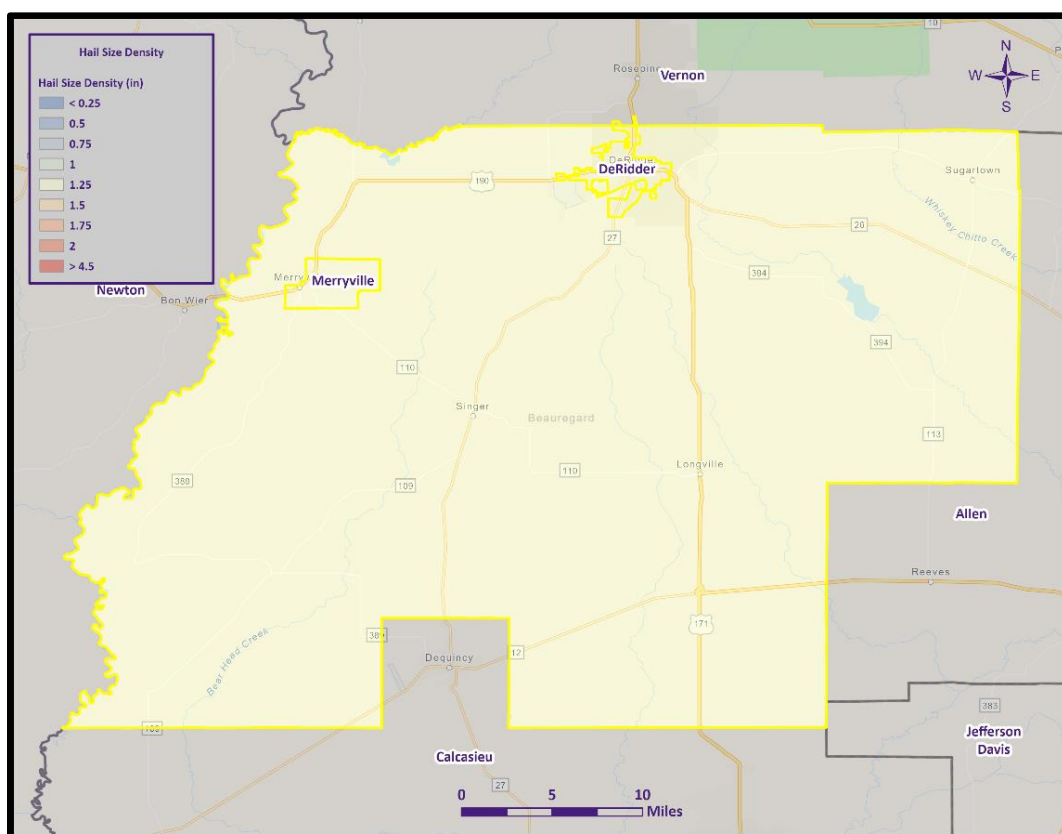


Figure 2-23: Hail Size Probability in Inches for Beauregard Parish.
(Source: National Weather Service)

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 four 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 0.13 (13% annual probability) or approximately one lightning occurrence every seven to eight years.

- Annual Return Rate (Frequency): 0.13, which represents a 13% likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one lightning event occurs approximately every seven to eight years. This is the inverse of the return rate ($1 / 0.13 = \sim 7.69$ 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 74 knots.

Previous Occurrences

The parish experienced 152 thunderstorm wind occurrences between the years 1996 and 2025. Since the last update, there have been 33 thunderstorm wind occurrences within the boundaries of the parish.

*Table 2-48: Historical Thunderstorm Wind Occurrences in Beauregard Parish since the Last Update.
(Source: National Centers for Environmental Information)*

Date	Magnitude (knots)	Property Damage	Crop Damage	Fatalities	Injuries
4/28/2020	50	\$25,000	\$0	0	0
5/5/2020	50	\$2,000	\$0	0	0
5/5/2020	50	\$3,000	\$0	0	0
5/5/2020	50	\$3,000	\$0	0	0
6/28/2020	50	\$3,000	\$0	0	0
8/16/2020	50	\$2,000	\$0	0	0
8/16/2020	50	\$2,000	\$0	0	0
12/18/2021	50	\$2,000	\$0	0	0
12/18/2021	50	\$2,000	\$0	0	0
12/18/2021	50	\$15,000	\$0	0	0
12/18/2021	50	\$4,000	\$0	0	0
11/11/2022	50	\$2,000	\$0	0	0
2/8/2023	50	\$10,000	\$0	0	0
7/17/2023	50	\$2,000	\$0	0	0
7/17/2023	50	\$2,000	\$0	0	0
7/22/2023	50	\$1,000	\$0	0	0
8/27/2023	50	\$2,000	\$0	0	0
8/27/2023	74	\$10,000	\$0	0	0
9/8/2023	50	\$10,000	\$0	0	0
1/8/2024	50	\$2,000	\$0	0	0
4/9/2024	50	\$2,000	\$0	0	0
5/12/2024	50	\$3,000	\$0	0	0
5/16/2024	50	\$5,000	\$0	0	0
5/16/2024	50	\$5,000	\$0	0	0
5/16/2024	50	\$1,000	\$0	0	0
5/29/2024	50	\$1,000	\$0	0	0
5/30/2024	50	\$5,000	\$0	0	0
5/30/2024	50	\$2,000	\$0	0	0
5/30/2024	50	\$0	\$0	0	0
12/26/2024	50	\$20,000	\$0	0	0
5/2/2025	50	\$0	\$0	0	0
5/2/2025	50	\$1,000	\$0	0	0
5/6/2025	10	\$1,000	\$0	0	0

Probability

The annual return rate (frequency) for thunderstorm wind occurrences in the parish is 5.06 (100% annual probability) or approximately five to six thunderstorm wind occurrences every year.

- Annual Return Rate (Frequency): 5.06, which represents a 100% likelihood of an event happening in any given year.
- Average Interval Between Events: On average, five to six wind events occur every year. This is the inverse of the return rate ($1 / 5.06 = \sim 0.19$ years)

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

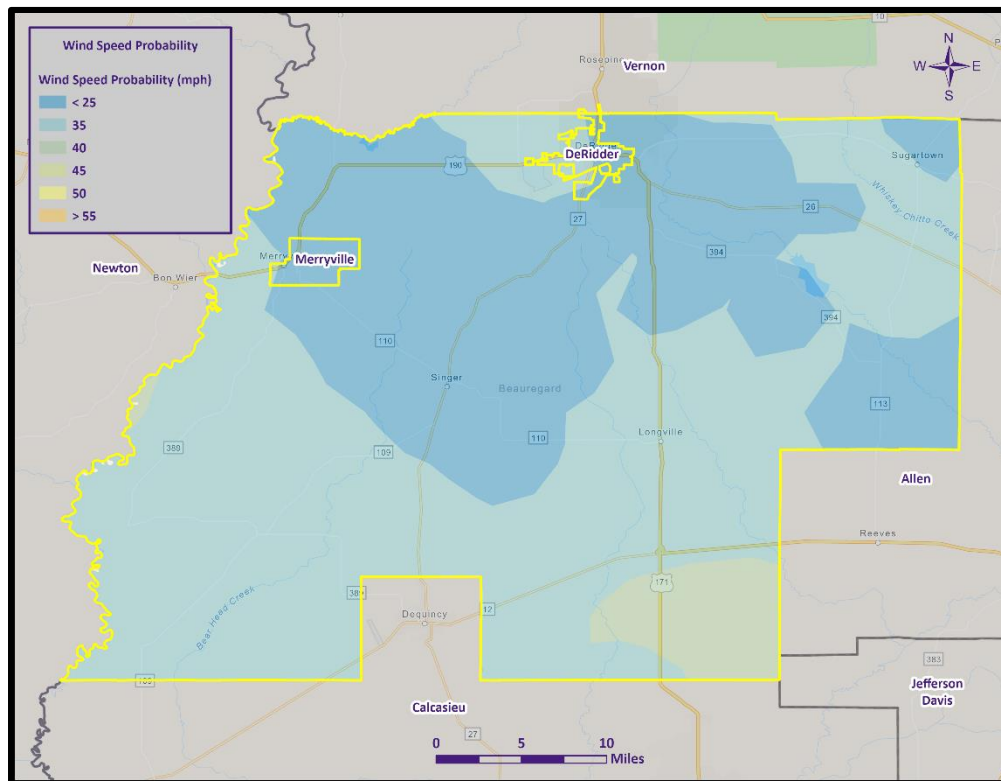


Figure 2-24: Thunderstorm High Wind Speed Probability in Miles Per Hour for Beauregard Parish.
(Source: National Weather Service)

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 2-49: National Risk Index (NRI) Summarization of Hail Occurrences for Beauregard 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 80 significant hail occurrences per the NCEI Storm Events Database. The total property damage associated with these storms totaled approximately \$1,000. 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 \$13 and \$33 per event. The following table provides an estimate of potential property losses for Beauregard Parish:

Table 2-50: Estimated Annual Property Losses in Beauregard Parish resulting from Hail Damage.

Estimated Annual Potential Losses from Hail Damage		
Beauregard Parish	DeRidder	Merryville
\$24	\$9	\$1

Vulnerable Population

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

Vulnerability Score

Table 2-51: Vulnerability Score for Hail in Beauregard Parish.

Hail Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	4	2	3	3	1	2.7

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 2-52: National Risk Index (NRI) Summarization of Lightning Occurrences for Beauregard 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 four significant lightning occurrences per the NCEI Storm Events Database. The total property damage associated with this storm totaled approximately \$35,000. 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 \$1,167 and \$8,750 per event. The following table provides an estimate of potential property losses for Beauregard Parish:

Table 2-53: Estimated Annual Property Losses in the Parish resulting from Lightning Damage.

Estimated Annual Potential Losses from Lightning Damage		
Beauregard Parish	DeRidder	Merryville
\$824	\$312	\$30

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 2-54: Vulnerability Score for Lightning in Beauregard Parish.

Lightning Vulnerability 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 2-55: 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 152 significant thunderstorm wind occurrences per the NCEI Storm Events Database. The total property damage associated with these storms totaled approximately \$1,335,000. 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 \$8,783 and \$44,500 per event. The following table provides an estimate of potential property losses for the Parish:

Table 2-56: Estimated Annual Property Losses in Beauregard Parish resulting from Thunderstorm Wind Damage.

Estimated Annual Potential Losses from Wind Damage		
Beauregard Parish	DeRidder	Merryville
\$31,424	\$11,915	\$1,161

Vulnerable Population

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

Vulnerability Score

Table 2-57: Vulnerability Score for Thunderstorm Wind in Beauregard Parish.

Thunderstorm Wind Vulnerability 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.

Table 2-58: Comparison of the Enhanced Fujita (EF) Scale to the Fujita (F) Scale.

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

Table 2-59: Fujita and Enhanced Fujita Tornado Damage Scale.

Scale	Typical Damage
F0/EF0	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 off 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.

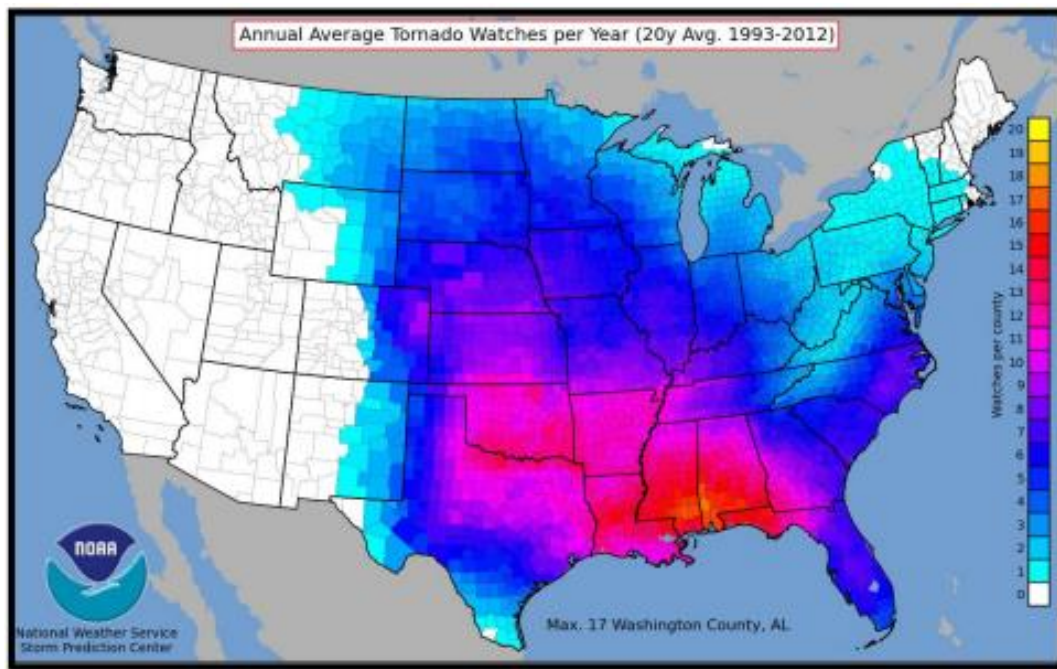


Figure 2-25: County-Level Tornado Watches Issued Per Year on Average
(Source: NOAA SPC)

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 EF3 tornado.

Previous Occurrences

The parish experienced 43 tornado occurrences between the years 1996 and 2025. Since the last update, there have been five tornado occurrences within the boundaries of the parish. The following table provides a summary of the events that have occurred in the parish since the last update.

*Table 2-60: Historical Tornado Occurrences in Beauregard Parish since the Last Update.
(Source: National Centers for Environmental Information)*

Date	Magnitude	Property Damage	Crop Damage	Fatalities	Injuries
5/5/2020	EF1	\$250,000	\$0	0	0
10/27/2021	EF1	\$5,000	\$0	0	0
1/24/2023	EF2	\$500,000	\$0	0	3
1/24/2023	EF1	\$20,000	\$0	0	0
12/28/2024	EF1	\$5,000	\$0	0	0

Probability

The annual return rate (frequency) for tornado events in the parish is 1.43, which means there is a 100% probability of one to two events occurring every year over the long term.

- Annual Return Rate (Frequency): 1.43 (100%), which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one to two tornado events are expected to occur approximately every year. This is the inverse of the return rate ($1 / 1.43 = \sim 0.69$ years)

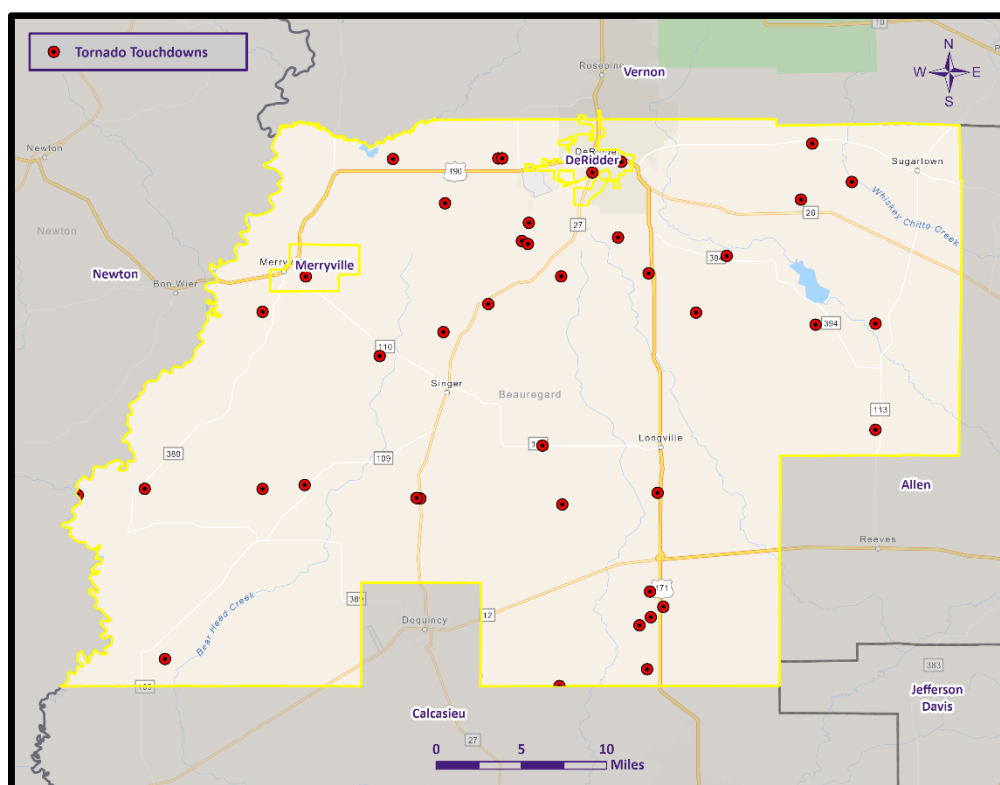


*Figure 2-26: Location of Tornadoes to Touchdown in the Parish
(Source: National Centers for Environmental Information)*

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 2-61: National Risk Index (NRI) Summarization of Tornado 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 43 significant tornado occurrences per the NCEI Storm Events Database. The total property damage associated with these storms totaled approximately \$6,557,000. 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 \$218,567 and \$152,488 per event. The following table provides an estimate of potential property losses for the Parish:

*Table 2-62: Estimated Annual Losses Due to Tornadoes in the Parish.
(Source: Hazus)*

Estimated Annual Potential Losses Due to Tornadoes		
Unincorporated BP	DeRidder	Merryville
\$154,343	\$58,521	\$5,702

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 2-63: 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	Mobile Homes (%)
2,409,057	266,642	77,994	14,465	79,602	27,311	26,406	30.5%

Vulnerable Population

Per the NCEI Storm Events Database, there have been no reported fatalities and 16 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 30.5% of all housing in the Parish consists of manufactured housing.

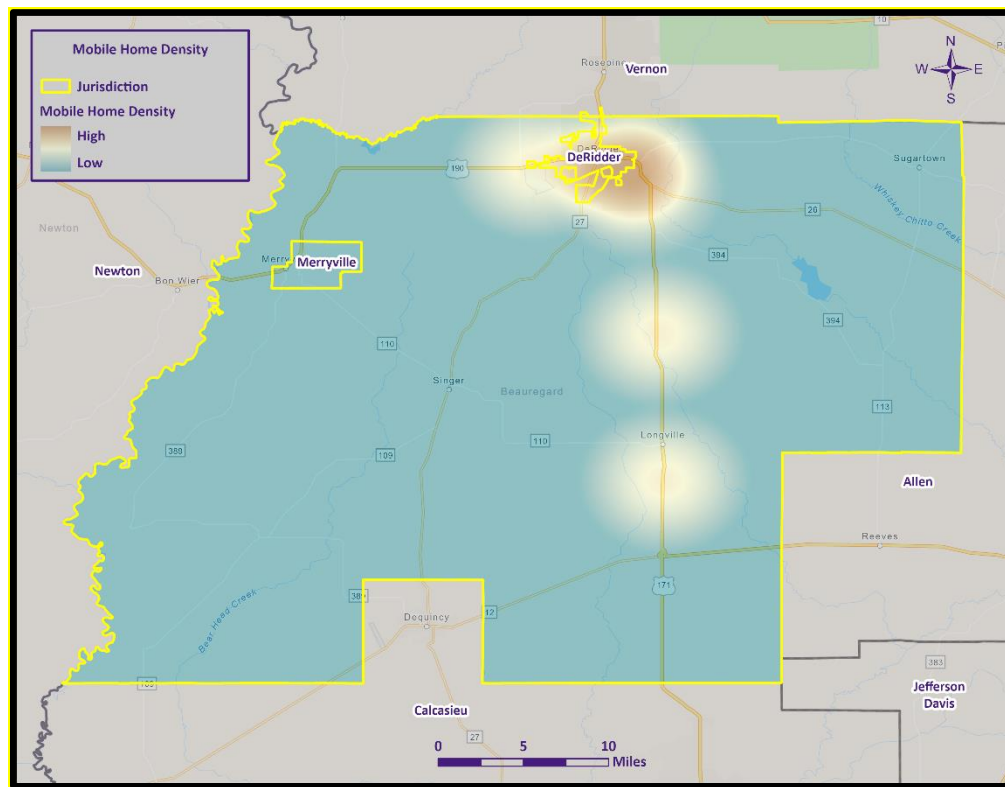


Figure 2-27: Density of Manufactured Homes in the Parish

Vulnerability Score

Table 2-64: Tornado Vulnerability Score for the Parish.

Tornado Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	4	3	2	4	3	3.2

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.

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 1st and ends November 30th. 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.

