



# IBERVILLE

## PARISH HAZARD MITIGATION UPDATE – 2016



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# IBERVILLE PARISH

## HAZARD MITIGATION PLAN UPDATE

*Prepared for:*

**Iberville Parish**



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This 2016 Iberville Parish Hazard Mitigation Plan Update was coordinated by the Iberville Parish Hazard Mitigation Plan Update Steering Committee, in collaboration with the participating jurisdictions as well as community stakeholders and the general public. The participating jurisdictions are made up of the following communities:

Unincorporated Iberville Parish  
 Village of Grosse Tete  
 Town of Maringouin  
 City of Plaquemine  
 Village of Rosedale  
 City of St. Gabriel  
 Town of White Castle

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## 1. Introduction

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

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

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

- Unincorporated Iberville Parish
- Village of Grosse Tete
- Town of Maringouin
- City of Plaquemine
- Village of Rosedale
- City of St. Gabriel
- Town of White Castle

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 and Rita environment in south Louisiana.

This Hazard Mitigation Plan is a comprehensive plan for disaster resiliency in Iberville 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.

Why this plan? 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 or cookbook 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.

Mitigation activities need funding. 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, a program that reduces flood insurance premiums in participating communities. This program is described at the end of this chapter.

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 Community Rating System credit, and provides the parish and its municipalities with a blueprint for reducing the impacts of these natural hazards on people and property.

## Location, Demography, and Economy

### Location

Iberville Parish is situated along the south central portion of Louisiana. To the east are East Baton Rouge and Ascension Parishes, to the west is St. Martin Parish, to the south are Assumption and Iberia Parishes, and to the north are Pointe Coupee and West Baton Rouge Parishes.

Iberville Parish has a large portion of its land located above coastal storm surge inundation elevations, yet its topography is relatively flat. In the south eastern portion of the parish, land is 14-20 feet above sea level along the Mississippi river banks, sloping gradually down to five feet and lower away from the river and toward backwater swamp areas. Going north, the elevation begins to rise again, reaching 16 feet in the northern portion of the parish. The only extensive lowland area is in the east-southeast sector which borders the eastern Atchafalaya River Levee.



Figure 1-1: Location of Iberville Parish within the State of Louisiana

Iberville Parish is located in Louisiana Governor’s Office of Homeland Security and Emergency Preparedness (GOHSEP) Region 2.

As noted above, Iberville Parish is located in the south central region of Louisiana.



Figure 1-2: Louisiana Homeland Security Regions

Table 1-1: Iberville Parish Population  
(Source: U.S. Census Bureau)

	2010 Census	2013 Census	(Current Yr) Estimate	Percent Change 2010 - 2013	Percent Change 2010 - (Current Year)
Total Population	33,407	33,438	33,327	0.10%	-0.20%
Population Density (Pop/Sq Mi)	54	—	—	—	—
Total Households	11,192	11,192	—	—	—

**Economy**

Iberville Parish is powered by a wide range of commercial and industrial businesses, including international corporations and small family-owned businesses. A major factor for this is due its excellent transportation routes, abundant raw materials, strong labor force, and land availability. The transportation network includes interstate, railroad, and pipeline access, along with Mississippi River and Gulf Coast access.

Iberville Parish still has significant agricultural operations, especially in the north Iberville communities of Rosedale, Grosse Tete, and Maringouin and in the White Castle area; and the fishing industry plays an important role in the rural areas of Bayou Sorrel and Bayou Pigeon.

The parish is situated in the industrial corridor, just 15 miles from Baton Rouge, the capital of the State of Louisiana. Dow Chemical Co. is the largest employer in the parish. Other major employers include Shintech, Georgia Gulf Corp., other chemical industrial plants, and government agencies, such as the Iberville Parish School Board and the Iberville Parish Council.

Industry data for business patterns in Iberville Parish can be found in the table below:

*Table 1-2: Business Patterns in Iberville Parish*  
(Source: <http://censtats.census.gov/cqi-bin/cbpnaic/cbpsect.pl>)

Business Description	Number of Employees	Number of Establishments	Annual Payroll (\$1,000)
Retail Trade	1,055	87	25,038
Manufacturing	3,403	29	323,130
Health Care and Social Assistance	705	44	19,200
Mining, Quarrying, Oil and Gas Extraction	106	7	6,182
Transportation and Warehousing	735	41	47,792
Construction	695	43	44,270
Administration and Support and Waste Management and Remediation Services	650	34	30,695
Real Estate and Rental and Leasing	146	27	7,643
Wholesale Trade	236	27	9,297
Other Services (except Public Administration)	195	48	6,854
Accommodation and Food Services	597	36	7,111
Financial and Insurance	276	37	11,960
Professional, Scientific, and Technical Services	500-999	40	27,111
Information	20-99	4	2,204
Educational Services	100-249	7	---
Arts, Entertainment, and Recreation	20-99	6	---
Management of Companies and Enterprises	0-19	2	---
Agriculture, Forestry, Fishing and Hunting	20-99	4	---
Utilities	20-99	4	---

While nature has presented the parish with a variety of hazards, the parish has the human resources that can face those hazards and manage the impact they have on people and property. This plan will discuss hazards affecting Iberville Parish. Hazard Profiles (see Section Two) contain detailed information on the likelihood of occurrence, possible magnitude or intensity, areas of the parish that could be affected, and conditions that could influence the manifestation of the hazard.

### Hazard Mitigation

To fully understand hazard mitigation efforts in Iberville 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 before 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 1-3* 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 1-3* 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, however, post-disaster revision is a vital component of improving mitigation. Each hazardous event affords an opportunity to reduce the consequences of future occurrences.



*Figure 1-3: The Four Phases of Emergency Management and their Relation to Future Hazard Mitigation*  
(Source: Louisiana State Hazard Mitigation Plan 2014)

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.

The catastrophic events of 2005 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 GOHSEP encourages the parishes and the local municipalities 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 2016 Iberville Parish Hazard Mitigation Plan maintains much of the information from the 2006 and 2011 plan versions, but it now reflects the order and methodologies of the 2011 Louisiana State Hazard Mitigation Plan. The sections in the 2011 Iberville Hazard Mitigation Plan were as follows:

- Section One Prerequisites
- Section Two Introduction and Parish Background
- Section Three Planning Process
- Section Four Plan Content
- Section Five Hazard Mitigation Strategy
- Section Six Plan Maintenance Procedures
- Attachments

This plan update now 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 Iberville Parish Hazard Mitigation Steering Committee was not ignorant or dismissive of the successful analysis and mitigation planning executed in previous plan updates. This plan update remains coherent with those documents, retaining language and content when needed, deleting it when appropriate, and augmenting it when constructive.

## 2016 Plan Update

This 2016 plan update proceeds with the previous goals of the Iberville Parish Hazard Mitigation Plan. The current goals are as follows:

- Reduce flood losses within Iberville Parish
- Increase disaster resistance of Iberville Parish and municipal facilities and infrastructure
- Ensure that new construction is hazard resistant and does not lead to increased hazard risk or exacerbate effects of hazards
- Identify, introduce, and implement cost effective hazard mitigation measures so as to accomplish parish goals and objectives and to raise both awareness and acceptance of hazard mitigation generally.

This plan update makes a number of textual changes throughout, but the most obvious changes are data related and structural edits. First, the Spatial Hazard Events and Losses Database for the United States (SHELDUS) was used as a data source for hazard identification because it incorporates all storm event data from the National Climatic Data Center (NCDC) Storm Events Database used in previous plans, as well as

storm event data from other sources including the NOAA Storm Prediction Center, National Hurricane Center, and U.S. Fire Administration. Furthermore, all of the sections were updated to reflect the most current information and the most current vision of the plan update. Second, instead of eleven, separate sections for numerous tables, maps, and appendices, the present plan update has four sections and five appendices. The most significant changes are the newly developed hazard profiles and risk assessments, as well as the removal of repetition between sections from the previous plan updates. The 2016 plan update is organized generally 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

*Table 1-4: Plan Crosswalk*

2010 Plan	Revised Plan (2016)
Section 1: Prerequisites	Appendix D: Plan Adoption
Section 2: Introduction and Parish Background	Section 1: Introduction
Section 3: Planning Process	Appendix A: Planning Process
Section 4: Plan Content	Section 2: Hazard Identification and Risk Assessment, Section 3: Capability Assessment, Appendix A: Planning Process
Section 5: Hazard Mitigation Strategy	Section 4: Mitigation Strategy
Section 6: Plan Maintenance Procedures	Appendix B: Plan Maintenance
Attachments	Appendices

Despite changes in this plan update, the plan remains consistent in its emphasis on the few types of hazards that pose the most risk to loss of life, injury, and property in Iberville Parish and its municipalities. The extent of this risk is dictated primarily by its geographic location. Most significantly, Iberville Parish remains at high risk of water inundation from various sources, including flooding, tornadoes, and tropical cyclone activity. All of the parish is also at high risk of damages from high winds and wind-borne debris caused by various meteorological phenomena. Other hazards threaten the parish and/or its municipalities, 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.

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

This section assesses the various hazard risks that Iberville Parish faces in order to identify a strategy for mitigation. Having identified the categories of hazards, emergencies, disasters, and catastrophes, this section details the major climatological and natural/human-influenced hazards by (1) defining them, (2) explaining how they are measured, (3) describing their geographic extent, (4) surveying their previous occurrences, and (5) evaluating their future likelihood of occurrences.

The table below provides an overview of the hazards that had been previously profiled in the Iberville Parish Hazard Mitigation Plan published in 2011, as well as the hazards that were identified in the state's 2014 Hazard Mitigation Plan that were considered to be of high or medium risk for the parish by the state. Those hazards identified as high or medium risk by the state or previously identified as a risk by the parish, have been determined to provide a risk to the parish and will be profiled in this section.

*Table 2-1: Hazard Profile Summary*

Hazard	Profiled in Last Plan	Considered Medium or High Risk in the State's HM Plan	Profiled in the 2016 Update
Subsidence/Coastal Land Loss	X		*
Drought			
Earthquakes			
Expansive Soils			
Fog			
Flooding	X	X	X
Extreme Heat			
Sinkholes		X	X
Thunderstorms (Hail, Lightning, & Wind)	X	X	X
Tornadoes	X	X	X
Tropical Cyclones	X	X	X
Tsunamis			
Wildfires			
Winter Storms			
Levee Failure	X		+

\* Hazard was profiled but discounted  
+ Data deficiency

### Prevalent Hazards to the Community

While many of the hazards identified in *Table 2-1* occur in the parish, their occurrence was not merited for further study by the planning committee. The determination was made to focus attention and resources on the most prevalent hazards, which include the hazards previously profiled, along with sinkholes. Coastal land loss with subsidence was discounted due to the hazard having no impact on Iberville Parish. A data deficiency was declared for the hazard of levee failure.

The following hazards have been selected to be included in this risk assessment:

- a) Coastal Land Loss/Subsidence
- b) Flooding (backwater, riverine, localized stormwater event)
- c) Sinkholes
- d) Thunderstorms (hail, lightning, wind)
- e) Tornadoes
- f) Tropical Cyclones (flooding and high winds)
- g) Levee Failure

For analysis purposes, the impact of the critical and prevalent hazards is summarized as follows:

- Flooding from rivers and waterways, rain storms, tropical cyclones, and hurricanes in the following forms:
  - a) Riverine
  - b) Stormwater
  - c) Surge
  - d) Backwater flooding (as the result of river flooding and surge)
- High wind damage most commonly resulting from hurricanes, thunderstorms, and tornadoes

The potential destructive power of tropical cyclones and flooding were determined to be the most prevalent hazards to the parish. Eighteen of the nineteen Presidential Declarations that Iberville Parish has received resulted from either tropical cyclones (10 declarations) or flooding (8 declarations), which validates these as the most significant hazards. Therefore, the issues of hurricanes and floods will both serve as the main focus during the mitigation planning process. Hurricanes present risks from the potential for flooding, primarily resulting from storm surge, and high wind speeds. While storm surge is considered the hazard with the most destructive potential, the risk assessment will also assess non-storm surge flooding as well. Flooding can also occur from non-hurricane events, as flash floods are a common occurrence due to heavy rainfall.

Hurricanes, tropical storms, and heavy storms are fairly common occurrences, and resultant wind damage is of utmost concern. Damage from high winds can include roof damage, destruction of homes and commercial buildings, downed trees and power lines, and damage and disruption to services caused by heavy debris. A wind map for Iberville Parish is included in the hurricane risk assessment.

Iberville Parish is also susceptible to tornadoes. Tornadoes can spawn from tropical cyclones or severe weather systems that pass through Iberville Parish. High winds produced by tornadoes have the potential to destroy residential and commercial buildings, as well as create wind-borne objects from the debris produced by the destruction of the natural and human environment, such as building materials and trees.

### [Previous Occurrences](#)

On the next page, [Table 2-2](#) summarizes federal disaster declarations for Iberville Parish since 1965. Information includes names, dates, and types of disaster.

Table 2-2: Iberville Parish Major Disaster Declarations

Disaster Declaration Number	Date	Type of Disaster
208	9/10/1965	Tropical Cyclone – Hurricane Betsy
315	10/13/1971	Tropical Cyclone – Hurricane Edith
374	4/27/1973	Severe Storms and Flooding
584	5/2/1979	Severe Storms and Flooding
616	4/9/1980	Severe Storms and Flooding
833	6/16/1989	Severe Storms and Tornadoes
835	7/17/1989	Tropical Cyclone - Tropical Storm Allison
904	5/3/1991	Severe Storms, Tornadoes, and Flooding
956	8/26/1992	Tropical Cyclone – Hurricane Andrew
978	2/2/1993	Severe Storms and Flooding
1380	6/11/2001	Tropical Cyclone - Tropical Storm Allison
1437	10/3/2002	Tropical Cyclone – Hurricane Lili
1521	6/8/2004	Severe Storms and Flooding
1603	8/29/2005	Tropical Cyclone – Hurricane Katrina
1607	9/24/2005	Tropical Cyclone – Hurricane Rita
1786	9/2/2008	Tropical Cyclone – Hurricane Gustav
3322	5/6/2011	Flooding
4015	8/18/2011	Flooding
4080	8/19/2012	Tropical Cyclone – Hurricane Isaac

### Probability of Future Hazard Events

The probability of a hazard event occurring in Iberville Parish is estimated in the table on the following page. The percent chance of an event happening during any given year was calculated by posting past events and dividing by the time period. Unless otherwise indicated, the time period used to assess probability followed the method used in the State of Louisiana’s most current Hazard Mitigation Plan. The primary source for historical data used throughout the plan is the Spatial Hazards Events and Losses Database (SHELDUS), which provides historical hazard data from 1960 to 2014. In staying consistent with the state plan, the SHELDUS database was evaluated for the last twenty-five years (1990 – 2015) in order to determine future probability of a hazard occurring. While the 25-year record used by the State was adopted for the purpose of determining the overall probability, in order to assist with determining estimated losses, unless otherwise stated, the full 54-year record was used when Hazus Multi-Hazard (MH) wasn’t available to determine losses. This full record was used to provide a more extensive record to determine losses. All assessed damages were adjusted for inflation in order to reflect the equivalent amount of damages with the value of the U.S. dollar today. In addition, the National Climatic Data Center (NCDC) was also used to help identify hazard data specific to the municipalities. This was used due to it containing specific data for cities, whereas the data within SHELDUS is limited to parishes.

The following table shows the annual probability for each hazard occurring across the parish and in separate jurisdictions:

*Table 2-3: Probability of Future Hazard Reoccurrence*

Hazard	Probability						
	Iberville Parish (Unincorporated)	Grosse Tete	Maringouin	Plaquemine	Rosedale	St. Gabriel	White Castle
Subsidence/Coastal Land Loss	<1%	<1%	<1%	<1%	<1%	<1%	<1%
Flooding	32%	24%	24%	36%	24%	24%	24%
Sinkholes	<1%	<1%	<1%	<1%	<1%	<1%	<1%
Thunderstorms (Hail)	100%	100%	100%	100%	100%	100%	100%
Thunderstorms (Lightning)	16%	16%	16%	16%	16%	16%	16%
Thunderstorms (Wind)	100%	100%	100%	100%	100%	100%	100%
Tornadoes	32%	32%	32%	32%	32%	32%	32%
Tropical Cyclones	36%	36%	36%	36%	36%	36%	36%
Levee Failure	<1%	<1%	<1%	<1%	<1%	<1%	<1%

As shown in [Table 2-3](#), thunderstorm winds and hail for the entire planning area, have the highest annual chance of occurrence in the parish (100%). Flood events for the incorporated area of Plaquemine and tropical cyclones for the entire planning area have an annual chance of occurrence of 36%. Flooding events for the remaining incorporated areas and the unincorporated areas have a slightly lower chance of occurring annually. Tornadoes have a 32% annual chance of reoccurrence, followed by lightning at 16%. Coastal land loss with subsidence, levee failure, and sinkholes have less than a 1% annual chance of occurrence. Coastal land loss with subsidence was discounted due to the hazard having no impact on Iberville Parish. Levee failure has a data deficiency.

### Inventory of Assets for the Entire Parish

As part of the Risk Assessment, the planning team identified essential facilities throughout the parish. Several methods were used to assist in identifying all essential facilities, including field data collected by the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) on critical infrastructure from a previous hazard mitigation project.

Within the entire planning area, there is an estimated value of \$18,611,725,000 in structures throughout the parish. The tables on the following page provide the total estimated value for each type of structure by occupancy.

Table 2-4: Estimated Total of Potential Losses throughout Iberville Parish

Occupancy	Iberville Parish	Unincorporated Iberville	Grosse Tete	Maringouin	Plaquemine
Agricultural	\$7,866,000	\$6,465,000	\$72,000	\$0	\$726,000
Commercial	\$314,147,000	\$117,779,000	\$7,886,000	\$7,182,000	\$104,763,000
Government	\$33,821,000	\$6,170,000	\$2,441,000	\$1,324,000	\$8,596,000
Industrial	\$172,784,000	\$74,541,000	\$881,000	\$9,548,000	\$6,105,000
Religion	\$74,337,000	\$28,721,000	\$3,256,000	\$2,313,000	\$25,685,000
Residential	\$2,340,027,000	\$1,157,852,000	\$46,753,000	\$66,358,000	\$568,176,000
Education	\$24,902,000	\$7,137,000	\$84,000	\$203,000	\$9,157,000
<b>Total</b>	<b>\$2,967,884,000</b>	<b>\$1,398,665,000</b>	<b>\$61,373,000</b>	<b>\$86,928,000</b>	<b>\$723,208,000</b>

Table 2-4: Estimated Total of Potential Losses (Continued)

Occupancy	Rosedale	St. Gabriel	White Castle
Agricultural	\$161,000	\$296,000	\$146,000
Commercial	\$2,637,000	\$46,033,000	\$27,867,000
Government	\$225,000	\$13,520,000	\$1,545,000
Industrial	\$1,009,000	\$79,901,000	\$799,000
Religion	\$2,080,000	\$6,687,000	\$5,595,000
Residential	\$66,499,000	\$330,550,000	\$103,839,000
Education	\$219,000	\$3,295,000	\$4,807,000
<b>Total</b>	<b>\$72,830,000</b>	<b>\$480,282,000</b>	<b>\$144,598,000</b>