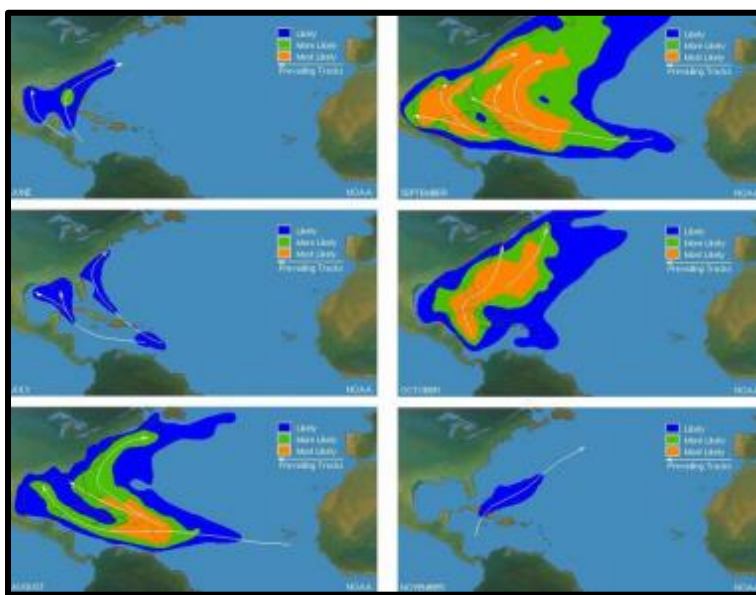


Figure 2-28: Areas of Likely Hurricane Formation and Tracking
(Source: NOAA NHC)

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.

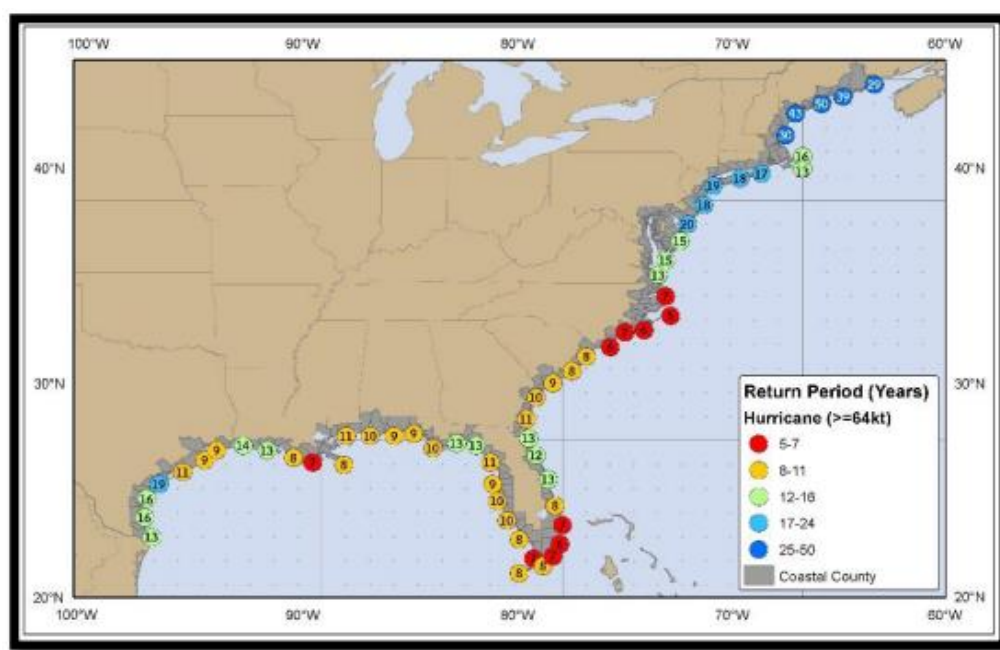


Figure 2-29: Hurricane Return Periods for the Atlantic Basin (USA)
(Source: NOAA NHC)

Table 2-65: 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 3 hurricane.

Previous Occurrences

The parish has experienced eight 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.

*Table 2-66: Historical Tropical Cyclone Occurrences in the Parish since the Last Update.
(Source: National Centers for Environmental Information)*

Date	Magnitude	Name	Property Damage	Crop Damage	Fatalities	Injuries
8/26/2020	Hurricane	Laura	\$1,000,000,000	\$0	0	0
10/9/2020	Tropical Storm	Delta	\$100,000,000	\$0	0	0

Hurricane Laura (2020)

Laura began as a large tropical wave that emerged off the west coast of Africa on August 16th. The wave traversed the tropical Atlantic for the next several days with little additional organization. On August 19th, the system became better organized, closed off a low-level circulation, and subsequently the National Hurricane Center began issuing advisories on Tropical Depression Thirteen late that evening.

On the morning of August 21st, Tropical Depression Thirteen strengthened into Tropical Storm Laura, which was the earliest twelfth named Atlantic storm, beating the previous record of Hurricane Luis of 1995 by eight days. As Laura moved westward, little additional strengthening took place as the center moved over the northern Lesser Antilles later that evening, and south of Puerto Rico on August 22nd. Early on August 23rd, Tropical Storm Laura made landfall across Hispaniola, traversed the entire island, and made landfall across Eastern Cuba later that evening. Tropical Storm Laura continued west northwestward, traveling just south of the island with a second landfall across Western Cuba late on August 24th.

On August 25th, Laura entered the Gulf of Mexico and became a Category 1 hurricane at 10 AM CDT. Laura began to explosively intensify on August 26th, reaching category 2 by 1 AM CDT, category 3 by 7 AM CDT, and category 4 by 1 PM CDT. Laura reached a peak intensity of 150 mph (130 knots) and a minimum central pressure of 937 millibars (27.67 inches of mercury) by 8 PM CDT.

With little change in strength, Laura made landfall at Cameron, Louisiana around 1 AM CDT August 27th, with sustained winds of 150 mph (130 knots) and a minimum central pressure of 938 millibars (27.70 inches of mercury). Laura was the strongest hurricane to strike Southwest Louisiana since records began in 1851. Laura slowly weakened after landfall but maintained major hurricane status throughout its passage across Cameron, Calcasieu, and southern Beauregard Parishes, and category 2 status across northern Beauregard and Vernon parishes as daybreak approached on August 27th. Laura finally weakened below hurricane strength by Noon as it was crossing I-20 in North Louisiana. With this being the strongest hurricane to affect Southwest Louisiana, wind damage to buildings and trees was major to catastrophic across Cameron and Calcasieu parishes, with considerable damage across Beauregard and Vernon parishes where the core of the hurricane passed.

The National Weather Service in Lake Charles, Louisiana recorded a station record highest peak wind gust of 116 knots (133 mph) at 1:42 AM CDT before the Automated Surface Observing System (ASOS) wind equipment failed. However, the ASOS barometer sensor that was safely within the NWS building (which received very little damage)

recorded a station record minimum sea level pressure of 956 millibars (28.23 inches of mercury) at 2:20 AM CDT when the eye of Hurricane Laura passed nearly overhead.

A total of 33 fatalities occurred throughout the state with four of them coming from falling trees. They included a 14-year-old girl in Vernon Parish, a 68-year-old man in Acadia Parish, a 51-year-old man in Jackson Parish, and a 64-year-old man in Allen Parish. Carbon monoxide poisoning from generators being inside homes, which is strongly discouraged, led to the deaths of twelve people in Calcasieu Parish and two people in Allen Parish. Another man died of drowning while aboard a sinking boat during the storm.

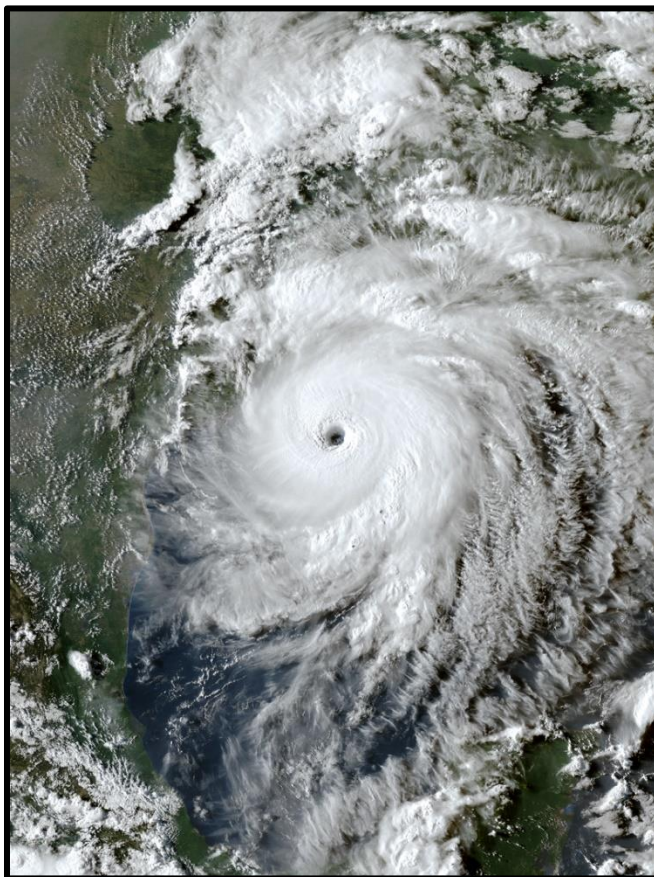


*Figure 2-30: Hurricane Laura in the Gulf Coast Area.
(Source: NOAA)*

In Beauregard Parish, there was a voluntary evacuation for the parish. Numerous trees, power lines, and power poles were blown down across the parish. Homes and businesses were damaged by fallen trees or by wind. All of the parish was without power immediately after the storm. Two indirect deaths due to heat-related stress. Wind gusts ranged from 110 to 130 mph.

Tropical Storm Delta (2020)

Hurricane Delta was the record-tying fourth named storm of 2020 to strike Louisiana, as well as the record-breaking tenth named storm to strike the United States in that year. The twenty-sixth tropical cyclone, twenty-fifth named storm, ninth hurricane, and third major hurricane of the record-breaking 2020 Atlantic hurricane season, Delta formed from a tropical wave which was first monitored by the National Hurricane Center on October 1. As it tracked across the western Caribbean, it rapidly intensified into a Category 4 hurricane. In fact, intensifying from tropical depression to Category strength in 40 hours is the fastest rate of intensification of any storm on record in the Atlantic Basin and was accomplished by Delta. Delta quickly weakened to a Category 1 hurricane after making its first landfall on the Yucatan Peninsula. It gradually recurved north towards the Louisiana coastline, fluctuating in intensity between categories 2 and 3.



*Figure 2-31: Hurricane Delta in the Gulf Coast Area.
(Source: NOAA)*

Hurricane Delta made landfall around 5 pm as a category 2 storm east of Cameron, Louisiana or about 15 miles east of where category 4 Hurricane Laura made landfall just a couple of months earlier of the same year. Local impacts included 50 to 70 mph wind gusts across the area, storm surge of 2 to 3 feet above ground, and widespread tree and structural damage. There were six injuries due to Hurricane Delta. In addition, outer bands of Delta produced a significant amount of rainfall on the north side of Baton Rouge Metro. Upwards of five to 10 inches of rain fell, causing street flooding in Baton Rouge and moderate river flooding in the region. Delta caused approximately \$100 million worth of damage across southeast Louisiana.

In Beauregard Parish, wind gusts of around 75 mph and heavy rainfall led to numerous downed trees and power lines across the parish. Mostly minor flooding was encountered across the parish; however, heavier rain fell in the eastern sections, and totals ranged from 5 to 15 inches. Bundick Creek reached moderate flood stage.

Probability

The annual return rate (frequency) for hurricane events in the parish is 0.36, which means there is a 36% probability of a tropical cyclone event occurring in any given year. This translates to an average of one tropical cyclone event occurring approximately every two to three years over the long term.

- Annual Return Rate (Frequency): 0.36 (36%), 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 two to three years. This is the inverse of the return rate ($1 / 0.36 = \sim 2.77$ 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 2030. 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 2-67: 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	15,968	11,178	11,766	12,385
Value of Structures	\$2,956,239,833	\$2,069,367,883	\$2,272,167,613	\$2,541,929,833
# of People	36,646	25,675	25,789	25,926

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 2-68: National Risk Index (NRI) Summarization of Hurricane Occurrences for the Parish

(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively Low	Relatively Low

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 2-69: Total Estimated Losses for a 100-Year Hurricane Event

(Source: Hazus)

Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event
Unincorporated Beauregard Parish	\$13,917,841
DeRidder	\$5,277,141
Merryville	\$514,161

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 2-70: 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 Beauregard Parish	\$13,917,841	\$1,587,766,000	0.88%
DeRidder	\$5,277,141	\$1,187,604,000	0.44%
Merryville	\$514,161	\$78,222,000	0.66%

Based on the Hazus Hurricane Model, estimated total losses for the parish are between 0.4% and 0.9% 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 are listed by sector in the tables on the next page.

*Table 2-71: Estimated Losses in Unincorporated Beauregard Parish for a 100-Year Hurricane Event
(Source: Hazus)*

Unincorporated BP	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$24,916
Commercial	\$245,672
Government	\$7,959
Industrial	\$39,562
Religious / Non-Profit	\$66,263
Residential	\$13,516,901
Schools	\$16,570
Total	\$13,917,841

*Table 2-72: Estimated Losses in DeRidder for a 100-Year Hurricane Event
(Source: Hazus)*

DeRidder	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$9,447
Commercial	\$93,150
Government	\$3,018
Industrial	\$15,000
Religious / Non-Profit	\$25,124
Residential	\$5,125,119
Schools	\$6,283
Total	\$5,277,141

*Table 2-73: Estimated Losses in Merryville for a 100-Year Hurricane Event
(Source: Hazus)*

Merryville	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$920
Commercial	\$9,076
Government	\$294
Industrial	\$1,462
Religious / Non-Profit	\$2,448
Residential	\$499,349
Schools	\$612
Total	\$514,161

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

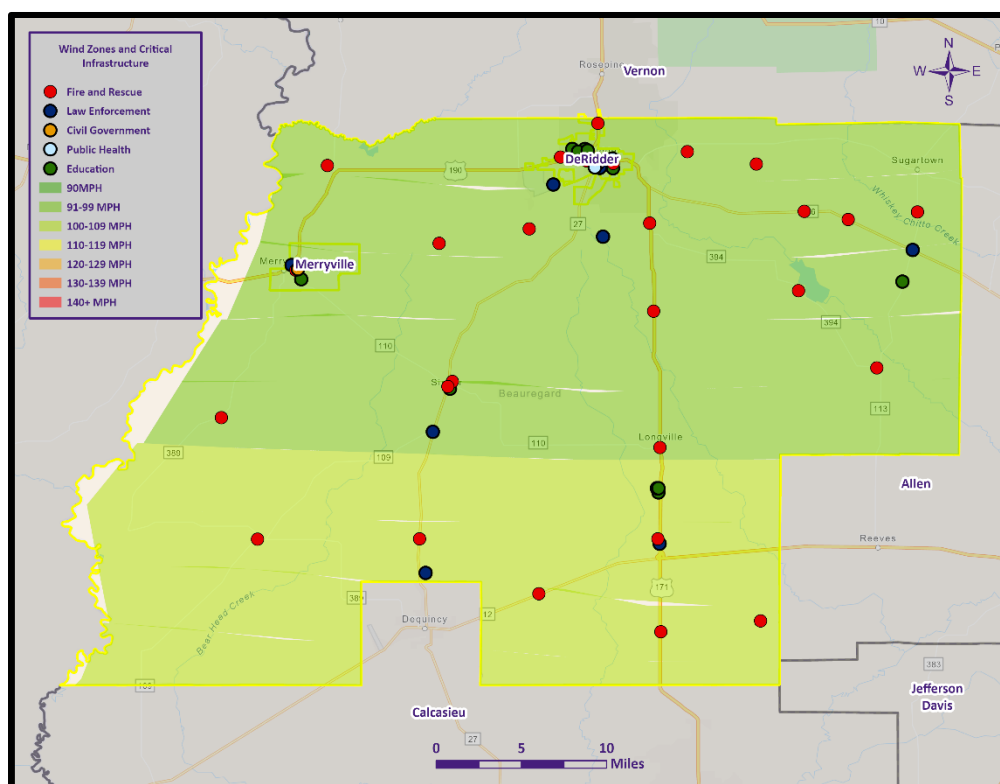


Figure 2-32: Winds Zones for the Parish in Relation to Critical Facilities
(Source: Louisiana State Hazard Mitigation Plan)

Vulnerable Population

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

Table 2-74: 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 Beauregard Parish	25,878	25,878	100.0%
DeRidder	9,812	9,812	100.0%
Merryville	956	956	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 2-75: Vulnerable Populations in the Unincorporated Areas of the Parish for a 100-Year Hurricane Event
(Source: Hazus)*

Unincorporated Beauregard Parish		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	25,878	100.0%
Persons Under 5 Years	1,760	6.8%
Persons Under 18 Years	6,547	25.3%
Persons 65 Years and Over	4,140	16.0%
White	20,728	80.1%
Minority	5,150	19.9%

*Table 2-76: Vulnerable Populations in DeRidder for a 100-Year Hurricane Event
(Source: Hazus)*

DeRidder		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	9,812	100.0%
Persons Under 5 Years	638	6.5%
Persons Under 18 Years	2,237	22.8%
Persons 65 Years and Over	1,756	17.9%
White	5,220	53.2%
Minority	4,592	46.8%

*Table 2-77: Vulnerable Populations in Merryville for a 100-Year Hurricane Event
(Source: Hazus)*

Merryville		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	956	100.0%
Persons Under 5 Years	62	6.5%
Persons Under 18 Years	216	22.6%
Persons 65 Years and Over	171	17.9%
White	758	79.3%
Minority	198	20.7%

Vulnerability Score

Table 2-78: Hurricane Vulnerability Score for Beauregard Parish.

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

Wildfires

Profile

A wildfire is combustion in a natural setting, marked by flames or intense heat. Most frequently, wildfires are ignited by lightning or unintentionally by humans. Fires set purposefully (but lawfully) are referred to as controlled fires or burns. There are three different types of wildfires: (1) Ground fires burn primarily in the thick layers of organic matter directly on the forest floor and even within the soil. Ground fires destroy root networks, peat, and compact litter. These fires spread extremely slowly and can smolder for months. (2) Surface fires burn litter (e.g., leaves, small sticks) and vegetative matter in the underbrush of a forest. (3) Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees. There are two types of crown fires: (a) passive (or dependent) crown fires rely on heat transfer from surface fire, whereas (b) active (or independent) crown fires do not require any heat transfer from below. Active crown fires tend to occur with greater tree density and drier conditions. A firestorm is a mass crown fire (also called a running crown fire, area fire, or conflagration). They are large, continuous, intense fires that lead to violent convection. They are characterized by destructively violent surface in-drafts near and beyond their perimeter. Crown fires are the most damaging and most difficult to contain. The intensity of crown fires enables the fire to produce its own wind gusts. These so-called fire whirls can move embers ahead of the fire front and ignite new fires. Fire whirls are spinning vortex columns of ascending hot air and gases rising from the fire. Large fire whirls have the intensity of a small tornado.

The conditions conducive to the occurrence of wildfires are not distributed equally across the United States. Wildfires have a much greater likelihood of occurring in the western part of the country. Although less frequent than in other areas, wildfires do occur in Louisiana. Wildfire danger can vary greatly season to season, and is exacerbated by dry weather conditions. Factors that increase susceptibility to wildfires are the availability of fuel (e.g., litter and debris), topography (i.e., slope and elevation affect various factors like precipitation, fuel amount, and wind exposure), and specific meteorological conditions (e.g., low rainfall, high temperatures, low relative humidity, and winds). The potential for wildfire is often measured by the Keetch–Byram Drought Index (KBDI), which represents the net effect of evapotranspiration and precipitation in producing cumulative moisture deficiency in the soil. The KBDI aims to measure the amount of precipitation needed to return soil to its full field capacity, with KBDI values ranging from 0 (moist soil) to 800 (severe drought).

The wildland-urban interface and intermix land cover surface, developed by the SILVIS Lab at the University of Wisconsin in Madison, can be used to determine areas at risk. Wildland-urban interface is defined as the zone of transition between unoccupied land and human development. This usually includes communities or areas of human development that are within 0.5 miles of the zone. Wildland-urban intermix is defined as areas in which human development is intermixed with wildland fuels. Intermix and interface areas are at risk of wildfires.

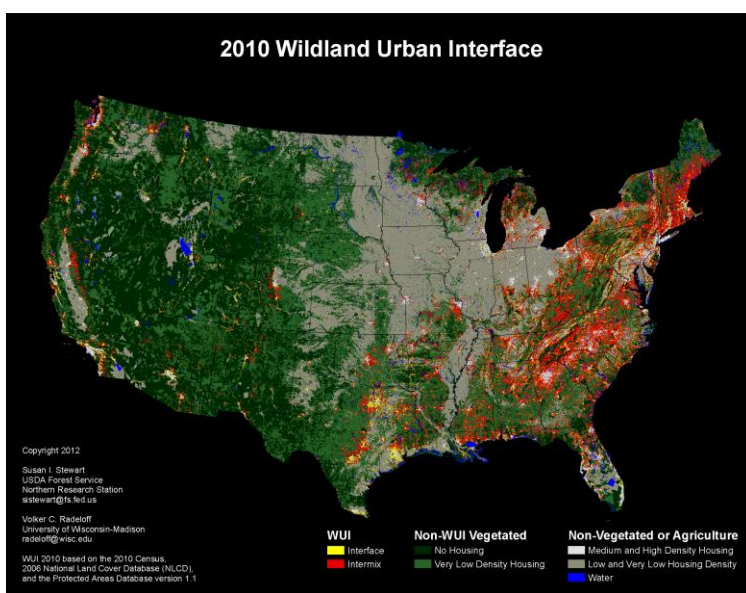


Figure 2-33: Contiguous USA Wildland Urban Interface Map.

According to the State of Louisiana Forestry Division, most forest fires in Louisiana are caused by intentional acts (arson) or carelessness and negligence committed by people, exacerbated by human confrontation with nature. The wildland–urban interface is the area in which development meets wildland vegetation, where both vegetation and the built environment provide fuel for fires. As development near wildland settings continues, more people and property are exposed to wildfire danger.

The Southern Group of State Foresters developed the Southern Wildfire Risk Assessment Portal to create awareness among the public and government sectors about the threat of wildfires in their areas. The Southern Wildfire Assessment Portal allows users to identify areas that are most prone to wildfires. The table on the next page summarizes the intensity levels assigned to areas in the Southern Wildfire Assessment Portal.

*Table 2-79: Southern Group of State Foresters Wildfire Intensity Scale.
(Source: Southern Wildfire Assessment Portal)*

Fire Intensity	
Level	Definition
1	Lowest Intensity: Minimal direct wildfire impacts. Location has a minimal chance of being directly impacted by a wildfire.
2	Low Intensity: Small flames usually less than two feet long; small amount of very short-range spotting possible. Fires are easy to suppress.
3	Moderate Intensity: Flames up to eight feet in length; short-range spotting is possible.
4	High Intensity: Large flames up to 30 feet in length; short-range spotting common; medium range spotting possible.
5	Highest Intensity: Very large flames up to 150 feet in length; profuse short-range spotting, frequent long-range spotting; strong fire induced winds.

Risk Assessment

Geographic Extent

Wildfires impact areas that are populated with forests and grasslands. The worst-case scenario for the unincorporated area of the parish and the incorporated areas of DeRidder and Merryville is a level 4. The figures on the following pages display the areas of wildland-urban interface and intermix in the Parish and the jurisdictions.

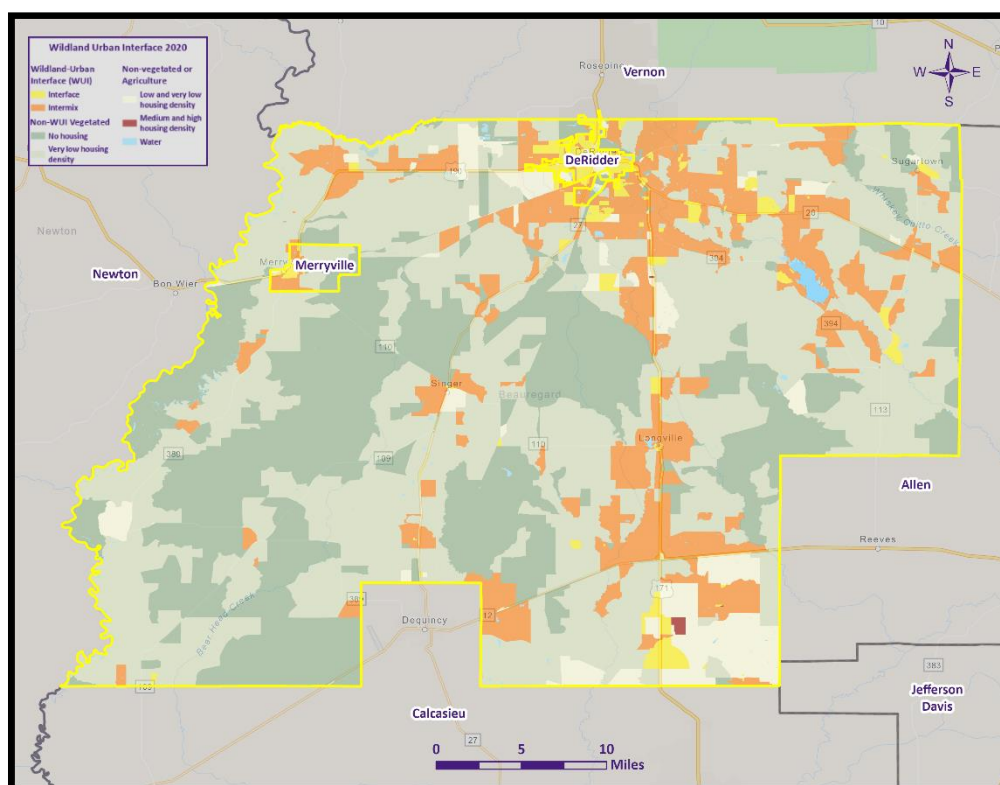


*Figure 2-34: Wildland-Urban Interaction in the Parish.
(Source: U.S. Forest Service)*

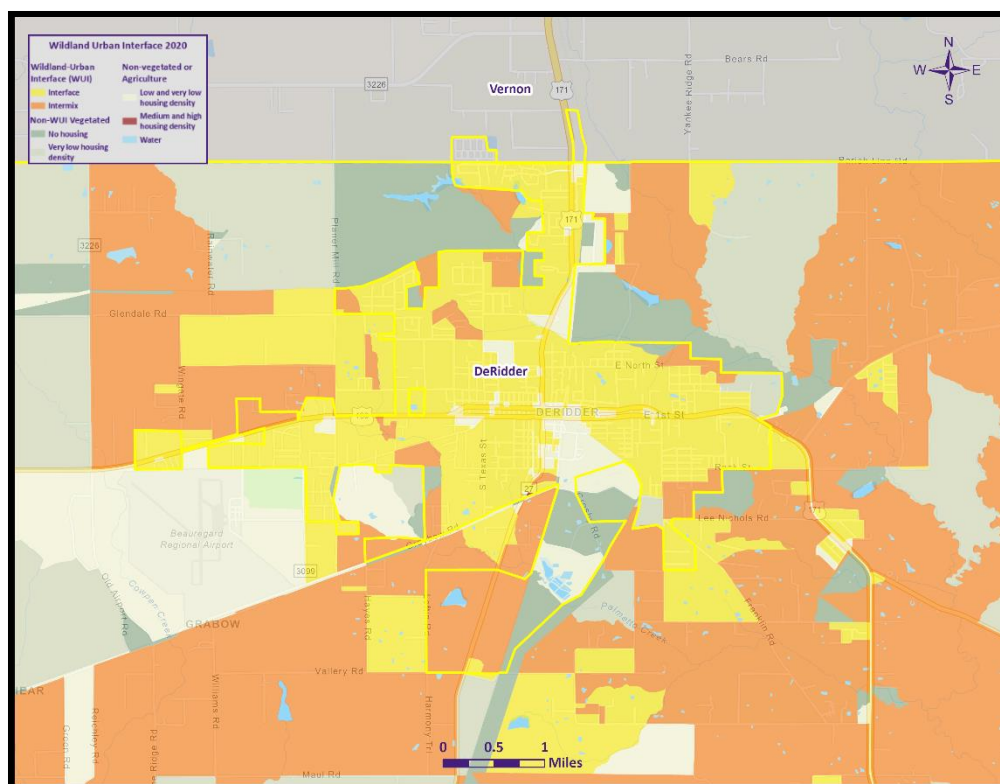


*Figure 2-35: Wildland-Urban Interaction in DeRidder.
(Source: U.S. Forest Service)*

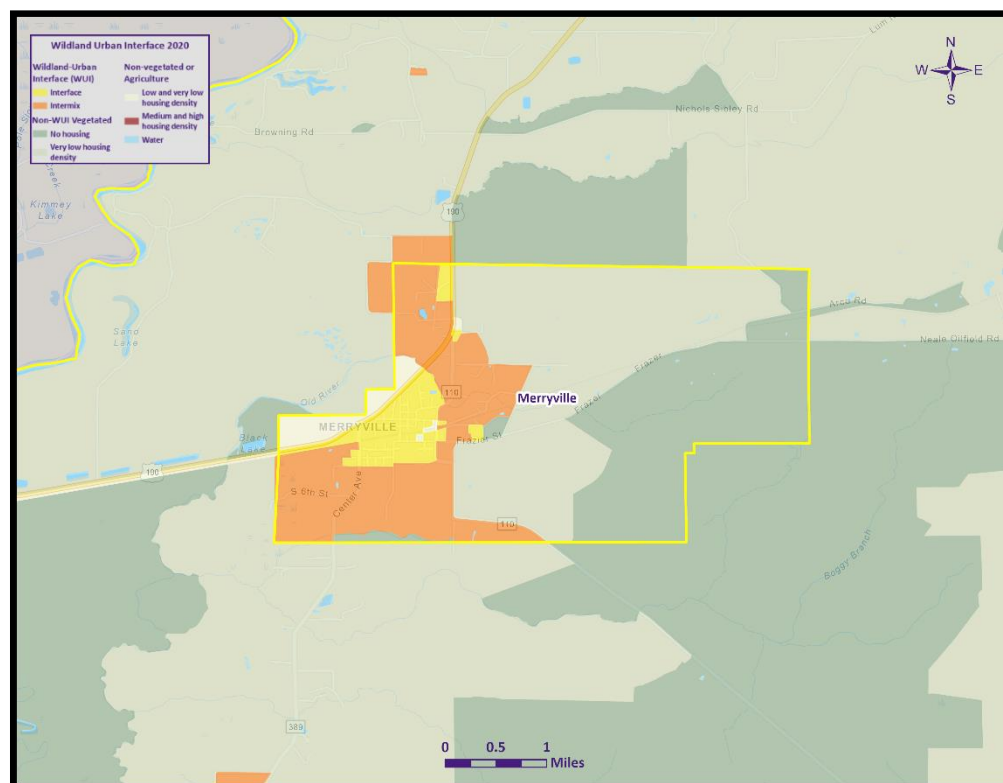


Figure 2-36: Wildland-Urban Interaction in Merryville.
(Source: U.S. Forest Service)

The following figures provide information on the homes at risk and the likelihood of occurrence.

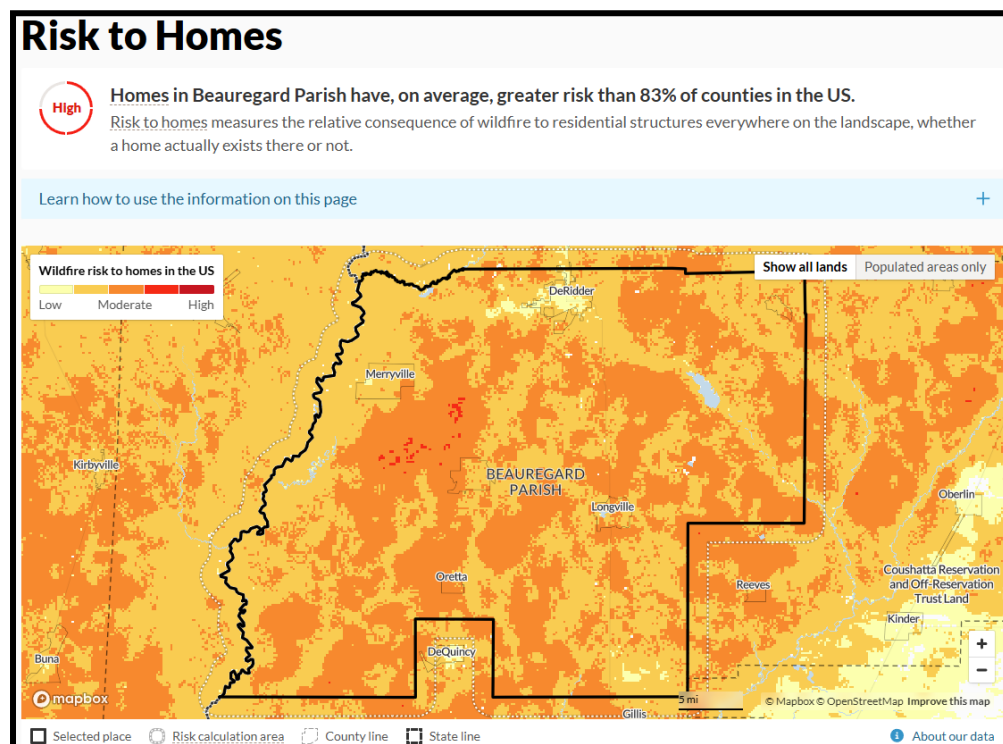


Figure 2-37: Homes in Beauregard Parish at Risk to Wildfires.
(Source: U.S. Forest Service)

Risk to Homes



Homes in DeRidder have, on average, greater risk than 82% of communities in the US.

Risk to homes measures the relative consequence of wildfire to residential structures everywhere on the landscape, whether a home actually exists there or not.

Learn how to use the information on this page

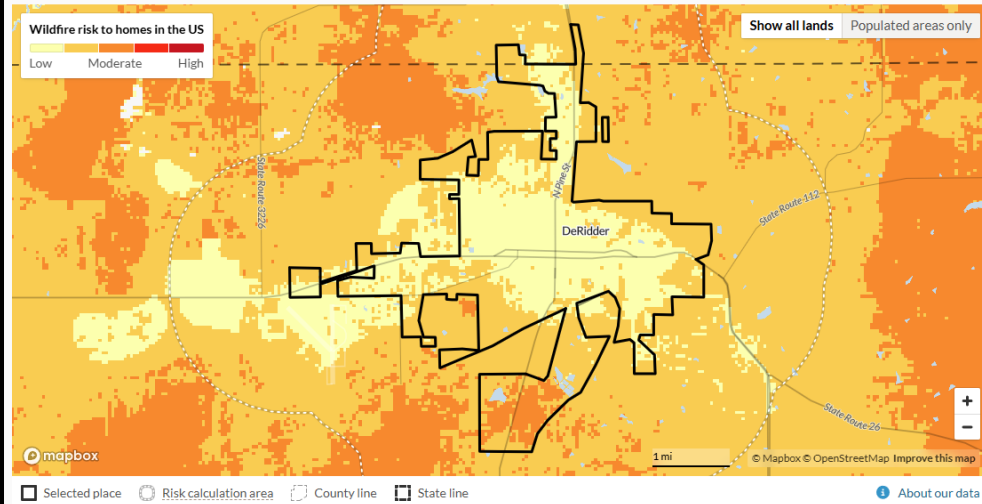


Figure 2-38: Homes in DeRidder at Risk to Wildfires.
(Source: U.S. Forest Service)

Risk to Homes



Homes in Merryville have, on average, greater risk than 84% of communities in the US.

Risk to homes measures the relative consequence of wildfire to residential structures everywhere on the landscape, whether a home actually exists there or not.

Learn how to use the information on this page

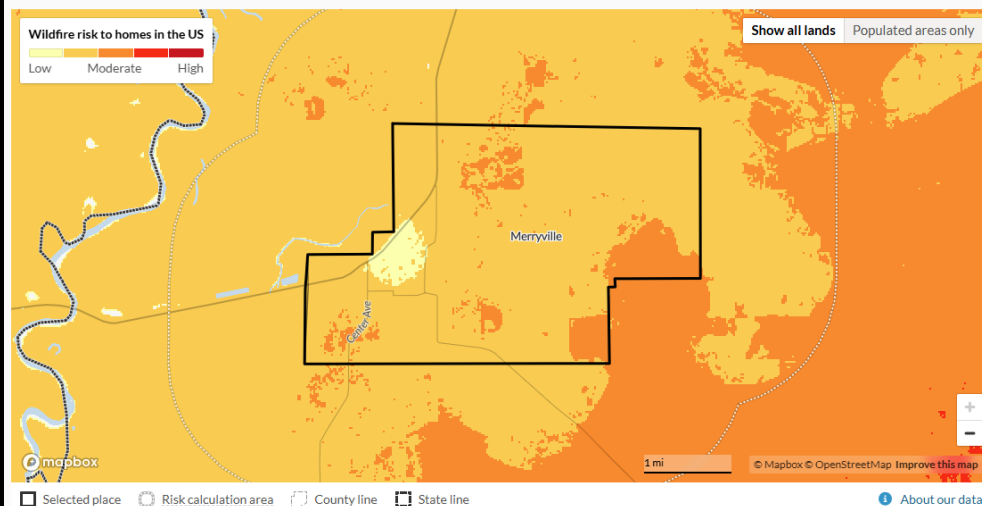


Figure 2-39: Homes in Merryville at Risk to Wildfires
(Source: U.S. Forest Service)

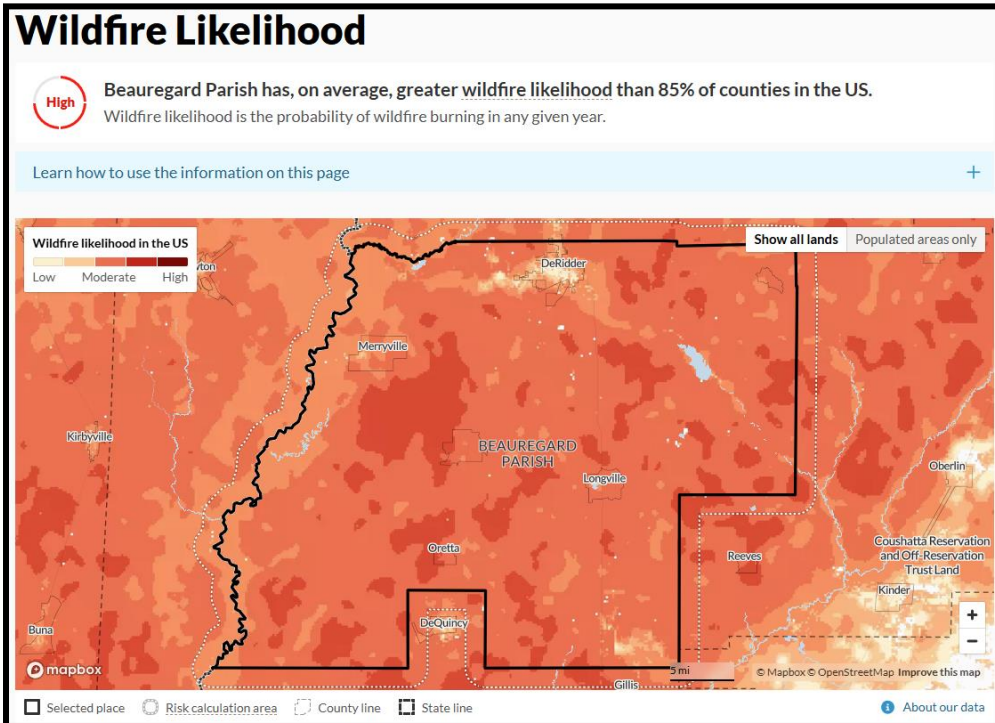


Figure 2-40: Likelihood of Wildfire Occurrence across Beauregard Parish
(Source: U.S. Forest Service)

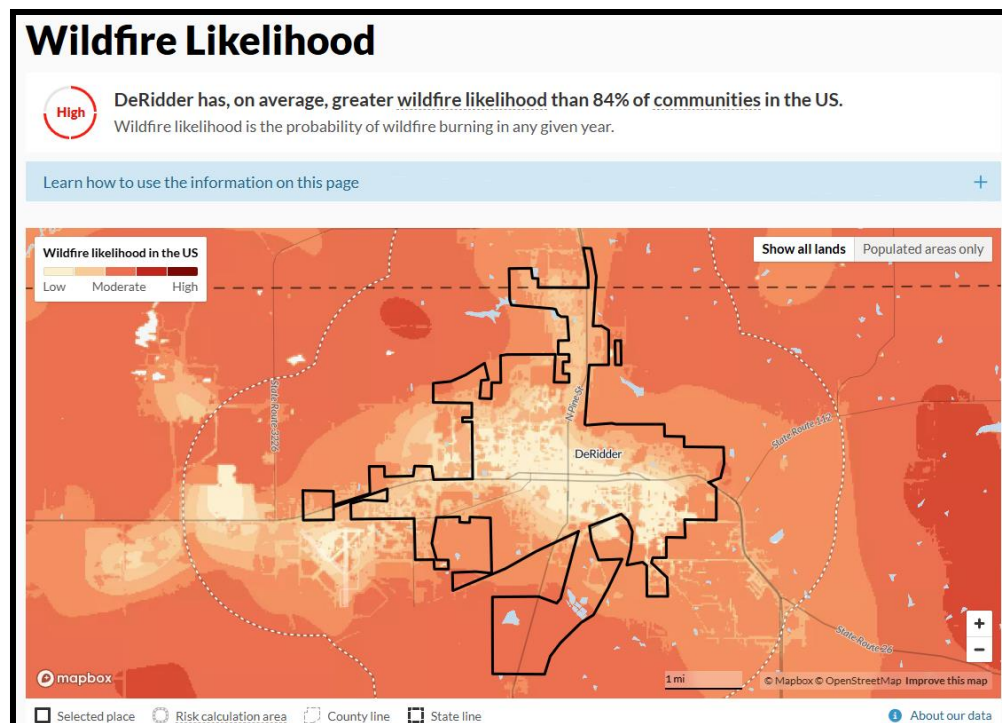


Figure 2-41: Likelihood of Wildfire Occurrence in DeRidder
(Source: U.S. Forest Service)