Essential Facilities of the Parish

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

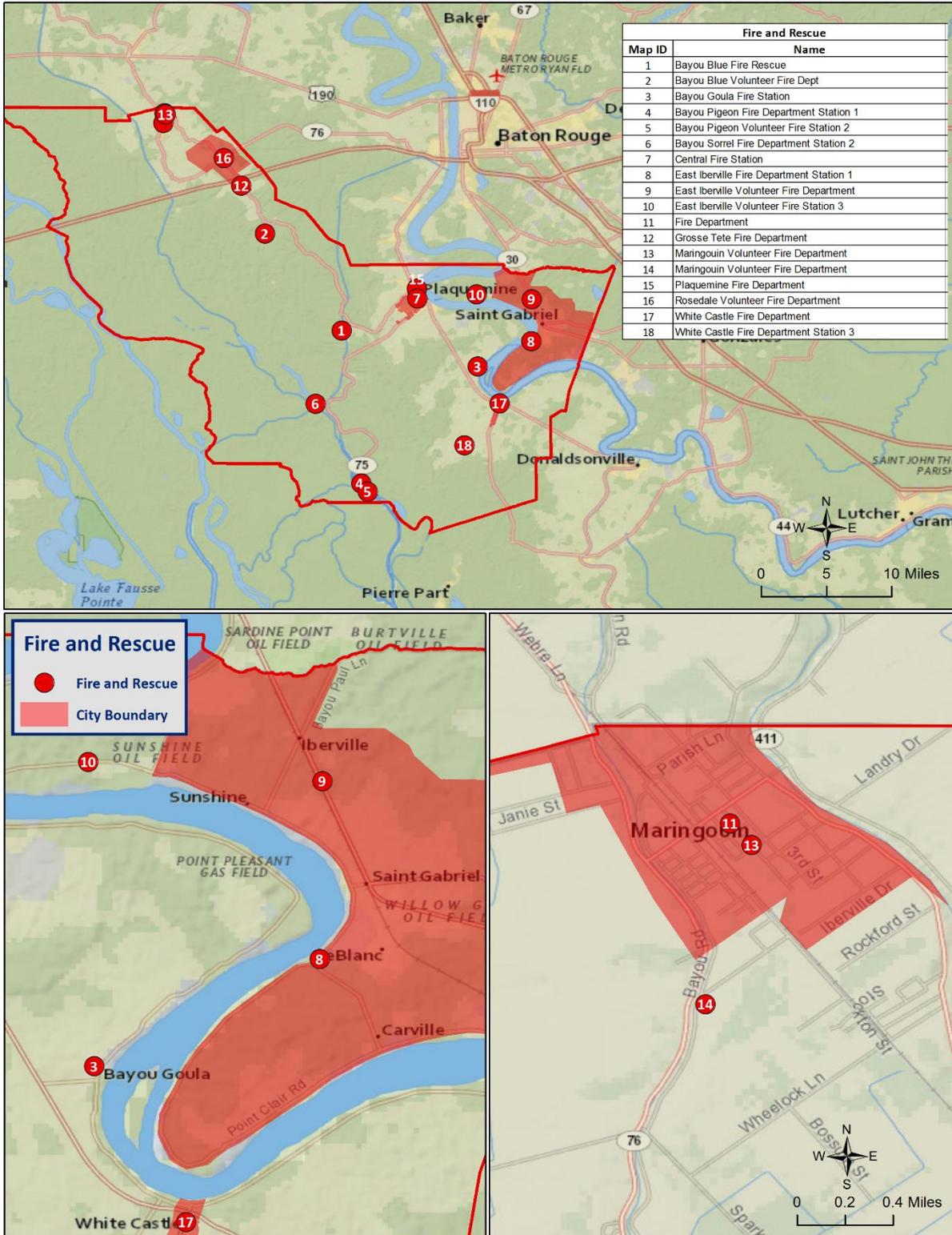


Figure 2-1: Fire and Rescue Buildings in Iberville Parish

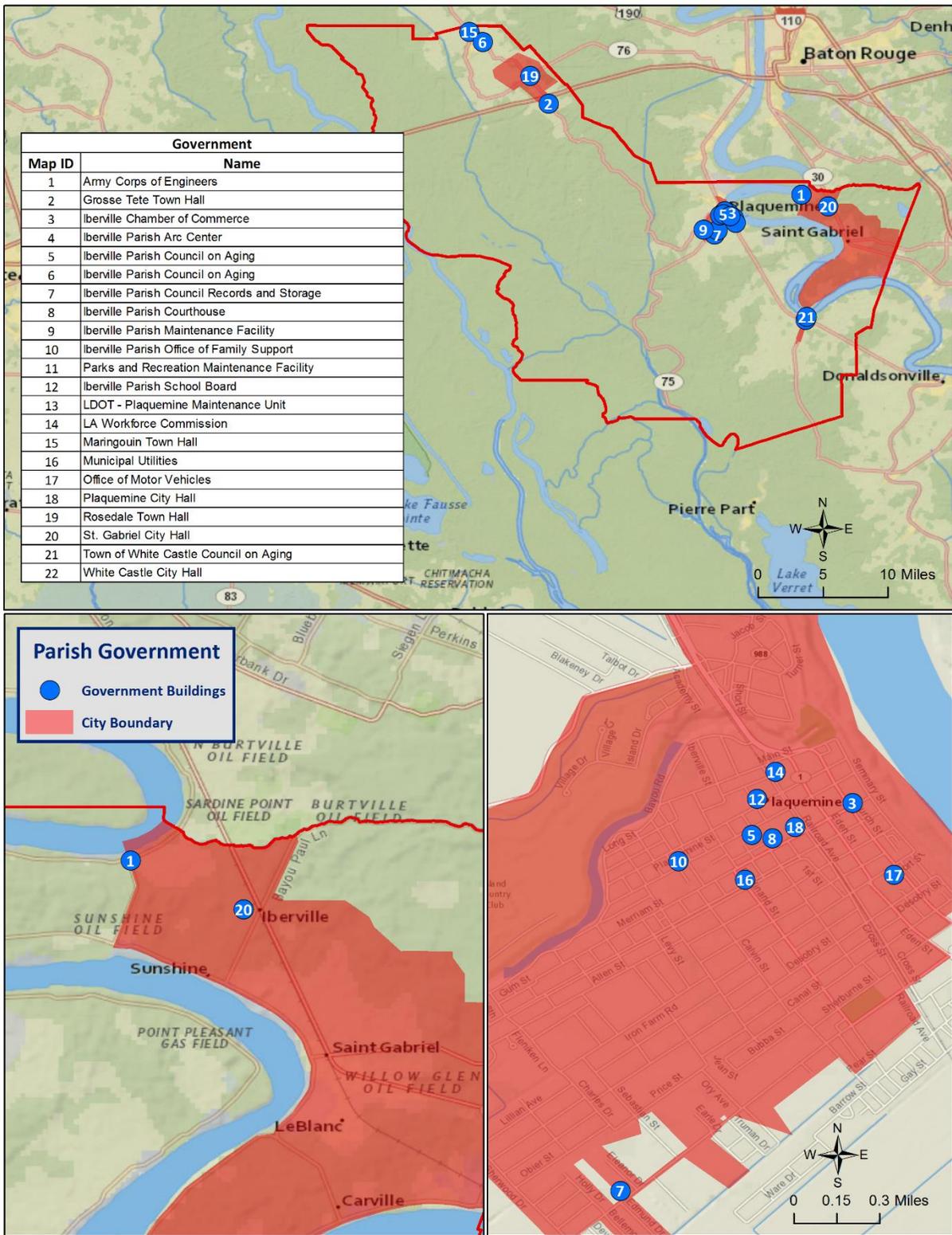


Figure 2-2: Government Buildings in Iberville Parish

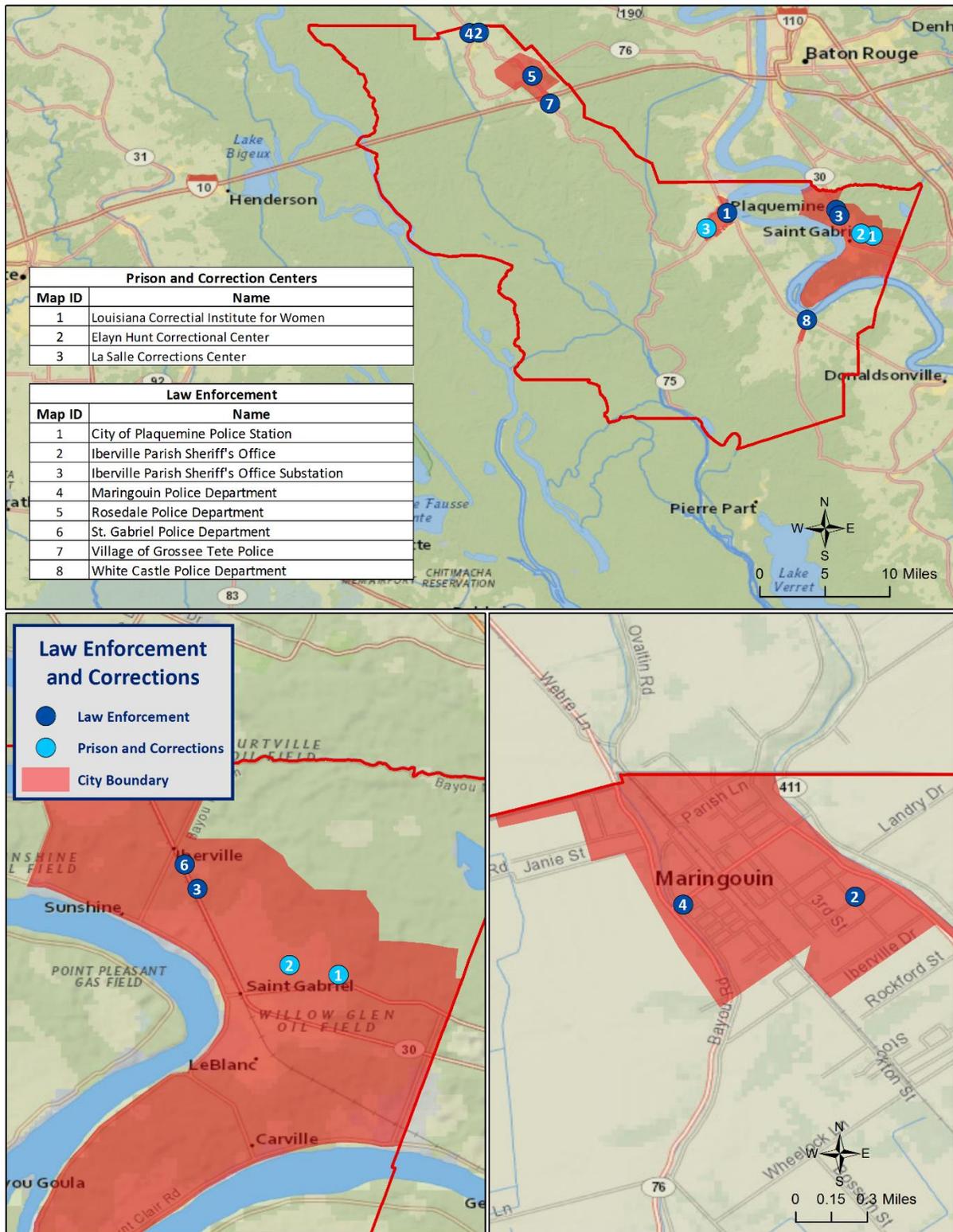


Figure 2-3: Law Enforcement Buildings in Iberville Parish

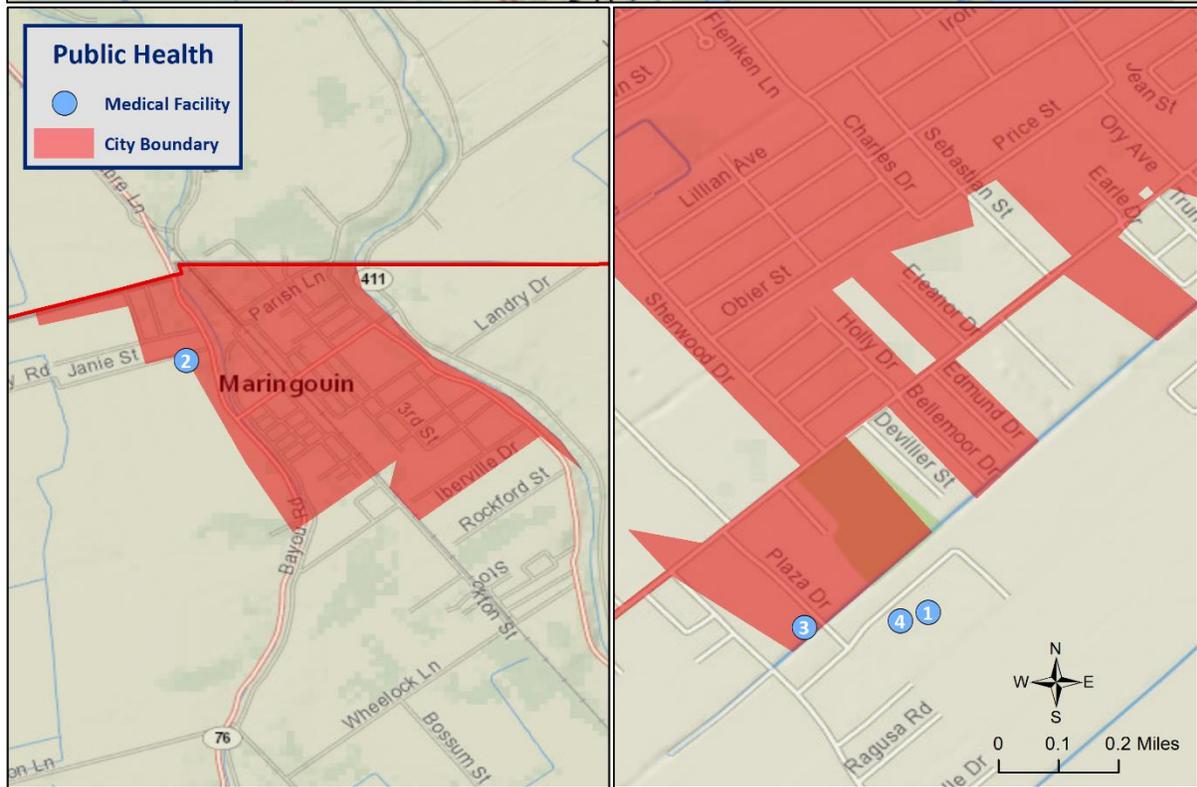
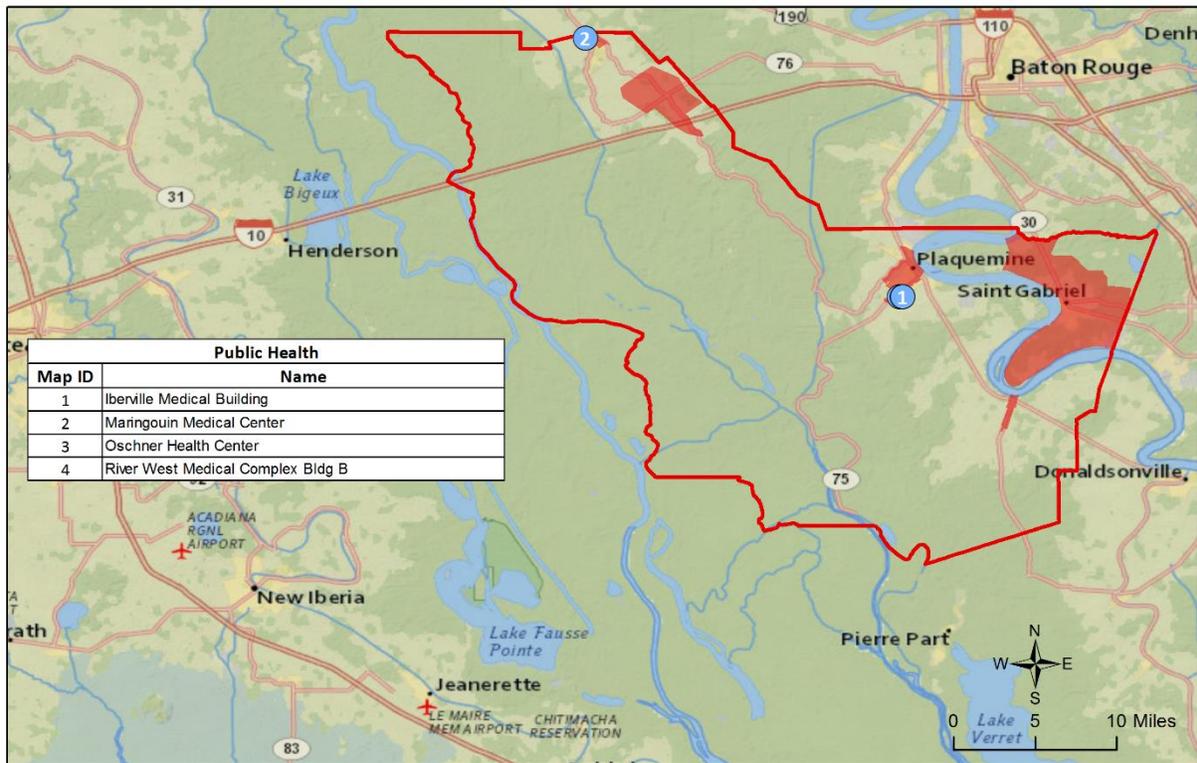


Figure 2-4: Public Health Facilities in Iberville Parish

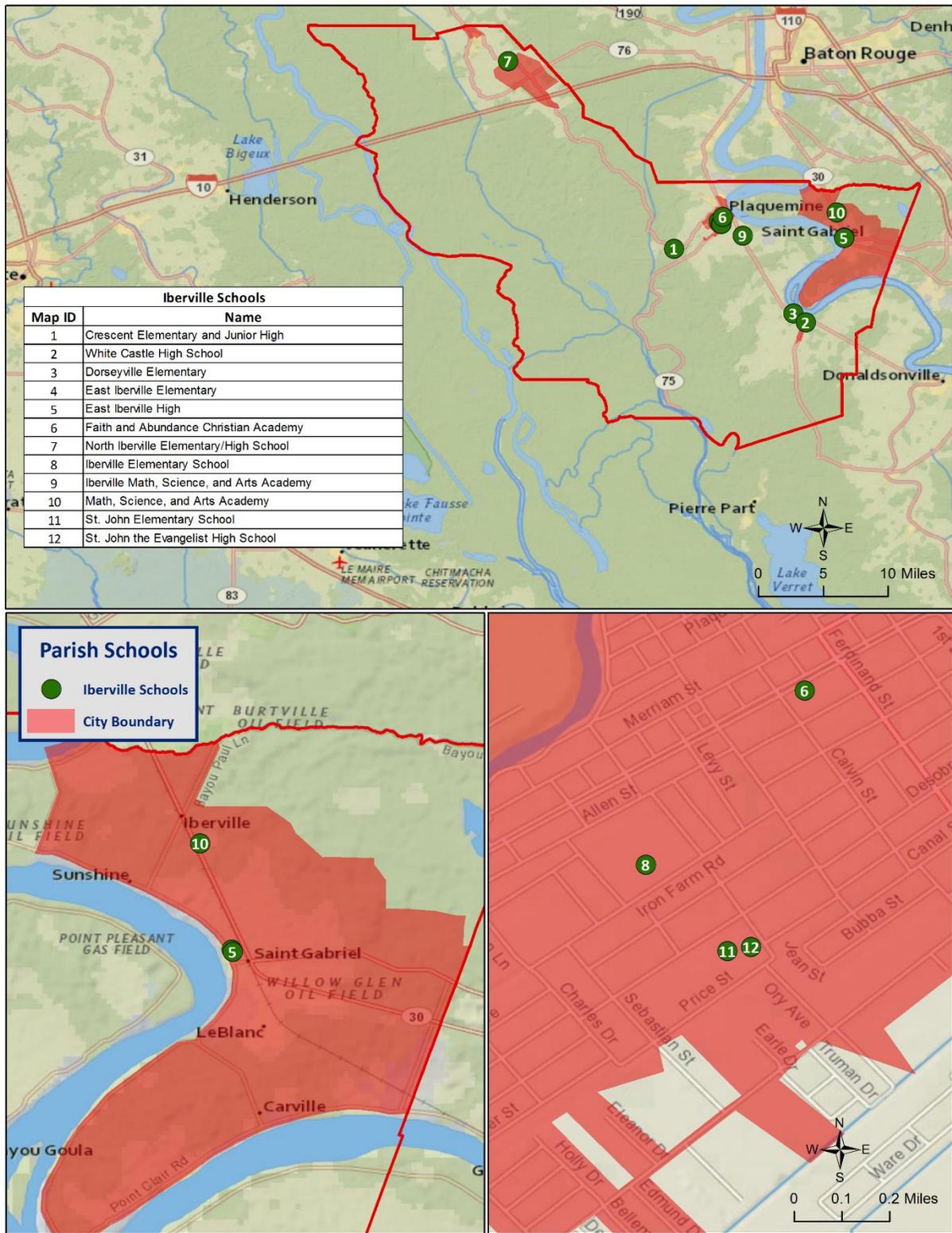


Figure 2-5: School Facilities in Iberville Parish

### Future Development Trends

Iberville Parish experienced a small growth in population and housing between the years of 2000 and 2014, growing from a population of 33,321 with 11,953 housing units in 2000 to a population of 33,327 with 12,849 housing units in 2014. Population growth was largely in the incorporated areas of Plaquemine, Rosedale, and St. Gabriel from the years 2000 to 2010, and in the incorporated area St. Gabriel 2010 to 2013. The incorporated areas of Grosse Tete, Maringouin, and White Castle along with the unincorporated areas of Iberville Parish experienced a decline in population from the years of 2000 to 2010. This decline continued during the period of 2010 to 2014 for these areas with St. Gabriel being the only area to experience population growth. The future population and number of buildings can be estimated using U.S. Census Bureau housing and population data. The following tables show population and housing unit estimates from 2000 to 2014:

*Table 2-5: Population Growth Rate for Iberville Parish*

Total Population	Iberville Parish	Iberville (Unincorporated)	Grosse Tete	Maringouin	Plaquemine	Rosedale	St. Gabriel	White Castle
1-Apr-00	33,321	16,026	658	1,244	7,047	779	5,623	1,944
1-Apr-10	33,364	15,158	647	1,097	7,113	792	6,675	1,882
1-Jul-14	33,327	15,016	641	1,077	6,963	781	6,993	1,856
Population Growth between 2000 – 2010	0.1%	-5.4%	-1.7%	-11.8%	0.9%	1.7%	18.7%	-3.2%
Average Annual Growth Rate between 2000 – 2010	0.0%	-0.5%	-0.2%	-1.2%	0.1%	0.2%	1.9%	-0.3%
Population Growth between 2010 – 2014	-0.1%	-0.9%	-0.9%	-1.8%	-2.1%	-1.4%	4.8%	-1.4%
Average Annual Growth Rate between 2010 – 2014	-0.03%	-0.23%	-0.23%	-0.46%	-0.53%	-0.35%	1.19%	-0.35%

Table 2-6: Housing Growth Rate for Iberville Parish

Total Housing Units	Iberville Parish	Iberville (Unincorporated)	Grosse Tete	Maringouin	Plaquemine	Rosedale	St. Gabriel	White Castle
1-Apr-00	11,953	6,329	294	458	2,828	296	986	762
1-Apr-10	12,707	6,694	287	439	2,995	351	1,184	757
1-Jul-14	12,849	6,186	316	436	3,103	467	1,391	950
Housing Growth between 2000 – 2010	6.3%	5.8%	-2.4%	-4.1%	5.9%	18.6%	20.1%	-0.7%
Average Annual Growth Rate between 2000 – 2010	0.6%	0.6%	-0.2%	-0.4%	0.6%	1.9%	2.0%	-0.1%
Housing Growth between 2010 – 2014	1.1%	-7.6%	10.1%	-0.7%	3.6%	33.0%	17.5%	25.5%
Average Annual Growth Rate between 2010 – 2014	0.3%	-1.9%	2.5%	-0.2%	0.9%	8.3%	4.4%	6.4%

As shown in previous tables, Iberville Parish has experienced slight growth in population from 2000 to 2010, and slight decline in population from 2010 to 2014. Housing units have experienced slight growth during these same time periods. Housing growth rates grew at 0.6% annually from 2000 to 2010, and at 0.3% annually from 2010 to 2013. Population growth rates for the parish were slightly lower at less than 0.1% annually from 2000 to 2010, and declined at an annual rate of -0.03% from 2010 to 2014. From 2000 to 2010, the incorporated area of St. Gabriel had the largest increase in population with an overall growth of 18.7%, followed by the incorporated area of Rosedale at 1.7%. From 2010 to 2014, the incorporated area of St. Gabriel was the only area to experience a growth in population.

The incorporated area of St. Gabriel experienced the largest increase in housing units from 2000 to 2010 at 20.1%, followed by the incorporated area of Rosedale at 18.6%. The incorporated area of Maringouin experienced the largest decrease in housing units at -4.1% during this time period. From 2010 to 2014, the incorporated area of Rosedale experience the largest increase in housing units at 33%, followed by White Castle at 25.5% and St. Gabriel at 17.5%.

### Future Hazard Impacts

Hazard impacts were estimated for five years and ten years in the future (2019 and 2024). Yearly population and housing growth rates were applied to parish inventory assets for composite flood and tropical cyclones. Based on a review of available information, it is assumed that population and housing units will grow slightly within Iberville Parish from the present until 2024. 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%. No changes in development have impacted the community's vulnerability since the plans last update.

*Table 2-7: Estimated Future Impacts, 2019-2024  
(Source: Hazus, US Census Bureau)*

Hazard / Impact	Total in Parish (2014)	Hazard Area (2014)	Hazard Area (2019)	Hazard Area (2024)
<b>Flood Damage</b>				
Structures	12,885	2,206	2,237	2,275
Value of Structures	\$3,006,532,474	\$514,731,471	\$549,130,549	\$593,457,283
# of People	33,360	5,711	5,740	5,775
<b>Tropical Cyclones</b>				
Structures	12,885	12,885	13,066	13,286
Value of Structures	\$3,006,532,474	\$3,006,532,474	\$3,207,456,548	\$3,466,367,791
# of People	33,360	33,360	33,527	33,729

### Land Use

The Iberville Parish Land Use table is provided below. Residential, commercial, and industrial areas account for only 5% of the parish's land use. Wetlands is the largest category at 288,040 acres, accounting for 69% of parish land. At 83,497 acres, agriculture land accounts for 20% of parish lands, while 18,101 acres of open water accounts for 4% of parish lands. The parish also consists of 3,805 acres of forested land, accounting for 1% of all parish lands.

*Table 2-8: Iberville Parish Land Use  
(Source: USGS Land Use Map)*

Land Use	Acres	Percentage
Agricultural Land, Cropland, and Pasture	83,497	20%
Wetlands	288,040	69%
Forest Land (not including forested wetlands)	3,805	1%
Urban/Development	22,002	5%
Water	18,101	4%

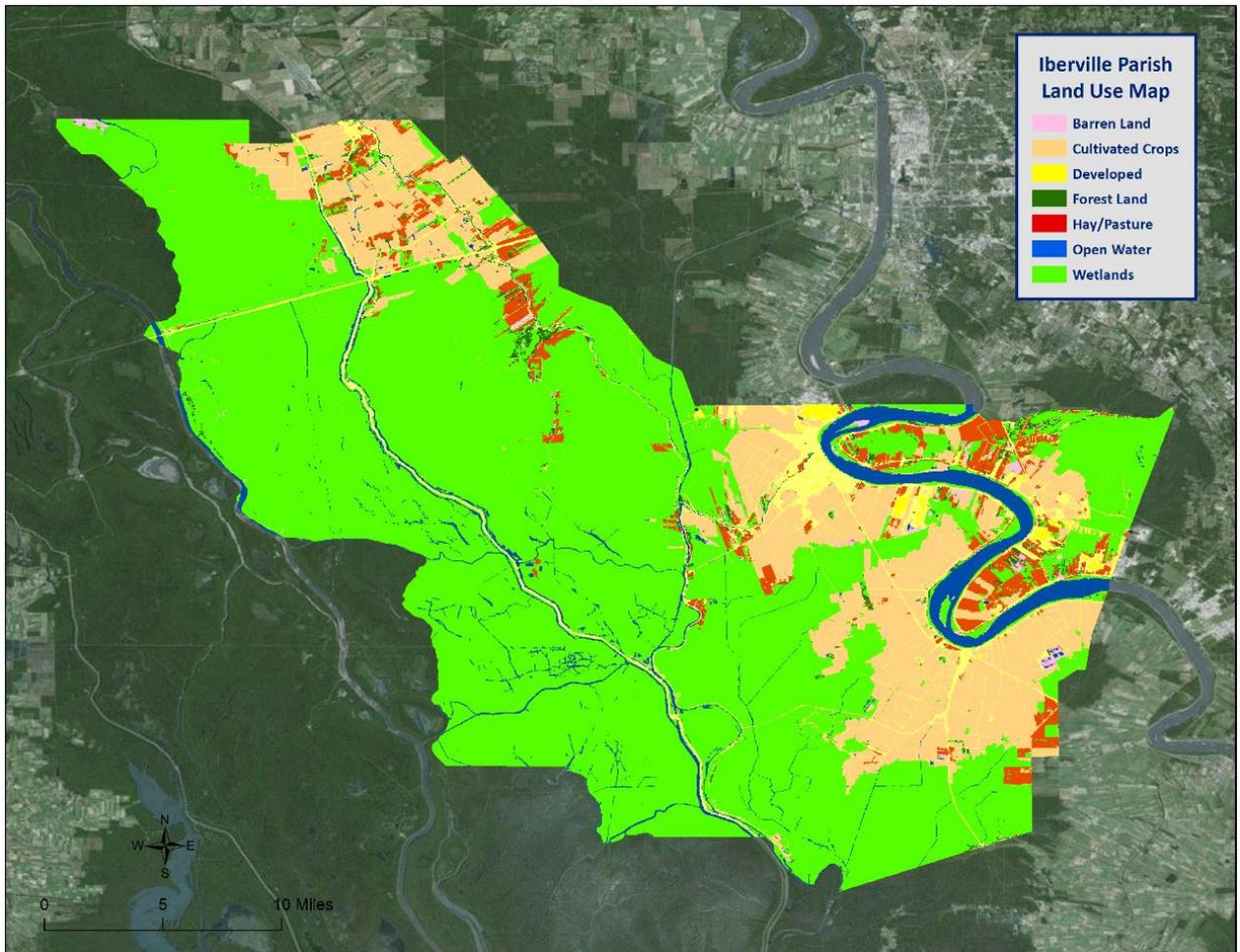


Figure 2-6: Iberville Parish Land Use Map  
(Source: USGS Land Use Map)

## Hazard Identification

### Coastal Land Loss/Subsidence

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

Some of the worst recent contributors to coastal land loss in the state are the tropical cyclones of the past decade. Two storms that stand out in this regard are Hurricanes Katrina and Rita. These powerful cyclones completely covered large tracts of land in a very brief period, permanently altering the landscape. The disastrous legacy of these storms galvanized already ongoing efforts to combat coastal land loss. Consistent with the 2014 State Hazard Mitigation Plan Update, coastal land loss is considered in terms of two of the most dominant factors: sea level rise and subsidence.

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

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

Subsidence results from a number of factors including:

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

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

Overall, subsidence creates three distinct problems in Louisiana:

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

#### *Location*

Historic areas of coastal land loss and gain (*Figure 2-7*) and subsidence rates (*Figure 2-8*) have been quantified for Iberville Parish using data from the U.S. Geologic Survey and Louisiana Coastal Protection and Restoration Authority (CPRA). Since 1932, the average annual land loss in Louisiana is 35 mi<sup>2</sup>, while the average annual land gain has been 3 mi<sup>2</sup> for a net loss of 32 mi<sup>2</sup> per year. However, the models reflect no measurable land loss or subsidence currently in Iberville Parish (*Figure 2-7* and *Figure 2-8*).

#### *Frequency / Probability*

Subsidence, sea level rise, and coastal land loss are ongoing hazards. Based on historical subsidence rates and land loss/gain trends, the probability of future land loss in Louisiana is 100% certain, but actual rates of subsidence and land loss/gain vary along the coast based on various meteorological, geological, and human-influenced dynamics (e.g., water/resource extraction, canal dredging, saltwater intrusion, marsh restoration projects, etc.). In Iberville Parish, there have been no measurable loss estimates due to land subsidence. Therefore, land subsidence is not carried forward into the risk assessment.

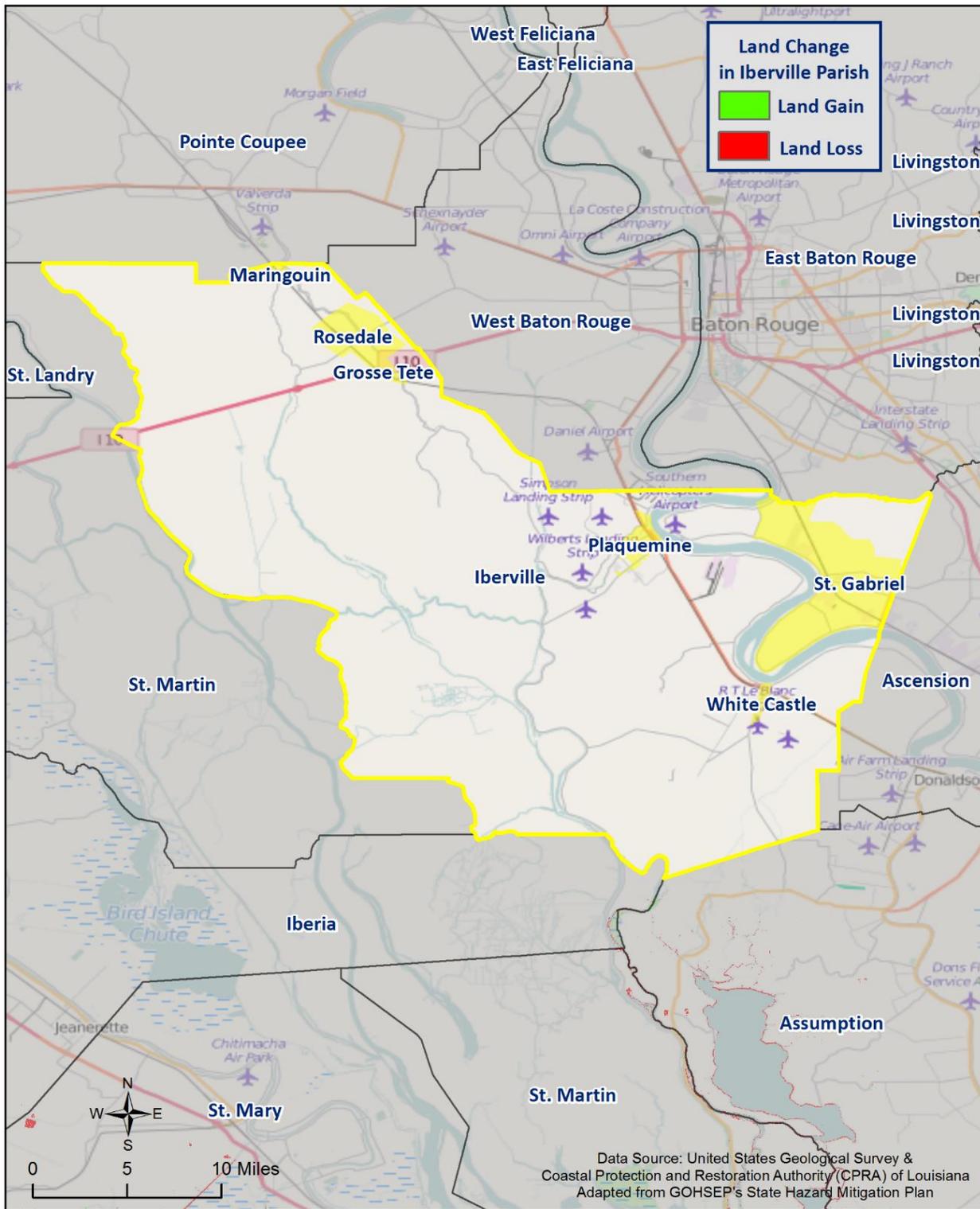


Figure 2-7: Historical Areas of Land Loss and Gain between 1932 and 2010  
(Source: State of Louisiana Hazard Mitigation Plan)



## Flooding

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.

Excess precipitation, produced from thunderstorms or hurricanes, is often the major initiating condition for flooding, and Louisiana can have high rainfall totals at any time of day or year. During the cooler months, slow-moving frontal weather systems produce heavy rainfalls, while the summer and autumn seasons produce major precipitation in isolated thunderstorm events (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.

In cooler months, particularly in the spring, Louisiana is in peak season for severe thunderstorms. The fronts that cause these thunderstorms often stall while passing over the state, occasionally producing rainfall totals exceeding ten inches within a period of a few days. Since soil tends to be nearly saturated at this time (due to relatively low overall evaporation rates), spring typically becomes the period of maximum stream flow across the state. Together, these characteristics increase the potential for high water, with low-lying, poorly drained areas being particularly susceptible to flooding during these months.

In Louisiana, 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. Thus, 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. A model example is the flooding that occurred in LaPlace during Hurricane Isaac in 2012. Although the town was protected by a levee on the side facing the

Mississippi River, floodwaters from Lake Maurepas and Lake Pontchartrain crept into the community on the side of town opposite the Mississippi River.

- **Urban flooding** is similar to flash flooding but is specific to urbanized areas. It takes place when storm water 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 sea water). Coastal flooding is typically caused by storm surge, tsunamis, or gradual sea level rise.

For purposes of this assessment, ponding, flash flood, and urban flooding are considered to be flooding as a result of storm water from heavy precipitation thunderstorms

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

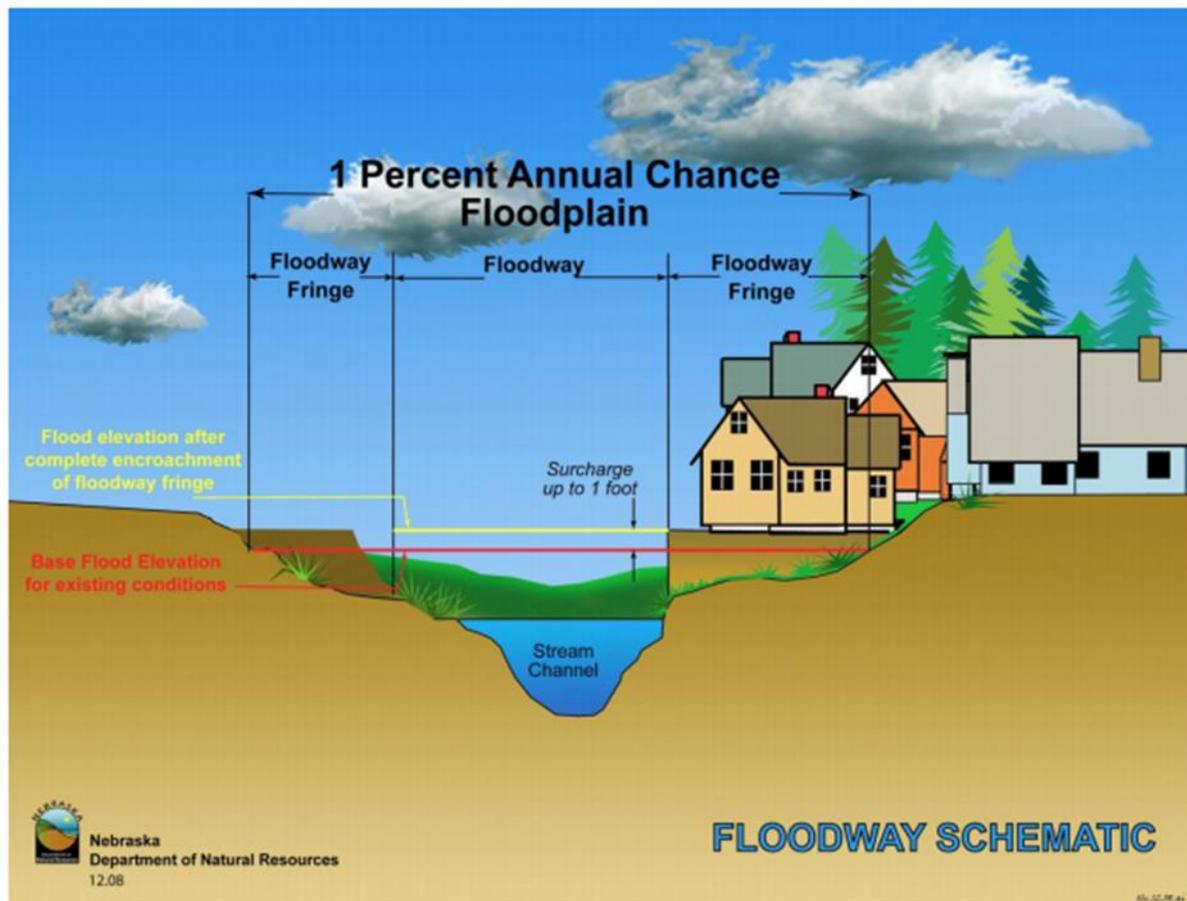
- **Flood Categories**
  - Minor Flooding: Minimal or no property damage, but possibly some public threat.
  - Moderate Flooding: Some inundation of structures and roads near streams. Some evacuations of people and/or transfer of property to higher elevations.
  - Major Flooding: Extensive inundation of structures and roads. Significant evacuations of people and/or transfer of property to higher elevations.
  - Record Flooding: Flooding which 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 event, for example, is an event of small magnitude (in terms of stream flow or precipitation) but with a relatively high annual probability of recurrence (10%). A 100-year flood event 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 event and a 10-year event, 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 event does not mean an event of that magnitude occurs only once in X years. Instead, it means that on average, we can expect a flood event 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 event as having a 25% chance of occurring over the life of a 30-year mortgage.

It is essential to understand that the magnitude of an X-year flood event for a particular area depends on the source of flooding and the area's location. The size of a specific flood event is defined through historic data of precipitation, flow, and discharge rates. Consequently, different 100-year flood events can have very

different impacts. The 100-year flood event in two separate locations have the same likelihood to occur, but they do not necessarily have the same magnitude. For example, a 100-year event for the Mississippi River means something completely different in terms of discharge values ( $\text{ft}^3/\text{s}$ ) than for the Amite River. Not only are the magnitudes of 100-year events different between rivers, they can be different along any given river. A 100-year event upstream is different from one downstream due to the variation of river characteristics (volume, discharge, and topography). As a result, the definition of what constitutes a 100-year flood event is specific to each location, river, and time, since floodplain and river characteristics temporally fluctuate. Finally, it is important to note that each flood event is unique. Two hypothetical events at the same location, given the same magnitude of stream flow, may still produce substantially different impacts if there were different antecedent moisture characteristics, different times of day of occurrence (which indicates the population's probable activities at the flood's onset), or other characteristic differences.

The 100-year flood event 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 *Figure 2-9*.



*Figure 2-9: 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 *Figure 2-9*), where the NFIP's floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies.

#### *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 are usually 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:

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

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

- a. It is covered under a contract for flood insurance made available under the NFIP; and
- b. It has incurred flood related damage –
  - 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 Iberville Parish are provided in the table below:

Table 2-9: Repetitive Loss Structures for Iberville Parish

Jurisdiction	Number of Structures	Residential	Commercial	Government	Total Claims	Total Claims Paid	Average Claim Paid
Iberville (Unincorporated)	54	46	8	0	147	1,136,293	\$7,730
Grosse Tete	0	0	0	0	0	\$0	\$0
Maringouin	0	0	0	0	0	\$0	\$0
Plaquemine	2	1	1	0	4	\$42,492	\$10,623
Rosedale	0	0	0	0	0	\$0	\$0
St. Gabriel	0	0	0	0	0	\$0	\$0
White Castle	0	0	0	0	0	\$0	\$0
<b>Total</b>	56	47	9	0	151	\$1,178,785	\$7,807

Of the 56 repetitive loss structures, 51 were able to be geocoded in order to provide an overview of where the repetitive loss structures were located throughout the parish. Figure 2-10 shows the approximate location of the 51 structures, while Figure 2-11 shows where the highest concentration of repetitive loss structures are located. Through the repetitive loss map, it is clear that the primary concentrated area of repetitive loss structures is along Louisiana Highway 75 in the unincorporated areas of the parish.

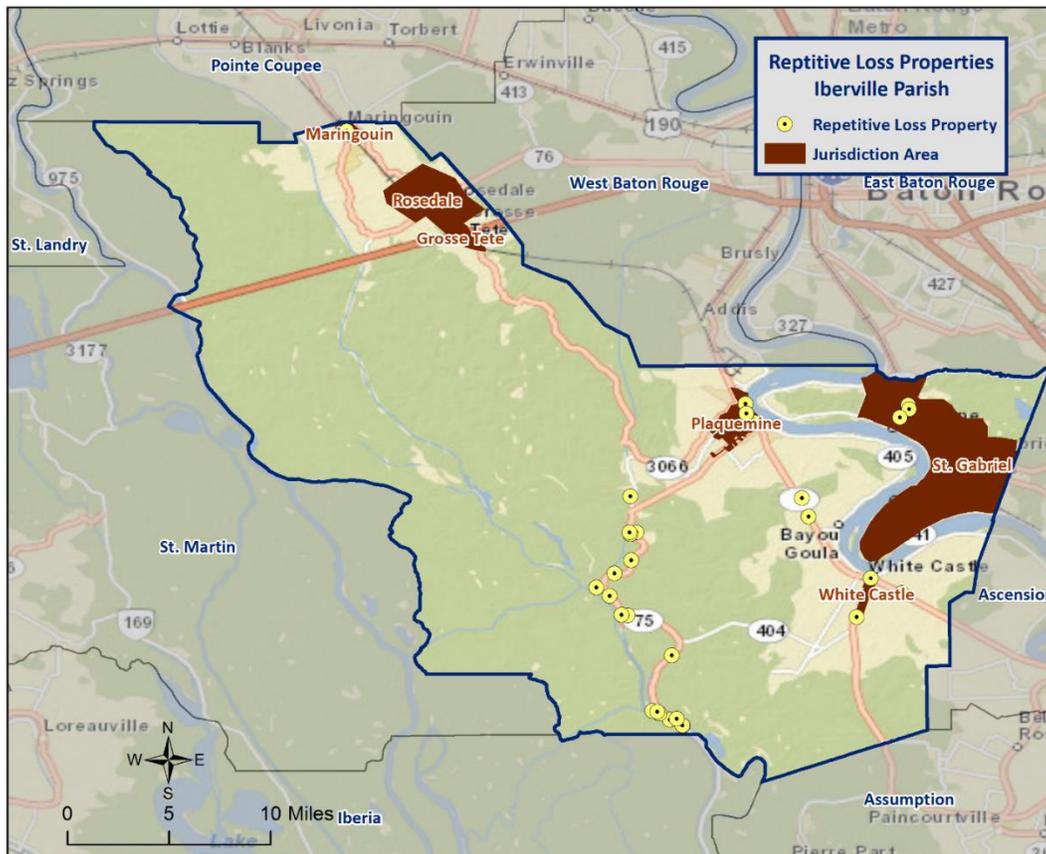


Figure 2-10: Repetitive Loss Properties in Iberville Parish

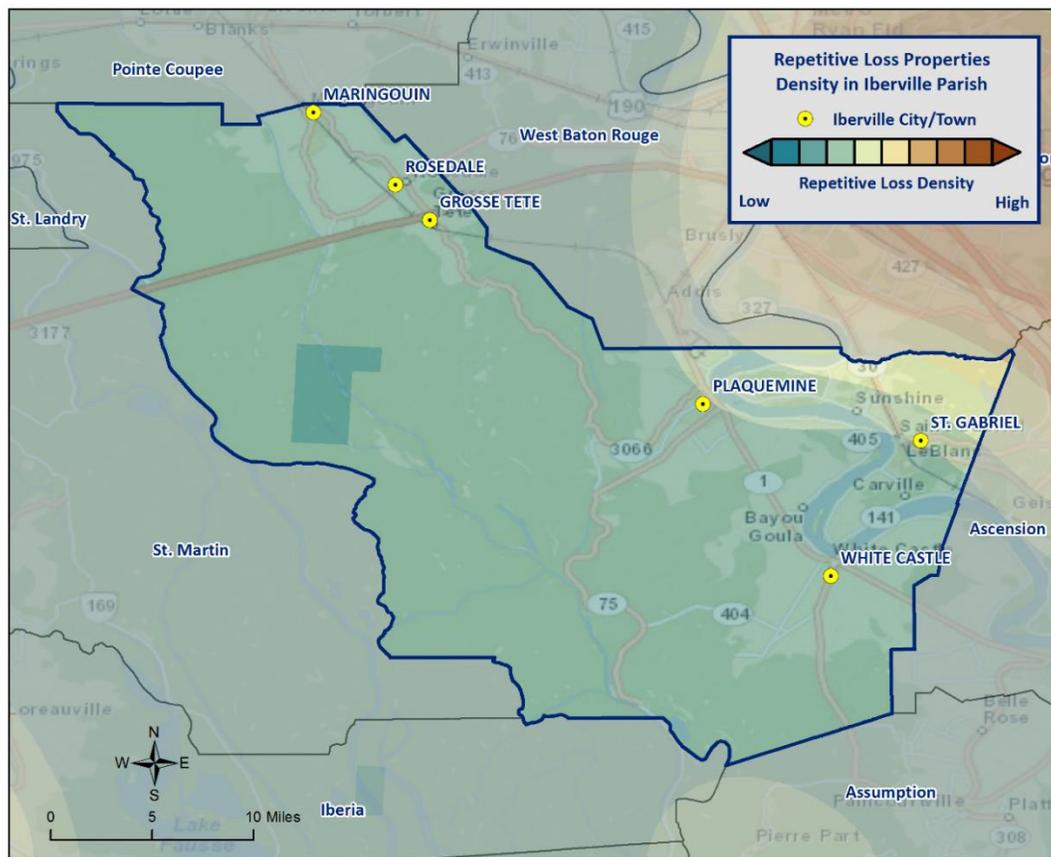


Figure 2-11: Repetitive Loss Property Densities in Iberville Parish

#### National Flood Insurance Program

Flood insurance statistics indicate that Iberville Parish has 1,047 flood insurance policies with the NFIP, with total annual premiums of \$689,845. Iberville Parish and the incorporated areas of Grosse Tete, Maringouin, Plaquemine, Rosedale, St. Gabriel, and White Castle are all participants in the NFIP. Iberville Parish and each of the incorporated jurisdictions will continue to adopt and enforce floodplain management requirements, including regulating new construction Special Flood Hazard Areas, and will continue to monitor activities including local requests for new map updates. Flood insurance statistics and additional NFIP participation details for Iberville Parish are provided in the tables on the next page.

Iberville Parish and the communities listed above will continue their active participation in the NFIP through various education and outreach activities. These activities will include community outreach on the availability of flood insurance within the parish and incorporated municipalities, as well as flood safe building initiatives throughout the parish. The Parish Floodplain Manager will continue to work in coordination with each community to ensure floodplain management regulations are adopted and enforced. The Parish Floodplain Manager will serve as the floodplain manager for the communities of Plaquemine, Maringouin, and White Castle and will work closely with these communities on NFIP compliance and outreach. The Parish Floodplain manager and floodplain managers of the jurisdictions of Grosse Tete, Rosedale, and St. Gabriel will continue to seek and attend floodplain management and NFIP continuing education.

Table 2-10: Summary of NFIP Policies for Iberville Parish

Location	No. of Insured Structures	Total Insurance Coverage Value	Annual Premiums Paid	No. of Insurance Claims Filed Since 1978	Total Loss Payments
Iberville Parish (Unincorporated)	851	\$197,229,000	\$568,120	425	\$2,407,690
Grosse Tete	3	\$735,000	\$1,051	2	\$2,536
Maringouin	12	\$2,846,500	\$5,546	1	\$1,700
Plaquemine	116	\$36,902,200	\$81,144	27	\$191,178
Rosedale	12	\$2,589,000	\$6,340	4	\$26,704
St. Gabriel	46	\$13,406,000	\$25,176	0	\$0
White Castle	7	\$1,890,000	\$2,468	1	\$6,246
<b>Total</b>	<b>1,047</b>	<b>\$255,597,700</b>	<b>\$689,845</b>	<b>460</b>	<b>\$2,636,054</b>

Table 2-11: Summary of Community Flood Maps for Iberville Parish

CID	Community Name	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date	Date Joined the NFIP	Tribal
220083#	Iberville Parish	10/18/1974	6/1/1978	11/6/2013	6/1/1978	No
220084#	Grosse Tete	1/25/1974	3/1/1978	11/6/2013	3/1/1978	No
220085#	Maringouin	4/12/1974	11/16/2013	11/6/2013	9/1/1981	No
220086#	Plaquemine	4/12/1974	11/6/2013	11/6/2013	8/26/1977	No
220087#	Rosedale	12/7/1973	2/15/1978	11/6/2013	2/15/1978	No
220402#	St. Gabriel	10/18/1974	8/5/1991	11/6/2013	7/12/2001	No
220088#	White Castle	9/7/1973	11/6/2013	11/6/2013	12/16/1977	No

According to the Community Rating System (CRS) list of eligible communities dated June 1, 2014, Iberville Parish and the incorporated areas of Grosse Tete, Maringouin, Plaquemine, Rosedale, St. Gabriel, and White Castle do not participate.

#### *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 flooding 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 waters can also infiltrate sewer lines and inundate wastewater treatment plants, causing sewage to backup and creating a breeding ground for dangerous bacteria. This infiltration may also cause water supplies to become contaminated and undrinkable.

### *Flooding in Iberville Parish*

By definition, flooding is caused when an area receives more water than the drainage system can convey. The following is a synopsis of the types of flooding that Iberville Parish experiences.

**Flash Flooding:** Flash flooding is characterized by a rapid rise in water level, high velocity, and large amounts of debris. It is capable of uprooting trees, undermining buildings and bridges, and scouring new channels. Major factors in flash flooding are the high intensity and short duration of rainfall, as well as the steepness of watershed and stream gradients.

**Local Drainage or High Groundwater Levels:** Locally heavy precipitation may produce flooding in areas other than delineated floodplains or along recognizable drainage channels. If local conditions cannot accommodate intense precipitation through a combination of infiltration and surface runoff, water may accumulate and cause flooding problems.

**Backwater Flooding:** Backwater flooding is normally associated with riverine flooding and connotes minimal velocity. All low lying areas are at risk. A heavy rainfall event coupled with a swollen river, canal, bayou, or marsh hinders drainage outflow, causing backwater flooding to the same areas susceptible to storm surge.

**Riverine Flooding:** Riverine flooding is, by definition, river-based. Most of the riverine flooding problems occur when the Atchafalaya River crests at flood stage levels, causing extensive flooding in low-lying areas.

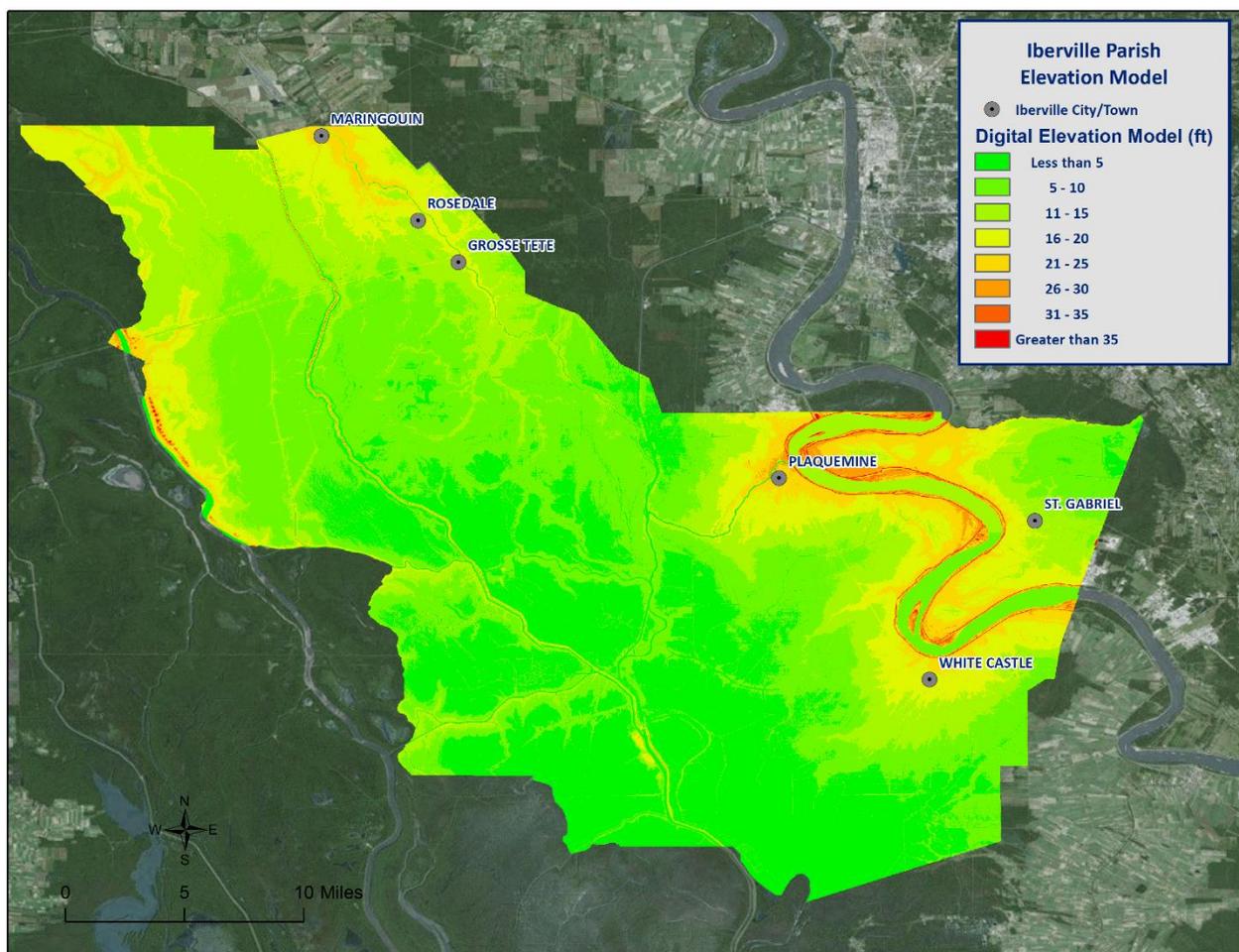


Figure 2-12: Elevation throughout Iberville Parish

Looking at the digital elevation model (DEM) in the figure on the previous page for Iberville Parish is instructive in visualizing where the low lying and high risk areas are for the parish. Elevations in the parish range from near sea level to approximately 40 feet. The highest elevations in the parish are approximately 40 feet, located in the unincorporated areas of the parish along the banks of the Mississippi River. The incorporated areas of the parish have elevations ranging on average from 16 to 23 feet, with Grosse Tete averaging 16 feet, Maringouin and Rosedale both averaging 20 feet, and the areas of Plaquemine, St. Gabriel, and White Castle averaging 23 feet. The lowest elevations of the parish average from one and five feet, and are located in the unincorporated areas of Iberville Parish.

Location

Iberville Parish has experienced significant flooding in its history and can expect more in the future. The parish is located within the Atchafalaya, Barataria, Mississippi, and Pontchartrain Basins. Approximately 80% of the parish lies within the 100-year floodplain.

The following are enlarged maps of the incorporated areas showing the areas within each jurisdiction that are at risk of flooding:

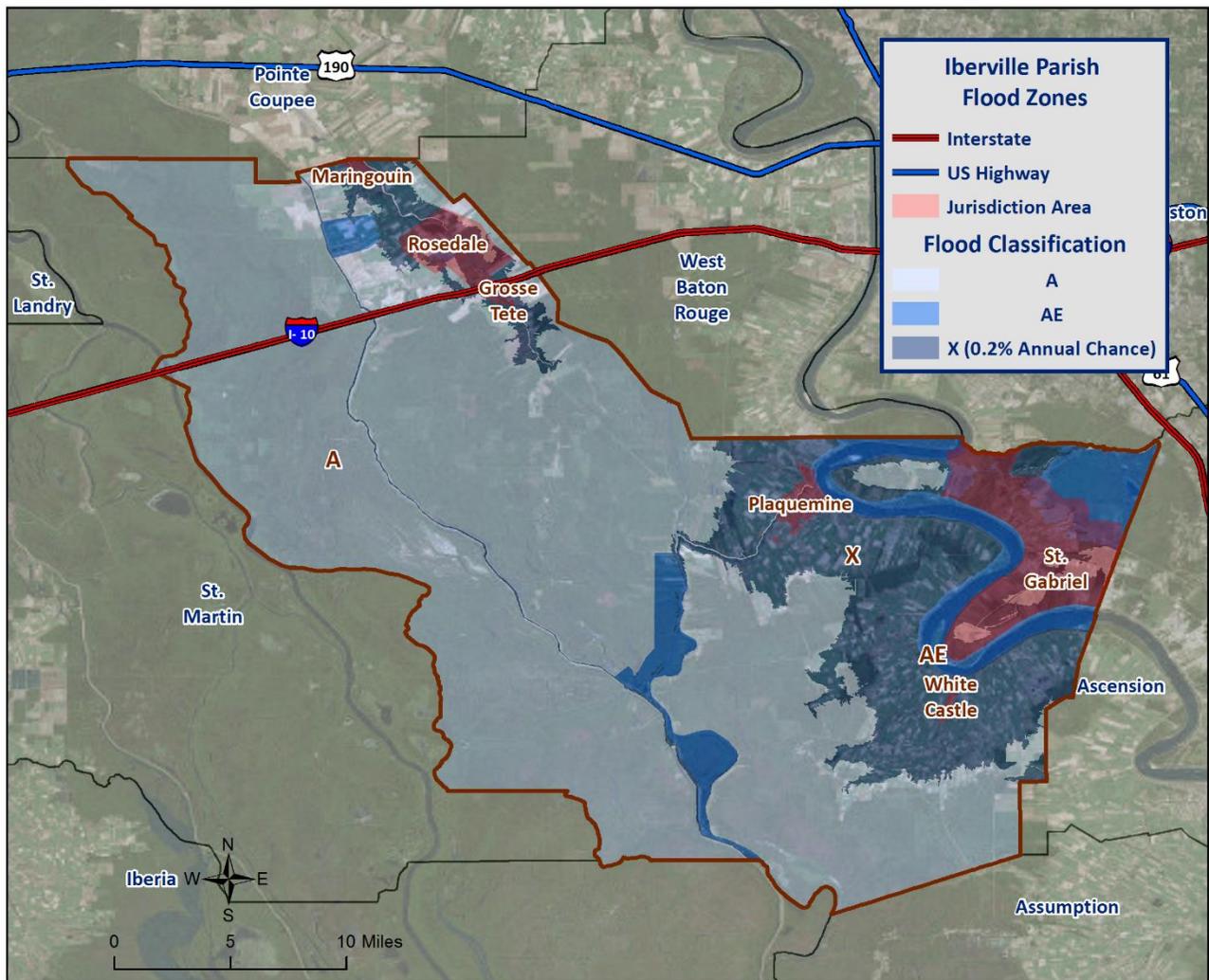


Figure 2-13: Iberville Parish Areas within the Flood Zones

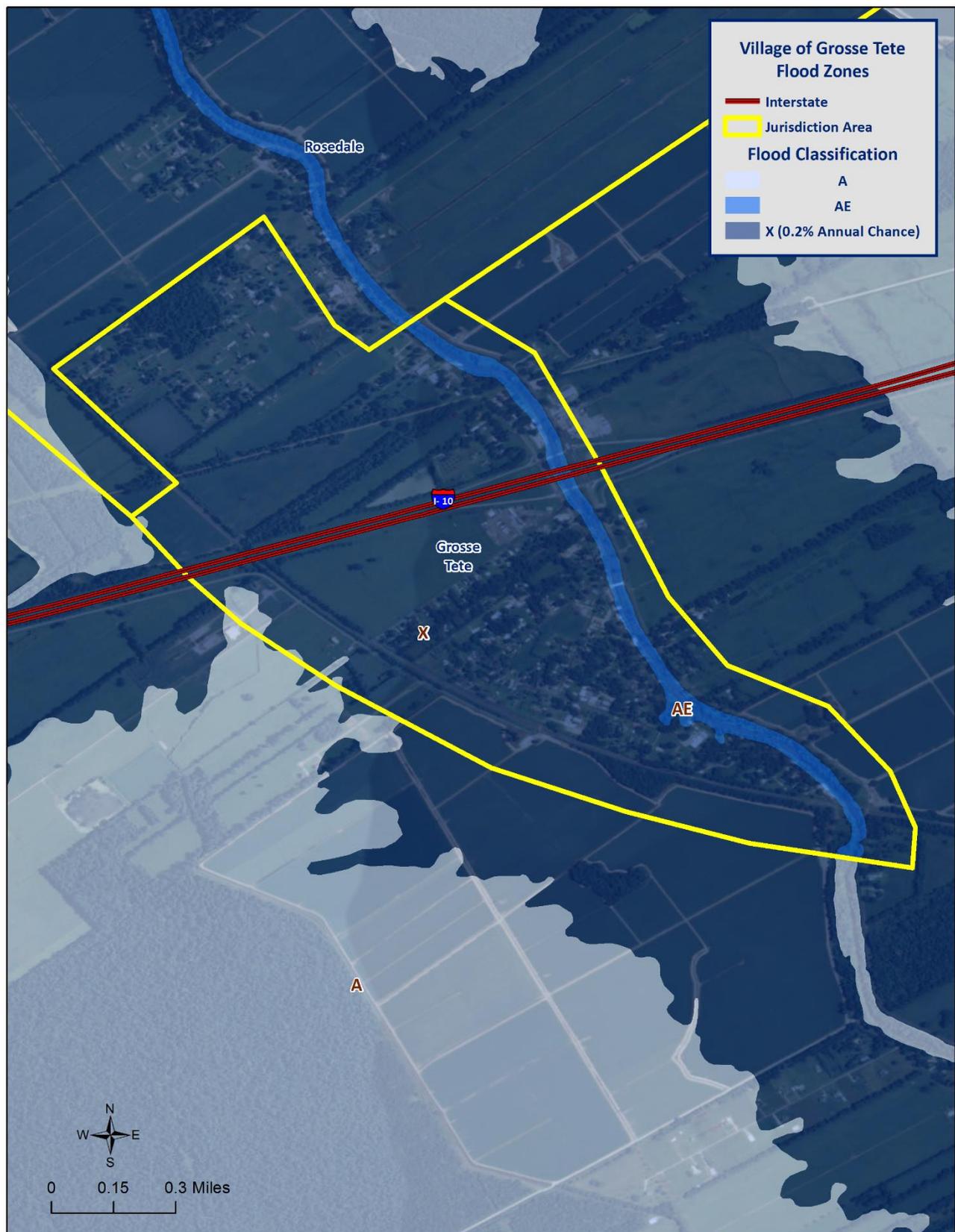


Figure 2-14: Village of Grosse Tete Areas within the Flood Zones

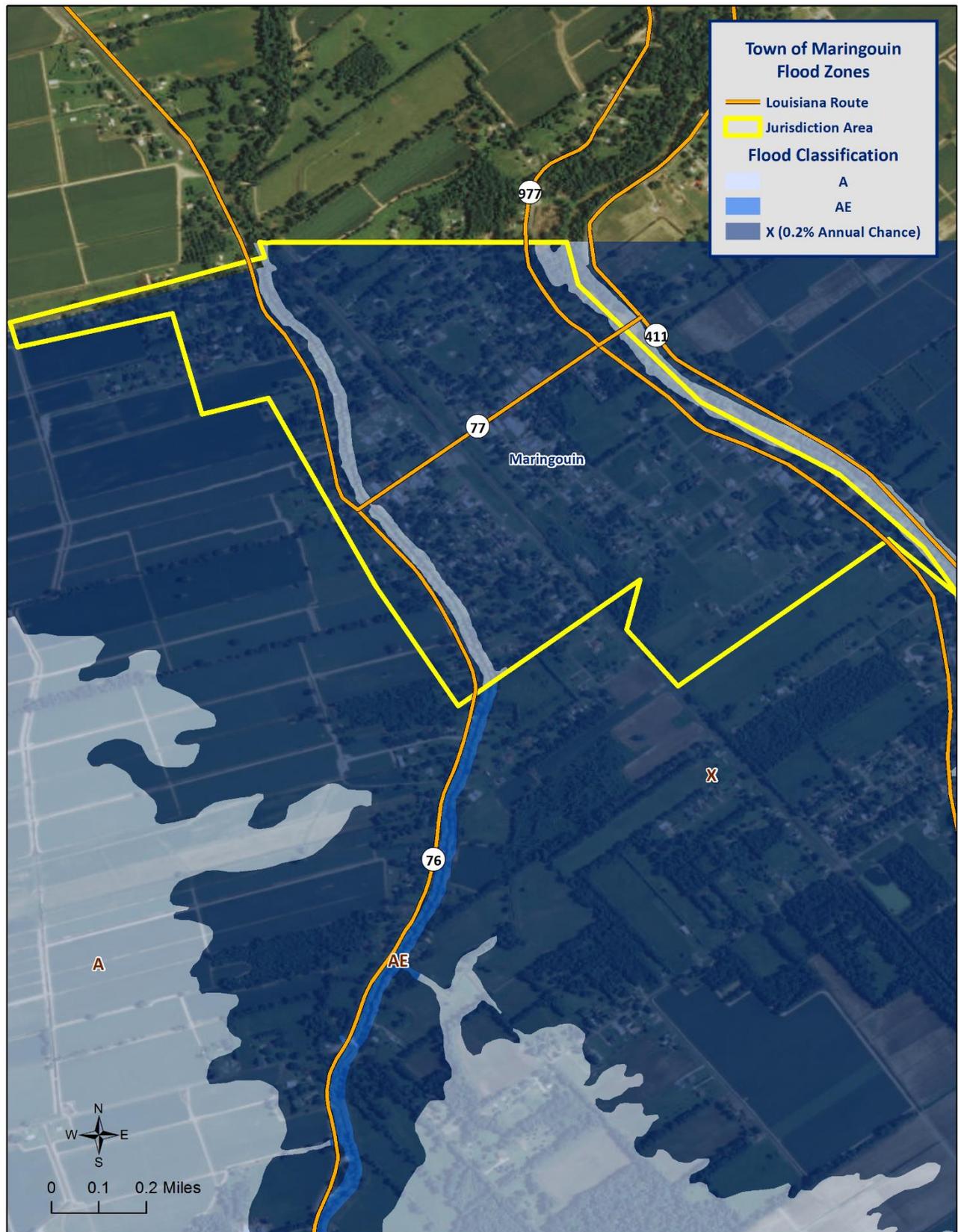


Figure 2-15: Town of Maringouin Areas within the Flood Zones

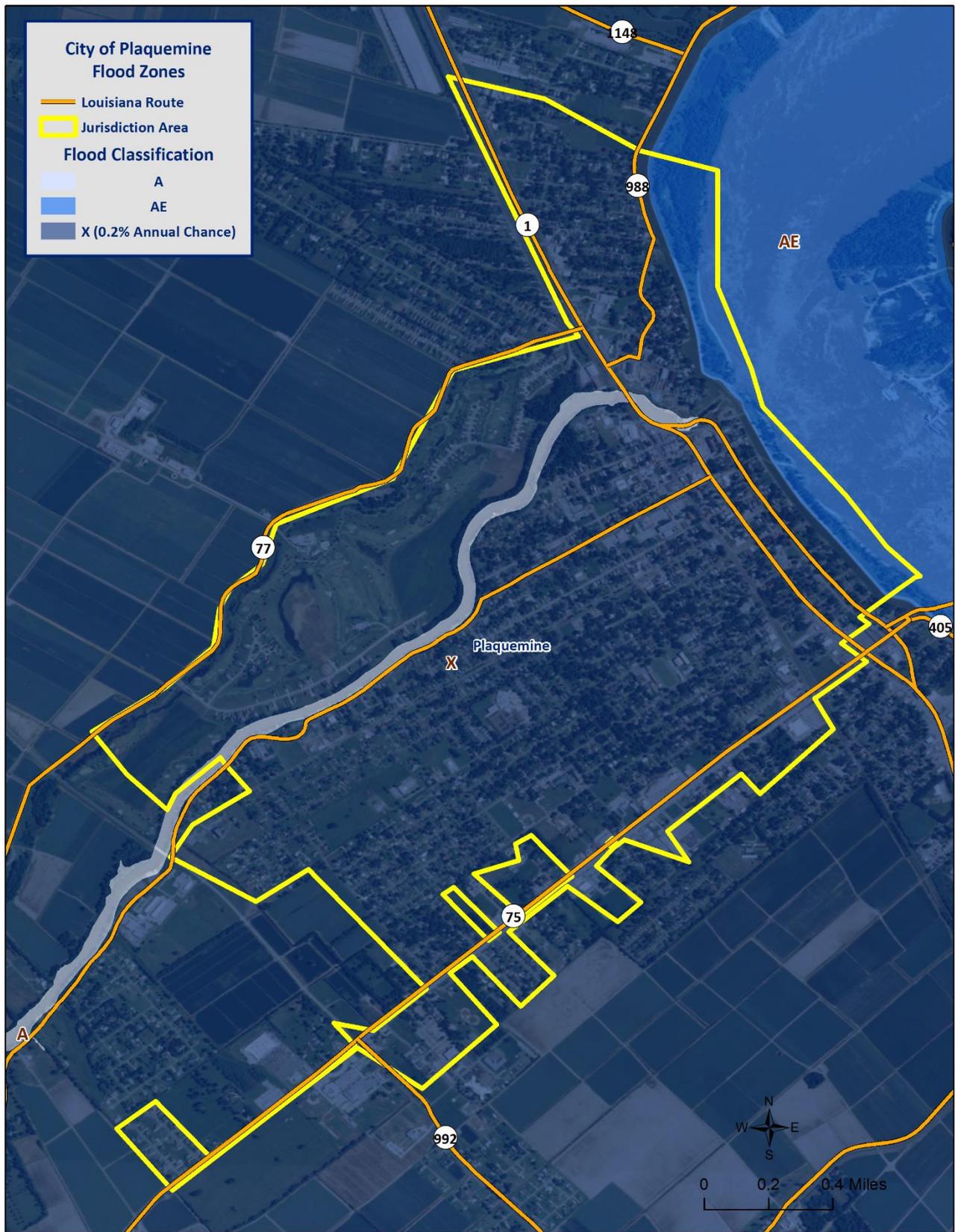


Figure 2-16: City of Plaquemine Areas within the Flood Zones

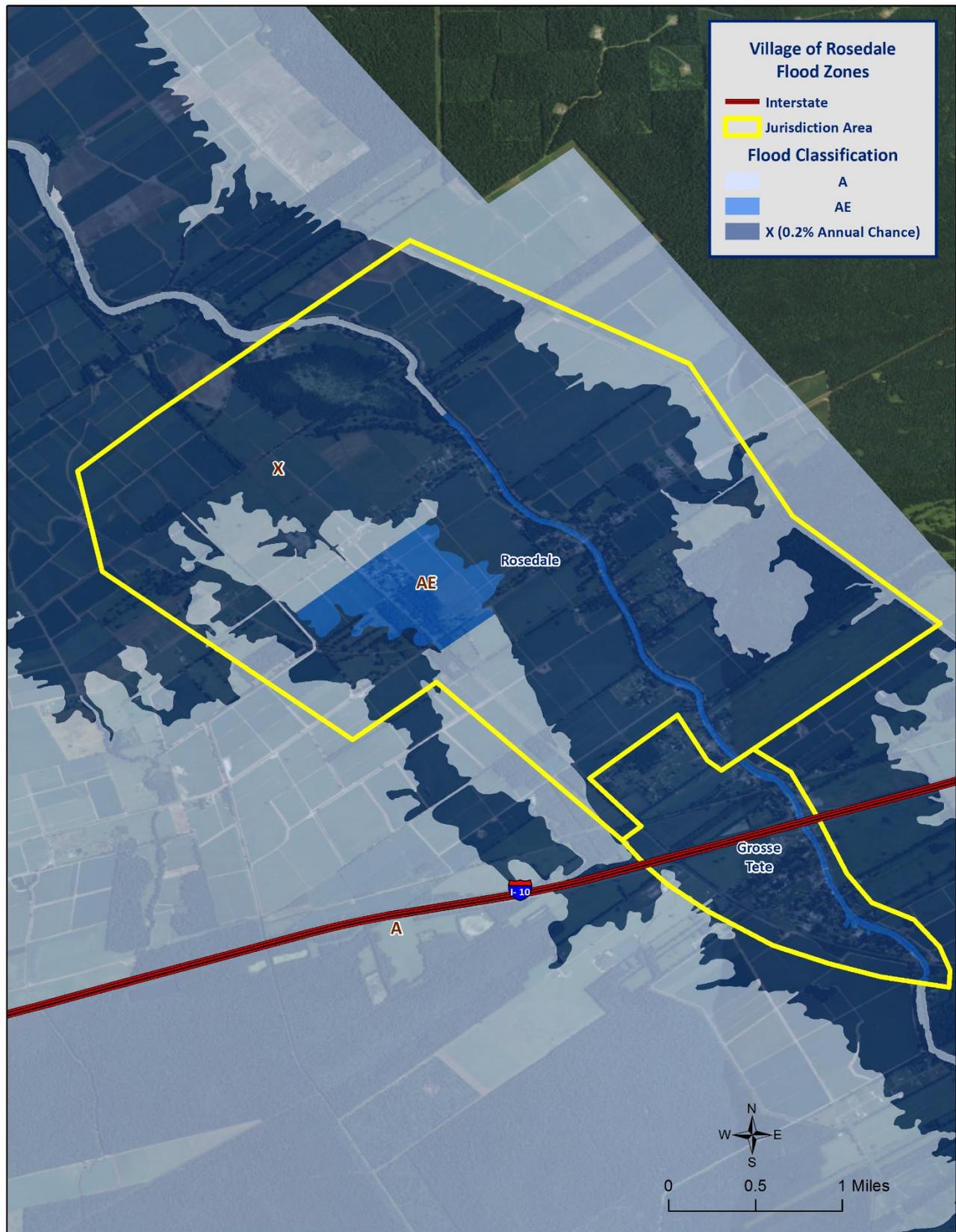


Figure 2-17: Village of Rosedale Areas within the Flood Zones

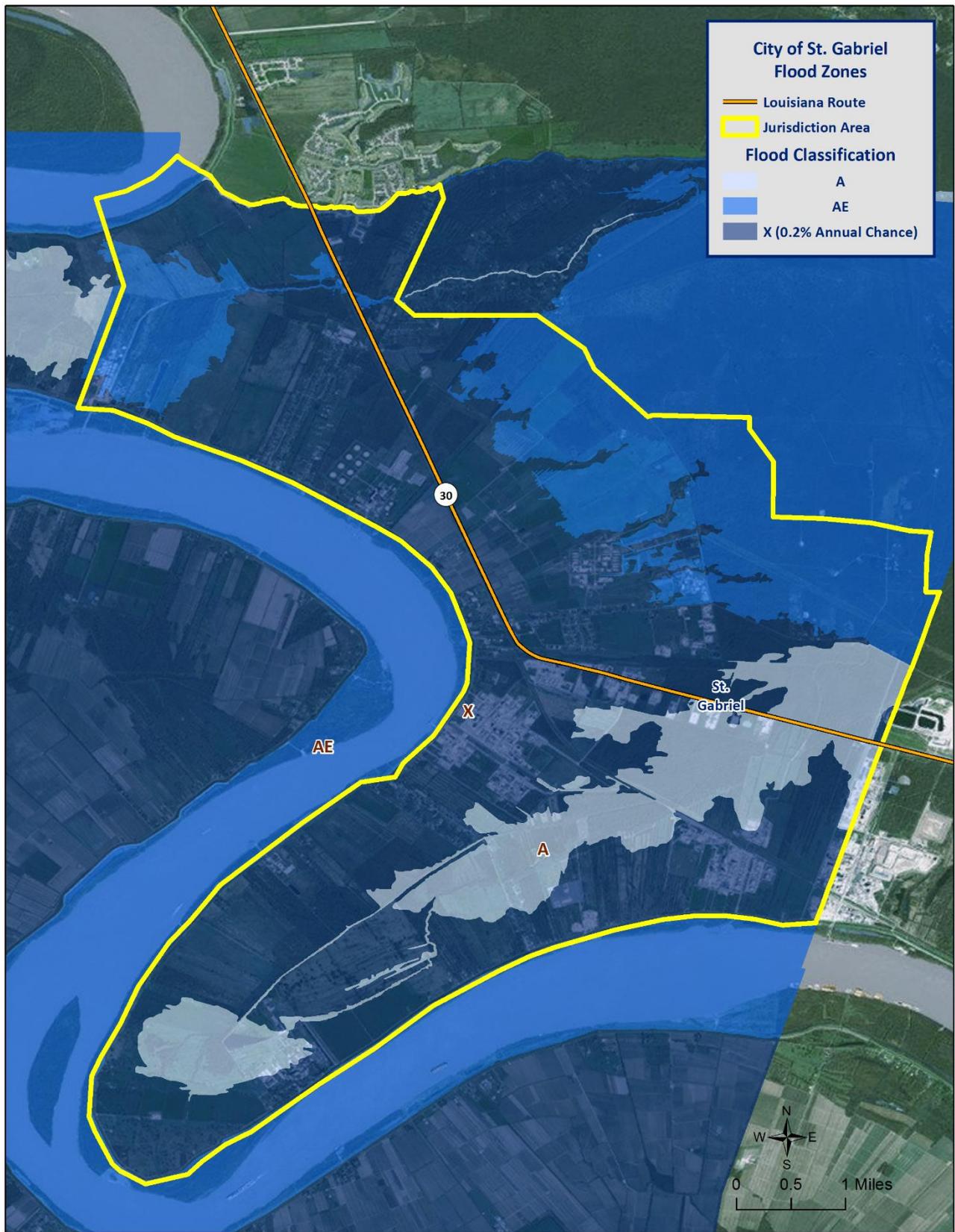


Figure 2-18: City of St. Gabriel Areas within the Flood Zones



Figure 2-19: Town of White Castle Areas within the Flood Zones

*Previous Occurrences / Extents*

Historically, there have been 11 flooding events that have created significant flooding in Iberville Parish between 1990 and 2015. Below is a brief synopsis of the flooding events that have occurred since 2010, including those flooding events that have occurred since the parish's last planning update. Since 2010, there have been no significant flooding events in the incorporated areas of Grosse Tete, Maringouin, Plaquemine, Rosedale, St. Gabriel, and White Castle.

*Table 2-12: Historical Floods in Iberville Parish with Locations from 2010 - 2015*

Date	Extents	Type of Flooding	Estimated Damages	Location
April 14, 2015	A stationary front provided for the development of several rounds of thunderstorms. Flash floods were reported in the unincorporated areas of the parish. Stalled vehicles were observed on Highway 1 due to water covered highways.	Flash Flood	\$0	UNINCORPORATED AREAS

The worst-case scenarios are based on several different types of flooding events. Storm water excesses and riverine flooding primarily affect the low-lying areas of the parish, and flood depths of up to seven feet can be expected in the unincorporated areas of the parish. The incorporated area of Plaquemine can expect flood depths from four to six feet, while the incorporated area of St. Gabriel can expect flood levels of three to four feet. The incorporated areas of Grosse Tete, Maringouin, Rosedale, and White Castle can expect flooding levels of approximately one to two feet.

*Frequency / Probability*

While other parts of this plan, along with the State's Hazard Mitigation Plan, have relied on the SHEL DUS database to provide the annual probability, due to Iberville Parish having multiple jurisdictions, it was necessary to assess the historical data found in the National Climatic Data Center for Iberville Parish and its jurisdictions to properly determine probability for future flood events. The table on the next page shows the probability and return frequency for each jurisdiction.

*Table 2-13: Annual Flood Probabilities for Iberville Parish*

Jurisdiction	Annual Probability	Return Frequency
Iberville Parish (Unincorporated)	32%	3 – 4 years
Grosse Tete	24%	4 – 5 years
Maringouin	24%	4 – 5 years
Plaquemine	36%	2 – 3 years
Rosedale	24%	4 – 5 years
St. Gabriel	24%	4 – 5 years
White Castle	24%	4 – 5 years

Based on historical record, the overall flooding probability for the entire Iberville Parish planning area is 44%, with 11 events occurring over a 25-year period.

#### *Estimated Potential Losses*

Using the Hazus 2.2 Flood Model, along with the Parish DFIRM, the 100-year flood scenario was analyzed to determine losses from this worst-case scenario. *Table 2-22* shows the total economic losses that would result from this occurrence.

*Table 2-14: Estimated Losses in Iberville Parish from a 100-Year Flood Event  
(Source: Hazus 2.2)*

Jurisdiction	Estimated Total Losses from 100-Year Flood Event
Iberville Parish (Unincorporated)	\$80,338,000
Grosse Tete	\$0
Maringouin	\$0
Plaquemine	\$1,312,000
Rosedale	\$0
St. Gabriel	\$2,412,000
White Castle	\$0
<b>Total</b>	<b>\$84,062,000</b>

The Hazus 2.2 Flood Model also provides a breakdown by jurisdiction for seven primary sectors (Hanus occupancy) throughout the parish. The losses for each jurisdiction by sector are listed in the tables on the next page.

Table 2-15: Estimated 100-Year Flood Losses for Unincorporated Iberville Parish by Sector  
(Source: Hazus 2.2)

Iberville Parish (Unincorporated)	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$154,000
Commercial	\$4,872,000
Government	\$707,000
Industrial	\$8,913,000
Religious / Non-Profit	\$3,405,000
Residential	\$61,527,000
Schools	\$760,000
<b>Total</b>	<b>\$80,338,000</b>

Table 2-16: Estimated 100-Year Flood Losses for Plaquemine by Sector  
(Source: Hazus 2.2)

Plaquemine	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$598,000
Government	\$0
Industrial	\$0
Religious / Non-Profit	\$7,000
Residential	\$707,000
Schools	\$0
<b>Total</b>	<b>\$1,312,000</b>

Table 2-17: Estimated 100-Year Flood Losses for St. Gabriel by Sector  
(Source: Hazus 2.2)

St. Gabriel	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$570,000
Government	\$136,000
Industrial	\$1,452,000
Religious / Non-Profit	\$0
Residential	\$254,000
Schools	\$0
<b>Total</b>	<b>\$2,412,000</b>

*Threat to People*

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

*Table 2-18: Vulnerable Populations Susceptible to a 100-Year Flood Event  
(Source: Hazus 2.2)*

<b>Number of People Exposed to Flood Hazards</b>			
<b>Location</b>	<b># in Community</b>	<b># in Hazard Area</b>	<b>% in Hazard Area</b>
Iberville Parish (Unincorporated)	<b>15,170</b>	<b>5,383</b>	<b>35.5%</b>
Grosse Tete	<b>647</b>	<b>0</b>	<b>0.0%</b>
Maringouin	<b>1,098</b>	<b>0</b>	<b>0.0%</b>
Plaquemine	<b>7,119</b>	<b>306</b>	<b>4.3%</b>
Rosedale	<b>793</b>	<b>0</b>	<b>0.0%</b>
St. Gabriel	<b>6,677</b>	<b>27</b>	<b>0.4%</b>
White Castle	<b>1,883</b>	<b>0</b>	<b>0.0%</b>
<b>Total</b>	<b>33,387</b>	<b>5,716</b>	<b>17.1%</b>

The Hazus 2.2 Flood Model was also extrapolated to provide an overview of vulnerable populations throughout the jurisdictions in the following tables:

*Table 2-19: Vulnerable Populations Susceptible to a 100-Year Flood Event in Unincorporated Iberville Parish  
(Source: Hazus 2.2)*

<b>Iberville Parish (Unincorporated)</b>		
<b>Category</b>	<b>Total Numbers</b>	<b>Percentage of People in Hazard Area</b>
Number in Hazard Area	5,383	35.5%
Persons Under 5 Years	334	6.2%
Persons Under 18 Years	1,210	22.5%
Persons 65 Years and Over	645	12.0%
White	2,625	48.8%
Minority	2,758	51.2%

*Table 2-20: Vulnerable Populations Susceptible to a 100-Year Flood Event in Plaquemine  
(Source: Hazus 2.2)*

Plaquemine		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	306	4.3%
Persons Under 5 Years	25	8.0%
Persons Under 18 Years	80	26.1%
Persons 65 Years and Over	45	14.8%
White	143	46.7%
Minority	163	53.3%

*Table 2-21: Vulnerable Populations Susceptible to a 100-Year Flood Event in St. Gabriel  
(Source: Hazus 2.2)*

St. Gabriel		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	27	0.4%
Persons Under 5 Years	1	3.7%
Persons Under 18 Years	3	12.0%
Persons 65 Years and Over	1	5.3%
White	9	34.1%
Minority	18	65.9%

#### *Vulnerability*

See Appendix C for parish and municipality buildings that are susceptible to flooding due to proximity within the 100-year floodplain.

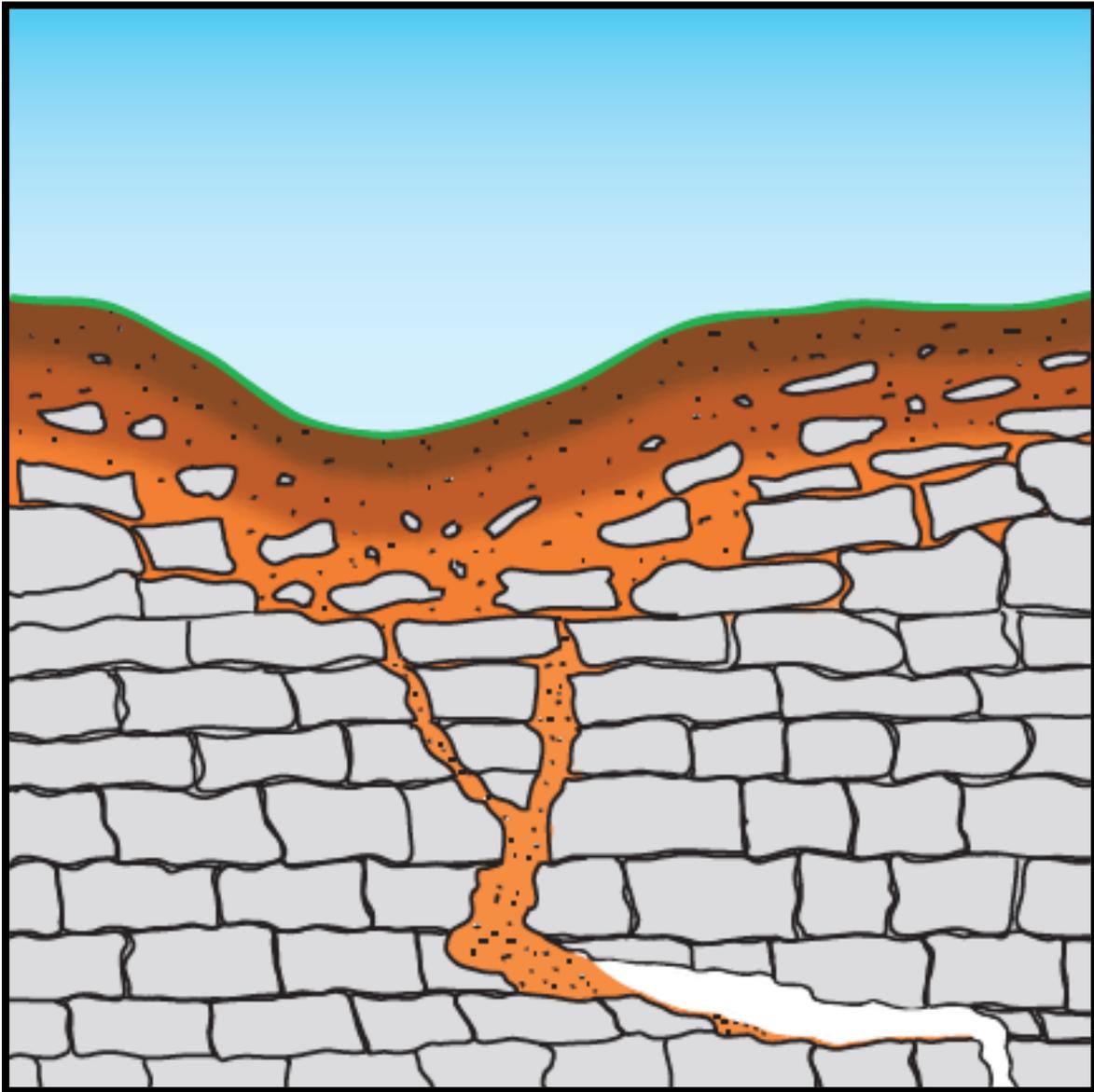
## Sinkholes

Sinkholes are areas of ground with no natural external surface drainage. They can vary in size from a few square feet to hundreds of acres, and can reach depths of more than 100 feet. 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, it encounters water-soluble bedrock. The water then begins to dissolve the bedrock, forming sinkholes. The karst rock dissolves along cracks; as the fissures grow, soil and other particles fill the gaps, loosening the soil above the bedrock. *Figure 2-20* 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 top soil above dissolving bedrock does not sink, but forms a bridge over the soil that is sinking beneath it. As *Figure 2-21* demonstrates, 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, by processes 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 the land 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.