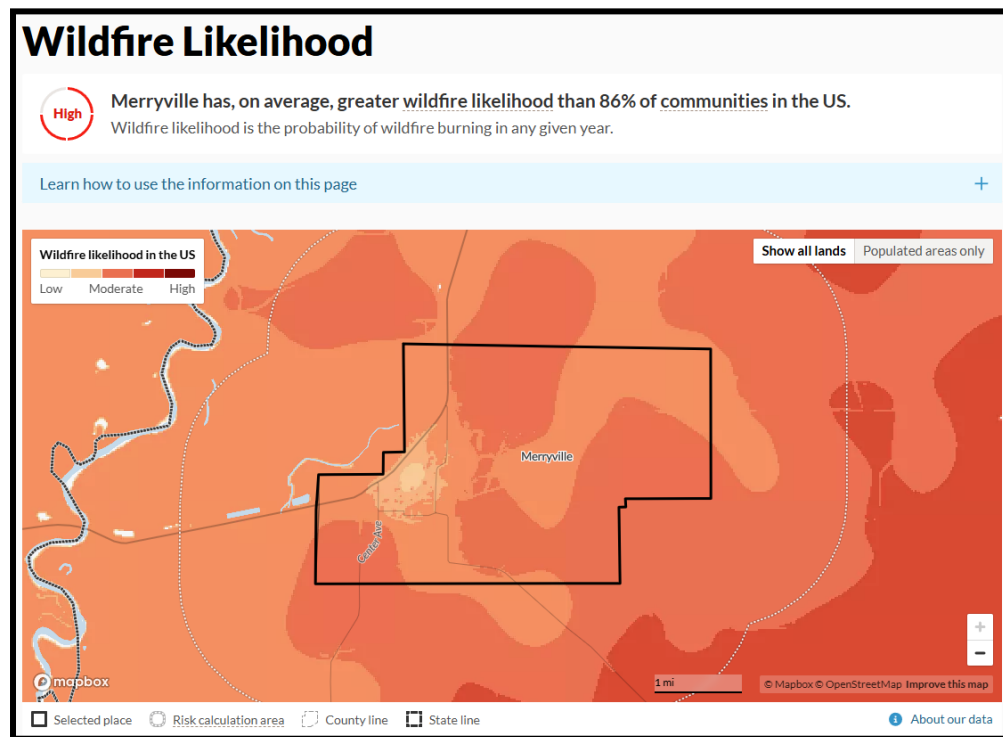


Figure 2-42: Likelihood of Wildfire Occurrence in Merryville
(Source: U.S. Forest Service)

Previous Occurrences

The parish has experienced two significant wildfire occurrences between the years 1996 and 2025 per the NCEI Storm Events Database. Since the previous update, there have been two significant wildfire events within the boundaries of the parish. The following provides a brief synopsis of each.

Table 2-80: Historical Wildfire Occurrences in Beauregard Parish since the last update.
(Source: National Center for Environmental Information)

Date	Property Damage	Crop Damage	Fatalities	Injuries
8/22/2023	\$16,880,000	0	0	0
9/1/2023	\$0	\$0	0	0

Probability

The annual return rate (frequency) for wildfire occurrences in the parish is approximately 0.07, which means there is approximately a 7% probability of a wildfire occurring in any given year. This translates to an average of one wildfire event occurring approximately every 14 to 15 years over the long term.

- Annual Return Rate (Frequency): 0.07 (7%), which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one wildfire event is expected to occur approximately every 14 to 15 years. This is the inverse of the return rate ($1 / 0.07 = \sim 14.3$ years)

Climate Change Impacts

The increasing probability and intensity of drought caused by climate change across Louisiana indicates that the risk of wildfires will also increase. The presence of drought or prolonged dry spells will lead to an increase in dry grasses, brush, and forests that act as fuel for fires.

Climate change is playing a significant role in the increasing frequency and severity of wildfires, resulting in substantial impacts on infrastructure and vulnerable populations. Rising temperatures, prolonged droughts, and altered precipitation patterns create ideal conditions for wildfires to ignite and spread rapidly. The destruction of critical infrastructure is one of the most profound consequences of wildfires. Roads, power lines, telecommunication networks, and water supply systems are vulnerable to damage, hindering emergency response efforts and disrupting access to essential services for communities affected by wildfires.

Vulnerable populations face unique challenges during wildfires. Those living in fire-prone areas often lack the means to adequately protect their homes and properties, making them more susceptible to property loss and displacement. Low-income communities may also have limited access to resources for evacuation and recovery, further exacerbating the impacts of wildfires on their well-being. Additionally, the elderly, children, and individuals with respiratory conditions are at heightened health risks due to poor air quality caused by wildfire smoke, which can lead to respiratory problems and other health issues.

Furthermore, wildfires can have long-term social and economic impacts on vulnerable populations. Displacement and property loss can force people to leave their homes and communities, leading to disruptions in education, employment, and social connections. The loss of livelihoods, particularly for those dependent on agriculture or tourism in affected regions, can exacerbate poverty and economic inequality.

To address the impacts of climate change on infrastructure and vulnerable populations concerning wildfires, various strategies are necessary. Investing in fire-resistant infrastructure and implementing better land use planning can help reduce the risk of infrastructure damage during wildfires. Creating and improving evacuation plans and warning systems can aid in ensuring the safety of vulnerable communities. Additionally, providing support and resources for those affected by wildfires, such as temporary housing, healthcare, and financial assistance, is essential for their recovery and well-being. To mitigate future wildfires and their impacts, it is imperative to take urgent action on climate change by reducing greenhouse gas emissions and implementing sustainable land management practices to protect both infrastructure and vulnerable populations from the increasing threats of wildfires.

Future Hazard Impacts

Population growth and development trends can significantly impact wildfire risks and impacts in several ways. As more people move into wildland-urban interface areas, there is an increased likelihood of human-caused fires due to activities like outdoor recreation or accidental ignition. Urban sprawl into fire-prone areas also increases the need for fire suppression and evacuation efforts during wildfire events, putting more lives and property at risk. Furthermore, development can alter natural fire regimes and vegetation patterns, potentially leading to more intense and difficult-to-control wildfires.

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 wildfires.

*Table 2-81: National Risk Index (NRI) Summarization of Wildfire Occurrences for the Parish
(Source: National Risk Index)*

Expected Annual Losses	Overall Risk Rating
Relatively Moderate	Relatively Moderate

Estimated Impact and Potential Loss

Using Hazus, along with wildland-urban interaction areas, the following table presents an analysis of total building exposure that is located within the wildland-urban interaction areas.

*Table 2-82: Total Building Exposure by Wildland-Urban Interaction Areas.
(Source: Hazus)*

Jurisdiction	Estimated Total Building Exposure
Unincorporated Beauregard Parish	\$1,429,800,000
DeRidder	\$956,392,000
Merryville	\$71,575,000

Hazus also provides a breakdown by jurisdiction for seven primary sectors (Hazus occupancy) throughout the parish. Utilizing this information with the wildland-urban interaction areas allows for identifying the total exposure by jurisdiction.

*Table 2-83: Estimated Exposure for Unincorporated Area of the Parish by Sector.
(Source: Hazus)*

Unincorporated Parish	Estimated Total Building Exposure by Sector
Agricultural	\$8,859,000
Commercial	\$75,049,000
Government	\$14,069,000
Industrial	\$32,813,000
Religious / Non-Profit	\$34,402,000
Residential	\$1,253,597,000
Schools	\$11,011,000
Total	\$1,429,800,000

*Table 2-84: Estimated Exposure for DeRidder by Sector.
(Source: Hazus)*

DeRidder	Estimated Total Building Exposure by Sector
Agricultural	\$2,518,000
Commercial	\$151,459,000
Government	\$7,280,000
Industrial	\$34,438,000
Religious / Non-Profit	\$28,631,000
Residential	\$718,390,000
Schools	\$13,676,000
Total	\$956,392,000

Table 2-85: Estimated Exposure for Merryville by Sector.
(Source: Hazus)

Merryville	Estimated Total Building Exposure by Sector
Agricultural	\$98,000
Commercial	\$3,705,000
Government	\$0
Industrial	\$1,741,000
Religious / Non-Profit	\$3,262,000
Residential	\$62,769,000
Schools	\$0
Total	\$71,575,000

Vulnerable Population

The total population within the parish that is located within a wildland-urban interaction area is shown in the table below:

Table 2-86: Population Located within Wildland-Urban Interaction Areas.
(Source: 2020 U.S. Census Data)

Number of People Located in Wildland-Urban Interaction Areas			
Location	# in Community	# in Hazard Area	% in Hazard Area
Unincorporated Parish	25,878	8,182	31.6%
DeRidder	9,812	1,293	13.2%
Merryville	956	654	68.4%

The 2020 U.S. Census data was also extrapolated to provide an overview of populations located within wildland-urban interaction areas throughout the jurisdictions. The data is illustrated in the following tables:

Table 2-87: Population in Unincorporated Area of the Parish Located within a Wildland-Urban Interaction Area.
(Source: 2020 Census Data)

Unincorporated Parish		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	8,182	31.6%
Persons Under 5 Years	556	6.8%
Persons Under 18 Years	2,070	25.3%
Persons 65 Years and Over	1,309	16.0%
White	6,554	80.1%
Minority	1,628	19.9%

*Table 2-88: Population in DeRidder Located within a Wildland-Urban Interaction Area.
(Source: 2020 Census Data)*

DeRidder		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	1,293	13.2%
Persons Under 5 Years	84	6.5%
Persons Under 18 Years	295	22.8%
Persons 65 Years and Over	231	17.9%
White	688	53.2%
Minority	605	46.8%

*Table 2-89: Population in Merryville Located within a Wildland-Urban Interaction Area.
(Source: 2020 Census Data)*

Merryville		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	654	68.4%
Persons Under 5 Years	43	6.5%
Persons Under 18 Years	148	22.6%
Persons 65 Years and Over	117	17.9%
White	519	79.3%
Minority	135	20.7%

Vulnerability Score

Table 2-90: Wildfire Vulnerability Score for the Parish.

Wildfire Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	2	3	4	1	2	2.5

Winter Weather

Profile

For Louisiana and other parts of the southeastern United States, a severe winter storm occurs when humid air from the Gulf of Mexico meets a cold air mass from the north. Once the cold air mass crosses Louisiana, and the temperature drops, precipitation may fall in the form of snow or sleet. If the ground temperature is cold enough but air temperature is above freezing, rain can freeze instantly on contact with the surface, causing massive ice storms.

The winter storm events that affect the state of Louisiana are ice storms, freezes, and snow events. Of the winter storm types listed above, ice storms are the most dangerous. Ice storms occur during a precipitation event when warm air aloft exceeds 32 °F, while the surface remains below the freezing point. Ice will form on all surfaces when precipitation originating as rain or drizzle contacts physical structures. These ice storms are usually accompanied by freezing temperatures and occasionally snow.

Winter storms can be accompanied by strong winds, creating blizzard conditions with blinding, wind driven snow, severe drifting, and dangerous wind chill. These types of conditions are very rare in Louisiana, even in north Louisiana, but ice storms are more common. The climatic line between snow and rain often stalls over north Louisiana, creating ideal conditions for ice accumulation.

In a typical winter storm event, homes and buildings are damaged by ice accumulation, either directly by the weight of the ice on the roofs or by trees and/or limbs falling on buildings. While it is not very prevalent, this type of damage can occur in Louisiana, particularly in north Louisiana. Effects of winter weather more likely to occur in Louisiana, especially southern Louisiana, include extreme temperatures which can cause waterlines to freeze and sewer lines to rupture. This is especially true with elevated or mobile homes since cold air is able to access more of the building's infrastructure. Winter storms can also have a devastating effect on agriculture, particularly on crops (like citrus) that are dependent on warm weather. Long exposures to low temperatures can kill many kinds of crops, and ice storms can weigh down branches and fruit.

Winter storms are not only a direct threat to human health through conditions like frostbite and hypothermia, but they are also an indirect threat to human health due to vehicle accidents and loss of power and heat, which can be disrupted for days. However, these impacts are rarely seen in Louisiana. As people use space heaters and fireplaces to stay warm, the risk of household fires and carbon monoxide poisoning increases.

Winter storm events occur throughout Louisiana usually during the colder calendar months of December, January, and February. Severe weather events do not occur with the same frequency across all parts of Louisiana. The northern quarter of Louisiana has historically experienced the most severe winter events between 1987 and 2012. The central, and to an even greater extent the southern parts of the state, such as Ascension Parish, have experienced the fewest severe winter events. The following table shows the Sperry-Piltz Ice Accumulation Index which is utilized to predict the potential damage to overhead utility systems from freezing rain and ice storms.

Table 2-91: Sperry-Piltz Ice Accumulation Index

Ice Damage Index	Damage and Impact Descriptions
0	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
2	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
3	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
4	Prolonged and widespread utility interruptions with extensive damage to main distribution feeder lines and some high voltage transmission lines/structure. Outages lasting 5 – 10 days.
5	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeks in some areas. Shelters needed.

*Risk Assessment**Geographic Extent*

All of the parish planning area is susceptible to the effects of winter weather. The worst-case scenario for winter weather is a 2 on the Sperry-Piltz Ice Accumulation Index.

Previous Occurrences

The parish has experienced 15 winter storm occurrences between the years 1996 and 2025 per the NCEI Storm Events Database. There have been three winter weather events since the last update

*Table 2-92: Historical Winter Weather Occurrences in the Parish since the last update
(Source: National Centers for Environmental Information)*

Date	Type	Property Damage	Crop Damage	Fatalities	Injuries
2/14/2021	Winter Storm	\$0	\$0	0	0
2/17/2021	Ice Storm	\$0	\$0	0	0
1/21/2025	Winter Storm	\$0	\$0	0	0

Probability

The annual return rate (frequency) for winter weather occurrences in the parish is approximately 0.5, which means there is approximately a 50% probability of a winter weather event occurring in any given year. This translates to an average of one winter weather event occurring approximately every 2 years over the long term.

- Annual Return Rate (Frequency): 0.5 (50%), which represents the likelihood of an event happening in any given year.
- Average Interval Between Events: On average, one winter weather event is expected to occur approximately every 2 years. This is the inverse of the return rate ($1 / 0.5 = \sim 2$ years)

Climate Change Impacts

Winter weather is likely to become less frequent as the winter season decreases in length over the next century due to an increase in ambient and sea surface temperatures. By the end of the century, Louisiana is expected to experience a 5°F to 10°F increase in average ambient temperatures which will drastically reduce the number of days below freezing and lower the chance of winter weather. Precipitation is expected to increase during the winter months.

Climate change is influencing winter weather patterns, leading to significant impacts on both infrastructure and vulnerable populations. While it may seem counterintuitive, global warming can cause more frequent and intense winter storms. The warming of the Arctic and the disruption of the polar jet stream can result in polar vortex shifts, causing freezing temperatures and extreme winter conditions in regions that typically experience milder winters.

Winter weather impacts infrastructure in various ways. Freezing temperatures can damage roads, bridges, and other transportation networks, leading to increased maintenance costs and travel disruptions. Ice and snow accumulation on power lines can cause blackouts and outages, leaving communities without electricity and heating during frigid temperatures. Water supply systems can also be affected, as frozen pipes can burst, leading to water shortages and damage to properties.

Vulnerable populations are particularly at risk during severe winter weather events. Homeless individuals may struggle to find shelter and protection from the cold, leading to an increased risk of hypothermia and frostbite. Low-income households may face difficulties in affording heating costs, potentially exposing them to unsafe living conditions. The elderly and those with limited mobility may find it challenging to access essential services and resources during snowstorms, leading to isolation and health risks.

Moreover, winter weather can have economic consequences for vulnerable populations. Closures of schools and businesses during severe weather can lead to loss of income and educational disruptions, impacting families already facing financial challenges. In regions where winter tourism is vital, extreme winter weather can affect local economies, leading to job losses and reduced economic opportunities for vulnerable communities.

To address the impacts of climate change on infrastructure and vulnerable populations concerning winter weather, various measures are essential. Investing in winter-ready infrastructure, such as weather-resistant roads and insulated power lines, can help mitigate damage and improve resilience. Implementing programs to support vulnerable populations, such as providing emergency shelters, fuel assistance, and resources for winter preparedness, can protect them during extreme winter events. Climate change mitigation efforts to reduce greenhouse gas emissions are also crucial to addressing the root causes of extreme winter weather patterns, helping to protect both infrastructure and vulnerable populations from the adverse effects of winter storms in the long run.

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 winter storms.

Table 2-93: National Risk Index (NRI) Summarization of Winter Weather Occurrences for the 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 15 significant winter weather occurrences per the NCEI Storm Events Database. The total property damage associated with these storms totaled approximately \$215,000. 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 \$7,167 and \$14,333 per event. The following table provides an estimate of potential property losses for the Parish:

Table 2-94: Estimated Annual Property Losses in the Parish resulting from Winter Weather Damage.

Estimated Annual Potential Losses		
Unincorporated Area	DeRidder	Merryville
\$5,061	\$1,919	\$187

Vulnerable Population

Per the NCEI Storm Events Database, there has been one reported fatality and no injuries as a result of winter weather. However, winter storms can have a significant impact the population. They can cause physical injuries and even fatalities. High winds, falling trees, and structural collapses can pose immediate risks to people's safety during a storm. These storms can displace individuals and families from their homes, either temporarily or permanently. In cases of extensive property damage, people may be forced to evacuate or seek emergency shelter. The displacement can result in temporary homelessness or the need for long-term housing solutions.

Winter storms can disrupt critical infrastructure such as transportation systems, power grids, and water supply networks. Disruption in these services could lead to health issues or the inability to access essential services that are needed to meet basic needs. This can lead to not only physical issues but psychological effects as well.

Everyone in the parish is vulnerable to the impacts of winter weather; however, they can have a disproportionate impact on vulnerable populations exacerbating existing social, economic, and health disparities. Vulnerable populations, including low-income individuals, the homeless, and those living in standardized housing, are often more susceptible to the effects of winter storms.

Vulnerability Score

Table 2-95: Winter Weather Vulnerability Score for the Parish.

Winter Weather Vulnerability Score						
	Probability	Impact	Spatial Extent	Warning Time	Duration	Risk Factor
Risk Level	3	4	4	1	2	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, Beauregard 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 Beauregard 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:

Table 3-1: Planning and Regulatory Capabilities

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

All jurisdictions within the Beauregard 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

Beauregard Parish Police Jury provides oversight for building permits and codes, land use planning, and all parish ordinances.

As of the 2026 update, Beauregard 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.

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

The Beauregard Parish 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 Beauregard Parish as a whole 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 Beauregard Parish 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.

Table 3-2: Administration and Technical Capabilities

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				
	Beauregard Parish	Deridder	Merryville	Comments
Administration	Yes / No			
Planning Commission	No	Yes	No	
Mitigation Planning Committee	Yes	No	No	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	Yes	No	
Staff	Yes / No			
Chief Building Official	Yes	Yes	No	
Floodplain Administrator	Yes	Yes	Yes	Merryville relies on Parish Floodplain Admin
Emergency Manager	Yes	No	No	
Community Planner	No	Yes	No	
Civil Engineer	Yes	Yes	No	
GIS Coordinator	No	No	No	
Grant Writer	No	No	No	
Other	N/A	N/A	N/A	
Technical	Yes / No			
Warning Systems / Service (Reverse 911, outdoor warning signals)	No	Yes	No	
Hazard Data & Information	Yes	No	No	
Grant Writing	No	No	No	
Hazus Analysis	No	No	No	
Other	N/A	N/A	N/A	

Financial capabilities are the resources that Beauregard 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 Beauregard Parish:

Table 3-3: Financial Capabilities

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

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 Beauregard 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. Specifically, focusing on advising repetitive loss property owners of ways they can reduce their exposure to damage by repetitive flooding remains a priority for the entire parish. The existing programs are as follows:

Table 3-4: Education and Outreach Capabilities

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.					
	Beauregard	Paish	Debidder	Merryville	
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	Yes	No		
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	No	Yes	No		
Natural Disaster or safety related school program	No	No	No		
Storm Ready certification	No	No	No		
Firewise Communities certification	No	No	No		
Public/Private partnership initiatives addressing disaster-related issues	LEPC	Yes	No		
Other	N/A	N/A	N/A		

As reflected with the above existing regulatory mechanisms, programs and resources within the parish, the jurisdictions within the Beauregard Parish planning area remain committed to expanding and improving on the existing capabilities within the parish. Communities will work together along with Beauregard 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 Beauregard 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 October 1, 2025, Unincorporated Beauregard Parish, the City of DeRidder, and the Town of Merryville are not participants 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 class 5 rating, followed by three communities with a class 6 rating: 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, 30 participate in the CRS. The remaining 20 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 2011¹, 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

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

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.

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 Beauregard 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 Beauregard Parish Hazard Mitigation Plan Planning Committee under the coordination of the Beauregard 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 August 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 Beauregard 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, Beauregard 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 Beauregard 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. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact.
2. Improve data collection, use, and sharing to reduce the impacts of hazards.
3. Improve capabilities and coordination to plan and implement hazard mitigation projects.
4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.

The Mitigation Action Plan focuses on actions to be taken by Beauregard 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 Plan 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 Beauregard Parish Hazard Mitigation Plan Planning Committee identified new actions that would reduce and/or prevent future damage within Beauregard 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 Beauregard 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.

Beauregard Parish Mitigation Actions

Previous Action Update

Unincorporated Beauregard Parish Mitigation Action Sheet						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
BP1: Acquisition Projects	Mitigate parish flood damage by acquiring or relocating properties in the parish.	HMGP, FMA, Local	1-5 Years	Beauregard Parish OHSEP/ Beauregard Parish Police Jury	Flooding, Tropical Cyclones	Not Started – Carried Over (See Beauregard Parish Mitigation Action 1)
BP2: Mitigation Outreach and Education	Public Education Campaign for all hazards, including Brochures, Fliers, PSAs, weather awareness campaigns for schools and local businesses.	HMGP, FMA, Local	1-5 Years	Beauregard Parish OHSEP/ Beauregard Parish Police Jury	Drought, Excessive Heat, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
BP3: Drainage Retrofit	Implementation and retrofitting of drainage and flood mitigation projects to reduce flooding problems, limit flood damage and associated costs, prevent road overtopping, and maintain open and usable roadways and public facilities (such as government, healthcare, and schools) during periods of high precipitation.	HMGP, FMA, Local	1-5 Years	BP Public Works Director/ Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Ongoing
BP4: Road Improvements, Including Debris Removal	Ensure usability of roads that serve a public purpose such as government, healthcare, and school districts by removing debris from nearby creeks and rivers.	HMGP, FMA, Local	1-5 Years	BP Public Works Director/ Beauregard Parish OHSEP	Flooding, Tropical Cyclones, Thunderstorms, Tornadoes	Ongoing
BP5: Elevation Projects	Mitigate parish flood damage by raising properties in the parish.	HMGP, FMA, Local	1-5 Years	Beauregard Parish OHSEP, BP Public Works Director	Flooding, Tropical Cyclones	Not Started – Carried Over (See Beauregard Parish Mitigation Action 2)

BP6: Implementation of Public Programs and Initiatives	Implement current and newly developed initiatives as directed by State and/or Federal regulations for public programs such as: (but not limited to) PPGP, Pilot Reconstruction, SRL, RFC, PDM, FMA	HMGP, FMA, Local	1-5 Years	BP Public Works Director/ Beauregard Parish OHSEP	Drought, Excessive Heat, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
BP7: Water Restriction Implementation	Implement water rationing program for times of drought	HMGP, Local	As needed	Beauregard Parish OHSEP/ Beauregard Parish Police Jury	Drought	Not Started – Carried Over (See Beauregard Parish Mitigation Action 3)
BP8: Air Conditioning Accessibility for Vulnerable Populations	Implement programs to provide air conditioning to homeless, elderly, and other vulnerable citizens	HMGP, Local	1-5 Years	Beauregard Parish OHSEP/ Beauregard Parish Police Jury	Excessive Heat	Ongoing
BP9: Capital Improvement Projects - Drainage Improvement	Carry out long-range capital improvements projects to support implementation of projects recommended by the U.S. Army Corps of Engineers related to the Sabine River in order to improve drainage.	HMGP, FMA, Local	1-5 Years	BP Public Works Director/ Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Not Started – Carried Over (See Beauregard Parish Mitigation Action 4)
BP10: Communications Systems Improvements	Improve communication in the parish by implementing warning systems and communications equipment.	HMGP, FMA, Local	1-5 Years	BP Public Works Director/ Beauregard Parish OHSEP	Drought, Excessive Heat, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
BP11: Safe Room Project	Construction of a safe room for first responders in Beauregard Parish	HMGP, FMA, Local	1-5 Years	Mayor - City of DeRidder, Beauregard Parish Public OHSEP/BP Public Works Director	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	In Progress
BP12: Drainage Improvement Projects	Implementation of drainage improvement/flood mitigation projects to 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.	HMGP, FMA, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP/BP Public Works Director	Flooding, Tropical Cyclones	Deleted - Combined with BP3 Action

BP13: Potable Water	Create redundancy of potable water supply to critical facilities, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, FMA, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP/BP Public Works Director	Drought, Excessive Heat, Flooding, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
BP14: Flood Proofing Projects	Flood-proof critical and residential structures and within the parish to help promote continuation of critical services during a storm event	HMGP, FMA, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP/BP Public Works Director	Flooding, Tropical Cyclones	Not Started – Carried Over (See Beauregard Parish Mitigation Action 5)
BP15: Generator Procurement and Installation	Acquire and install backup generators and transfer switches at critical public facilities to ensure generator use during and after emergency events, supporting continuity of operations for government, parish, and municipal services during disasters.	HMGP, FMA, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
BP16: 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, FMA, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Deleted - Combined with BP15 Action
BP17: Map and Assess Vulnerability to High Wind	Develop and maintain database of current community vulnerability to high wind. Utilize GIS to identify and map areas at risk to wind with different conditions (hurricane categories) to provide better awareness of the hazard to emergency management officials and community members.	HMGP, FMA, Local	1-5 Years	Parish Administrator, Beauregard Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Not Started – Carried Over (See Beauregard Parish Mitigation Action 6)
BP18: Improvements to Flood Risk Assessment	Heighten awareness within the parish 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	HMGP, FMA, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Ongoing

	maintaining a database to track community exposure to high water and flood risk events.					
BP19: Floodproofing of Residential and Non-residential Structures	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.	HMGP, FMA, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Deleted - Combined with BP14 Action
BP20: Protect Power Lines and Infrastructure	Establishment of standards for utility companies regarding tree pruning around lines. Burying of powerlines to provide uninterrupted power after severe weather, installation of redundancies and loopfeeds.	HMGP, FMA, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Ongoing
BP21: Retrofit of Structures with Ignition Resistant Materials	Installation of non combustible materials and technologies of existing structures in wildfire hazard areas.	HMGP, Local	1-5 years	Parish Administrator, Beauregard Parish OHSEP	Wildfires	Not Started – Carried Over (See Beauregard Parish Mitigation Action 7)
BP22: Relocation Projects	Mitigate parish flood damage by relocating properties in the parish.	HMGP, FMA, Local	1-5 Years	Beauregard Parish OHSEP, BP Public Works Director	Flooding, Tropical Cyclones	Deleted - Combined with BP1 Action
BP23: Building Restrictions for Future Development	Reduce future development, i.e. new buildings, in floodplains and correct inappropriate development already in floodplains, i.e. existing buildings. Methods include (but are not limited to): Modification of codes, zoning, etc.	HMGP, FMA, Local	1-5 Years	BP Public Works Director/ Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Ongoing

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 1	Acquisition Projects
LEAD AGENCY	Beauregard Parish OHSEP
SUPPORTING AGENCIES	Beauregard Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Mitigate parish flood damage by acquiring or relocating properties in the parish.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Acquiring repetitive loss, severe repetitive loss, or flood prone properties will reduce the potential risk of loss of life and property in the parish. Further, it reduces the amount of flood insurance claims made throughout the area.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 2	Elevation Projects
LEAD AGENCY	Beauregard Parish OHSEP
SUPPORTING AGENCIES	Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Mitigate parish flood damage by raising properties in the parish.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Elevating repetitive loss, severe repetitive loss, or flood prone properties will reduce the potential risk of loss of life and property in the parish. Further, it reduces the amount of flood insurance claims made throughout the area.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 3	Water Restriction Implementation
LEAD AGENCY	Beauregard Parish OHSEP
SUPPORTING AGENCIES	Beauregard Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Low
Action Description	Implement water rationing program for times of drought
Type of Mitigation Action	Local Plans and Regulations, Natural Resources Protection
How Action Aligns with Risk Reduction	Reducing the amount of water consumption during drought events ensures that enough water will be available for critical facilities to remain operable.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 4	Capital Improvement Projects – Drainage Improvement
LEAD AGENCY	Beauregard Parish Public Works
SUPPORTING AGENCIES	Beauregard Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact. 2. Improve data collection, use, and sharing to reduce the impacts of hazards. 3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Carry out long-range capital improvements projects to support implementation of projects recommended by the U.S. Army Corps of Engineers related to the Sabine River in order to improve drainage.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Projects that improve drainage in the parish will reduce the risk to flooding to public and private properties.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 5	Flood Proofing Projects
LEAD AGENCY	Beauregard Parish Administrator
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Flood-proof critical and residential structures and 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 facilities around the parish will reduce the risk to flood damage and property loss.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 6	Map and Assess Vulnerability to High Wind
LEAD AGENCY	Beauregard Parish Administrator
SUPPORTING AGENCIES	Beauregard Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Develop and maintain database of current community vulnerability to high wind. Utilize GIS to identify and map areas at risk to wind with different conditions (hurricane categories) to provide better awareness of the hazard to emergency management officials and community members.
Type of Mitigation Action	Local Plans and Regulations, Education and Awareness Programs
How Action Aligns with Risk Reduction	Utilizing GIS software to map vulnerable structure around the area will allow the parish to target the most vulnerable areas and implement mitigation efforts to reduce the risk to loss of life.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 7	Retrofit of Structures with Ignition Resistant Materials
LEAD AGENCY	Beauregard Parish Administrator
SUPPORTING AGENCIES	Beauregard Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Installation of noncombustible materials and technologies of existing structures in wildfire hazard areas.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Utilizing noncombustible materials on structures and parish owned property will reduce the risk to loss of property and life during wildfire events
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 8	Cooling Spaces
LEAD AGENCY	Beauregard Parish OHSEP
SUPPORTING AGENCIES	Beauregard Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Identify and install cooling spaces in various facilities around the parish. Facilities that are already constructed and will be used for cooling stations will have a designated sign on the property denoting the location as a cooling space
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Identifying cooling spaces around the parish will allow for vulnerable populations to remain cool and safe from excessive heat events
Current Status of Action	New
Hazard(s) Addressed	Excessive Heat

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 9	Restrictions for Development in Sinkhole Areas
LEAD AGENCY	Beauregard Parish Public Works
SUPPORTING AGENCIES	Beauregard Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Reduce/restrict future development in areas within close proximity to sinkholes. This includes any area within a two mile radius of the location of the sinkhole.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Restricting development in sinkhole areas reducing the risk of property damage due to sinkholes. It also prevents critical facilities from being established in the area.
Current Status of Action	New
Hazard(s) Addressed	Sinkholes

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 10	Winter Weather Equipment Acquisition
LEAD AGENCY	Beauregard Parish OHSEP
SUPPORTING AGENCIES	Beauregard Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Purchase or partner with other agencies to acquire equipment to help aid with winter weather events. Equipment includes, but is not limited to, industrial snow plows, de-icing materials, pipe insulation, tree trimming equipment, equipped/reinforced emergency response vehicles.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Acquiring winter weather equipment for the parish will ensure that the areas is prepared for the next winter storm that impacts the parish. Partnering with neighboring communities and local agencies will enhance relationship for future hazard needs.
Current Status of Action	New
Hazard(s) Addressed	Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS BEAUREGARD PARISH	
DESCRIPTION	
BEAUREGARD PARISH MITIGATION ACTION 11	Enhance Critical Infrastructure and Communication Redundancy to Withstand Solar Flares and Geomagnetic Storms
LEAD AGENCY	Beauregard Parish Public Works
SUPPORTING AGENCIES	Beauregard Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact. 2. Improve data collection, use, and sharing to reduce the impacts of hazards. 3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Coordinate with local utilities, emergency management, and communications providers to reduce vulnerabilities to space weather events. Efforts may include installing protective devices on critical transformers, developing continuity-of-operations plans for loss of GPS and communications, and building redundancy into critical communication systems (e.g., satellite, land-mobile radio, and hardwired backups) to maintain emergency coordination.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Coordinating with utilities and communication providers, installing protective devices, planning for outages, and creating redundant systems, communities can maintain critical functions and emergency coordination even if primary systems fail.
Current Status of Action	New
Hazard(s) Addressed	Solar Flares

City of DeRidder Mitigation Actions

Previous Action Update

City of DeRidder Mitigation Action Sheet						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
DER1: Acquisition Projects	Mitigate flood damage by acquiring or relocating properties	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Not Started – Carried Over (See DeRidder Mitigation Action 1)
DER2: Mitigation Outreach and Education	Public Education Campaign for all hazards, including Brochures, Fliers, PSAs, weather awareness campaigns for schools and local businesses.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
DER3: Drainage retrofit	Implementation and retrofitting of drainage and flood mitigation projects to reduce flooding problems, limit flood damage and associated costs, prevent road overtopping, and maintain open and usable roadways and public facilities (such as government, healthcare, and schools) during periods of high precipitation.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Ongoing
DER4: Road improvements, including debris removal	Ensure usability of roads that serve a public purpose such as government, healthcare, and school districts by removing debris from nearby creeks and rivers.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones, Thunderstorms, Tornadoes	Ongoing
DER5: Elevation Projects	Mitigate flood damage by raising properties	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Not Started – Carried Over (See DeRidder Mitigation Action 2)

DER6: Implementation of public programs and initiatives	Implement current and newly developed initiatives as directed by State and/or Federal regulations for public programs such as: (but not limited to) PPGP, Pilot Reconstruction, SRL, RFC, PDM, FMA	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
DER7: Water Restriction Implementation	Implement water rationing program for times of drought	HMGP, Local	As needed	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Drought	Not Started – Carried Over (See DeRidder Mitigation Action 3)
DER8: Air Conditioning Accessibility for Vulnerable Populations	Implement programs to provide air conditioning to homeless, elderly, and other vulnerable citizens	HMGP, Local	1-5 years	City of DeRidder Mayor's Office, Beauregard Parish OHSEP	Excessive Heat	Ongoing
DER9: Capital improvement projects - drainage improvement	Carry out long-range capital improvements projects to support implementation of projects recommended by the U.S. Army Corps of Engineers related to the Sabine River in order to improve drainage.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Not Started – Carried Over (See DeRidder Mitigation Action 4)
DER10: Communications Systems Improvements	Improve communication by implementing warning systems and communications equipment.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
DER11: Safe Room Project	Construction of a safe room for first responders	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started – Carried Over (See DeRidder Mitigation Action 5)
DER12: Drainage Improvement Projects	Implementation of drainage improvement/flood mitigation projects to relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Deleted - Combined with DER3 Action

	keeping open roadways during periods of high precipitation.					
DER13: Potable Water	Create redundancy of potable water supply to critical facilities, and provide protection of potable water supply by acquisition/ installation of backflow preventers at appropriate critical locations.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Drought, Excessive Heat, Flooding, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
DER14: Flood Proofing Projects	Flood-proof critical and residential structures to help promote continuation of critical services during a storm event	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Not Started – Carried Over (See DeRidder Mitigation Action 6)
DER15: Generator Procurement and Installation	Acquire and install backup generators and transfer switches at critical public facilities to ensure generator use during and after emergency events, supporting continuity of operations for government and municipal services during disasters.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
DER16: 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, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Deleted - Combined with DER15 Action
DER17: Map and Assess Vulnerability to High Wind	Develop and maintain database of current community vulnerability to high wind. Utilize GIS to identify and map areas at risk to wind with different conditions (hurricane categories) to provide better awareness of the hazard to emergency management officials and community members.	HMGP, FMA, Local	1-5 Years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Not Started – Carried Over (See DeRidder Mitigation Action 7)

DER18: Improvements to Flood Risk Assessment	Heighten awareness of 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, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Ongoing
DER19: Floodproofing of Residential and Non-residential Structures	Better protect structures 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, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Deleted - Combined with DER14 Action
DER 20: Protect Power Lines and Infrastructure	Establishment of standards for utility companies regarding tree pruning around lines. Burying of powerlines to provide uninterrupted power after severe weather, installation of redundancies and loop feeds.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Ongoing
DER21: Retrofit of Structures with Ignition Resistant Materials	Installation of noncombustible materials and technologies of existing structures in wildfire hazard areas.	HMGP, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Wildfires	Not Started – Carried Over (See DeRidder Mitigation Action 8)
DER22: Wind hardening for governmental buildings and critical facilities	Ensure adequate public resources in time of disaster by providing retrofits for buildings that will serve an Emergency Response role the event of a natural disaster.	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, Beauregard Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Not Started – Carried Over (See DeRidder Mitigation Action 9)

DER23: 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, FMA, Local	1-5 Years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Tropical Cyclones	Not Started
DER24: Relocation projects	Mitigate flood damage by relocating properties	HMGP, FMA, Local	1-5 years	City of DeRidder Mayor's Office, BP Public Works Director, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Deleted - Combined with DER1 Action

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 1	Acquisition Projects
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Mitigate parish flood damage by acquiring or relocating properties in the city.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Acquiring repetitive loss, severe repetitive loss, or flood prone properties will reduce the potential risk of loss of life and property in the area. Further, it reduces the amount of flood insurance claims made throughout the area.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 2	Elevation Projects
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Mitigate parish flood damage by raising properties in the city.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Elevating repetitive loss, severe repetitive loss, or flood prone properties will reduce the potential risk of loss of life and property in the city. Further, it reduces the amount of flood insurance claims made throughout the area.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 3	Water Restriction Implementation
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Low
Action Description	Implement water rationing program for times of drought
Type of Mitigation Action	Local Plans and Regulations, Natural Resources Protection
How Action Aligns with Risk Reduction	Reducing the amount of water consumption during drought events ensures that enough water will be available for critical facilities to remain operable.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 4	Capital Improvement Projects – Drainage Improvement
LEAD AGENCY	City of DeRidder Mayor’s Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact. 2. Improve data collection, use, and sharing to reduce the impacts of hazards. 3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Carry out long-range capital improvements projects to support implementation of projects recommended by the U.S. Army Corps of Engineers related to the Sabine River in order to improve drainage.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Projects that improve drainage in the city will reduce the risk to flooding to public and private properties.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 5	Safe Room Projects
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Construction of a safe room for first responders
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creation of safe rooms will allow first responders to have a safe place to be stationed during hazard events
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 6	Flood Proofing Projects
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Flood-proof critical and residential structures and 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 facilities around the parish will reduce the risk to flood damage and property loss.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 7	Map and Assess Vulnerability to High Wind
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Develop and maintain database of current community vulnerability to high wind. Utilize GIS to identify and map areas at risk to wind with different conditions (hurricane categories) to provide better awareness of the hazard to emergency management officials and community members.
Type of Mitigation Action	Local Plans and Regulations, Education and Awareness Programs
How Action Aligns with Risk Reduction	Utilizing GIS software to map vulnerable structure around the area will allow the city to target the most vulnerable areas and implement mitigation efforts to reduce the risk to loss of life.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 8	Retrofit of Structures with Ignition Resistant Materials
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Installation of noncombustible materials and technologies of existing structures in wildfire hazard areas.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Utilizing noncombustible materials on structures and city owned property will reduce the risk to loss of property and life during wildfire events
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 9	Wind Hardening for Governmental Buildings and Critical Facilities
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	Ensure adequate public resources in time of disaster by providing retrofits for buildings that will serve an Emergency Response role the event of a natural disaster.
PRIORITY	Medium
Action Description	Ensure adequate public resources in time of disaster by providing retrofits for buildings that will serve an Emergency Response role the event of a natural disaster.
Type of Mitigation Action	Hardening critical facilities will help ensure their protection and endurance during high wind events
How Action Aligns with Risk Reduction	Structure and Infrastructure Projects
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 10	Cooling Spaces
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Identify and install cooling spaces in various facilities around the city. Facilities that are already constructed and will be used for cooling stations will have a designated sign on the property denoting the location as a cooling space
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Identifying cooling spaces around the city will allow for vulnerable populations to remain cool and safe from excessive heat events
Current Status of Action	New
Hazard(s) Addressed	Excessive Heat