*Figure 2-20: Cover-subsidence Sinkhole Formation from the Breaking Apart of Karst Bedrock by Soil Deposit  
(Courtesy of USGS Sinkholes Fact Sheet)*

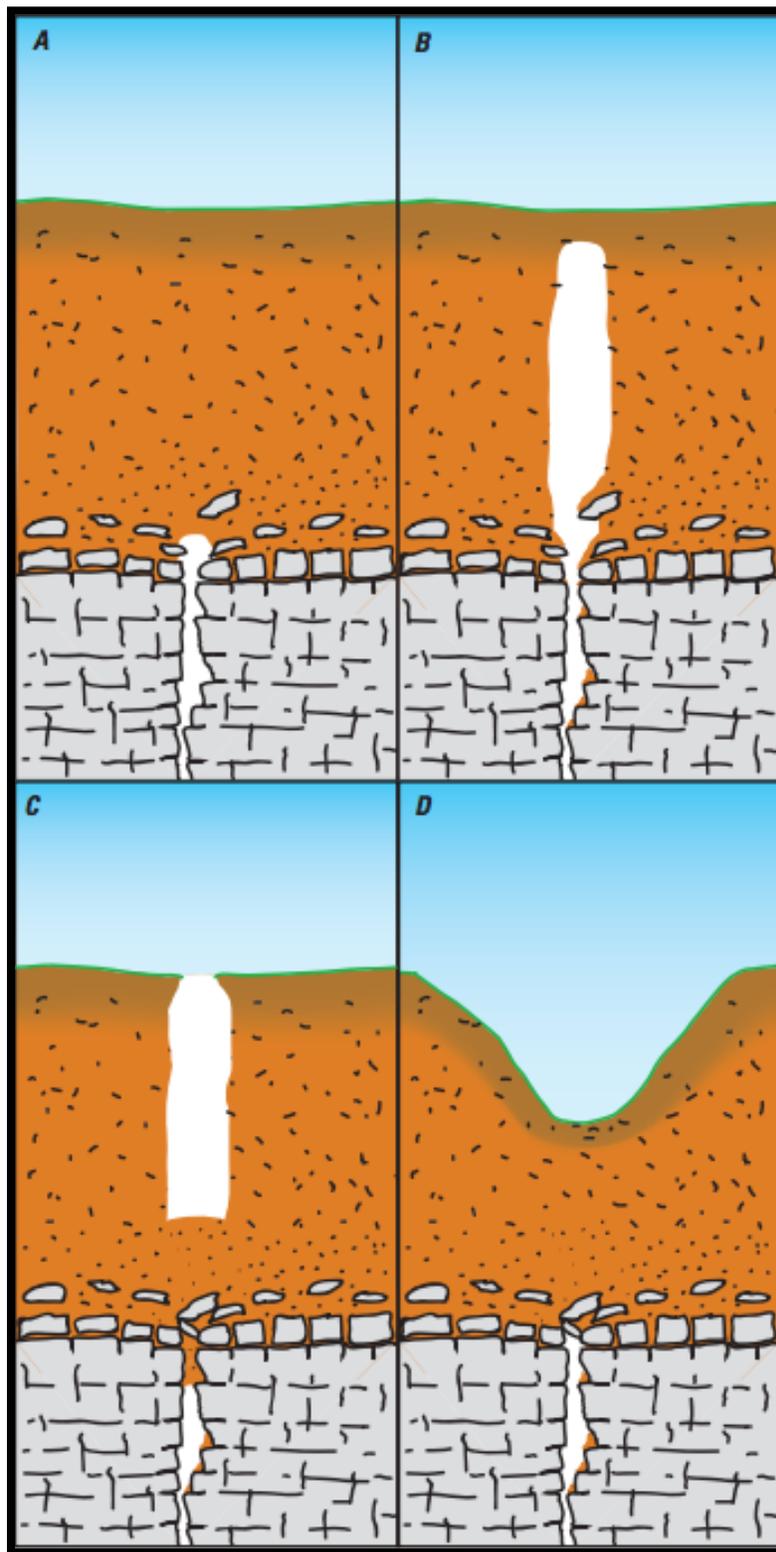
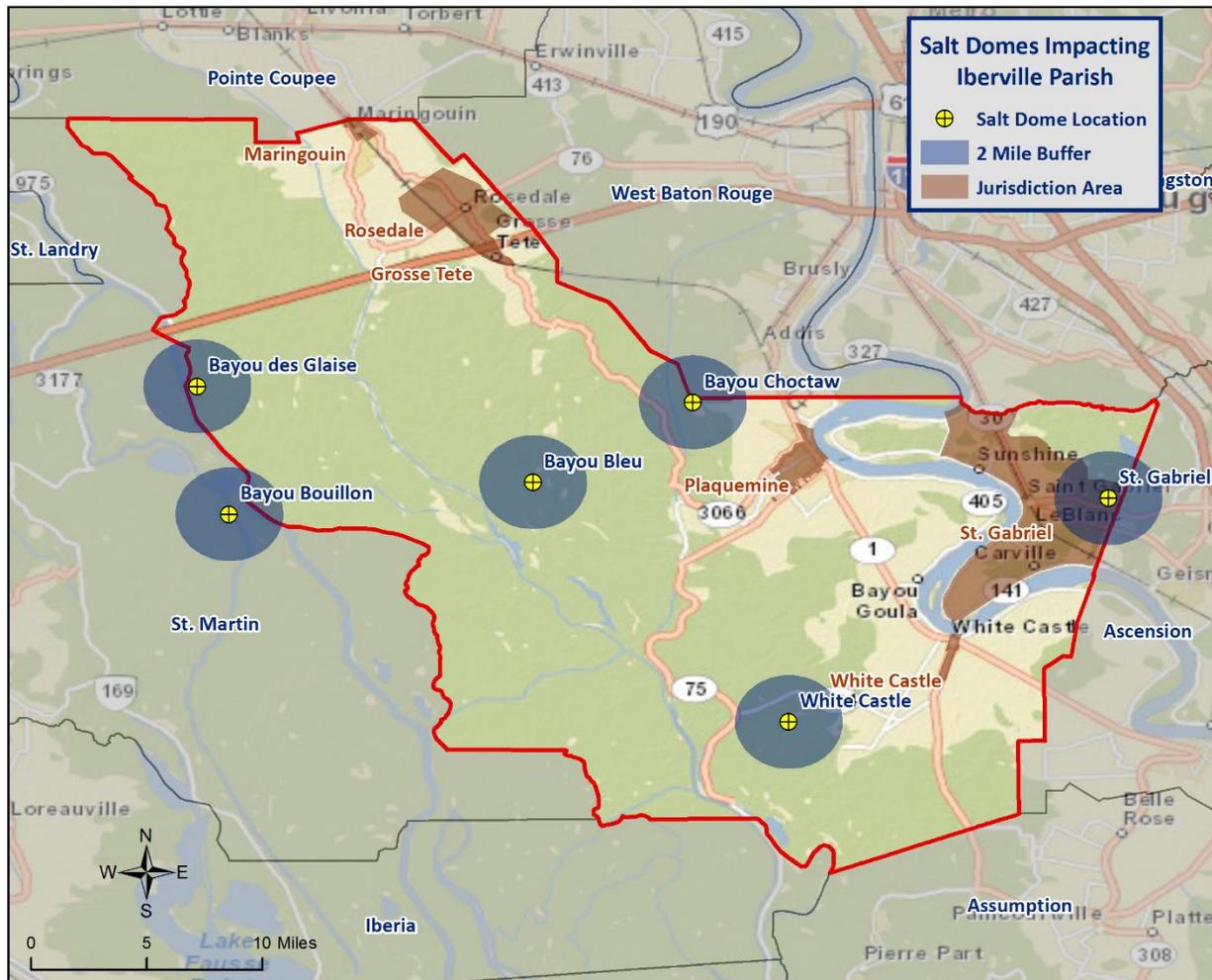


Figure 2-21: Formation of Cover-collapse Sinkhole after a Soil Bridge forms above Dissolving Bedrock  
(Courtesy of USGS Sinkhole Fact Sheet)

### Location

Currently, there are five identifiable salt dome locations in Iberville Parish. In addition, there is one salt dome in which its two mile buffer extends into Iberville Parish. *Figure 2-22* displays the locations of these salt domes with their relative location to the nearest jurisdiction. As depicted in *Figure 2-22*, the sinkholes are dispersed throughout Iberville Parish. While the majority of sinkholes are located in unincorporated areas of the parish, a two mile buffer around each the St. Gabriel salt domes encompasses parts of the incorporated area of St. Gabriel. At this time, there are no sinkholes in or near the incorporated areas of Grosse Tete, Maringouin, Plaquemine, Rosedale, and White Castle, but the salt domes will continue to be monitored.



*Figure 2-22: Salt Dome Locations in Iberville Parish Relative to Jurisdictions*

### Previous Occurrences / Extents

There have been no recorded incidents of sinkholes or salt dome collapses in Iberville Parish to date. Based on previous sinkhole formations in the State of Louisiana, Iberville Parish could expect a sinkhole that encompasses approximately 35 acres and is approximately 200 feet in depth.

### Frequency / Probability

Since there has been no recorded incidents of sinkhole or salt dome collapse in Iberville Parish, the annual chance of occurrence is calculated at less than 1%.

### *Estimated Potential Losses*

Of the six salt domes that influence Iberville Parish, five were analyzed to determine the number of people and houses that are potentially susceptible to losses from a sinkhole materializing from one of the salt domes. The remainder was discounted due to it not being located near any populated areas of the parish. 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 2010 U.S. Census block data to determine the number of houses and people located within two miles of each salt dome. Critical facilities were also analyzed to determine if they fell within the two mile buffer of a salt dome. Total value for all occupancy groups from Hazus 2.2 was used to estimate a total loss of all facilities that were within two miles of a salt dome.

The salt dome that poses the greatest risk to Iberville Parish is St. Gabriel Salt Dome. The St. Gabriel Salt Dome contains a total of 1,127 homes and 3,845 people within its two mile buffer.

*Table 2-22: Estimated Potential Losses from a Sinkhole Formation  
(Source: U.S. 2010 Census Data and Hazus 2.2)*

Salt Dome Name	Total Building Exposure	Critical Infrastructure Exposure	Number of People Exposed	Number of Houses Exposed
Bayou Bleu	\$18,404,000	0	113	44
Bayou Bouillon	\$0	0	0	0
Bayou Choctaw	\$96,642,000	0	896	498
Bayou des Glaise	\$1,346,000	0	21	10
St. Gabriel	\$141,986,000	1	3,845	1,127
White Castle	\$74,979,000	0	976	420

### *Vulnerability*

See Appendix C for parish and municipality building exposure to a sinkhole hazard.

## Thunderstorms

The term “thunderstorm” is usually used as a catch-all term for several kinds of storms. Here, “thunderstorm” is defined to include any precipitation event in which thunder is heard or lightning is seen. Thunderstorms are often accompanied by heavy rain and strong winds, and depending on conditions, occasionally 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 parishes (counties).

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) characterizes 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 within this report; therefore, for the purpose of thunderstorms, the sub-hazards of hail, high winds, and lightning will be profiled.

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

#### *Hazard Description*

##### *Hailstorms*

Hailstorms are severe thunderstorms in which balls or chunks of ice fall along with rain. 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 means larger hailstone sizes. The tables on the next page display a spectrum of hailstone diameters and their everyday equivalents, as well as the TORRO Hailstorm Intensity Scale.

Table 2-23: 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 2-24: Spectrum of Hailstone Diameters and their Everyday Descriptions  
(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 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.

### High Winds

In general, high winds can occur in a number of different ways, within and without thunderstorms. The Federal Emergency Management Agency (FEMA) distinguishes these as shown in the following table.

*Table 2-25: High Winds Categorized by Source, Frequency, and Duration  
(Source: Making Critical Facilities Safe from High Wind, FEMA)*

High Winds Categories			
High Wind Type	Description	Relative Frequency in Louisiana	Relative Maximum Duration in Louisiana
Straight-line Winds	Wind blowing in straight line; usually associated with intense low-pressure area	High	Few minutes – 1 day
Downslope Winds	Wind blowing down the slope of a mountain; associated with temperature and pressure gradients	N/A	N/A
Thunderstorm Winds	Wind blowing due to thunderstorms, and thus associated with temperature and pressure gradients	High (especially in the spring and summer)	Few minutes – several hours
Downbursts	Sudden wind blowing down due to downdraft in a thunderstorm; spreads out horizontally at the ground, possibly forming horizontal vortex rings around the downdraft	Medium-to-High (~5% of all thunderstorms)	~15 – 20 minutes
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 and land	N/A	N/A
Hurricane Winds	Wind blowing in spirals, converging with increasing speed toward eye; associated with temperature and pressure gradients between the Atlantic and Gulf and land	Low-to-Medium	Several days
Tornado Winds	Violently rotating column of air from base of a thunderstorm to the ground with rapidly decreasing winds at greater distances from center; associated with extreme temperature gradient	Low-to-Medium	Few minutes – few hours

The only high winds of present concern 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 the hilly areas of Louisiana where they occur. Nor'easters are cyclonic events that have at most a peripheral effect on Louisiana, and none associated with high winds. Winds associated with hurricanes and tornadoes will be considered in their respective sections.

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 2-26: 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

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, loss of revenue for businesses, increased vulnerability to fire, food spoilage, and other losses that might be sustained by a loss of power. Power outages may pose a health risk for those requiring electric medical equipment and/or air conditioning.

### Lightning

Lightning is a natural electrical discharge in the atmosphere that is a by-product of thunderstorms. Every thunderstorm produces lightning. There are three primary types of lightning: intra-cloud, cloud-to-ground, and cloud-to-cloud. Cloud-to-ground lightning has the potential to cause the most damage to property and crops, while also posing as a health risk to the populace in the area of the strike.

Damage caused by lightning is usually to homes or businesses. These strikes have the ability to damage electrical equipment inside the home or business, and can also ignite a fire that could destroy homes or crops.

Lightning continues to be one of the top three storm-related killers in the United States per FEMA, but it also has the ability to cause negative long-term health effects to the individual that is struck. The following table outlines the lightning activity level that is a measurement of lightning activity.

*Table 2-27: 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 reach 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	

*Hazard Profile**Hailstorms**Location*

Because hailstorms are a climatological based hazard, the entire planning area for Iberville Parish is equally at risk for hailstorms.

*Previous Occurrences / Extents*

The SHELDUS database reports 26 significant hailstorm events occurring within the boundaries of Iberville Parish between the years of 1990-2015. According to the National Climatic Data Center, hailstorm diameters experienced in Iberville Parish have ranged from 0.75 inches to 1.75 inches since 1989. The most frequently recorded hail size has been 1.75 inch diameters. Based on the National Climatic Data Center dataset, [Table 2-28](#) provides an overview of hailstorms that have impacted the Iberville Parish Planning area since 2010. On the next page, [Figure 2-23](#) displays the density of hailstorms in Iberville Parish and adjacent parishes. Iberville Parish can expect to experience hail up to 1.75 inches in diameter for future events. Since 2010, there have been no hailstorm events in the incorporated areas of Maringouin, Rosedale and St. Gabriel.

*Table 2-28: Previous Occurrences of Hailstorms in Iberville Parish  
(Source: NCDC)*

Date	Recorded Hail Size (inches)	Location
May 18, 2010	1	CARVILLE
March 29, 2011	1	BAYOU SORREL
March 29, 2001	1.25	BAYOU SORREL
April 15, 2011	1	GROSSE TETE
April 15, 2011	1	PLAQUEMINE
April 24, 2015	1.75	BAYOU SORREL
April 24, 2015	1.75	WHITE CASTLE

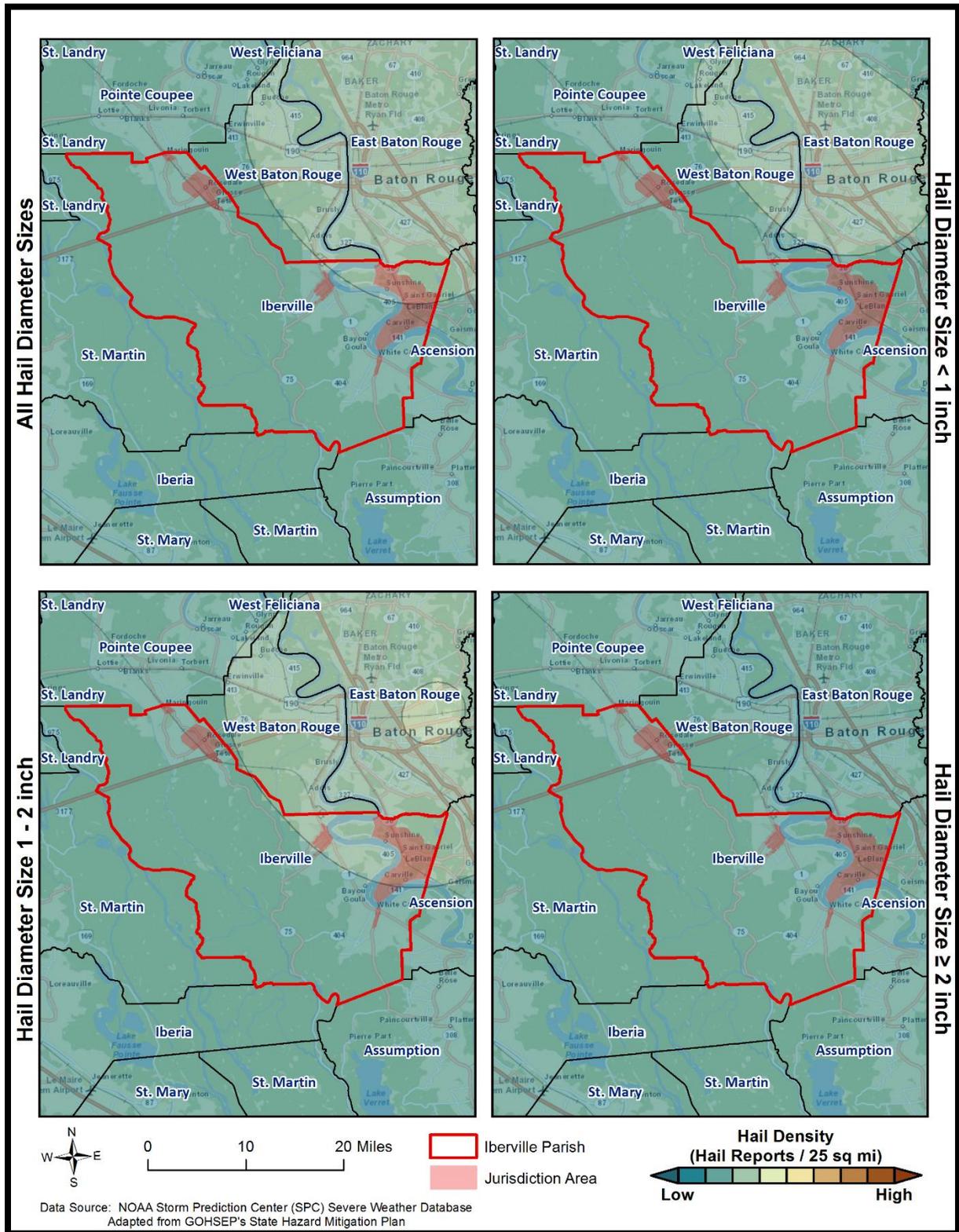


Figure 2-23: Density of Hailstorms by Diameter from 1950-2012  
 (Source: State of Louisiana Hazard Mitigation Plan 2014)

### Frequency

Based on historical data from SHELDUS for the past 25 years, it is estimated the probability of occurrence for a significant hailstorm event is approximately 100%. The probability was determined based on a review of significant hail data that has caused damages in the last 25 years, in which Iberville Parish has had 26 recorded events.

### Estimated Potential Losses

According to the SHELDUS database, property damage due to hailstorms in Iberville Parish have totaled approximately \$4,633 since 1990. To estimate the potential losses of a hail event on an annual basis, the total damages recorded for hailstorm events was divided by the total number of years of available wind data in SHELDUS (1990 – 2015). This provides an annual estimated potential loss of \$185. Table 2-29 provides an estimate of potential property losses for Iberville Parish.

Table 2-29: Estimated Annual Property Losses in Iberville Parish from Hailstorms

Estimated Annual Potential Losses from Hailstorms for Iberville Parish						
Unincorporated Iberville Parish (45.4% of Population)	Grosse Tete (1.9% of Population)	Maringouin (3.3% of Population)	Plaquemine (21.3% of Population)	Rosedale (2.4% of Population)	St. Gabriel (20.0% of Population)	White Castle (5.6% of Population)
\$84	\$4	\$6	\$40	\$4	\$37	\$10

There has been one injury due to hailstorms from 1990 – 2015 in Iberville Parish.

### Vulnerability

See Appendix C for parish and municipality buildings that are susceptible to hailstorms.

### High Winds

#### Location

Because high winds are a climatological based hazard, the entire planning area for Iberville Parish is equally at risk for high winds.

#### Previous Occurrences / Extents

The SHELDUS database reports a total of 50 thunderstorm wind events occurring within the boundaries of Iberville Parish between the years of 1990 to 2015. The significant thunderstorm wind events experienced in Iberville Parish have ranged in wind speed from 58 mph to 104 mph. Iberville Parish can expect to receive thunderstorm winds up to 104 mph for future high wind events. The table on the next page provides an overview of significant high wind events over the last five years.

Table 2-30: Previous Occurrences for Thunderstorm High Wind Events

Location	Date	Recorded Wind Speeds (mph)	Property Damage	Crop Damage
REVEILLE	March 5, 2011	69	\$2,589	\$0
GROSSE TETE	February 18, 2012	60	\$3,551	\$0
ST GABRIEL	February 18, 2012	60	\$3,551	\$0
GROSSE TETE	December 25, 2012	60	\$101	\$0
ST GABRIEL	April 24, 2013	60	\$3,000	\$0
PLAQUEMINE	April 24, 2013	60	\$3,000	\$0
BAYOU SORREL	April 24, 2015	69	\$0	\$0
CRESCENT	April 27, 2015	104	\$195,896	\$0
PLAQUEMINE	April 27, 2015	60	\$0	\$0

Since 2009, there have been no significant high wind events in the incorporated areas of Maringouin, Rosedale, and White Castle.

#### Frequency

High winds are a fairly common occurrence within Iberville Parish, with an annual chance of occurrence calculated at 100%.

#### Estimated Potential Losses

Since 1990, there have been 50 significant wind events that have resulted in property damages according to the SHELDUS database. The total property damages associated with those storms have totaled \$168,068. To estimate the potential losses of a wind event on an annual basis, the total damages recorded for wind events was divided by the total number of years of available wind data in SHELDUS (1990 – 2015). This provides an annual estimated potential loss of \$6,723. The following table provides an estimate of potential property losses for Iberville Parish:

Table 2-31: Estimated Annual Property Losses in Iberville Parish Resulting from Wind Damage

Estimated Annual Potential Losses from Thunderstorm Winds for Iberville Parish						
Unincorporated Iberville Parish (45.4% of Population)	Grosse Tete (1.9% of Population)	Maringouin (3.3% of Population)	Plaquemine (21.3% of Population)	Rosedale (2.4% of Population)	St. Gabriel (20.0% of Population)	White Castle (5.6% of Population)
\$3,055	\$130	\$221	\$1,433	\$160	\$1,344	\$379

There has been one reported fatality as a result of a thunderstorm wind event over the 25-year record. On May 15, 2008, thunderstorm winds blew down a tree that fell on a trailer. A 77 year old man inside the trailer was killed by the tree.

#### Vulnerability

See Appendix C for parish and municipality buildings that are susceptible to high winds.

## Lightning

### Location

Like hail and high winds, lightning is a climatological based hazard and has the same probability of occurring throughout the entire planning area for Iberville Parish.

### Previous Occurrences / Extents

The SHELDUS database reports a total of four lightning events occurring within the boundaries of Iberville Parish between the years of 1990-2015. The SHELDUS database only records lightning events that cause death, injuries, crop damage, and/or property damage, so these numbers do not accurately reflect the number of lightning events in Iberville Parish, which occur on a nearly monthly basis. The planning area can expect to have a lightning density of 9 - 10 flash/sq. mile/year. The table below provides an overview of significant lightning strikes over the last five years:

*Table 2-32: Previous Occurrences of Significant Lightning Strikes in Iberville Parish from 1990 – 2015  
(Source: NCDC and SHELDUS)*

Location	Date	Summary	Property Damage
RAMAH	May 1, 1993	A fisherman was injured when he was struck by lightning about 4 miles south of Ramah.	\$0
PLAQUEMINE	November 2, 1995	Lightning started a fire in a furniture refinishing shop causing minor damage to the structure and contents.	\$30,572
PLAQUEMINE	June 17, 1997	Lightning struck a radio tower and knocked out the 911 emergency telephone system	\$116,116
PLAQUEMINE	June 12, 2007	Lightning struck a house causing significant damage.	\$16,853

Since 2009, there have been no lightning events that have caused property damage or loss of life in the unincorporated areas of Iberville Parish and the incorporated areas of Grosse Tete, Maringouin, Rosedale, St. Gabriel, and White Castle.

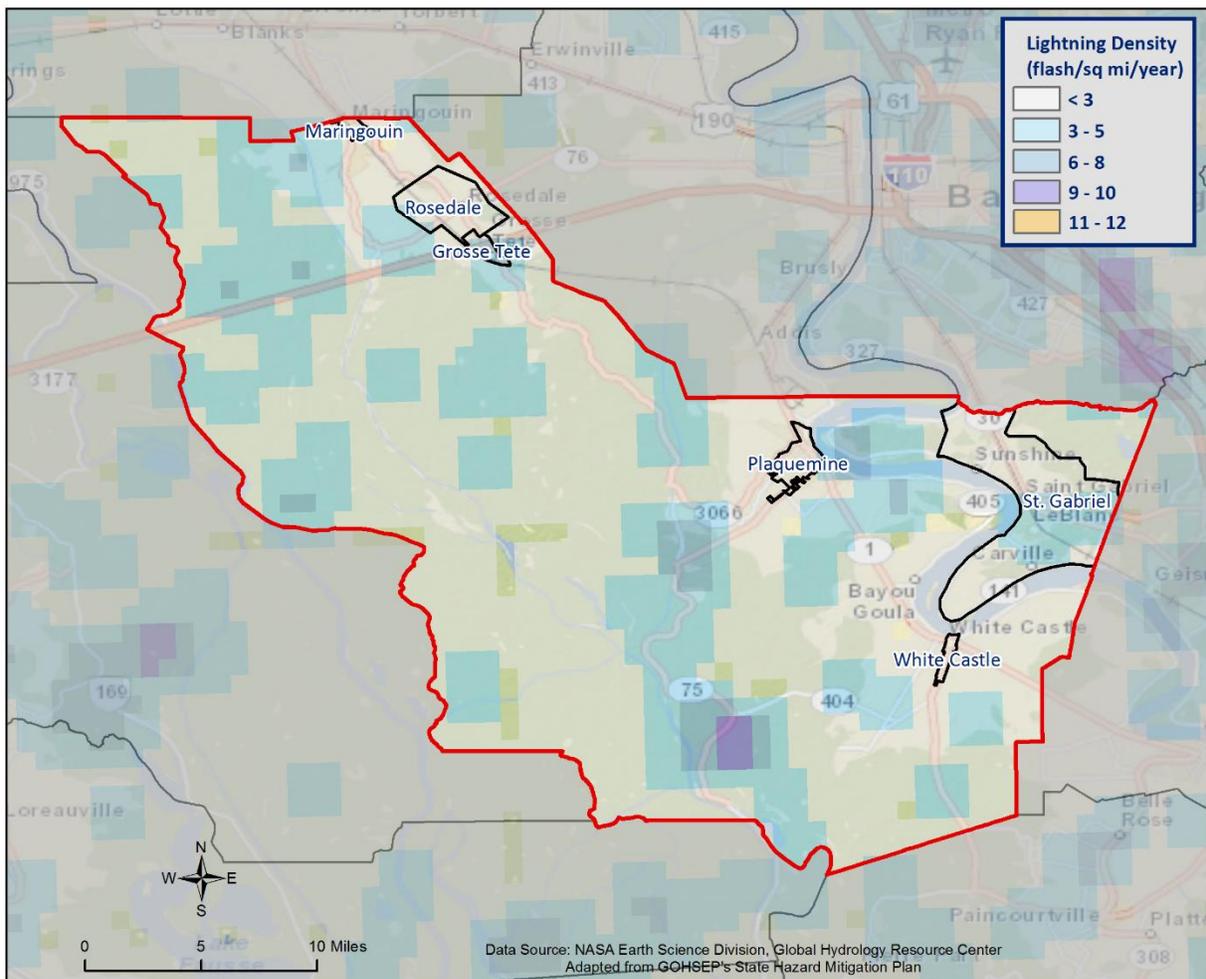


Figure 2-24: Lightning Density Reports for Iberville Parish

### Frequency

Lightning can strike anywhere and is produced by every thunderstorm, so the chance of lightning occurring in Iberville Parish is high. However, lightning that meets the definition that is used by SHELDUS and the NCDC that actually results in damages to property and injury or death is a less likely event. According to SHELDUS, there have been four lightning events that have caused property damages or injuries over the last 25 years, establishing an annual probability of 16%.

### Estimated Potential Losses

Since 1990, there have been four significant lightning events that have resulted in property damages according to the SHELDUS database. The total property damages associated with lightning events totaled \$163,541. To estimate the potential losses of a lightning event on an annual basis, the total damages recorded for lightning events was divided by the total number of years of available major lightning strike data in SHELDUS (1990 – 2015). This provides an annual estimated potential loss of \$6,542. The table on the next page provides an estimate of potential property losses for Iberville Parish.

*Table 2-33: Estimated Annual Property Losses in Iberville Parish from Lightning*

Estimated Annual Potential Losses from Thunderstorm Lightning for Iberville Parish						
Unincorporated Iberville Parish (45.4% of Population)	Grosse Tete (1.9% of Population)	Maringouin (3.3% of Population)	Plaquemine (21.3% of Population)	Rosedale (2.4% of Population)	St. Gabriel (20.0% of Population)	White Castle (5.6% of Population)
\$2,972	\$127	\$215	\$1,395	\$155	\$1,308	\$369

There have been one reported injury and no fatalities in Iberville Parish as a result of a lightning strikes over the 25-year record.

#### *Vulnerability*

See Appendix C for parish and municipality building exposure to lightning hazards.

## Tornadoes

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 events, 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. *Table 2-34* shows the EF scale in comparison with the old 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 2-34: 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 2-35: 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 forest 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, along 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 radar identifies a distinctive “hook-shaped” area within a thunderstorm line.

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.

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.

#### *Location*

While there is a significant tornado record in Iberville Parish with actual locations, tornadoes in general are a climatological based hazard and have the same approximate probability of occurring in Iberville Parish as all of its jurisdictions. Because a tornado has a similar probability of striking anywhere within the planning area for Iberville Parish, all jurisdictions are equally at risk for tornadoes.

#### *Previous Occurrences / Extents*

SHELDUS reports a total of eight tornadoes or waterspouts occurring within the boundaries of Iberville Parish between the years of 1990-2015. The tornadoes experienced in Iberville Parish have ranged from EF0 on the EF scale, and ranged from F0 to F2 on the F scale. The worst case scenario Iberville Parish can expect in the future is an EF2 tornado.

The tornado that caused the most damage to property occurred on June 8, 1989. Thunderstorms spawned three F2 intensity tornadoes. The first tornado touched down just west of Grosse Tete, moved across the small town, and destroyed or severely damaged a total of 32 structures, including mobile homes. Another 47

structures had minor damage. Two people were killed and 30 individuals suffered injuries, two of which were serious.

*Table 2-36: Historical Tornadoes in Iberville Parish with Locations from 1990-2015*

Date	Impacts	Property Damage	Location	Magnitude
August 26, 1992	1 mile path with a width of 20 yards. A tornado spawned from the remnants of Hurricane Andrew and contributed to the storm's damage.	\$8,302	UNINCORPORATED AREA	F1
May 24, 1997	0.6 mile path with a width of 20 yards. A mobile home and 12 houses suffered minor damage.	\$29,029	WHITE CASTLE	F0
June 9, 2005	0.2 mile path with a width of 30 yards. A tornado caused minor damage at a correctional facility, severely damaged and moved a wood frame house eight feet off its foundation, and knocked down a tree.	\$214,707	ST GABRIEL	F1
October 16, 2006	2.24 mile path with a width of 40 yards. Two mobile homes were overturned or heavily damaged. 10 to 15 houses suffered minor to moderate damage.	\$57,777	PLAQUEMINE	F1
January 10, 2013	0.3 mile path with a width of 100 yards. Small areas of roofing and some siding were pulled off a well-constructed metal building.	\$15,000	REVEILLE	EFO
April 24, 2013	0.38 mile path with a width of 75 yards. Five to ten oaks were snapped or uprooted with numerous branches snapped. One storage shed had a roof ripped off.	\$20,000	BAYOU PAUL	EFO

The incorporated areas of Grosse Tete, Maringouin, Plaquemine, Rosedale, St. Gabriel, and White Castle have not experienced a tornado event from 2009 to the present. Since 2010, the year in which the last update to this hazard mitigation plan was written, Iberville Parish has had two tornadoes touchdown in the unincorporated areas of the parish. The following is a brief synopsis of these events:

*January 10, 2013 – EF0 Tornado in Reveille*

A weak tornado touched down briefly at an industrial plant on Highway 405 east southeast of Plaquemine, LA. Small areas of roofing and some siding were pulled off a well-constructed metal building. The tornado strength was estimated at upper end EF1 range with maximum wind speeds of 105 mph.

*April 24, 2013 – EF0 Tornado in Bayou Paul*

A weak tornado touched down in the Bayou Paul area, just north of St. Gabriel. The short lived tornado crossed over Lawrence Parkway, Beehive Street, and Daisy Avenue, mainly causing tree damage. Five to ten oaks were snapped or uprooted with numerous branches snapped. One storage shed had a roof ripped off. The tornado quickly lifted after crossing Daisy Avenue. Estimated peak wind was 85 mph.

*Frequency / Probability*

Tornadoes are a sporadic occurrence within Iberville Parish with an annual chance of occurrence calculated at 32% based on the records for the past 25 years (1990-2015). The figure on the next page displays the density of tornado touch downs in Iberville Parish and neighboring parishes.

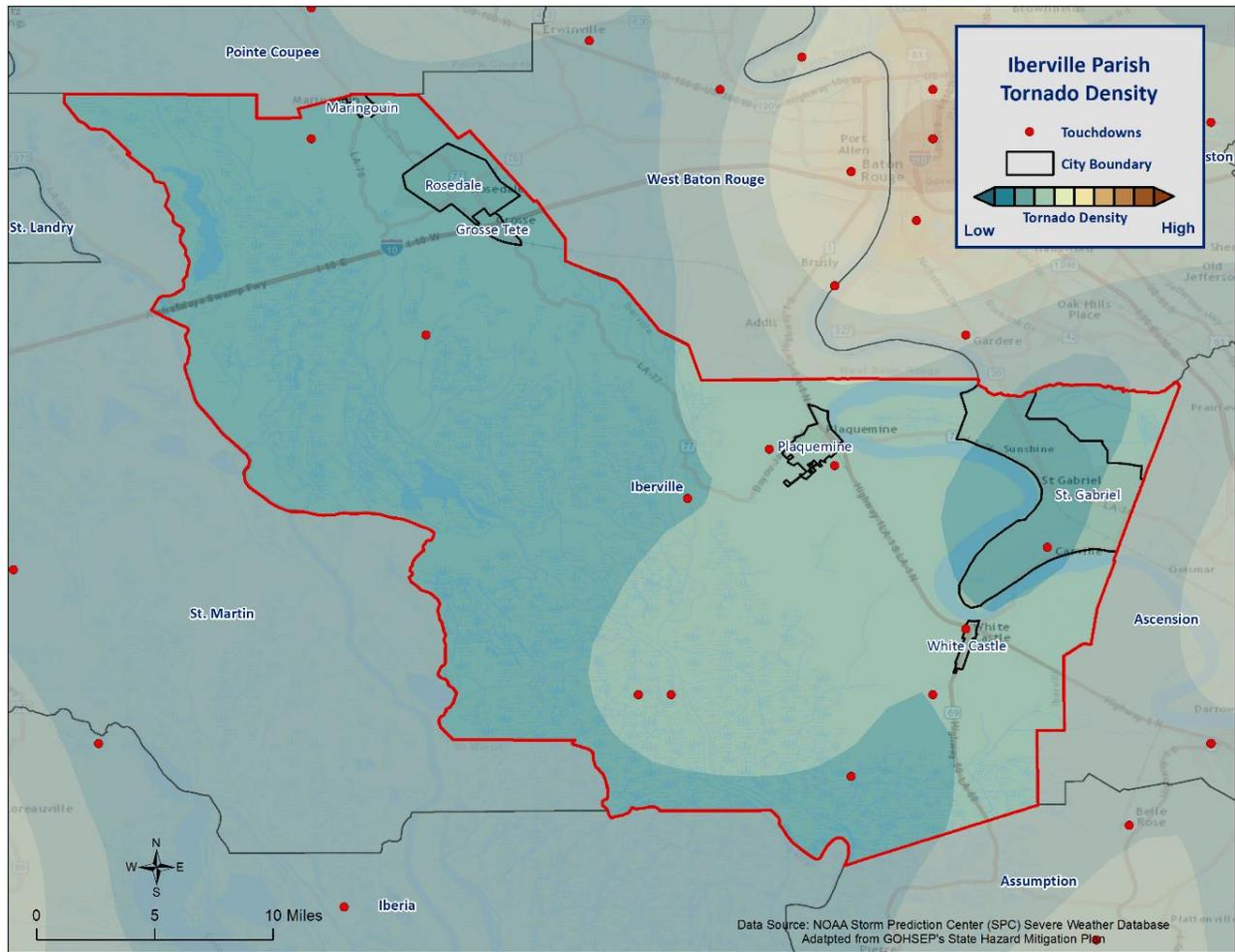


Figure 2-25: Location and Density of Tornadoes to Touch Down in Iberville Parish (Source: NOAA/SPC Severe Weather Database)

*Estimated Potential Losses*

According to the SHELDUS database, there have been eight tornadoes that have caused some level of property damage. The total damage from the actual claims for property is \$823,880, with an average cost of \$102,985 per tornado strike. When annualizing the total cost over the 25-year record, total annual losses based on tornadoes are estimated to be \$32,995. To provide an estimated annual estimated potential loss per jurisdiction, the 2010 Census population was used to assign the estimated potential losses proportionally across the jurisdictions. Based on the 2010 Census data, the following table provides an annual estimate of potential losses for Iberville Parish.

Table 2-37: Estimated Annual Losses for Tornadoes in Iberville Parish

Estimated Annual Potential Losses from Tornadoes for Iberville Parish						
Unincorporated Iberville Parish (45.4% of Population)	Grosse Tete (1.9% of Population)	Maringouin (3.3% of Population)	Plaquemine (21.3% of Population)	Rosedale (2.4% of Population)	St. Gabriel (20.0% of Population)	White Castle (5.6% of Population)
\$14,974	\$639	\$1,084	\$7,027	\$783	\$6,591	\$1,859

Table 2-38 presents an analysis of building exposure that is susceptible to tornadoes by general occupancy type for Iberville Parish, along with the percentage of building stock that are mobile homes.

*Table 2-38: Building Exposure by General Occupancy Type for Tornadoes in Iberville Parish  
(Source: FEMA's Hazus 2.2)*

Building Exposure by General Occupancy Type for Tornadoes							
Exposure Types (\$1,000)							
Residential	Commercial	Industrial	Agricultural	Religion	Government	Education	Mobile Homes (%)
2,340,027	314,147	172,784	7,866	74,337	33,821	24,902	19.6%

The parish has suffered through a total of two days in which tornadoes or waterspouts have accounted for 16 injuries and two fatalities during this 25-year period (Table 2-39). The average number of injuries per event for Iberville Parish is 2.25 per tornado, with an average of 0.72 per year for the 25-year period.

*Table 2-39: Tornadoes in Iberville Parish by Magnitude that Caused Injuries or Deaths*

Date	Magnitude	Deaths	Injuries
June 8, 1989	F2	15	2
October 16, 2006	F1	1	0

In assessing the overall risk to population, the most vulnerable population throughout the parish are those residing in manufacturing housing. Approximately 19.6% of all housing in Iberville Parish consists of manufactured housing. Based on location data collected in a previous hazard mitigation project, there are two known locations where manufactured housing is concentrated. Each of those two locations have an overall number of manufactured houses ranging from 28 to 205. The location and density of manufactured houses can be seen in Figure 2-26.

Manufactured housing is more likely to sustain damage from a tornado than any other residential structure. The highest concentration of manufactured home parks is located in the unincorporated area of Iberville Parish (Table 2-40). However, this does not influence the risk associated with a tornado event since they strike at random, making all structures and population within the planning area equally vulnerable.

*Table 2-40: Manufactured Home Distribution throughout Iberville Parish*

Location	Number of Manufactured Home Parks	% of Manufactured Home Parks
Unincorporated Area	2	100.0%
Grosse Tete	0	0.0%
Maringouin	0	0.0%
Plaquemines	0	0.0%
Rosedale	0	0.0%
St. Gabriel	0	0.0%
White Castle	0	0.0%

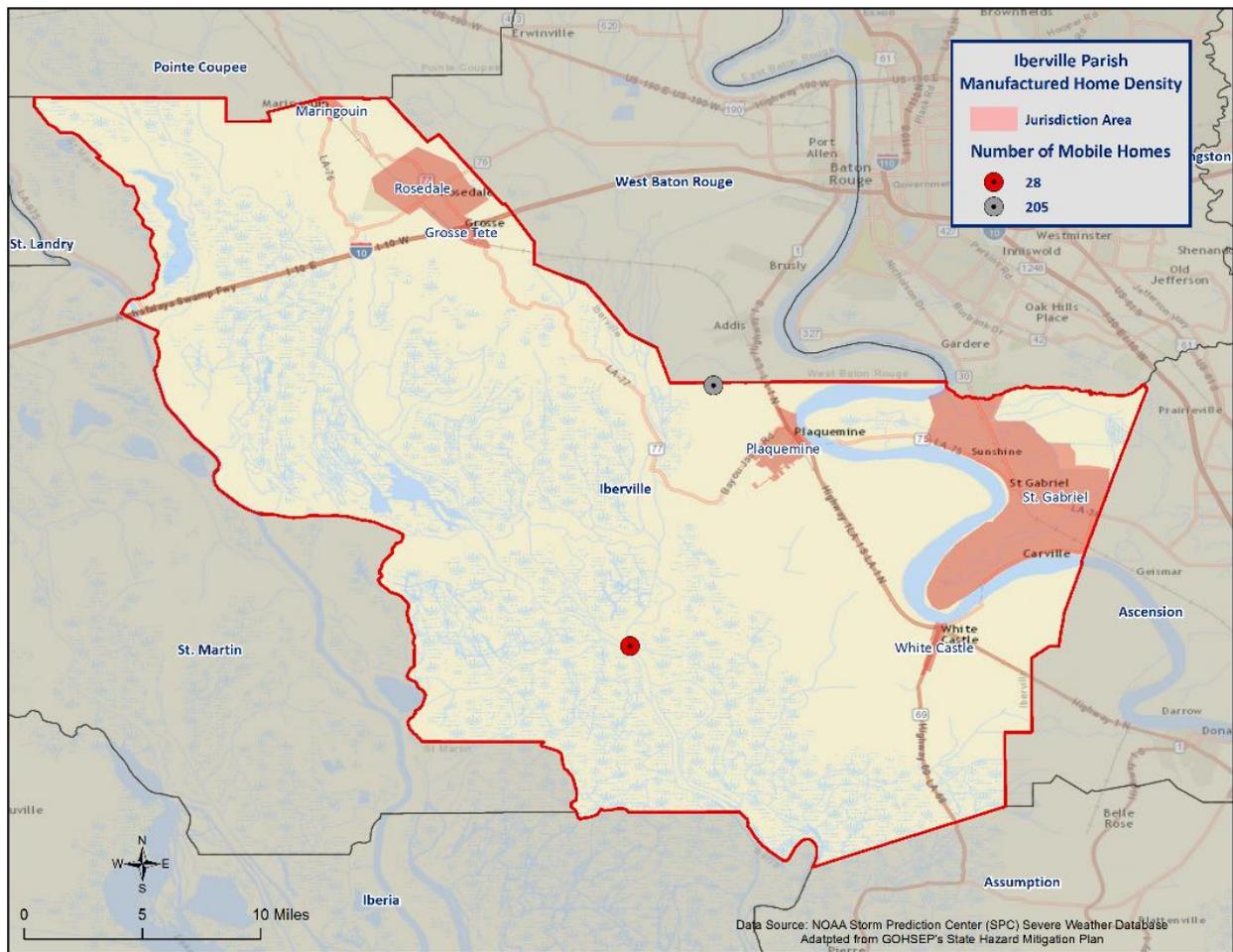


Figure 2-26: Location and Approximate Number of Units in Manufactured Housing Locations throughout Iberville Parish

*Vulnerability*

See Appendix C for parish and municipality building exposure to tornado hazards.

### Tropical Cyclones

Tropical cyclones are among the worst hazards Louisiana faces. These spinning, low-pressure air masses draw surface air into their centers and attain strength ranging from weak tropical waves to the most intense hurricanes. Usually, these storms begin as clusters of oceanic thunderstorms off the western coast of Africa, moving westward in the trade wind flow. The spinning of these thunderstorm clusters begins because of the formation of low pressure in a perturbation in the westerly motion of the storms associated with differential impacts of the Earth's rotation. The west-moving, counterclockwise-spinning collection of storms, now called a tropical disturbance, may then gather strength as it draws humid air toward its low-pressure center. This results in the formation of a tropical depression (defined when the maximum sustained surface wind speed is 38 mph or less), then a Tropical Cyclone (when the maximum sustained surface wind ranges from 39 mph to 73 mph), and finally a hurricane (when the maximum sustained surface wind speeds exceed 73 mph). On the next page, [Table 2-41](#) presents the Saffir-Simpson Hurricane Wind Scale, which categorizes tropical cyclones based on sustained winds.

Table 2-41: 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.

Many 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. Salt water and fresh water intrusions from storm surge send animals, such as snakes, into areas occupied by humans.

#### *Location*

Hurricanes are the single biggest threat to all of South Louisiana. With any single hurricane having the potential to devastate multiple parishes at once, the risk of a tropical cyclone has the probability of impacting anywhere within the planning area for Iberville Parish. As such, all jurisdictions are equally at risk for tropical cyclones.

#### *Previous Occurrences / Extents*

The central Gulf of Mexico coastline is among the most hurricane-prone locations in the United States, and hurricanes can affect every part of the state. The SHELDUS database reports a total of eight tropical cyclone events occurring within the boundaries of Iberville Parish between the years 2002 and 2015 ([Table 2-42](#)). The tropical cyclone events experienced in Iberville Parish include depressions, storms, and hurricanes. As a worst case scenario, Iberville Parish can expect to experience hurricanes at the Category 4 level in the future.

Table 2-42: Historical Tropical Cyclone Events in Iberville Parish from 2002-2015  
(Source: SHELJUS)

Date	Name	Storm Type At Time of Impact
October 2, 2002	Lili	Hurricane –Category 1
August 28, 2005	Katrina	Hurricane – Category 3
September 23, 2005	Rita	Hurricane – Category 3
August 24, 2008	Fay	Tropical Depression
September 1, 2008	Gustav	Hurricane – Category 2
September 11, 2008	Ike	Hurricane – Category 2
September 2, 2011	Lee	Tropical Storm
August 28, 2012	Isaac	Tropical Storm

#### Hurricane Betsy (1965)

Hurricane Betsy made landfall near the mouth of the Mississippi River in Louisiana on September 9, 1965. The hurricane was a Category 3 storm with maximum winds of 140 mph recorded in Terrebonne Parish. The event caused wind and water damage to area homes and businesses parish-wide. In addition, the area's agricultural crops (sugarcane) suffered significant losses. One fatality was reported as a result of Hurricane Betsy.

#### Hurricane Andrew (1992)

Hurricane Andrew came ashore August 26, 1992 as a Category 3 storm on a track that would guide it up the Atchafalaya River system. Damage caused by the storm was catastrophic with few structures in Iberville Parish spared from the storm's relentless winds. While the amount of storm water produced localized flooding, the wind produced by the storm caused the most significant damage to property in Iberville Parish. Pre-Katrina, Andrew was most often referred to as the most expensive storm in United States history with damage totals nearing \$55 billion.



Figure 2-27: Hurricane Andrew Path and Satellite Image taken on 25 August 1992

### [Tropical Storm Allison \(2001\)](#)

Tropical Storm Allison made landfall near Freeport, Texas and slowly drifted to the east leaving a severely drenched Texas and Louisiana in its path. Areas of southern Louisiana received as much as 20 inches of rain over three days. Allison will be remembered as the costliest tropical storm in United States history with 41 deaths and \$6.5 billion in damage. Heavy rainfall caused flooding in several areas of Iberville Parish including Bayou Sorrel. By June 8<sup>th</sup>, many locations had received 10 to 18 inches of rain. Periods of torrential rain overwhelmed local drainage and created severe ponding of water which flooded numerous roadways and low-lying areas, leaving many homes and some businesses flooded. Another round of heavy rainfall developed on June 10 as the remnant circulation of Tropical Storm Allison moved over southeast Louisiana and intensified. By the end of the event on June 11<sup>th</sup>, a reported total of 15 to 25 inches of rain was common with some locations reporting up to 30 inches of rain. Moderate to major river flooding occurred on the lower portions of the Amite and Comite River Basins with the highest water levels observed since 1983. In the eastern section of Iberville Parish, flooding was widespread due to levee failures along Bayou Manchac, inundating roadways and homes. At least \$300,000 in property damages were reported in Iberville Parish. No deaths or injuries were reported.

### [Hurricane Lili \(2002\)](#)

Hurricane Lili made landfall on the Louisiana coast on October 3, 2002, with an estimated intensity of 80 knots. Although Lili weakened considerably before making landfall on the central Louisiana coast, it caused significant wind and flood damage in the area. Strong winds toppled trees onto houses and into roadways, stripped shingles from roofs, and blew out windows. The wind and driving rain flattened sugarcane fields throughout southern Louisiana. A combination of storm surge and rain caused levees to fail in Montegut and Franklin, Louisiana. Lili also temporarily curtailed oil production in the Gulf of Mexico.

Hurricane Lili caused little to no damage to buildings and structures in Iberville Parish. Major roads in Iberville Parish were used as evacuation routes for residents of parishes in southwest Louisiana.

### [Hurricane Katrina \(2005\)](#)

Hurricane Katrina was one of the strongest and most destructive hurricanes on record to impact the coast of the United States. The National Hurricane Center ranked Katrina as the costliest storm (both before and after adjusting for inflation) and the third deadliest in the U.S. since 1851. The hurricane initially made landfall in Plaquemines Parish on August 29, 2005, as a Category 3 storm and continued on a north-northeast track, with a second landfall occurring near the Louisiana-Mississippi border. Hurricane Katrina caused widespread devastation along the central Gulf Coast states. Following the passage of Katrina, the flooding of New Orleans was catastrophic, resulting in the displacement of more than 250,000 people. The most significant impact of Hurricane Katrina on Iberville Parish was widespread flood damage especially in the southwestern and easternmost areas of the parish.

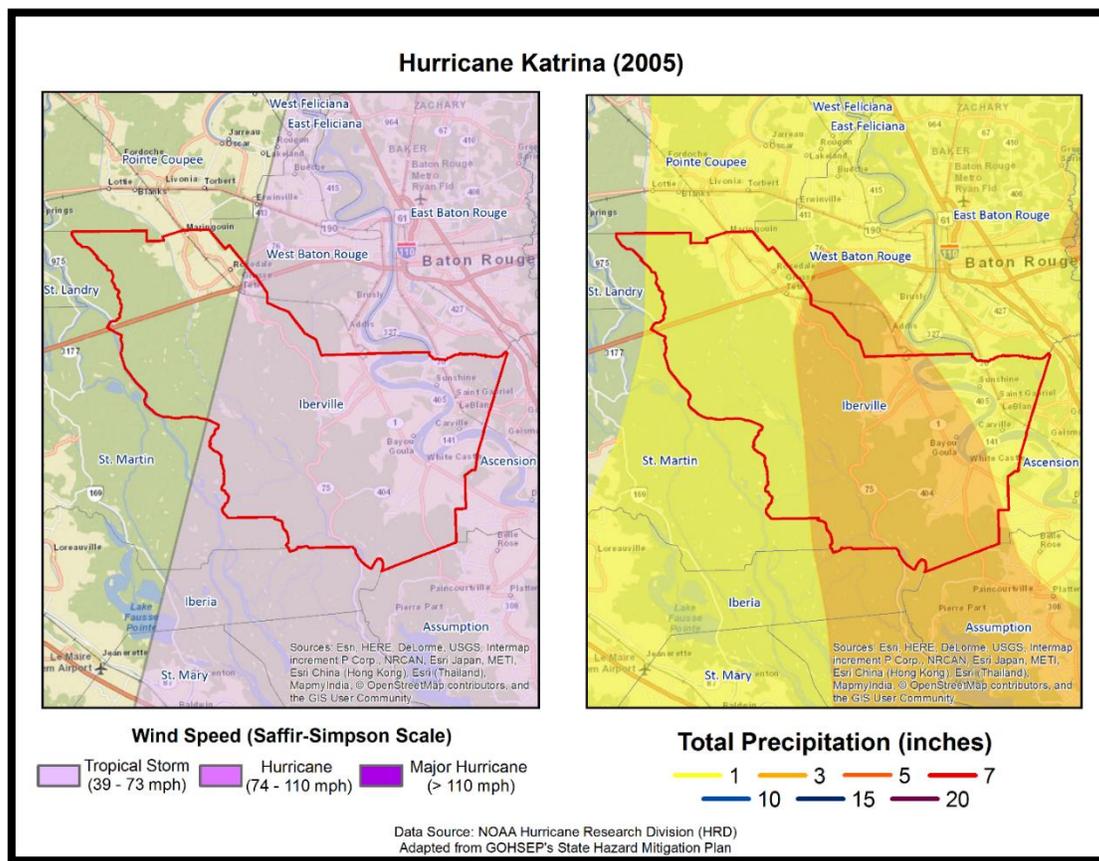
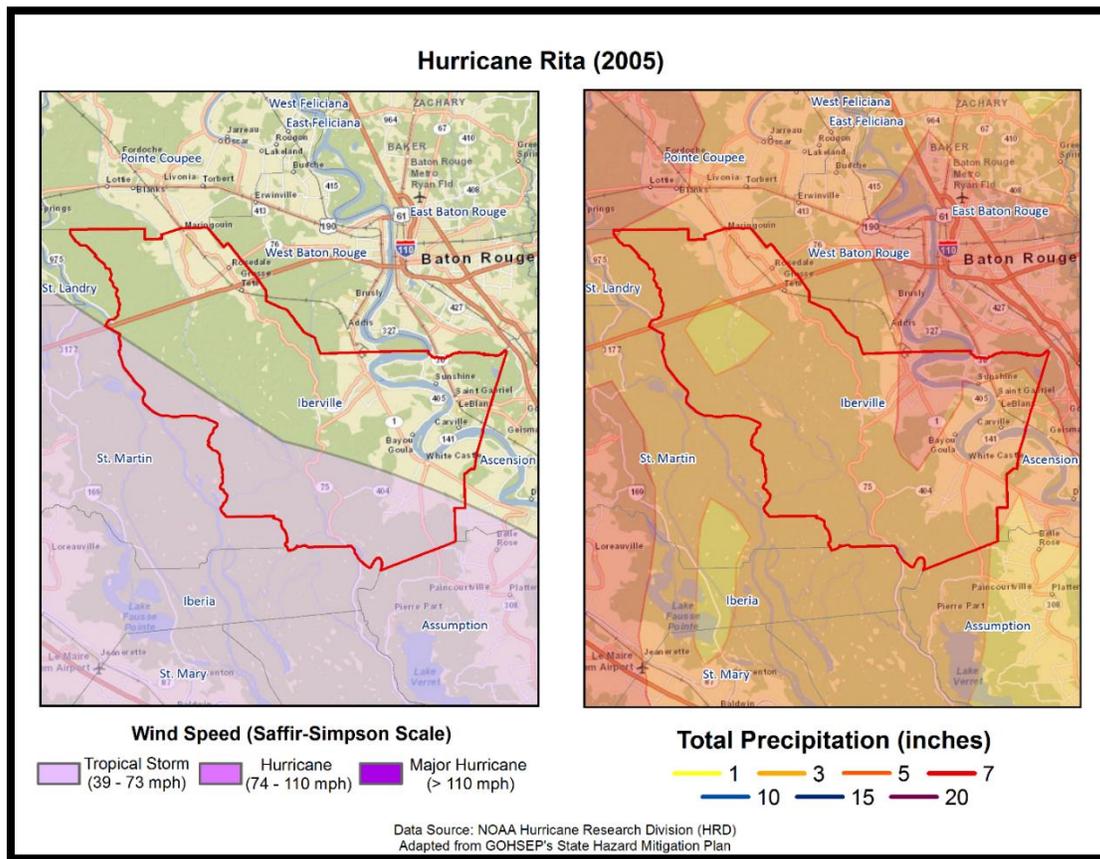


Figure 2-28: Wind Speed and Precipitation Totals in Iberville Parish for Hurricane Katrina

### Hurricane Rita (2005)

While Hurricane Katrina and resulting levee failures captured headlines worldwide, lesser known (but just as destructive) Hurricane Rita wreaked havoc on southwestern Louisiana less than a month later. The storm made landfall as a Category 3 hurricane in Cameron Parish. Across southeast Louisiana, the main effect from Hurricane Rita was the substantial storm surge flooding that occurred in low lying communities across coastal areas of southern Terrebonne, southern Lafourche, and southern Jefferson Parishes, where numerous homes and businesses were flooded. Some of the most substantial damage occurred in southern Terrebonne Parish, where storm surge of five to seven feet above normal overtopped or breached local drainage levees, inundating many small communities. Newspaper accounts indicated that approximately 10,000 structures were flooded in Terrebonne Parish. Lafitte and other communities in lower Jefferson Parish also suffered extensive storm surge flooding. Storm surge flooding also occurred in areas adjacent to Lake Pontchartrain and Lake Maurepas, affecting homes and businesses from Slidell to Mandeville and Madisonville. Approximately 1,500 structures were reported as flooded in Livingston Parish near Lake Maurepas. Repaired levees damaged by Hurricane Katrina in late August were overtopped or breached along the Industrial Canal in New Orleans, resulting in renewed flooding in adjacent portions of New Orleans and St. Bernard Parish. However, the flooding was much more limited in scope than during Hurricane Katrina.



*Figure 2-29: Wind Speed and Precipitation Totals in Iberville Parish for Hurricane Rita*

Hurricane Rita was the most powerful hurricane to impact southwestern Louisiana since Hurricane Audrey in 1957. Estimated damages in southwest Louisiana totaled near \$4 billion, with the majority of those losses occurring in Cameron and Calcasieu Parishes. Entire towns were destroyed in Cameron Parish, including downtown Cameron, Creole, Holly Beach, and Grand Chenier. An estimated 90 to 95 percent of the homes in the parish were severely damaged or destroyed. Storm surge values were estimated around 15 feet in parts of Cameron Parish. Iberville Parish experienced little damage from Hurricane Katrina.

#### Hurricane Gustav (2008)

Hurricane Gustav entered the southeast Gulf of Mexico as a major Category 3 hurricane on August 31, 2008, after developing in the Caribbean Sea and moving across western Cuba. Gustav tracked northwestward across the Gulf toward Louisiana and made landfall as a Category 2 hurricane near Cocodrie, Louisiana, during the morning of September 1st. Gustav continued to move northwest across south Louisiana and weakened to a Category 1 storm over south central Louisiana later that day. The storm diminished to a tropical depression over northwestern Louisiana on September 2nd.

The highest wind gust recorded was 117 mph (102 kts) at a USGS site at the Houma Navigational Canal and at the Pilot Station East C-MAN near the Southwest Pass of the Mississippi River. The highest sustained wind of 91 mph was recorded at the Pilot's Station East C-MAN site. However, due to the failure of equipment at some observation sites during the storm, higher winds may have occurred. The minimum sea level pressure measured was 951.6 millibars at a USGS site at Caillou Lake, southwest of Dulac, and 954.5 millibars at the

LUMCON facility near Dulac. Rainfall varied considerably across southeast Louisiana, ranging from around four inches to just over 11 inches.