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 11	Winter Weather Equipment Acquisition
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Purchase or partner with other agencies to acquire equipment to help aid with winter weather events. Equipment includes, but is not limited to, industrial snow plows, de-icing materials, pipe insulation, tree trimming equipment, equipped/reinforced emergency response vehicles.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Acquiring winter weather equipment for the city will ensure that the areas is prepared for the next winter storm that impacts the area. Partnering with neighboring communities and local agencies will enhance relationship for future hazard needs.
Current Status of Action	New
Hazard(s) Addressed	Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF DERIDDER	
DESCRIPTION	
CITY OF DERIDDER MITIGATION ACTION 12	Enhance Critical Infrastructure and Communication Redundancy to Withstand Solar Flares and Geomagnetic Storms
LEAD AGENCY	City of DeRidder Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact. 2. Improve data collection, use, and sharing to reduce the impacts of hazards. 3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Coordinate with local utilities, emergency management, and communications providers to reduce vulnerabilities to space weather events. Efforts may include installing protective devices on critical transformers, developing continuity-of-operations plans for loss of GPS and communications, and building redundancy into critical communication systems (e.g., satellite, land-mobile radio, and hardwired backups) to maintain emergency coordination.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Coordinating with utilities and communication providers, installing protective devices, planning for outages, and creating redundant systems, communities can maintain critical functions and emergency coordination even if primary systems fail.
Current Status of Action	New
Hazard(s) Addressed	Solar Flares

Town of Merryville Mitigation Actions

Previous Action Update

Town of Merryville Mitigation Action Sheet						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
MVL1: Acquisition Projects	Mitigate town flood damage by acquiring or relocating properties	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Merryville Mitigation Action 1)
MVL2: Mitigation Outreach and Education	Public Education Campaign for all hazards, including Brochures, Fliers, PSAs, weather awareness campaigns for schools and local businesses.	HMGP, FMA, Local	1-5 Years	Town of Merryville, Beauregard Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
MVL3: Drainage Retrofit	Implementation and retrofitting of drainage and flood mitigation projects to reduce flooding problems, limit flood damage and associated costs, prevent road overtopping, and maintain open and usable roadways and public facilities (such as government, healthcare, and schools) during periods of high precipitation.	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, BP Public Works	Flooding, Tropical Cyclones	Ongoing
MVL4: Road Improvements, Including Debris Removal	Ensure usability of roads that serve a public purpose such as government, healthcare, and school districts by removing debris from nearby creeks and rivers.	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, BP Public Works	Flooding, Tropical Cyclones, Thunderstorms, Tornadoes	Ongoing
MVL5: Elevation Projects	Mitigate town flood damage by raising properties	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP, BP Public Works Director	Flooding, Tropical Cyclones	Not Started - Carried Over (See Merryville Mitigation Action 2)

MVL6: Implementation of Public Programs and Initiatives	Implement current and newly developed initiatives as directed by State and/or Federal regulations for public programs such as: (but not limited to) PPGP, Pilot Reconstruction, SRL, RFC, PDM, FMA	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, BP Public Works	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
MVL7: Water Restriction Implementation	Implement water rationing program for times of drought	HMGP, FMA, Local	As needed	Town of Merryville Mayor's Office, BP Public Works	Drought	Not Started - Carried Over (See Merryville Mitigation Action 3)
MVL8: Air Conditioning Accessibility for Vulnerable Populations	Implement programs to provide air conditioning to homeless, elderly, and other vulnerable citizens	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Excessive Heat	Ongoing
MVL9: Capital Improvement Projects - Drainage Improvement	Carry out long-range capital improvements projects to support implementation of projects recommended by the U.S. Army Corps of Engineers related to the Sabine River in order to improve drainage.	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, BP Public Works Director	Flooding, Tropical Cyclones,	Not Started - Carried Over (See Merryville Mitigation Action 4)
MVL10: Communications Systems Improvements	Improve communication in the town by implementing warning systems and communications equipment.	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, BP Public Works Director	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
MVL11: Safe Room Project	Construction of a safe room for first responders in Merryville	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP, BP Public Works Director	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started - Carried Over (See Merryville Mitigation Action 5)
MVL12: Drainage Improvement Projects	Implementation of drainage improvement/flood mitigation projects to relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open	HMGP, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP, BP Public Works Director	Flooding, Tropical Cyclones	Deleted - Combined with MVL3 Action

	roadways during periods of high precipitation.					
MVL13: Potable Water	Create redundancy of potable water supply to critical facilities, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP, BP Public Works Director	Drought, Excessive Heat, Flooding, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
MVL14: Flood Proofing Projects	Flood-proof critical and residential structures within the area to help promote continuation of critical services during a storm event	HMGP, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP, BP Public Works Director	Flooding, Tropical Cyclones	Not Started - Carried Over (See Merryville Mitigation Action 6)
MVL15: Generator Procurement and Installation	Acquire and install backup generators and transfer switches at critical public facilities to ensure generator use during and after emergency events, supporting continuity of operations for government, and municipal services during disasters.	HMGP, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
MVL16: 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, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Deleted - Combined with MVL15 Action
MVL17: Map and Assess Vulnerability to High Wind	Develop and maintain database of current community vulnerability to high wind. Utilize GIS to identify and map areas at risk to wind with different conditions (hurricane categories) to provide better awareness of the hazard to emergency management officials and community members.	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Merryville Mitigation Action 7)

MVL18: Improvements to Flood Risk Assessment	Heighten awareness within the town 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, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Ongoing
MVL19: Floodproofing of Residential and Non-residential Structures	Better protect structures within the town 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, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Flooding, Tropical Cyclones	Deleted - Combined with MVL14 Action
MVL20: Protect Power Lines and Infrastructure	Establishment of standards for utility companies regarding tree pruning around lines. Burying of powerlines to provide uninterrupted power after severe weather, installation of redundancies and loop feeds.	HMGP, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Ongoing
MVL21: Retrofit of structures with ignition resistant materials	Installation of non combustible materials and technologies of existing structures in wildfire hazard areas.	HMGP, FMA, Local	1-5 years	Town of Merryville Mayor's Office, Beauregard Parish OHSEP	Wildfires	Not Started - Carried Over (See Merryville Mitigation Action 8)
MVL22: Wind Hardening for Governmental Buildings and Critical Facilities	Ensure adequate public resources in time of disaster by providing retrofits for buildings that will serve an Emergency Response role the event of a natural disaster.	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, BP Public Works	Thunderstorms, Tropical Cyclones, Tornadoes	Not Started - Carried Over (See Merryville Mitigation Action 9)
MVL23: Building Restrictions for Future Development	Reduce future development, i.e. new buildings, in floodplains and correct inappropriate development already in floodplains, i.e. existing buildings. Methods include (but are not limited to): Modification of codes, zoning, etc.	HMGP, FMA, Local	1-5 Years	Town of Merryville Mayor's Office, BP Public Works Director	Flooding, Tropical Cyclones	Ongoing

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 1	Acquisition Projects
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Mitigate parish flood damage by acquiring or relocating properties in the city.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Acquiring repetitive loss, severe repetitive loss, or flood prone properties will reduce the potential risk of loss of life and property in the area. Further, it reduces the amount of flood insurance claims made throughout the area.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 2	Elevation Projects
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Mitigate parish flood damage by raising properties in the city.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Elevating repetitive loss, severe repetitive loss, or flood prone properties will reduce the potential risk of loss of life and property in the city. Further, it reduces the amount of flood insurance claims made throughout the area.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 3	Water Restriction Implementation
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Low
Action Description	Implement water rationing program for times of drought
Type of Mitigation Action	Local Plans and Regulations, Natural Resources Protection
How Action Aligns with Risk Reduction	Reducing the amount of water consumption during drought events ensures that enough water will be available for critical facilities to remain operable.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 4	Capital Improvement Projects – Drainage Improvement
LEAD AGENCY	Town of Merryville Mayor’s Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact. 2. Improve data collection, use, and sharing to reduce the impacts of hazards. 3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Carry out long-range capital improvements projects to support implementation of projects recommended by the U.S. Army Corps of Engineers related to the Sabine River in order to improve drainage.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Projects that improve drainage in the city will reduce the risk to flooding to public and private properties.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 5	Safe Room Projects
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Construction of a safe room for first responders
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creation of safe rooms will allow first responders to have a safe place to be stationed during hazard events
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 6	Flood Proofing Projects
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, FMA, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Flood-proof critical and residential structures and 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 facilities around the parish will reduce the risk to flood damage and property loss.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 7	Map and Assess Vulnerability to High Wind
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Develop and maintain database of current community vulnerability to high wind. Utilize GIS to identify and map areas at risk to wind with different conditions (hurricane categories) to provide better awareness of the hazard to emergency management officials and community members.
Type of Mitigation Action	Local Plans and Regulations, Education and Awareness Programs
How Action Aligns with Risk Reduction	Utilizing GIS software to map vulnerable structures around the area will allow the city to target the most vulnerable areas and implement mitigation efforts to reduce the risk to loss of life.
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 8	Retrofit of Structures with Ignition Resistant Materials
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Installation of noncombustible materials and technologies of existing structures in wildfire hazard areas.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Utilizing noncombustible materials on structures and city owned property will reduce the risk to loss of property and life during wildfire events
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 9	Wind Hardening for Governmental Buildings and Critical Facilities
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	Ensure adequate public resources in time of disaster by providing retrofits for buildings that will serve an Emergency Response role the event of a natural disaster.
PRIORITY	Medium
Action Description	Ensure adequate public resources in time of disaster by providing retrofits for buildings that will serve an Emergency Response role the event of a natural disaster.
Type of Mitigation Action	Hardening critical facilities will help ensure their protection and endurance during high wind events
How Action Aligns with Risk Reduction	Structure and Infrastructure Projects
Current Status of Action	Not Started – Carried Over from 2021 Plan
Hazard(s) Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 10	Cooling Spaces
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Identify and install cooling spaces in various facilities around the city. Facilities that are already constructed and will be used for cooling stations will have a designated sign on the property denoting the location as a cooling space
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Identifying cooling spaces around the city will allow for vulnerable populations to remain cool and safe from excessive heat events
Current Status of Action	New
Hazard(s) Addressed	Excessive Heat

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 11	Winter Weather Equipment Acquisition
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Purchase or partner with other agencies to acquire equipment to help aid with winter weather events. Equipment includes, but is not limited to, industrial snow plows, de-icing materials, pipe insulation, tree trimming equipment, equipped/reinforced emergency response vehicles.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Acquiring winter weather equipment for the city will ensure that the areas is prepared for the next winter storm that impacts the area. Partnering with neighboring communities and local agencies will enhance relationship for future hazard needs.
Current Status of Action	New
Hazard(s) Addressed	Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF MERRYVILLE	
DESCRIPTION	
TOWN OF MERRYVILLE MITIGATION ACTION 12	Enhance Critical Infrastructure and Communication Redundancy to Withstand Solar Flares and Geomagnetic Storms
LEAD AGENCY	Town of Merryville Mayor's Office
SUPPORTING AGENCIES	Beauregard Parish OHSEP, Beauregard Parish Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, Local
ASSOCIATED GOALS	1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact. 2. Improve data collection, use, and sharing to reduce the impacts of hazards. 3. Improve capabilities and coordination to plan and implement hazard mitigation projects. 4. Pursue opportunities to reduce impacts from hazards through mitigation of repetitive and severe repetitive loss properties and other appropriate construction projects and related activities.
PRIORITY	Medium
Action Description	Coordinate with local utilities, emergency management, and communications providers to reduce vulnerabilities to space weather events. Efforts may include installing protective devices on critical transformers, developing continuity-of-operations plans for loss of GPS and communications, and building redundancy into critical communication systems (e.g., satellite, land-mobile radio, and hardwired backups) to maintain emergency coordination.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Coordinating with utilities and communication providers, installing protective devices, planning for outages, and creating redundant systems, communities can maintain critical functions and emergency coordination even if primary systems fail.
Current Status of Action	New
Hazard(s) Addressed	Solar Flares

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 Beauregard Parish and the incorporated jurisdictions. 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 define 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**
 - **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**
 - **Impact:** Limited or speculative long-term benefit
 - **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

Beauregard 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.

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 Beauregard Parish Hazard Mitigation Plan Update

The Beauregard Parish Hazard Mitigation Plan Update process began in April 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
5/20/2025	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.
7/10/2025	Initial Planning Committee Meeting	DeRidder, LA	No	Discuss with Beauregard Parish Hazard Mitigation Planning Committee the process and expectations of plan participants. Discuss timeline and action items for parish and each jurisdiction.
8/28/2025	Mitigation Action Workshop	DeRidder, LA	No	Discussion with Beauregard Parish Hazard Mitigation Planning Committee of the outstanding data required for plan update, as well as discussion of mitigation actions (old and new) for plan update.
11/20/2025	Risk Assessment Review	DeRidder, LA	Yes	Presentation of Risk Assessment and profiled hazards to Planning Committee.
11/20/2025	Public Meeting	DeRidder, 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 Beauregard 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 Beauregard 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 Beauregard Parish OHSEP Director. Beauregard 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 organizations contacted included the Council on Aging, and the local American Red Cross chapter, but no response was received. There are no higher education institutions in Beauregard Parish; therefore, no members of academia could be included in the planning process on a parish level. However, SDMI is an institution under the Louisiana State University system, so this plan update received constant feedback from academia personnel on LSU's campus. Therefore, LSU was able to be included for academic participation during the plan update process.

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

Beauregard Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	Email
Aaron Moreno	Firefighter	BPFD #3	amoreno1986@outlook.com
Adam Williams	Director	DeRidder Public Works	awilliams@cityofderidder.org
Amy Michiels	Regional Coordinator	GOHSEP	amy.michiels2@la.gov
Andrea Couch	Parish Treasurer	Beauregard Public Works	acouch@beauparish.org
Anthony Rodriguez	Public Works	Town of Merryville	anthony.rodriguez14@yahoo.com
Ashley Alford	Town Clerk	Town of Merryville	merryvilletownof@bellsouth.net
Cindy Brister, Police Chief	Chief of Police	Merryville Police Department	cindy_brister06@yahoo.com
Craig Richard	Chief of Police	DeRidder Police Dept.	crichard@cityofderidder.org
Daniel Cambell	Mayor	Town of Merryville	danieloldpkp@gmail.com
Darren Hall	Deputy Chief	DeRidder Police Dept.	dhall@cityofderidder.org
Daryl Binford	Fire Chief	Beau. Fire Dist #3	bpvfd3@gmail.com
Devon Goodwin	Fire Chief	Beau. Fire Dist #1	firedistrict1beau@outlook.com
Dianna Nichols	Senior Operations Specialist	Beauregard Parish Police Jury	dnichols@beauparish.org
Eric Stracener	Fire Chief	Beau. Fire Dist #4	estracener@bpfd4.org
George Lee Glass	Reverend	Grace Church	pastorglee@gracederidder.org
Glen Mears	Operations Chief	BPOHSEP	gulfcentral59@centurylink.net
Jared Morton	Chief Deputy	Beauregard Sheriff Office	jmorton@bpsheriff.org
Ken Harlow	Fire Chief	DeRidder Fire	kharlow@cityofderidder.org
Lance Grant	Logistics	BPSO	lgrant@bpsheriff.org
Lee Williams	Fire Chief	BPFD #3	bpvfd3@gmail.com

Lennie Lafleur	Program Coordinator	GOHSEP	lennie.lafleur@la.gov
Lucus Reynolds	Fire Chief	Beau. Fire Dist #2	distfirechiefbeaufd2@gmail.com
Mark Herford	Sheriff	Beauregard Sheriff Office	mherford@bpsheriff.org
Michael Guimbellott	Operations Manager	Water District #3	michaelguimbellott@waterworks3.com
Michael Harris	Mayor	City DeRidder	mharris@cityofderidder.org
Michael Worthen	Facilities Manager	Beauregard Public Works	mworthen@beauparish.org
Mike Harper	Police Jury President	Beauregard Police Jury	policejuror@hotmail.com
Mike Luttrell	Economic Development Manager	Beauregard Electric	mluttrell@beci.org
Paula Rose	Office Manager	Water District #2	waterworksno3@yahoo.com
Rev. Laraine Waughtal	Pastor	First United Methodist	revlaraine@fumcderidder.org
Sara Sellers	Deputy Director	BPOHSEP	ssellers@bpsheriff.org
Scott Greenmun	Director	BPOHSEP	bpso434@yahoo.com
Tracy Adams	Director	DeRidder Parks and Recreation	tracy.williams@cityofderidder.org
Will Martin	Patrol Commander	Beauregard Sheriff Office	wmartin@bpsheriff.org

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 Beauregard 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, Beauregard 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, Beauregard 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 Beauregard, and how to combat any issues that have arisen within the means and regulations of the hazard mitigation plan.

Beauregard 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 Beauregard 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: May 20, 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:

Beauregard Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Scott Greenmun	Director	Beauregard 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 10, 2025

Location: DeRidder, 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:

Beauregard Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Aaron Moreno	Firefighter	BPFD #3
Adam Williams	Director	DeRidder Public Works
Amy Michiels	Regional Coordinator	GOHSEP
Andrea Couch	Parish Treasurer	Beauregard Public Works
Anthony Rodriguez	Public Works	Town of Merryville
Ashley Alford	Town Clerk	Town of Merryville
Cindy Brister, Police Chief	Chief of Police	Merryville Police Department
Craig Richard	Chief of Police	DeRidder Police Dept.
Daniel Cambell	Mayor	Town of Merryville
Darren Hall	Deputy Chief	DeRidder Police Dept.

Daryl Binford	Fire Chief	Beau. Fire Dist #3
Devon Goodwin	Fire Chief	Beau. Fire Dist #1
Dianna Nichols	Senior Operations Specialist	Beauregard Parish Police Jury
Eric Stracener	Fire Chief	Beau. Fire Dist #4
George Lee Glass	Reverend	Grace Church
Glen Mears	Operations Chief	BPOHSEP
Jared Morton	Chief Deputy	Beauregard Sheriff Office
Ken Harlow	Fire Chief	DeRidder Fire
Lance Grant	Logistics	BPSO
Lee Williams	Fire Chief	BPFD #3
Lennie Lafleur	Program Coordinator	GOHSEP
Lucus Reynolds	Fire Chief	Beau. Fire Dist #2
Mark Herford	Sheriff	Beauregard Sheriff Office
Michael Guimbellott	Operations Manager	Water District #3
Michael Harris	Mayor	City DeRidder
Michael Worthen	Facilities Manager	Beauregard Public Works
Mike Harper	Police Jury President	Beauregard Police Jury
Mike Lutrell	Economic Development Manager	Beauregard Electric
Paula Rose	Office Manager	Water District #2
Rev. Laraine Waughtal	Pastor	First United Methodist
Sara Sellers	Deputy Director	BPOHSEP
Scott Greenmun	Director	BPOHSEP
Tracy Adams	Director	DeRidder Parks and Recreation
Will Martin	Patrol Commander	Beauregard Sheriff Office

Meeting #3: Hazard Mitigation Plan Update Mitigation Action Workshop

Date: August 28, 2025

Location: DeRidder, LA

Purpose: Discussion with Beauregard Parish Hazard Mitigation Planning Committee of the outstanding data required for plan update, as well as discussion of mitigation actions (old and new) for plan update. Continued timeline discussions.