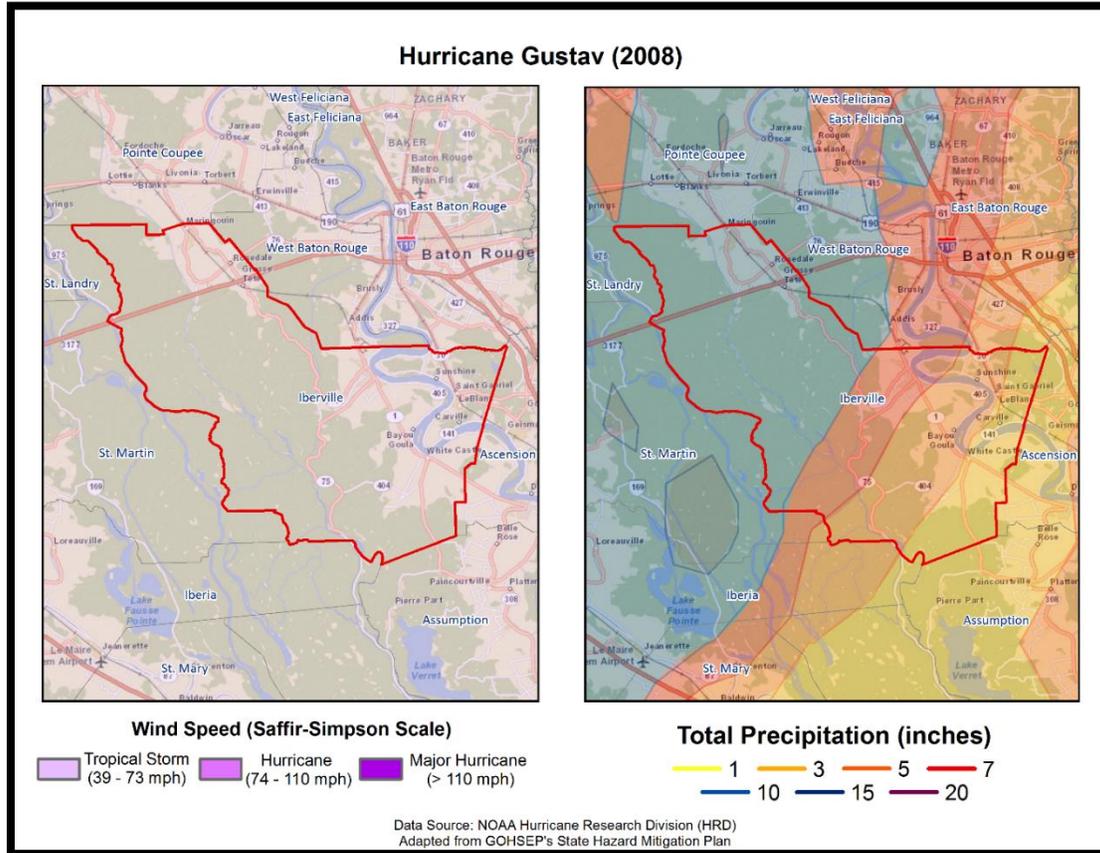


Figure 2-30: Wind Speed and Precipitation Totals in Iberville Parish for Hurricane Gustav

Gustav produced widespread wind damage across southeast Louisiana, especially in the area from Houma and Thibodaux through the greater Baton Rouge area. Hurricane force wind gusts occurred also across the inland areas, including the Baton Rouge area and surrounding parishes. A peak wind gust of 91 mph was recorded at the Baton Rouge (Ryan Field) Airport at 1:12 PM CST. This was only one mph less than the highest wind gust recorded during Hurricane Betsy in 1965. After the storm, the electric utility serving most of southeast Louisiana reported 75 to 100 percent of utility customers were without power, in areas ranging from Lafourche and Terrebonne Parishes northwest through the Baton Rouge area to central Louisiana and southwest Mississippi. Considerable damage occurred to many houses and structures as large tree limbs and trees were toppled by the hurricane force winds. Preliminary estimates from the American Red Cross indicated that around 13,000 single family dwellings were damaged by the hurricane in southeast Louisiana, and several thousand more apartments and mobile homes were also damaged. Early estimates from Louisiana Economic Development indicated that Gustav caused at least \$4.5 billion in property damage in Louisiana, including insured and uninsured losses. Hurricane Gustav inundated parts of Grosse Tete, the low-lying areas of the Atchafalaya Basin, as well as St. Gabriel.

Hurricane Ike (2008)

Hurricane Ike caused wind damage, storm surge flooding, and tornadoes across southwest Louisiana. Ike made landfall near Galveston, TX early in the morning on September 13, 2008, as a strong category 2 hurricane. Sustained hurricane force winds were confined to extreme western Cameron Parish. The highest recorded winds in southwest Louisiana were experienced at Lake Charles Regional Airport, with sustained winds of 53 mph (46 kts) and gusts of 77 mph (67 kts). The lowest pressure reading occurred at Southland Field near Sulphur, LA, with a low of 994.6 millibars. Several tornadoes were reported across southwest Louisiana. The most significant one was near Mamou, where ten to fifteen homes were damaged, including one that lost its roof. Storm surge was a significant event. Water levels ranged from 14 feet in western Cameron Parish, to eight feet in St. Mary Parish. This resulted in widespread flooding of the same areas that flooded during Hurricane Rita in 2005. Most of Cameron Parish was under water. Over 3,000 homes were flooded. This extended north into Calcasieu Parish, where another 1,000 homes flooded in Lake Charles, Westlake, and Sulphur. In Vermilion Parish, at least 1,000 homes flooded in Pecan Island, Forked Island, Intracoastal City, and Henry. This extended east into Iberia Parish, where another 1,000 homes flooded south of Highway 14 and Highway 90. In St. Mary Parish, some of the worst flooding occurred in Franklin, where a man-made levee failed, flooding over 450 homes. Maximum storm total rainfall ranged from six to eight inches across Cameron, Calcasieu, and Beauregard Parishes. No fatalities were reported in southwest Louisiana. Total property damages, however, were high. Losses were estimated to be almost \$420 million across southwest Louisiana. Agricultural losses were over \$225 million. The sequence of both Hurricane Gustav and Hurricane Ike occurring within two weeks of each other caused additional damages in Iberville Parish due to the high water from Gustav not having adequate time to recede before Hurricane Ike hit, thereby increasing the still water elevation at the time of Ike’s landfall.

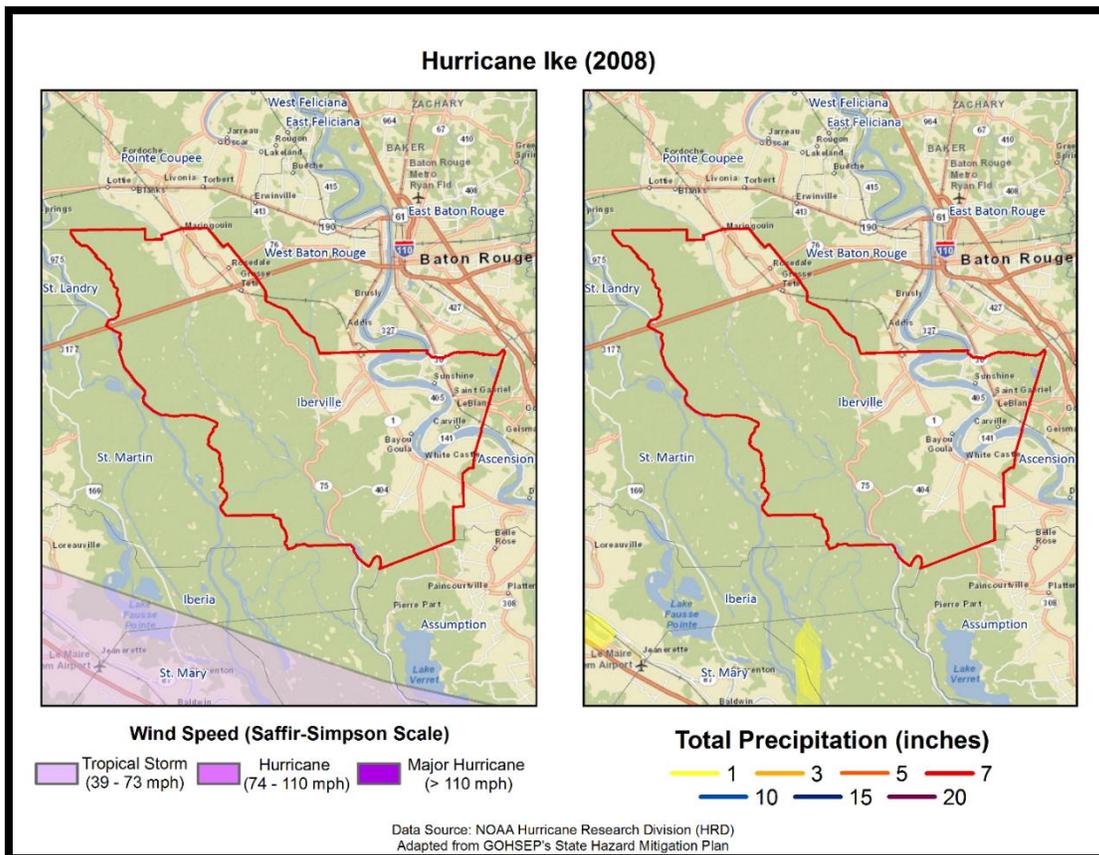


Figure 2-31: Wind Speed and Precipitation Totals in Iberville Parish for Hurricane Ike

### Tropical Storm Lee (2011)

Tropical Storm Lee initially developed as Tropical Depression Thirteen in the middle of the Gulf of Mexico on the evening of Thursday, September 1, 2011. The depression moved slowly north and gradually strengthened, eventually reaching Tropical Storm strength just south of the Louisiana coast on Friday afternoon September 2, 2011. Tropical Storm Lee made only slow and haltingly northward progress over the next 24 hours, eventually moving onshore at the Louisiana coast Saturday night, September 3, 2011, with a maximum sustained wind estimated around 60 mph. Lee moved slowly inland to the north of Baton Rouge late Sunday September 4, 2011, and eventually weakened to a tropical depression Sunday evening. Tropical Depression Lee then moved steadily northeast throughout Monday, September 5, 2011, taking on extra-tropical characteristics over the next 24 hours as it interacted with an upper level disturbance moving through the region. The maximum winds observed in Louisiana were a southerly wind of 46 mph (40 kts) sustained, with a 58 mph (50 kts) gust at New Orleans Lakefront Airport on September 4, 2012, at 0528 CST. The lowest minimum central pressure was 993.2 millibars, recorded at Baton Rouge Ryan Field on September 4, 2012, at 0959CST. As Tropical Depression Lee was moving northeast and taking on mid-latitude characteristics, strong northerly winds were experienced across the region, occasionally gusting to higher levels than experienced when Lee was characterized as a tropical cyclone. No fatalities or injuries were associated with any Tropical Storm Lee hazards.

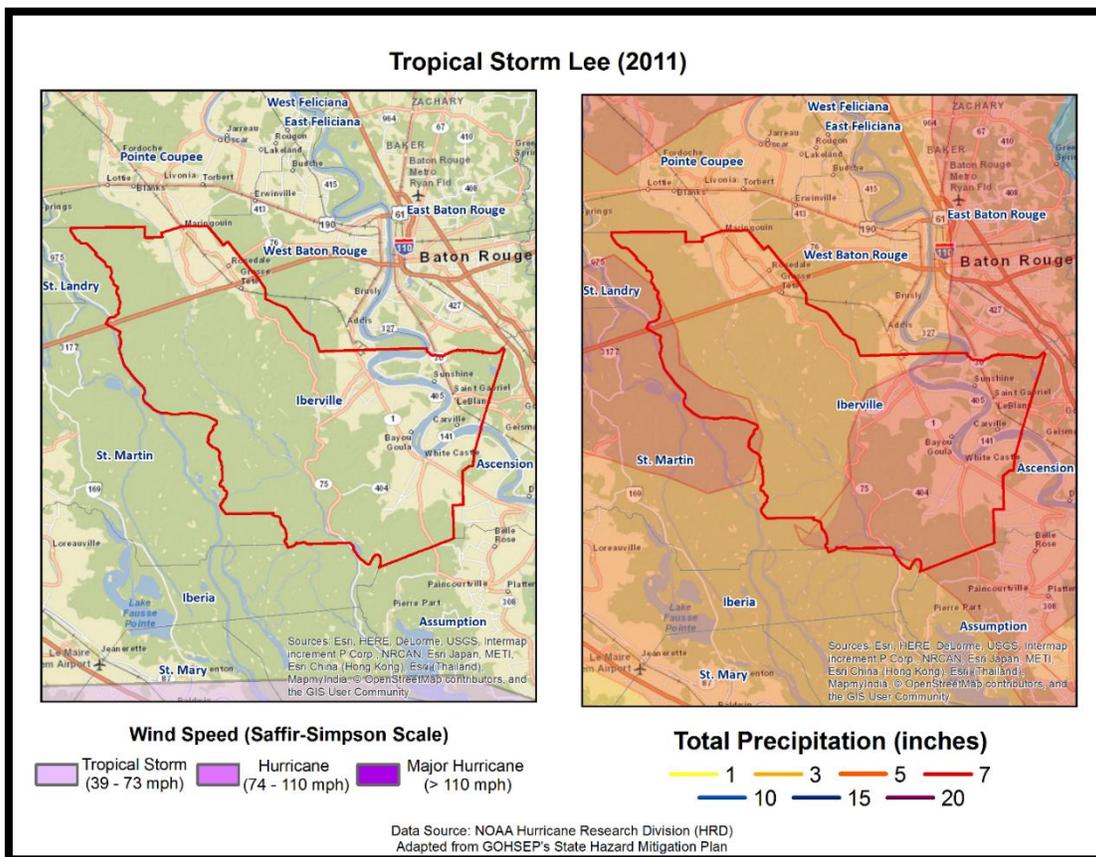


Figure 2-32: Wind Speed and Precipitation Totals in Iberville Parish for Tropical Storm Lee

The main impacts associated with Tropical Storm Lee were storm surge and rainfall. Both of these impacts were related to its slow speed as it crossed the region, which allowed the circulation to linger over the area

for several days. Storm surge associated with Lee caused storm tides three to five feet above normal, resulting in lowland flooding. Additional detailed information about Tropical Storm Lee’s storm surge is contained in the separate storm surge report. Four day rainfall totals ranged from seven to 15 inches across the area. A maximum of 15.48 inches was recorded near Holden in Livingston Parish. Due to dry antecedent conditions, river flooding was minimal for the amount of rainfall that occurred. Wind impacts were generally minimal due to only tropical cyclone strength winds being recorded, resulting in tree limbs being blown down and weak trees toppling, causing power outages.

Overall, there were minimal reports of damage to residences or infrastructure in Iberville Parish. Localized flooding was experienced in low-lying areas of the parish, but flood damage was minimal. Isolated power outages due to a few downed trees were also reported across the parish.

**Hurricane Isaac (2012)**

Isaac entered the Gulf of Mexico as a tropical storm on August 26, moving northwest after crossing Haiti, Cuba and the Florida Straits. Isaac strengthened into a hurricane on the morning of the 28th when it was 75 miles south-southeast of the mouth of the Mississippi River. Isaac made landfall in Plaquemines Parish as a Category 1 Hurricane near Southwest Pass of the Mississippi River on the evening of the 28th. A second landfall occurred near Port Fourchon the following morning. The storm weakened to a tropical storm on the afternoon of the 29th about 50 miles west southwest of New Orleans, and weakened further to a tropical depression on the afternoon of the 30th near Monroe, Louisiana.

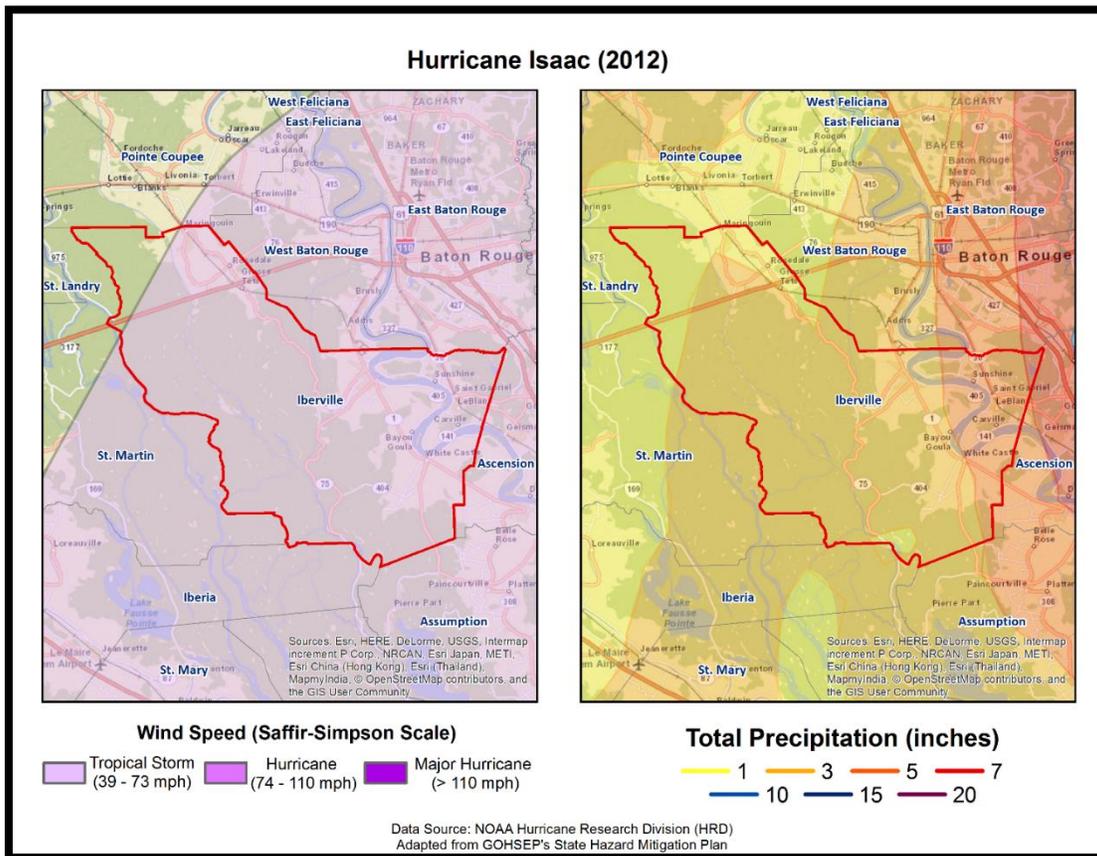


Figure 2-33: Wind Speed and Precipitation Totals for Hurricane Isaac

The highest wind gust recorded on land in Louisiana was 75 knots, or 86 mph, measured by a portable weather station (Texas Tech University) near Buras on the evening of August 28. The maximum sustained wind in Louisiana was 65 knots, or 75 mph, at the same portable weather station near Buras on the evening of August 28. There were several marine observations near the coast that had slightly higher wind readings, but their observation heights were generally 80 ft. or higher.

Due to Isaac's very large size, and slow forward speed, tropical storm force winds lasted in excess of 48 hours in many areas of coastal southeast Louisiana. Occasional hurricane gusts of 70 to 85 mph were recorded across southeast Louisiana during the night of the Aug 28th and early on the 29th, especially south of Lake Pontchartrain. Interior areas of southeast Louisiana such as around Baton Rouge and northward experienced tropical storm force winds. Widespread power outages occurred across the area. Local utility companies reported over 700,000 customers were without power at the peak of the storm in southeast Louisiana. Generally, most of the wind damage was limited to downed trees and power lines, and roof damage caused by wind and falling trees and tree limbs.

Significant impact also occurred around Lakes Pontchartrain and Maurepas with a storm tide of 5 to 9 feet. 5 to 10 thousand homes were flooded in low lying areas of that border these lakes of the following parishes: St. Tammany, Tangipahoa, Livingston, Ascension, St James and St John the Baptist. Laplace in St. John the Baptist was especially hard hit with over 5,000 homes flooded by storm surge. An additional storm surge fatality occurred in St. Tammany Parish on the morning of the 30th when a 75 year old man drove his car into a storm surge filled ditch. Storm surge flooding also affected areas south and southwest of New Orleans with a storm tide of 4 to 7 feet. Roadways and low lying property were flooded. Local levees around Lafitte and Myrtle Grove were overtopped and/or breached resulting flooding of numerous houses and property in this area.

Many areas of southeast Louisiana received 8 to 12 inches of rain with a few locations having 15 inches of rain or more. Maximum storm total rainfall was 20.66 inches at the New Orleans Carrollton gauge on the Mississippi River. Rainfall run-off produced moderate to major flooding on the Tangipahoa, Tchefuncte, Tickfaw, Amite, Pearl, Bogue Chitto and Bogue Falaya Rivers. Storm surge and high tides restricted outflow of the rivers near the coast and lakes exacerbating flooding in those areas.

Overall impacts of Isaac resulted in at least \$600 million in damages in southeast Louisiana, 3 direct fatalities, and 2 indirect fatalities. Storm surge flooding accounted for the bulk of damage, estimated around \$500 million and the three direct storm surge fatalities in Louisiana. Winds accounted for a much lesser amount of slightly more than a \$100 million. Hurricane Isaac damaged over 500 homes in Iberville Parish, but the parish was largely spared when compared with other areas in Louisiana. The parish sustained some wind damage to trees and power lines with roughly 1,400 power outages reported across Iberville Parish. Approximately 100 people were evacuated to parish shelters.

The figure on the next page displays the wind zones that affect Iberville Parish in relation to critical facilities throughout the parish.

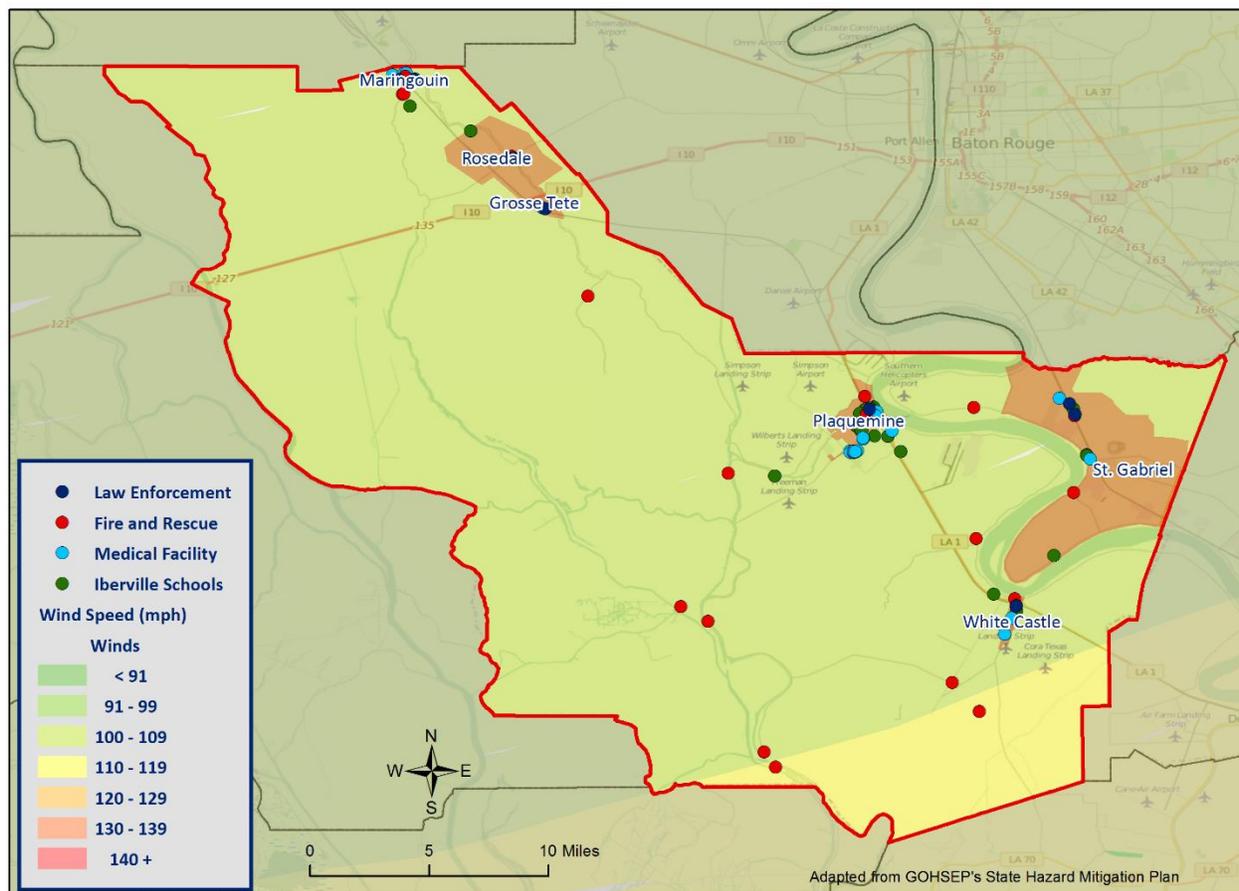


Figure 2-34: Winds Zones for Iberville Parish in Relation to Critical Facilities

### Frequency / Probability

Tropical cyclones are large natural hazard events that regularly impact Iberville Parish. The annual chance of occurrence for a tropical cyclone is estimated at 36% for Iberville Parish and its municipalities, with nine events occurring within 25 years. The tropical cyclone season for the Atlantic Basin is from June 1st through November 30<sup>th</sup>, with most of the major hurricanes (Saffir-Simpson Categories 3, 4, & 5) occurring between the months of August and October. Based on geographical location alone, Iberville Parish is highly vulnerable to tropical cyclones. This area has experienced several tropical cyclone events in the past and can expect more in the future.

### Estimated Potential Losses

Using Hazus 2.2 100-Year Hurricane Model, the 100-year hurricane scenario was analyzed to determine losses from this worst-case scenario. The table on the next page shows the total economic losses that would result from this occurrence.

*Table 2-43: Total Estimated Losses for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event
Iberville Parish (Unincorporated)	\$24,698,847
Grosse Tete	\$1,053,405
Maringouin	\$1,787,695
Plaquemine	\$11,590,711
Rosedale	\$1,291,113
St. Gabriel	\$10,871,074
White Castle	\$3,065,783
<b>Total</b>	<b>\$54,358,629</b>

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

*Table 2-44: Ratio of Total Losses to Total Estimated Value of Assets for each Jurisdiction in Iberville Parish  
(Source: Hazus 2.2)*

Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event	Total Estimated Value of Assets	Ratio of Estimated Losses to Total Value
Unincorporated	\$24,698,847	\$1,398,665,000	1.8%
Grosse Tete	\$1,053,405	\$61,373,000	1.7%
Maringouin	\$1,787,695	\$86,928,000	2.1%
Plaquemine	\$11,590,711	\$723,208,000	1.6%
Rosedale	\$1,291,223	\$72,830,000	1.8%
St. Gabriel	\$10,871,074	\$480,282,000	2.3%
White Castle	\$3,065,783	\$144,598,000	2.1%

Based on the Hazus 2.2 Hurricane Model, estimated total losses range from 1.6% to 2.3% of the total estimated value of all assets for the unincorporated area of Iberville Parish and the incorporated areas of Grosse Tete, Maringouin, Plaquemine, Rosedale, St. Gabriel, and White Castle.

The Hazus 2.2 Hurricane Model also provides a breakdown by jurisdiction for seven primary sectors (Hazus occupancy) throughout the parish. The losses for each jurisdiction by sector are listed in the tables on the following pages.