Public Invitation: No

Meeting Invitees:

Beauregard Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Aaron Moreno	Firefighter	BPFD #3
Adam Williams	Director	DeRidder Public Works
Amy Michiels	Regional Coordinator	GOHSEP
Andrea Couch	Parish Treasurer	Beauregard Public Works
Anthony Rodriguez	Public Works	Town of Merryville
Ashley Alford	Town Clerk	Town of Merryville
Cindy Brister, Police Chief	Chief of Police	Merryville Police Department
Craig Richard	Chief of Police	DeRidder Police Dept.
Daniel Cambell	Mayor	Town of Merryville
Darren Hall	Deputy Chief	DeRidder Police Dept.
Daryl Binford	Fire Chief	Beau. Fire Dist #3
Devon Goodwin	Fire Chief	Beau. Fire Dist #1
Dianna Nichols	Senior Operations Specialist	Beauregard Parish Police Jury

Eric Stracener	Fire Chief	Beau. Fire Dist #4
George Lee Glass	Reverend	Grace Church
Glen Mears	Operations Chief	BPOHSEP
Jared Morton	Chief Deputy	Beauregard Sheriff Office
Ken Harlow	Fire Chief	DeRidder Fire
Lance Grant	Logistics	BPSO
Lee Williams	Fire Chief	BPFD #3
Lennie Lafleur	Program Coordinator	GOHSEP
Lucus Reynolds	Fire Chief	Beau. Fire Dist #2
Mark Herford	Sheriff	Beauregard Sheriff Office
Michael Guimbellott	Operations Manager	Water District #3
Michael Harris	Mayor	City DeRidder
Michael Worthen	Facilities Manager	Beauregard Public Works
Mike Harper	Police Jury President	Beauregard Police Jury
Mike Lutrell	Economic Development Manager	Beauregard Electric
Paula Rose	Office Manager	Water District #2
Rev. Laraine Waughtal	Pastor	First United Methodist
Sara Sellers	Deputy Director	BPOHSEP
Scott Greenmun	Director	BPOHSEP
Tracy Adams	Director	DeRidder Parks and Recreation
Will Martin	Patrol Commander	Beauregard Sheriff Office

Meeting #4: Hazard Mitigation Plan Update Planning Committee Risk Assessment Review

Date: November 20, 2025

Location: DeRidder, LA

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

Public Invitation: No

Meeting Invitees:

Beauregard Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Aaron Moreno	Firefighter	BPFD #3
Adam Williams	Director	DeRidder Public Works
Amy Michiels	Regional Coordinator	GOHSEP
Andrea Couch	Parish Treasurer	Beauregard Public Works
Anthony Rodriguez	Public Works	Town of Merryville
Ashley Alford	Town Clerk	Town of Merryville
Cindy Brister, Police Chief	Chief of Police	Merryville Police Department
Craig Richard	Chief of Police	DeRidder Police Dept.
Daniel Cambell	Mayor	Town of Merryville
Darren Hall	Deputy Chief	DeRidder Police Dept.
Daryl Binford	Fire Chief	Beau. Fire Dist #3
Devon Goodwin	Fire Chief	Beau. Fire Dist #1
Dianna Nichols	Senior Operations Specialist	Beauregard Parish Police Jury
Eric Stracener	Fire Chief	Beau. Fire Dist #4
George Lee Glass	Reverend	Grace Church
Glen Mears	Operations Chief	BPOHSEP
Jared Morton	Chief Deputy	Beauregard Sheriff Office
Ken Harlow	Fire Chief	DeRidder Fire

Lance Grant	Logistics	BPSO
Lee Williams	Fire Chief	BPFD #3
Lennie Lafleur	Program Coordinator	GOHSEP
Lucus Reynolds	Fire Chief	Beau. Fire Dist #2
Mark Herford	Sheriff	Beauregard Sheriff Office
Michael Guimbellott	Operations Manager	Water District #3
Michael Harris	Mayor	City DeRidder
Michael Worthen	Facilities Manager	Beauregard Public Works
Mike Harper	Police Jury President	Beauregard Police Jury
Mike Lutrell	Economic Development Manager	Beauregard Electric
Paula Rose	Office Manager	Water District #2
Rev. Laraine Waughtal	Pastor	First United Methodist
Sara Sellers	Deputy Director	BPOHSEP
Scott Greenmun	Director	BPOHSEP
Tracy Adams	Director	DeRidder Parks and Recreation
Will Martin	Patrol Commander	Beauregard Sheriff Office

Meeting #5: Hazard Mitigation Plan Update Public Meeting

Date: November 20, 2025

Location: DeRidder, 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 courthouse, published in the local newspaper, 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 Beauregard Parish, their jurisdictions, and with assistance from SDMI.

Public Invitation: Yes

Meeting Invitees:

Beauregard Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Aaron Moreno	Firefighter	BPFD #3
Adam Williams	Director	DeRidder Public Works
Amy Michiels	Regional Coordinator	GOHSEP
Andrea Couch	Parish Treasurer	Beauregard Public Works
Anthony Rodriguez	Public Works	Town of Merryville
Ashley Alford	Town Clerk	Town of Merryville
Cindy Brister, Police Chief	Chief of Police	Merryville Police Department
Craig Richard	Chief of Police	DeRidder Police Dept.
Daniel Cambell	Mayor	Town of Merryville
Darren Hall	Deputy Chief	DeRidder Police Dept.
Daryl Binford	Fire Chief	Beau. Fire Dist #3
Devon Goodwin	Fire Chief	Beau. Fire Dist #1

Dianna Nichols	Senior Operations Specialist	Beauregard Parish Police Jury
Eric Stracener	Fire Chief	Beau. Fire Dist #4
George Lee Glass	Reverend	Grace Church
Glen Mears	Operations Chief	BPOHSEP
Jared Morton	Chief Deputy	Beauregard Sheriff Office
Ken Harlow	Fire Chief	DeRidder Fire
Lance Grant	Logistics	BPSO
Lee Williams	Fire Chief	BPFD #3
Lennie Lafleur	Program Coordinator	GOHSEP
Lucus Reynolds	Fire Chief	Beau. Fire Dist #2
Mark Herford	Sheriff	Beauregard Sheriff Office
Michael Guimbellott	Operations Manager	Water District #3
Michael Harris	Mayor	City DeRidder
Michael Worthen	Facilities Manager	Beauregard Public Works
Mike Harper	Police Jury President	Beauregard Police Jury
Mike Lutrell	Economic Development Manager	Beauregard Electric
Paula Rose	Office Manager	Water District #2
Rev. Laraine Waughtal	Pastor	First United Methodist
Sara Sellers	Deputy Director	BPOHSEP
Scott Greenmun	Director	BPOHSEP
Tracy Adams	Director	DeRidder Parks and Recreation
Will Martin	Patrol Commander	Beauregard Sheriff Office

Meeting Announcement:**BEAUREGARD PARISH OFFICE OF HOMELAND SECURITY & EMERGENCY PREPAREDNESS****PUBLIC MEETING ANNOUNCEMENT****Beauregard Parish and its partners are seeking community input for the
2026 Beauregard Parish Hazard Mitigation Plan update!**

Beauregard 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 Beauregard 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.

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 Thursday, November 20th for a public meeting at 2:00 PM to learn more about the plan and share your input on the risks and vulnerabilities that most impact you and your community.

Meeting Location:

Beauregard Parish Emergency Operations Center
506 LA-3099.
DeRidder, LA 70634

Residents of Beauregard 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_71wTsRxOdewMWHQ



The Parish appreciates your input.

If you have questions, please contact the Beauregard 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 Beauregard Parish residents was conducted during the entirety of the plan update process. The survey was designed to capture public perceptions and opinions regarding natural hazards in the Beauregard Parish planning area. 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 Beauregard Parish Hazard Mitigation Plan Planning Committee are representative of the outlook of the community at large. However, because there were very few responses to the survey, this public feedback could not be incorporated into the plan. The full Beauregard Parish survey can be found at the following link:

https://lsu.qualtrics.com/jfe/form/SV_71wTsRxOdewMWHQ

Outreach Activity #2: Public Meeting Activity - Incident Questionnaire

Date: November 20, 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 Beauregard Parish regarding hazard events and their localized impacts. While the information collected via the questionnaire was to be integrated into this planning document, there was no public turnout for the meeting, and subsequently no results could be collected. A copy of the incident questionnaire can be found on the next page.

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

Date: Ongoing

Location: SDMI Hazard Mitigation Website

Public Initiation: Yes

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

BEAUREGARD PARISH PUBLIC OUTREACH**PUBLIC ACTIVITY:
INCIDENT/ ISSUE
QUESTIONNAIRE****1. HAZARD TYPE(S):**

- A. DROUGHT
- B. EXCESSIVE HEAT
- C. FLOODING
- D. SINKHOLES
- E. SOLAR FLARES
- F. THUNDERSTORMS
- G. TORNADOES
- H. TROPICAL CYCLONES
- I. WILDFIRES
- J. WINTER WEATHER

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/DID THE 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?**

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 Beauregard 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

Beauregard 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

Lafayette 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 Beauregard 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 Beauregard 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 at the SDMI Hazard Mitigation 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 Beauregard Parish Hazard Mitigation Plan Planning Committee and participating jurisdictions to determine additional implementation procedures when appropriate. This may include integrating the requirements of the Beauregard 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
- Transportation 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 Beauregard 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 City of DeRidder and the Town of Merryville, Beauregard 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:

Beauregard Parish		
Plan/Ordinance/Action	Update Frequency	Lead Agency
Capital Improvements Plan	Updated as needed	Beauregard Parish Police Jury
Continuity of Operations Plan	Updated as needed	Beauregard Parish OHSEP
Local Emergency Operations Plan	Updated as needed	Beauregard Parish OHSEP

City of DeRidder		
Plan/Ordinance/Action	Update Frequency	Lead Agency
Local Emergency Operations Plan	Updated as needed	DeRidder Mayor's Office

Town of Merryville		
Plan/Ordinance/Action	Update Frequency	Lead Agency
Local Emergency Operations Plan	Updated as needed	Merryville Mayor's Office

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.

Appendix C: Critical Facilities

Critical Facilities within the Beauregard Parish Planning Area

Beauregard Parish Planning Area Critical Facilities											
Type	Name	Drought	Excessive Heat	Flooding	Sinkholes	Solar Flares	Thunderstorms	Tornadoes	Tropical Cyclones	Wildfires	Winter Weather
Civil Government	Beauregard Parish Clerk of Court	X	X			X	X	X	X		X
	Beauregard Parish Police Jury	X	X			X	X	X	X		X
	Beauregard Parish Public Works Office	X	X			X	X	X	X		X
	Beauregard Parish School Board Main Office	X	X			X	X	X	X	X	X
	DeRidder City Hall	X	X			X	X	X	X		X
	Merryville Town Hall	X	X			X	X	X	X	X	X
Fire & SAR	Beauregard Fire Dist. 2 Broadlands Station	X	X			X	X	X	X	X	X
	Beauregard Fire Dist. 3 Bundicks Lake Station	X	X			X	X	X	X	X	X
	Beauregard Fire Dist. 3 Longacre Station	X	X			X	X	X	X		X
	Beauregard Fire Dist. 4 Admin.	X	X			X	X	X	X	X	X
	Beauregard Fire Dist. 4 Pleasant Hill Station	X	X			X	X	X	X	X	X
	Beauregard Fire District #3 Main Office	X	X			X	X	X	X	X	X
	Beauregard Fire District 1 - Fields Station	X	X			X	X	X	X		X
	Beauregard Fire District 1 - Junction Station	X	X			X	X	X	X	X	X
	Beauregard Fire District 1 - Merryville Station	X	X			X	X	X	X	X	X
	Beauregard Fire District 2 - Gordon Station	X	X			X	X	X	X		X
	Beauregard Fire District 2 - Longville Station	X	X			X	X	X	X	X	X

	Beauregard Fire District 2 - Meadow Village Station	X	X			X	X	X	X	X	X
	Beauregard Fire District 2 - Ragley Station	X	X			X	X	X	X	X	X
	Beauregard Fire District 2 - Texas Eastern Station	X	X			X	X	X	X		X
	Beauregard Fire District 3 - Kipling VFD	X	X			X	X	X	X	X	X
	Beauregard Fire District 3 - Sugartown VFD	X	X			X	X	X	X		X
	Beauregard Fire District 4 - Pine Ridge FD	X	X			X	X	X	X	X	X
	Beauregard Fire District 4 - Planner Mill FD	X	X			X	X	X	X	X	X
	Beauregard Fire District 4 - Three Pines FD	X	X			X	X	X	X	X	X
	Bivens Fire Station	X	X			X	X	X	X		X
	DeRidder Fire Department - Eastside Station	X	X			X	X	X	X	X	X
	DeRidder Fire Department - Main Office	X	X			X	X	X	X		X
	DeRidder Fire Department - Northside Station	X	X			X	X	X	X	X	X
	DeRidder Fire Department - Westside Station	X	X			X	X	X	X	X	X
	Dry Creek Fire Department	X	X			X	X	X	X	X	X
	Fire District #1 Office	X	X			X	X	X	X	X	X
	Oretta Fire Station	X	X			X	X	X	X	X	X
	Pujo Fire Station	X	X			X	X	X	X		X
	Singer Fire Station and Office	X	X			X	X	X	X	X	X
Law Enforcement	Beauregard Firing/Gun Range	X	X			X	X	X	X	X	X
	Beauregard Parish Sheriff Maintenance Shop	X	X			X	X	X	X		X
	Beauregard Parish Sheriff/911 Communications Office	X	X			X	X	X	X		X
	Beauregard Parish Sheriff's Office Annex	X	X			X	X	X	X		X

	Beauregard Parish Sheriff's EOC	X	X			X	X	X	X		X
	Beauregard Sheriff's Office Training Center	X	X			X	X	X	X		X
	DeRidder Police Department	X	X			X	X	X	X	X	X
	East Side Substation	X	X			X	X	X	X	X	X
	Merryville Police Station	X	X			X	X	X	X		X
	Phelps Correctional Center	X	X			X	X	X	X		X
	Singer Substation	X	X			X	X	X	X		X
	South Side Substation	X	X			X	X	X	X	X	X
	West Side Substation	X	X			X	X	X	X	X	X
Public Health	Beauregard Parish Health System	X	X			X	X	X	X		X
	Beauregard Parish Health Unit	X	X			X	X	X	X	X	X
Education	Beauregard Alternative Program	X	X			X	X	X	X	X	X
	DeRidder Elementary	X	X			X	X	X	X	X	X
	DeRidder High	X	X			X	X	X	X	X	X
	DeRidder Junior High	X	X			X	X	X	X	X	X
	East Beauregard Elementary and High School	X	X			X	X	X	X	X	X
	K.R. Hanchey Elementary	X	X			X	X	X	X	X	X
	Merryville High School	X	X			X	X	X	X		X
	Pine Wood Elementary	X	X			X	X	X	X	X	X
	Singer High School	X	X			X	X	X	X	X	X
	South Beauregard Elementary School	X	X			X	X	X	X		X
	South Beauregard High School	X	X			X	X	X	X	X	X
	South Beauregard Upper Elementary	X	X			X	X	X	X	X	X

******THIS PAGE LEFT INTENTIONALLY BLANK******



Appendix D: Plan Adoption

FEMA Approval Letter

*****WILL UPDATE ONCE JURISDICTIONS FORMALLY ADOPT HMP AFTER FEMA REVIEW*****

GOHSEP Approval Letter



Beauregard Parish



City of DeRidder



Town of Merryville



******THIS PAGE LEFT INTENTIONALLY BLANK******



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

Beauregard Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	Email
Aaron Moreno	Firefighter	BPFD #3	amoreno1986@outlook.com
Adam Williams	Director	DeRidder Public Works	awilliams@cityofderidder.org
Amy Michiels	Regional Coordinator	GOHSEP	amy.michiels2@la.gov
Andrea Couch	Parish Treasurer	Beauregard Public Works	acouch@beauparish.org
Anthony Rodriguez	Public Works	Town of Merryville	anthony.rodriguez14@yahoo.com
Ashley Alford	Town Clerk	Town of Merryville	merryvilletownof@bellsouth.net
Cindy Brister, Police Chief	Chief of Police	Merryville Police Department	cindy_brister06@yahoo.com
Craig Richard	Chief of Police	DeRidder Police Dept.	crichard@cityofderidder.org
Daniel Cambell	Mayor	Town of Merryville	danieloldpkp@gmail.com
Darren Hall	Deputy Chief	DeRidder Police Dept.	dhall@cityofderidder.org
Daryl Binford	Fire Chief	Beau. Fire Dist #3	bpvfd3@gmail.com
Devon Goodwin	Fire Chief	Beau. Fire Dist #1	firedistrict1beau@outlook.com
Dianna Nichols	Senior Operations Specialist	Beauregard Parish Police Jury	dnichols@beauparish.org
Eric Stracener	Fire Chief	Beau. Fire Dist #4	estracener@bpfd4.org
George Lee Glass	Reverend	Grace Church	pastorglee@gracederidder.org
Glen Mears	Operations Chief	BPOHSEP	gulfcentral59@centurylink.net
Jared Morton	Chief Deputy	Beauregard Sheriff Office	jmorton@bpsheriff.org
Ken Harlow	Fire Chief	DeRidder Fire	kharlow@cityofderidder.org
Lance Grant	Logistics	BPSO	lgrant@bpsheriff.org
Lee Williams	Fire Chief	BPFD #3	bpvfd3@gmail.com
Lennie Lafleur	Program Coordinator	GOHSEP	lennie.lafleur@la.gov
Lucus Reynolds	Fire Chief	Beau. Fire Dist #2	distfirechiefbeaufd2@gmail.com
Mark Herford	Sheriff	Beauregard Sheriff Office	mherford@bpsheriff.org
Michael Guimbellott	Operations Manager	Water District #3	michaelguimbellott@waterworks3.com
Michael Harris	Mayor	City DeRidder	mharris@cityofderidder.org

Michael Worthen	Facilities Manager	Beauregard Public Works	mworthen@beauparish.org
Mike Harper	Police Jury President	Beauregard Police Jury	policejuror@hotmail.com
Mike Luttrell	Economic Development Manager	Beauregard Electric	mluttrell@beci.org
Paula Rose	Office Manager	Water District #2	waterworksno3@yahoo.com
Rev. Laraine Waughtal	Pastor	First United Methodist	revlaraine@fumcderidder.org
Sara Sellers	Deputy Director	BPOHSEP	ssellers@bpsheriff.org
Scott Greenmun	Director	BPOHSEP	bpso434@yahoo.com
Tracy Adams	Director	DeRidder Parks and Recreation	tracy.williams@cityofderidder.org
Will Martin	Patrol Commander	Beauregard Sheriff Office	wmartin@bpsheriff.org

Capability Assessment

Unincorporated Beauregard Parish

Capability Assessment Worksheet - Beauregard 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	No	
Capital Improvements Plan	Yes	
Economic Development Plan	No	
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan	Yes	
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		
Fire Department ISO/PIAL rating	Yes	
Site plan review requirements	No	
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)	No	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	Yes	
Other	n/a	

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	No	
Mitigation Planning Committee	Yes	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	
Staff	Yes / No	Comments
Chief Building Official	Yes	
Floodplain Administrator	Yes	
Emergency Manager	Yes	
Community Planner	No	
Civil Engineer	Yes	
GIS Coordinator	No	
Grant Writer	No	
Other	n/a	
Technical	Yes / No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	No	
Hazard Data & Information	Yes	
Grant Writing	No	
Hazus Analysis	No	
Other	n/a	

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	
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	No	

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.	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	LEPC	
Other	n/a	

City of DeRidder

Capability Assessment Worksheet - City of DeRidder		
Local mitigation capabilities are existing authorities, policies 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	Yes	Updated 2019
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	3
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)	No	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	Yes	
Other	No	

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	No	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	
Staff	Yes / No	Comments
Chief Building Official	Yes	FT
Floodplain Administrator	Yes	FT
Emergency Manager	No	
Community Planner	Yes	FT
Civil Engineer	Yes	Contracted to private firm
GIS Coordinator	No	
Grant Writer	No	
Other	No	
Technical	Yes / No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Utilizes city account with NIXLE
Hazard Data & Information	No	
Grant Writing	No	
Hazus Analysis	No	
Other	No	

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	
Fees for water, sewer, gas, or electric services	Yes	
Impact fees for new development	Yes	
Stormwater Utility Fee	No	
Community Development Block Grant (CDBG)	Yes	
Other Funding Programs	Yes	

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	Local community groups who focus on the elderly and low income
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	Yes	All city departments promote public education
Natural Disaster or safety related school program	No	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	Yes	Local community church groups designed for disaster response
Other	No	

Town of Merryville

Capability Assessment Worksheet - Town of Merryville		
Local mitigation capabilities are existing authorities, policies 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	Yes	
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	No	
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)	No	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	No	
Other	n/a	

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	No	
Mitigation Planning Committee	No	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	No	
Staff	Yes / No	Comments
Chief Building Official	No	
Floodplain Administrator	No	
Emergency Manager	No	
Community Planner	No	
Civil Engineer	No	
GIS Coordinator	No	
Grant Writer	No	
Other	n/a	
Technical	Yes / No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	No	
Hazard Data & Information	No	
Grant Writing	No	
Hazus Analysis	No	
Other	n/a	

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	No	
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	No	

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.	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	n/a	

Building Inventory

Beauregard Parish Owned Building Information								
Beauregard Parish								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Beauregard Alternative Program	Education	220 Martin Luther King Drive	DeRidder	30.84359	-93.28788			
Beauregard Electric Substation DeQuincy/Fields	Utilities	La. 389 at Dee Gilland Rd	DeQuincy	30.52020714	-93.50386411			
Beauregard Electric Substation Dry Creek	Utilities	8264 LA-113	Dry Creek	30.67116466	-93.04678792			
Beauregard Electric Substation Junction Area	Utilities	La. 111 and April Road	Junction	30.8472595	-93.50908549			
Beauregard Electric Substation Longville	Utilities	US 191	Longville	30.59405604	-93.23780035			
Beauregard Electric Substation Ragley	Utilities	US 171 and Conley Rd	Ragley	30.52177397	-93.23189403			
Beauregard Fire Dist. 2 Broadlands Station	Fire Department	124 Lee Hall Road	DeRidder	30.7195971	-93.2382872			
Beauregard Fire Dist. 3 Bundicks Lake Station	Fire Department	4929 Hwy 394	DeRidder	30.73702395	-93.11528724			
Beauregard Fire Dist. 3 Longacre Station	Fire Department	750 Longacre Road	DeRidder	30.844419	-93.151157			
Beauregard Fire Dist. 4 Admin.	Fire Department	2061 Bilbo Street	DeRidder	30.8502299	-93.3171916			
Beauregard Fire Dist. 4 Pleasant Hill Station	Fire Department	4081 Hwy 171	DeRidder	30.79428291	-93.24146129			
Beauregard Fire District #3 Main Office	Fire Department	5691 Hwy 26	DeRidder	30.79740642	-93.07308851			
Beauregard Fire District 1 - Fields Station	Fire Department	13491 Highwa389	Merryville	30.52638456	-93.57427678			
Beauregard Fire District 1 - Junction Station	Fire Department	272 Mouth of Creek Road	Merryville	30.8431695	-93.51509865			
Beauregard Fire District 1 - Merryville Station	Fire Department	637 Hennigan Street	Merryville	30.75453622	-93.54174839			
Beauregard Fire District 2 - Gordon Station	Fire & SAR	3285 Highway 12	DeQuincy	30.48016177	-93.33555999			
Beauregard Fire District 2 - Longville Station	Fire & SAR	11078 Highway 171	Longville	30.60424915	-93.23296288			
Beauregard Fire District 2 - Meadow Village Station	Fire & SAR	16793 Highway 171	Ragley	30.44788828	-93.2321887			

Beauregard Fire District 2 - Ragley Station	Fire & SAR	160 1st Pentecostal Church Road	Longville	30.5267945	-93.23462053			
Beauregard Fire District 2 - Texas Eastern Station	Fire & SAR	2190 Texas Eastern Road	Ragley	30.45729248	-93.14749864			
Beauregard Fire District 3 - Kipling VFD	Fire Department	4444 Highway 26	DeRidder	30.80430916	-93.11047272			
Beauregard Fire District 3 - Sugartown VFD	Fire & SAR	3141 Highway 113	Sugartown	30.80372588	-93.01427382			
Beauregard Fire District 4 - Pine Ridge FD	Fire Department	1009 Pine Ridge Road	DeRidder	30.78955079	-93.34383286			
Beauregard Fire District 4 - Planner Mill FD	Fire Department	2061 Bilbo Street	DeRidder	30.85036093	-93.31721046			
Beauregard Fire District 4 - Three Pines FD	Fire Department	354 Three Pines Church Road	DeRidder	30.85478786	-93.20954523			
Beauregard Firing/Gun Range	Law Enforcement	1366 Ball Road	DeRidder	30.7829181	-93.2811757			
Beauregard Parish Animal Control	Law Enforcement	440 Bolivar Bishop Drive	DeRidder	30.84148	-93.28315			
Beauregard Parish Clerk of Court	Civil Government	201 W 1st St	DeRidder	30.84626485	-93.2875686			
Beauregard Parish Health Unit	Public Health	600 S Pine St	DeRidder	30.84155213	-93.28804176			
Beauregard Parish Health Unit	Governmental	216 Evangeline St.	DeRidder	30.84901143	-93.2732962			
Beauregard Parish Police Jury	Civil Government	201 W 2nd St	DeRidder	30.845514	-93.28760523			
Beauregard Parish Public Works Office	Public Works	203 West 3rd Street	DeRidder	30.84495536	-93.2853733			
Beauregard Parish School Board Main Office	Civil Government	202 West 3rd St.	DeRidder	30.84460605	-93.28791428			
Beauregard Parish School Bus Barn	Education	506 Martin Luther King Drive	DeRidder	30.84070224	-93.27259521			
Beauregard Parish Sheriff Maint. Shop	Law Enforcement	430 Bolivar Bishop Drive	DeRidder	30.84109444	-93.28400586			
Beauregard Parish Sheriff/911 Communications Office	Law Enforcement	412 Bolivar Bishop Dr	DeRidder	30.84176112	-93.2839014			
Beauregard Parish Sheriff's Office Annex	Law Enforcement	120 S Stewart St	DeRidder	30.84611184	-93.28703881			
Beauregard Parish Sheriff's EOC	Law Enforcement	560 La-3099	DeRidder	30.8270763	-93.323416			
Beauregard Parish Tax Assessor	Civil Government	214 West 2nd Street	DeRidder	30.84611	-93.288333	\$250,000		
Beauregard Parish Water District 2	Fire & SAR	9252 Hwy 27	Singer	30.6510808	-93.41504466			
Beauregard Sheriff's Office Training Center	Law Enforcement	420 Bolivar Bishop Drive	DeRidder	30.84130155	-93.28380154			
Bivens Fire Station	Fire Department	5163 Hwy 389	Merryville	30.62954611	-93.60500941			
DeRidder Elementary	Education	909 High School Dr	DeRidder	30.85719212	-93.29639655			
DeRidder High	Education	723 Oneal St	DeRidder	30.85707736	-93.30718185			
DeRidder Junior High	Education	415 N Frusha Dr	DeRidder	30.85215695	-93.30275371			

Dry Creek Baptist Camp	Education	8237 Highway 113	Dry Creek	30.67240892	-93.04414718			
Dry Creek Fire Department	Fire & SAR	8352 Highway 394	DeRidder	30.67166696	-93.04884611			
East Beauregard Elementary and High School	Education	5364 Highway 113	Dry Creek	30.74466059	-93.02705966			
East Side Substation	Law Enforcement	7653 La-26	DeRidder	30.77166713	-93.01854028			
Fields Library	Library	6249 LA-109	Fields	30.52444	-93.575277	1,000,000		
Fire District #1 Office	Fire & SAR	1287 Newlin Cemetery Road	Singer	30.66014886	-93.4090257			
K.R. Hanchey Elementary	Education	611 N Frusha Dr	DeRidder	30.8548292	-93.30237134			
Merryville High School	Education	7061 LA-110	Merryville	30.74686893	-93.53724969			
Oretta Fire Station	Fire & SAR	114 Parker Road	Singer	30.52670006	-93.43671607	Changed Address		
Parker Propane	Utilities	La. 27 &Snuffy Rd	Singer	30.43226188	-93.42892716			
Phellps Correctional Center	Law Enforcement	14925 Highway 27	DeQuincy	30.49782631	-93.43166984			
Pine Wood Elementary	Education	815 Mel Branch Memorial Dr	DeRidder	30.85581954	-93.29412476			
Pujo Fire Station	Fire Department	9386 Schutz Road	DeRidder	30.7770823	-93.420048			
Ragley Library	Library	6715 Hwy. 12, Suite A	Ragley	30.51083	-93.236388	10,000		
Singer Fire Station and Office	Fire & SAR	9088 Highway 27	Singer	30.65576564	-93.41264346			
Singer Fire Station Office	Fire Department	9080 Hwy 27	Singer	30.65393286	-93.41099221			
Singer High School	Education	152 Highway 110 East	Singer	30.61779873	-93.42546468			
Singer Library	Library	9130 Hwy. 27	Singer	30.6175489	-93.4254758	20,000		
Singer Substation	Law Enforcement	10526 La-27	Singer	30.56618394	-93.23409053			
South Beauregard Elementary School	Education	12380 Highway 171	Longville	30.56960783	-93.23550987			
South Beauregard High School	Education	151 Longville Church Road	Longville	30.5695714	-93.23413344			
South Beauregard Upper Elementary	Education	12378 US-171	Longville	30.55722266	-93.23311761			
South Beauregard Water System	Fire & SAR	12810 US-171	Longville	30.5226936	-93.2331985			
South Side Substation	Law Enforcement	14062 Hwy 171	Ragley	30.45942638	-93.14510658			
Texas Eastern Gas Pipeline	Transportation	2240 Texas Eastern Road	Ragley	30.4338605	-93.22990161			
Transcontinental Gas Pipeline	Transportation	17333 Highway 171	Ragley	31.38704916	-93.43755634			
Trunkline Gas Pipeline	Transportation	Highway 171	Longville	30.7588208	-93.545396			
West Side Substation	Law Enforcement	703 North Bryan Street	Merryville	30.84359	-93.28788			

City of DeRidder

Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Beauregard Parish Library	Library	205 S. Washington Street	DeRidder	30.84528	-93.286666	\$2,000,000		
BCAA Offices	Civil Government	204 West 1st. Street	DeRidder	30.84694	-93.287777	\$660,000		
Parish Activities Building	Community Activities	201 West 2nd Street	DeRidder	30.84556	-93.288611	\$100,000		
City of DeRidder Sewer Treatment Plant	Governmental	1366 Ball Road	DeRidder	30.78298131	-93.28063423	\$20,000,000.00	1990	
Pujo Fire Department	Fire Department	2386 Schuetz Rd	DeRidder	30.77706371	-93.42005375			
Broadlands Fire Department	Fire Department	124 Lee Hall Road	DeRidder	30.71965695	-93.23829013			
East Beauregard FD Station #3	Fire Department	1150 Longacre Road	DeRidder	30-49.601n	93-9.033w			
Pleasant Hill Fire Department	Fire Department	4081 Highway 171	DeRidder	30.79432871	-93.24148145			
DeRidder Fire Department - Main Office	Fire Department	200 South Jefferson Street	DeRidder	30.84528103	-93.28547709	\$4,000,000.00	Remodel 1998	
DeRidder Fire Department - Eastside Station	Fire Department	201 Martin Luther King Drive	DeRidder	30.84484348	-93.27233058	\$200,000.00	1959	
DeRidder Fire Department - Westside Station	Fire Department	102 Wilson Street	DeRidder	30.84707312	-93.29470949	\$400,000.00	1976	
DeRidder Fire Department - Northside Station	Fire Department	1809 North Pine St	DeRidder	30.87878935	-93.2853972	\$400,000.00	2006	
Dry Creek Fire Department	Fire & SAR	8352 Highway 394	DeRidder	30.67166696	-93.04884611			
City of DeRidder Police Department	Law Enforcement	200 S Jefferson St	DeRidder	30.84524577	-93.28543906	\$4,000,000.00	Remodel 1998	
Acadian Ambulance Service	Medical	613 Pittman Street	DeRidder	30.85330118	-93.28998141			
Cox Communications	Communications	1501 North Pine Street	DeRidder	30.87281268	-93.28538629			
Beauregard Electric Main Office	Utilities	1010 East 1st St.	DeRidder	30.84620367	-93.26673793			
Beauregard Electric Substation DeRidder area	Utilities	La. 27 and Maul Rd	DeRidder	30.79526446	-93.30169959			
CLECO Service Office	Utilities	North Pine Street	DeRidder	30.9902256	-93.28199542			
CLECO Substation DeRidder	Utilities	Louis st and East 1st st.	DeRidder	30.84713901	-93.29542911			
DeRidder Propane	Utilities	1044 Eric Green Road	DeRidder	30.81400914	-93.22160163			
Ferrell Gas	Utilities	2825 Highway 3226	DeRidder	30.87721122	-93.35349126			
Chase	Financial Institution	111 West 2nd Street	DeRidder	30.8455133	-93.28718881			
Beauregard Federal Savings and Loan	Financial Institution	122 North Jefferson Street	DeRidder	30.84776573	-93.28523073			
City Savings Bank	Financial Institution	301 North Pine Street	DeRidder	30.84925532	-93.28940286			

1st Federal Bank of La.	Financial Institution	519 North Pine Street	DeRidder	30.85360225	-93.2894096			
First National Bank of DeRidder	Financial Institution	131 N. Washington Ave.	DeRidder	30.84774999	-93.28640482			
Ampacet	Chemical Industry	125 Ampacet Drive	DeRidder	30.86965501	-93.28287332			
Boise Cascade Paper Mill	Chemical Industry	4200 Highway 190 West	DeRidder	30.86343139	-93.3723086			
Mead Wewstvac	Chemical Industry	400 Crosby Road	DeRidder	30.82696898	-93.28520076			
US Post Office	Postal	116 East 4th Street	DeRidder	30.84410873	-93.28449898			
Wal-Mart Super Center	Retail	1125 North Pine Street	DeRidder	30.86646108	-93.28779633			
Park Terrace Shopping center	Retail	1000 Block of North Pine Street	DeRidder	30.86289364	-93.28906355			
East Side Shopping Center	Retail	1000 Block of Mahlon Street	DeRidder	30.84850709	-93.272906			
Civic Center Covered Arena	Retail	5515 Highway 190 West	DeRidder	30.83733202	-93.41869603			
Beauregard Parish Fair Grounds	Community Activities	613 North Pine Street	DeRidder	30.85571961	-93.29115955			
Amerisafe Insurance	Insurance	2301 Highway 190	DeRidder	30.84527045	-93.32074933			
Westside Office Complex	Commercial	1807 Hwy 190 West	DeRidder	30.84699314	-93.28663418			
DeRidder City Hall	Governmental	200 S Jefferson St	DeRidder	30.84516698	-93.28545243	\$4,000,00 0.00	Remodel 1998	
Social Security Office	Governmental	807 South Pine Street	DeRidder	30.8385381	-93.29009255			
Carver Elementary School	School	220 MLK Drive	DeRidder	30.84420511	-93.2726939			
Building Blocks Child Care Center	School	500 W 8th St	DeRidder	30.83916545	-93.29156229			
First Baptist Church Preschool	School	219 W 2nd St	DeRidder	30.84551294	-93.28846625			
Methodist Church First United Pre School Bldg	School	403 W Port St	DeRidder	30.84859026	-93.28939073			
Mother Goose Day Care And Learning Center	School	130 Ellis Rd	DeRidder	30.84773581	-93.30966429			
War Memorial Civic Center	Community Activities	250 West 7th street	DeRidder	30.84064662	-93.28862153			
VFW Post 3619	Community Activities	1115 Hwy 27	DeRidder	30.83180208	-93.29212521			
American Legion	Community Activities	176 Hwy 112	DeRidder	30.84353758	-93.24946491			
Town of Merryville								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type

Merryville Town Hall	Civil Government	1009 HWY 110	Merryville	30.75520334	-93.54013472	\$137,280	1960	Unreinforced Masonry
Police Station	Law Enforcement	1009 Highway 110	Merryville	30.75508288	-93.54022958	\$85,280	1960	Unreinforced Masonry
Jeff Cagle Pavillion	Public Gatherings	649 HENNIGAN ST.	Merryville	30.75476238	-93.54204559	\$50,000	2012	Reinforced Masonry
Community Center	Public Gatherings / Local Shelter Location	3024 S. PINE ST.	Merryville	30.75239539	-93.54293244	\$46,800	1970	Unreinforced Masonry
Town Barn	Public Works And Equipment Location	3014 S. PINE ST.	Merryville	30.75278972	-93.54288423	\$32,760	1970	Unreinforced Masonry
Merryville Library	Library	1007 Hwy. 110	Merryville	30.75470055	-93.54036907	\$20,000		
Bivens Volunteer Fire Department	Fire Department	5163 Highway 389	Merryville	30.62952231	-93.60499117			
Merryville Water System	Water System	530 Hennigan Street	Merryville	30.754687	-93.54016894			
South Merryville Water System	Water System	3189 Highway 389	Merryville	30.6776539	-93.57972669			
Beauregard Electric Substation Merryville	Utilities	La. 389 and Daniel Hollingsworth Rd.	Merryville					
Eott Energy	Utilities	2001 Neale Oil Filed Road	Merryville	30.76686922	-93.47877515			
Sabine State Bank	Financial Institution	1470 Highway 190	Merryville	30.75959787	-93.54453129			
Play Pen Daycare	School	831 Highway 110 W	Merryville	30.75817131	-93.53817517			

Vulnerable Populations

Vulnerable Populations Worksheet - Beauregard Parish					
All Hospitals (Private or Public)					
Name	Address	City	Zip Code	Latitude	Longitude
Beauregard Health Systems	600 South Pine Street	DeRidder	70634	30.841528	-93.288336
Oceans Behavioral Hospital	1420 Blankenship Drive	DeRidder	70634	30.841932	-93.31172
MOB Building	501 South Pine Street	DeRidder	70634		
Beauregard Urgent Care	200 West 5th Street	DeRidder	70634		
Cardiology Clinic DeRidder	101 West 6th Street	DeRidder	70634		
Washington Street Clinic	301 South Washington Street	DeRidder	70634		
South Beauregard Health Center	12186 Highway 171	Longville	70634		
BPG Billing Office	401 South Pine Street	DeRidder	70634		
Fourth Street Clinic	109 West 4th Street	DeRidder	70634		
Nursing Homes (Private or Public)					
Name	Address	City	Zip Code	Latitude	Longitude
Westwood Manor Nursing Home	714 High School Drive	DeRidder	70634	30.858009	-93.294229
Beauregard Retirement and Rehab	1420 Blankenship Drive	DeRidder	70634	30.841932	-93.31172
Merryville Rehab Center	900 N. Bryan St.	Merryville	70634		
Mobile Home Parks					
Name	Address	City	Zip Code	Latitude	Longitude
A & B Mobile Home Park	1246 Highway 112	DeRidder	70634		
Back 40 RV Park	690 Highway 26	DeRidder	70634		
Big Oak RV Park	6315 US Hwy 171	DeRidder	70634		
Bilbo Trailer Park	1638 Bilbo Street	DeRidder	70634	30.851189	-93.307275
Burnett Trailer Park	Kmatt Drive	Dequincy	70634		
Bypass Trailer Park	2844 Highway 3226	DeRidder	70634		
C & B Trailer Park	422 Tilley Street	DeRidder	70634		
Camp Edgewood	3419 Camp Edgewood Road	Dequincy	70634		
Camp One 90	7457 US Hwy 190E	Ragley	70657		
Clear Creek Trailer Park	445 Cooper Street	Merryville	70634		
Country Meadows Estate	137 Farris Loop	Merryville	70660		
Cowboy RV Park	131 Calvin Shirley Rd.	DeRidder	70634		
D & A Mobile Home Park	Herman Smith Road	DeRidder	70634		
Deer Creek RV Park	400 Arthur Cooley Rd	DeRidder	70634		
DeRidder Back Forty RV Park	690 Hwy 26	DeRidder	70634		
Dixie Trailer Park	131 Crumpler Road	DeRidder	70634	30.836465	-93.292275

Evergreen Mobile Home Park	7643 Highway 171	Longville	70634		
Fees Trailer Park	Granberry Road	DeRidder	70634		
Fish Pond RV Park	15672 US Hwy 171	Ragley	70657		
G & A Trailer Park	Kulaga Road	DeRidder	70634		
G & S Trailer Park	411 Tilley Street	DeRidder	70634		
Gator RV Park	15690 US Hwy 171	Ragley	70657		
Happy Days RV Park	2819 US Hwy 190W	DeRidder	70634		
Hickory Creek Mobile Home Park	500 Hickory Creek Loop	DeRidder	70634	30.872223	-93.290281
Holidays Mobile Home Park	422 Louis Street	DeRidder	70634		
Holliday Trailer Park	451 Petty Street	DeRidder	70634	30.840499	-93.342101
Juanita Mobile Home Park	100 Cloud Loop	Singer	70634		
Legend Lane Trailer Park	1685 Highway 27	DeRidder	70634		
Mathis Trailer Park	193 Thunder Valley Road	DeRidder	70634		
Mockingbird Mobile Home Park	114 Mockingbird Lane	DeRidder	70634		
Pates Trailer Park	Franklin Road	DeRidder	70634		
Pine Grove Estates	1100 Alan Hickman Drive	DeRidder	70634	30.845771	-93.264234
Pine Hill Mobile Home Park	Highway 26	DeRidder	70634		
Rainwater Mobile Estate& RV	2062 Rainwater Road	DeRidder	70634		
RV Estate	206 Louise Street	DeRidder	70634		
Sugartown Acres	4239 Hwy 113	DeRidder	70634		
Tall Timbers Trailer Park	1507 Bilbo Street	DeRidder	70634	30.850411	-93.30521
Trout Creek RV Park	1285 Smith Road	DeRidder	70634		
Willow Ranch RV Park	2021 Hwy 12	Dequincy	70633		

National Flood Insurance Program (NFIP)

National Flood Insurance Program (NFIP)			
	Beauregard Parish	DeRidder	Merryville
Insurance Summary			
How many NFIP policies are in the community? What is the total premium and coverage?	# of Policies: 60; Total Premiums: \$50,595; Total Coverage: \$18,083,000	# of Policies: 154; Total Premiums: \$126,520; Total Coverage: \$40,480,000	# of Policies: 4; Total Premiums: \$3,124; Total Coverage: \$680,000
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: 529; Total amount of paid claims: \$7,739,833; Substantial Damage: 96	# of Paid claims: 78; Total amount of paid claims: \$1,127,079; Substantial Damage: 10	# of Paid claims: 5; Total amount of paid claims: \$118,983; Substantial Damage: 1
How many structures are exposed to flood risk with in the community?			
Describe any areas of flood risk with limited NFIP 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?	E= 09/09/1974; R= 10/19/19	E= 09/09/1974; R= 10/19/1982	E= 11/01/1974; R= 02/01/1987
Are there any outstanding compliance issues(i.e., current violations)?	Digital	Digital	Digital
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact(CAC)?	5/3/1990	10/19/1982	2/1/1987
Is a CAV or CAC scheduled or needed? If so when?	Meets	Meets	Meets
Regulation			
When did the community enter the NFIP?			
Are the FIRMs digital or paper?			
When did the community adopt the latest FIRMs?			
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?			
Community Rating System (CRS)			
Does the community participate in CRS?	No	No	No
What is the community's CRS Class Ranking?	N/A	N/A	N/A
Does the plan include CRS planning requirements?			