Table 2-45: Estimated Losses in Unincorporated Iberville Parish for a 100-Year Hurricane Event  
(Source: Hazus 2.2)

Iberville Parish (Unincorporated)	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$145,843
Commercial	\$2,321,550
Government	\$390,323
Industrial	\$683,030
Religious / Non-Profit	\$422,261
Residential	\$35,830,798
Schools	\$133,022
<b>Total</b>	<b>\$39,926,817</b>

Table 2-46: Estimated Losses in Grosse Tete for a 100-Year Hurricane Event  
(Source: Hazus 2.2)

Grosse Tete	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$3,848
Commercial	\$61,250
Government	\$10,298
Industrial	\$18,020
Religious / Non-Profit	\$11,141
Residential	\$945,338
Schools	\$3,510
<b>Total</b>	<b>\$1,053,405</b>

Table 2-47: Estimated Losses in Maringouin for a 100-Year Hurricane Event  
(Source: Hazus 2.2)

Maringouin	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$6,530
Commercial	\$103,946
Government	\$17,476
Industrial	\$30,582
Religious / Non-Profit	\$18,906
Residential	\$1,604,299
Schools	\$5,956
<b>Total</b>	<b>\$1,787,695</b>

*Table 2-48: Estimated Losses in Plaquemine for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

<b>Plaquemine</b>	<b>Estimated Total Losses from 100-Year Hurricane Event</b>
Agricultural	\$42,338
Commercial	\$673,943
Government	\$113,310
Industrial	\$198,280
Religious / Non-Profit	\$122,582
Residential	\$10,401,641
Schools	\$38,616
<b>Total</b>	<b>\$11,590,711</b>

*Table 2-49: Estimated Losses in Rosedale for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

<b>Rosedale</b>	<b>Estimated Total Losses from 100-Year Hurricane Event</b>
Agricultural	\$4,716
Commercial	\$75,072
Government	\$12,622
Industrial	\$22,087
Religious / Non-Profit	\$13,655
Residential	\$1,158,660
Schools	\$4,302
<b>Total</b>	<b>\$1,291,113</b>

*Table 2-50: Estimated Losses in St. Gabriel for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

<b>St. Gabriel</b>	<b>Estimated Total Losses from 100-Year Hurricane Event</b>
Agricultural	\$39,709
Commercial	\$632,100
Government	\$106,275
Industrial	\$185,969
Religious / Non-Profit	\$114,971
Residential	\$9,755,831
Schools	\$36,219
<b>Total</b>	<b>\$10,871,075</b>

*Table 2-51: Estimated Losses in White Castle for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

White Castle	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$11,199
Commercial	\$178,260
Government	\$29,971
Industrial	\$52,4446
Religious / Non-Profit	\$32,423
Residential	\$2,751,270
Schools	\$10,214
<b>Total</b>	<b>\$3,065,783</b>

#### *Threat to People*

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

*Table 2-52: Number of People Susceptible to a 100-Year Hurricane Event in Iberville Parish  
(Source: Hazus 2.2)*

Number of People Exposed to Hurricane Hazards			
Location	# in Community	# in Hazard Area	% in Hazard Area
Parish (Unincorporated)	15,170	15,170	100.0%
Grosse Tete	647	647	100.0%
Maringouin	1,098	1,098	100.0%
Plaquemine	7,119	7,119	100.0%
Rosedale	793	793	100.0%
St. Gabriel	6,677	6,677	100.0%
White Castle	1,883	1,882	100.0%
<b>Total</b>	<b>33,387</b>	<b>33,387</b>	<b>100.0%</b>

The HAZUS-MH hurricane model was also extrapolated to provide an overview of vulnerable populations throughout the jurisdictions. These populations are illustrated in the following tables:

*Table 2-53: Vulnerable Populations in Unincorporated Iberville Parish for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

Iberville Parish (Unincorporated)		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	15,170	100.0%
Persons Under 5 Years	941	6.2%
Persons Under 18 Years	3,409	22.5%
Persons 65 Years and Over	1,819	12.0%
White	7,397	48.8%
Minority	7,773	51.2%

*Table 2-54: Vulnerable Populations in Grosse Tete for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

<b>Grosse Tete</b>		
<b>Category</b>	<b>Total Numbers</b>	<b>Percentage of People in Hazard Area</b>
Number in Hazard Area	647	100.0%
Persons Under 5 Years	51	7.9%
Persons Under 18 Years	135	20.9%
Persons 65 Years and Over	96	14.8%
White	399	61.7%
Minority	248	38.3%

*Table 2-55: Vulnerable Populations in Maringouin for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

<b>Maringouin</b>		
<b>Category</b>	<b>Total Numbers</b>	<b>Percentage of People in Hazard Area</b>
Number in Hazard Area	1,098	100.0%
Persons Under 5 Years	73	6.7%
Persons Under 18 Years	264	24.1%
Persons 65 Years and Over	175	15.9%
White	150	13.7%
Minority	948	86.3%

*Table 2-56: Vulnerable Populations in Plaquemine for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

<b>Plaquemine</b>		
<b>Category</b>	<b>Total Numbers</b>	<b>Percentage of People in Hazard Area</b>
Number in Hazard Area	7,119	100.0%
Persons Under 5 Years	572	8.0%
Persons Under 18 Years	1,857	26.1%
Persons 65 Years and Over	1,051	14.8%
White	3,322	46.7%
Minority	3,797	53.3%

*Table 2-57: Vulnerable Populations in Rosedale for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

Rosedale		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	793	100.0%
Persons Under 5 Years	58	7.3%
Persons Under 18 Years	159	20.1%
Persons 65 Years and Over	114	14.4%
White	439	55.4%
Minority	354	44.6%

*Table 2-58: Vulnerable Populations in St. Gabriel for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

St. Gabriel		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	6,677	100.0%
Persons Under 5 Years	249	3.7%
Persons Under 18 Years	801	12.0%
Persons 65 Years and Over	356	5.3%
White	2,279	34.1%
Minority	4,398	65.9%

*Table 2-59: Vulnerable Populations in White Castle for a 100-Year Hurricane Event  
(Source: Hazus 2.2)*

White Castle		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	1,883	100.0%
Persons Under 5 Years	154	8.2%
Persons Under 18 Years	596	31.7%
Persons 65 Years and Over	231	12.3%
White	260	13.8%
Minority	1,623	86.2%

### *Vulnerability*

See Appendix C for parish and municipality buildings that are susceptible to hurricanes.

### Levee Failure

Levees and floodwalls are flood control barriers constructed of earth, concrete, or other materials. For the purposes of this plan, levees are distinguished from smaller flood barriers (such as berms) by their size and extent. Berms are barriers that only protect a small number of structures, or at times only a single structure. Levees and floodwalls are barriers that protect significant areas of residential, commercial, or industrial development; at a minimum, they protect a neighborhood or small community. Levee failure involves the overtopping, breach, or collapse of the levee. Levee failure is especially destructive to nearby development during flood and hurricane events.

The northern half of Louisiana is protected by levees on the Ouachita River, under the authority of the Vicksburg District of the United States Army Corp of Engineers (USACE). The Vicksburg District encompasses 68,000 mi<sup>2</sup> in the states of Arkansas, Mississippi and Louisiana. They manage seven drainage basins, including the Yazoo, Pearl, Big Black, Red, Ouachita, and Mississippi Rivers; 12 locks and dams on the Pearl, Red, and Ouachita Rivers; 1,808 miles of levees, including 468 miles along the Mississippi River; and multiple lakes with 1,709 miles of shoreline.

Coastal and southern Louisiana are protected by an extensive levee system under the authority of the New Orleans District of the USACE. This system includes 30,000 mi<sup>2</sup> of Louisiana south of Alexandria, including 961 miles of river levees in the Mississippi River and Tributaries Project, 449 miles of river levees in the Atchafalaya Basin, and 340 miles of hurricane-protection levees. Other levees have been built along stretches of rivers throughout Louisiana by local levee districts and private citizens. The data regarding these non-federal levees are managed by the individual entity responsible for construction and subsequent maintenance and are not kept in a consistent format for comprehensive hazard analysis.

The effects of a levee failure on property is similar to that of a flood, as discussed in the flooding section. One major difference is that the velocity of the water is increased in the area of the breach, so the potential for property damage is higher in these areas.

A levee failure occurs during high water events, so the populace is normally alerted to the potential danger. Levees are normally monitored during these events and the population in danger is alerted to a possible levee failure. However, if people consider themselves safe once a levee has been breached and do not evacuate, the results could be deadly.

### Location

Iberville Parish is awaiting a response from the U.S. Army Corps of Engineers on levee locations within the Iberville Parish Planning area. Currently, a data deficiency exists for levee failure in Iberville Parish.

### Previous Occurrences / Extents

There have been no reported levee failures in Iberville Parish from 1990 to 2015. Levee information including the extent of a levee failure has been requested from the U.S. Army Corps of Engineers. Iberville Parish is awaiting a response from the USACE, and will continue to update this information as new data is received.

### Frequency / Probability

Based on the 25-year record, it is determined that a levee failure has less than a 1% annual chance of occurrence in the Iberville Parish planning area. Iberville Parish is awaiting a response from the USACE, and will continue to work to update this information as new data is received.

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### 3. Capability Assessment

This section summarizes the results of the Iberville Parish jurisdictions and other agency efforts 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, Iberville Parish and the participating jurisdictions are able to identify strengths that could be used to reduce losses and reduce risk throughout the community. 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

Iberville Parish capabilities are unique to the parish, 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. They take an integrated and strategic look holistically at hazard mitigation in Iberville Parish 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 in Iberville Parish and its jurisdictions are shown in the table on the following page.

Table 3-1: Iberville Parish Planning and Regulatory Capabilities

Planning and Regulatory								
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.								
	Iberville Parish	Grosse Tete	Maringouin	Plaquemine	Rosedale	St. Gabriel	White Castle	
<b>Plans</b>	Yes / No							
Comprehensive / Master Plan	Yes	No	No	No	No	No	Yes	
Capital Improvements Plan	Yes	No	No	Yes	No	No	Yes	
Economic Development Plan	Yes	No	No	Yes	No	No	Yes	
Local Emergency Operations Plan	Yes	Yes	No	Yes	Yes	Yes	No	
Continuity of Operations Plan	Yes	No	No	Yes	No	No	No	
Transportation Plan	Yes	No	No	No	No	No	No	
Stormwater Management Plan	Yes	No	No	Yes	No	No	No	
Community Wildfire Protection Plan	No	No	No	No	No	No	No	
Other plans (redevelopment, recovery, coastal zone management)	No	No	No	No	No	No	Yes. Redevelopment plans.	
<b>Building Code, Permitting and Inspections</b>	Yes / No							
Building Code	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	No	No	No	No	No	No	
Fire Department ISO/PIAL rating	Yes	Yes	No	Yes	Yes	Yes	3	
Site plan review requirements	Yes	Yes	Yes	Yes	Yes	Yes	No	
<b>Land Use Planning and Ordinances</b>	Yes / No							
Zoning Ordinance	Yes	No	No	Yes	No	No	Yes	
Subdivision Ordinance	Yes	Yes	No	Yes	Yes	Yes	No	
Floodplain Ordinance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	No	No	No	No	No	No	
Flood Insurance Rate Maps	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Acquisition of land for open space and public recreation uses	No	Yes	No	Yes	No	No	Yes	
Other	No	No	No	No	No	No		

Building Codes, Permitting, Land Use Planning and Ordinances

The Iberville Parish Permit & Inspection Department provides oversight for building permits and codes for the entire parish, land use planning for the unincorporated areas, Plaquemine, and White Castle, and all parish ordinances where applicable.

As of the 2016 update, Iberville Parish and its jurisdictions ensure that all adopted building codes are enforced and in compliance relating to the construction of any structure within the boundaries of the parish. Building permits are required prior to beginning any type of construction or renovation projects, installation of electrical wiring, plumbing or gas piping, moving manufactured/modular or portable buildings, and reroofing or demolitions.

The Iberville Parish Permit & Inspection Department is also responsible for enforcing the Parish Ordinances relating to health and safety, property maintenance standards, condemnation of unsafe structures, and zoning compliance.

While local capabilities for mitigation can vary from community to community, Iberville Parish as a whole has a system in place to coordinate and share these capabilities through Iberville Parish Government 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

As a community, Iberville Parish has 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 below shows examples of resources in place in Iberville Parish and its jurisdictions.

Table 3-2: Iberville Parish Administrative 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 th								
at the next higher level government that can provide technical assistance, indicate so in your comments.								
	Iberville Parish	Grosse Tete	Maringouin	Plaquemine	Rosedale	St. Gabriel	White Castle	
<b>Administration</b>	Yes / No							
Planning Commission	Yes	No	no	yes	No	Yes	Yes	
Mitigation Planning Committee	Yes	No	no	yes	No	Yes	No	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	Yes	Yes	yes	Yes	Yes	Yes	
<b>Staff</b>	Yes / No; FT/PT; % Hazard Mitigation							
	Yes - Independent Contractor							
Chief Building Official	No	no	yes	Yes	Yes	No		
Floodplain Administrator	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Emergency Manager	Yes	Yes	no	yes	Yes	Yes	No	
Community Planner	No	No	no	yes	No	no	Yes	
Civil Engineer	No	Yes	no	yes	Yes	Yes	Yes	
GIS Coordinator	Yes	No	no	yes	No	no	No	
Grant Writer	No	Yes	no	yes	Yes	no	Yes	
Other	No	No	No	No	No	no	No	
<b>Technical</b>	Yes / No							
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Yes	No	no	Yes	Yes	Yes	
Hazard Data & Information	Yes	No	no	No	No	No	No	
Grant Writing	No	Yes	no	yes	Yes	No	Yes	
Hazus Analysis	No	No	no	No	No	No	No	
Other	No	No	No	No	No	No	No	

Financial capabilities are the resources that Iberville 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 jurisdictions may vary from little/no cost actions, such as outreach efforts, to substantial action costs such acquisition of flood prone properties.



In some cases, the jurisdictions rely on Iberville Parish OHSEP and/or Iberville Parish Government Agencies for the above listed planning and regulatory, administrative and technical, financial, and education and outreach capabilities. Comments regarding the jurisdictions utilization or intentions to utilize and leverage the capabilities of the parish government can be found in Appendix E in the jurisdictional specific worksheets.

As reflected in the aforementioned existing regulatory mechanisms, programs, and resources within each jurisdiction, Iberville Parish and its jurisdiction remains committed to expanding and improving on the existing capabilities within the parish. All participating jurisdictions will work 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 jurisdictions, will help to enhance and expand risk reduction measures within the parish.

With the sharing of these capabilities, the following municipalities and entities are recognized by the Parish of Iberville under the Hazard Mitigation Plan, allowing them to apply for available hazard mitigation funding for as long as these municipalities and entities notify the parish of their intentions and the parish concurs:

- Unincorporated Iberville Parish
- Village of Grosse Tete
- Town of Maringouin
- City of Plaquemine
- Village of Rosedale
- City of St. Gabriel
- Town of White Castle

### Flood Insurance and Community Rating System

Iberville Parish is not a participant in the Community Rating System (CRS), nor are any of its jurisdictions. Obtaining the CRS rating for the parish and participating jurisdictions is recognized as an eventual goal by the Hazard Mitigation Steering Committee. Participation in the CRS strengthens local capabilities by lowering flood insurance premiums for jurisdictions that exceed NFIP minimum requirements.

Under the Federal Emergency Management Agency (FEMA), the National Flood Insurance Program (NFIP) administers the Community Rating System. 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.

During the last update, 38 Louisiana communities participated. Mandeville, Shreveport, and Jefferson and East Baton Rouge Parishes had the best classifications in the state, class 7. As of the 2016 update, Jefferson, East Baton Rouge, and Terrebonne Parishes all lead the state with best classifications, class 6.

As of May 2012, 310 communities in the State of Louisiana participate in the Federal Emergency Management Agency's NFIP. Of these communities, 41 (or 13%) participate in the Community Rating System (CRS). Of the top fifty

Louisiana communities, in terms of total flood insurance policies held by residents, 27 participate in the CRS. The remaining 23 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.

First, 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 1st of each year. That report must be made available to the media and the public.

Second, the parish must annually recertify to FEMA that it is continuing to implement its CRS credited activities. Failure to maintain the same level of involvement in flood protection can result in a loss of CRS credit points and a resulting increase in flood insurance rates to residents.

In 2011<sup>1</sup>, the National Flood Insurance Program (NFIP) completed a comprehensive review of the Community Rating System that will result 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 in order to evaluate the CRS and refine the program to meet its stated goals.

The upcoming changes will 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.

The 2013 CRS Coordinator's Manual changes will impact each CRS community differently. Some communities will see an increase in the points they receive since points for certain activities have increased (e.g., Activity 420 Open Space Preservation). Other communities will 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 will have to identify new CRS credits in order to remain in the CRS.

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.

\* In determining CRS Premium Discounts, all AR and A99 Zones are treated as non-SFHAs.

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

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

Typically, CRS communities do not request credit for all the activities they are currently implementing unless it would earn enough credit to advance the community to a higher CRS class. A community that finds itself losing CRS credit with the 2013 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 and when the 2013 manual will impact their community.

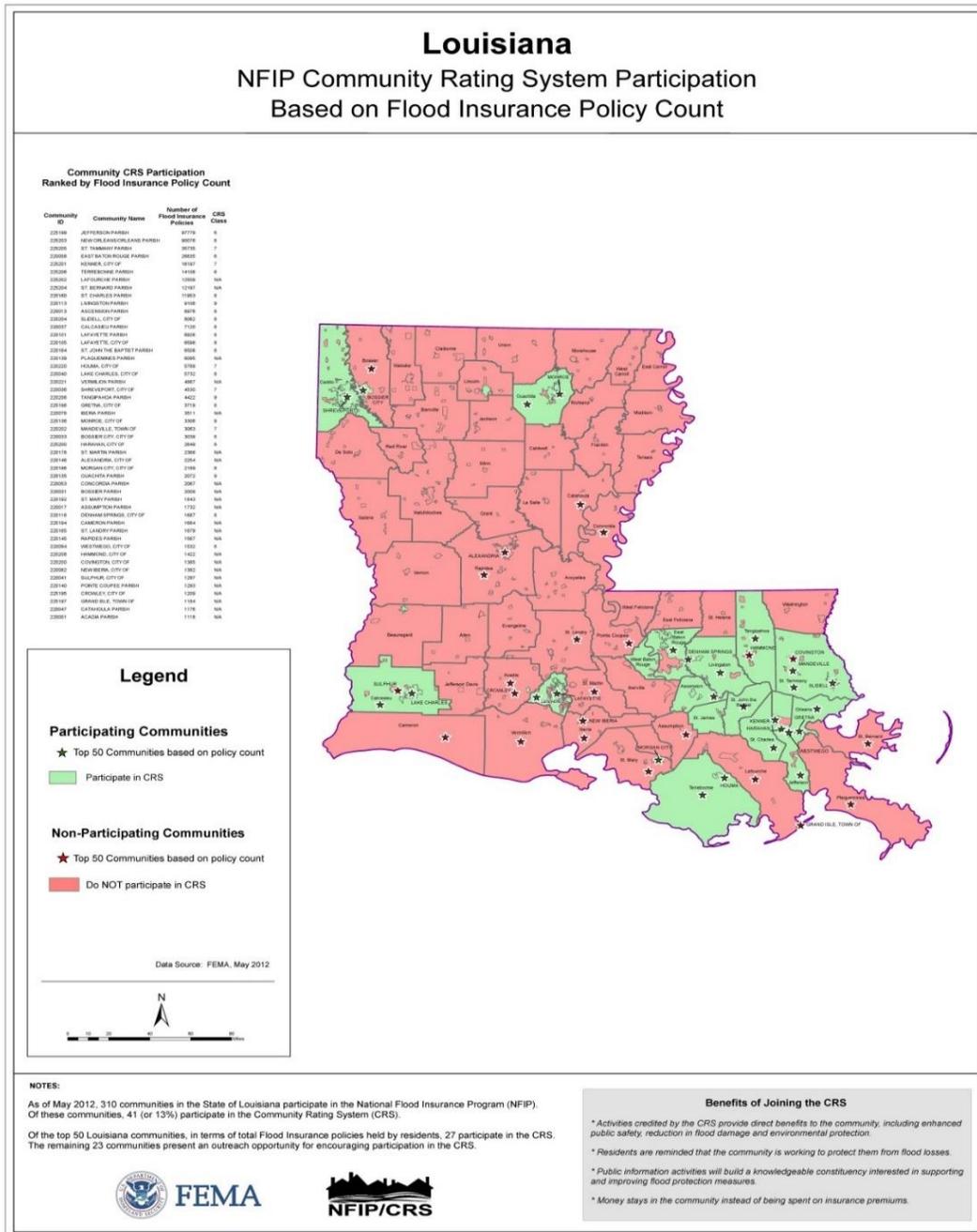


Figure 3-2: Louisiana CRS NFIP Participation  
(Source: FEMA<sup>2</sup>)

<sup>2</sup> [http://www.fema.gov/media-library-data/20130726-2128-31471-9581/ks\\_ky\\_la\\_crs\\_may\\_2012\\_508.zip](http://www.fema.gov/media-library-data/20130726-2128-31471-9581/ks_ky_la_crs_may_2012_508.zip)

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 programs 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.

\*\*More information on the Community Rating System can be found at [www.fema.gov/nfip/crs.shtm](http://www.fema.gov/nfip/crs.shtm)\*\*

### NFIP Worksheets

Parish and participating jurisdiction NFIP worksheets can be found in Appendix E: State Required Worksheets

## 4. Mitigation Strategy

### Introduction

Iberville Parish's Hazard Mitigation Strategy has a common guiding principle and is the demonstration of the parish's and participating jurisdictions' 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.

Iberville Parish confirmed the goals, objectives, actions, and projects over the period of the Hazard Mitigation Plan Update process. The mitigation actions and projects in this 2016 update are a product of analysis and review of the Iberville Parish Hazard Mitigation Plan Steering Committee, under the coordination of the Iberville Parish Office of Homeland Security and Emergency Preparedness. The committee was presented a list of projects and actions, new and from the 2011 plan, for review from January 2016 – June 2016.

An online public opinion survey was conducted of Iberville Parish residents between January and August 2016. The survey was designed to capture public perceptions and opinions regarding natural hazards in Iberville Parish. In addition, the survey sought to collect 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 Iberville Parish Hazard Mitigation Plan Steering Committee are representative of the outlook of the community at large. However, because there were no responses to the survey, this public feedback could not be incorporated into the plan. The full Iberville Parish survey can be found at the following link:

<https://www.surveymonkey.com/r/Iberville>

During the public meeting in April, the committee provided a status of the projects from 2011 and the proposed actions for the 2016 update. Committee members then agreed on the submission of each project based on feasibility for funding, ease of completion and other community specific factors. The actions were later prioritized.

### 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 Iberville 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, Iberville Parish and its jurisdictions 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 Iberville Parish Hazard Mitigation Plan Update Steering Committee represent long-term commitments by the parish and its jurisdictions. After assessing these goals, the committee decided that the current four goals remain valid. The goals are as follows:

- Reduce flood losses within Iberville Parish
- Increase disaster resistance of Iberville Parish and municipal facilities and infrastructure
- Ensure that new construction is hazard resistant and does not lead to increased hazard risk or exacerbate effects of hazards
- Identify, introduce, and implement cost effective hazard mitigation measures so as to accomplish parish goals and objectives and to raise both awareness and acceptance of hazard mitigation generally.

The Mitigation Action Plan focuses on actions to be taken by Iberville Parish and its jurisdictions. All of the activities in the Mitigation Action Plan will be focused on helping the parish and its municipalities 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 Steering Committee and each jurisdiction 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.

### [2016 Mitigation Actions and Update on Previous Plan Actions](#)

The Iberville Parish Hazard Mitigation Plan Steering Committee and participating jurisdictions each identified actions that would reduce and/or prevent future damage within Iberville Parish and their respective communities. In that effort, each jurisdiction focused on a comprehensive range of specific mitigation actions. These actions were identified in thorough fashion by the consultant team, the committee, and the individual jurisdictions by way of frequent and open communications and meetings held throughout the planning process.

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.

The established and agreed upon parish and jurisdiction actions relative to the parish-wide goals are below. Additionally, action updates from the previous plan updates can be found in the first table below.

### Iberville 2011 Hazard Mitigation Action Update

Iberville Parish - Unincorporated				
Jurisdiction-Specific Action	Action Description	Funding Source	Responsible Party, Agency, or Department	Status
I1: Community Rating System	Attain Community Rating System (CRS) status for unincorporated areas of Iberville Parish and within the municipalities.	Local	Existing designated full-time personnel in parish and municipal governments.	Carried Over
I2: Public Awareness Campaign	Implement a public awareness campaign to inform and educate residents on flood insurance following flood events.	Local	Existing designated full-time personnel in parish and municipal governments.	Ongoing
I3: New Building Codes	Encourage adherence to building codes and construction standards for new construction parish-wide specific to wind and flood-related hazards through incentive programs and also introduce new codes to protect new buildings and infrastructure.	Local and Regional	Existing municipal and parish administration	Ongoing
I4: Levee Maintenance Program	Develop a local levee maintenance program for levees that are not under the jurisdiction of the USACE, Pontchartrain Levee Board, or Atchafalaya Levee Board jurisdiction to prevent levee failure on the local level.	Local and Regional	Public Works and Rosedale employees	Ongoing

15: Drainage Study	Complete a drainage study of Iberville Parish to determine areas that have greater risk from stormwater flooding and poor drainage.	Local and Regional	Parish Engineer, Municipal Engineers, Engineering Consultant	Ongoing
16: Repetitive Loss Structures	Elevate, acquire, or pilot reconstruct all repetitive and severe repetitive losses in the unincorporated areas and the municipalities that would inundate in the event of a flood or levee failure event.	HMGP	Existing municipal and parish administration	Ongoing
17: Clearing and Dredging	Clear and dredge Bayou Plaquemine, Bayou Breaux, White Castle Canal, and Merrell Canal.	Local, Regional, and Federal	Existing municipal and parish administration	Ongoing
18: Drainage Canal Lining	Line drainage canals with concrete and/or widen to ensure proper conveyance of stormwater, including Tircuit Canal, Price Street Canal, Hwy 933 Ditch, Church Street, and Bowie Street Ditch	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
19: Culvert Upgrading	Upgrade culverts to ensure proper conveyance of stormwater, including along Jake Lane, Besson Lane, St. Francis Street, Augusta Culverts, Angelloz Subdivision, and Shady Lane Canal.	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
110: New Pump Stations	Install new pump stations to improve conveyance of stormwater including at Hwy 386, Bayou Blue, Bayou Pigeon, Hwy 77 between Gross Tete and Plaquemine, Carville, Sunshine Sewer Plant	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
111: New Drainage Canals	Dig new drainage canals including those at Griffland Terrace in Rosedale	Local and Regional	Existing municipal and parish administration	Ongoing
112: Physical Security	Maintain physical security of parish and municipal facilities.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted
113: Problem and Security Gap Identification	Identify problems and security gaps for all structures and infrastructure identified on the Critical Facility List	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing

I14: All-Hazard Warning System	Acquire all-hazard warning system to ensure proper citizen notification of tornadoes, levee failure, hurricanes, and coastal/tropical storms.	HMGP, local, and regional	Existing designated full-time personnel in Parish administration	Ongoing
I15: Critical Facility Review	Review critical facilities and hazard categories and then assess structural need or necessary upgrades to make Parish facilities and infrastructure more hazard resistant.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
I16: GIS Database	Develop and update a parish-wide GIS database that incorporates Parish infrastructure, critical facilities, land use, and hazard zones, and provide annual updates of the database	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
I17: Safe Rooms	Construct safe rooms	HMGP	Parish and Municipal administrative staff	Carried Over
I18: Wind Hardening	Wind harden critical facilities	HMGP	Parish and Municipal administrative staff	Ongoing
I19: Wind Retrofitting	Wind retrofit critical facilities using window film, screen, or shutters	HMGP	Parish and Municipal administrative staff	Ongoing
I20: Generators	Purchase generators for critical facilities	HMGP	Parish and Municipal administrative staff	Ongoing
I21: Floodplain Management Plan	Develop a comprehensive floodplain management plan.	Federal Grants, Parish Funds	Existing municipal and parish administration	Carried Over
I22: No Adverse Impact Approach	Adopt a "No Adverse Impact" approach to floodplain management	No additional funds required	Existing municipal and parish administration	Carried Over
I23: International Building Code	Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.	No additional funds required	One current full-time member of the parish and each municipality	Ongoing
I24: Drainage System Improvement	Improve current drainage systems in the municipalities and the unincorporated areas of the parish	HMGP, state, local, other federal funds	Existing municipal and parish administration	Ongoing
I25: Levee System Improvement	Evaluate and improve local levee systems	State, local, federal funds	Existing municipal and parish administration	Ongoing

I26: Hazard Mitigation Section	Add hazard mitigation section to parish emergency guidebook	No additional funds required	OHSEP	Ongoing
I27: Hazard Mitigation Workshops	Arrange and hold hazard mitigation workshops for homeowners	No additional funds required	Parish Grant Consultants	Carried Over
I28: Storm Ready Status	Attain "Storm-Ready" status through the national weather service.	No additional funds required	OHSEP	Carried Over
I29: Communication with Government	Maintain and foster communications with the Governor's Office of Homeland Security and Emergency Preparedness	No additional funds required	OHSEP and Municipal Governments	Ongoing
I30: Federal Funding Opportunities	Examine Federal funding opportunities at conferences, workshops, and following disasters on hazard events.	No additional funds required	All Parish and Municipal staff	Ongoing

Village of Gross Tete				
Jurisdiction-Specific Action	Action Description	Funding Source	Responsible Party, Agency, or Department	Status
G1: Community Rating System	Attain Community Rating System (CRS) status for unincorporated areas of Iberville Parish and within the municipalities.	Local	Existing designated full-time personnel in parish and municipal governments.	Carried Over
G2: Public Awareness Campaign	Implement a public awareness campaign to inform and educate residents on flood insurance following flood events.	Local	Existing designated full-time personnel in parish and municipal governments.	Ongoing
G3: New Building Codes	Encourage adherence to building codes and construction standards for new construction parish-wide specific to wind and flood-related hazards through incentive programs and also introduce new codes to protect new buildings and infrastructure.	Local and Regional	Existing municipal and parish administration	Ongoing
G4: Drainage Study	Complete a drainage study of Iberville Parish to determine areas that have greater risk from stormwater flooding and poor drainage.	Local and Regional	Parish Engineer, Municipal Engineers, Engineering Consultant	Carried Over

G5: Culvert Upgrades	Upgrade culverts to ensure proper conveyance of stormwater, including along Jake Lane, Besson Lane, St. Francis Street, Augusta Culverts, Angelloz Subdivision, and Shady Lane Canal.	HMGP, local, and regional	Existing municipal and parish administration	Carried Over
G6: New Pump Stations	Install new pump stations to improve conveyance of stormwater including at Hwy 386, Bayou Blue, Bayou Pigeon, Hwy 77 between Gross Tete and Plaquemine, Carville, Sunshine Sewer Plant	HMGP, local, and regional	Existing municipal and parish administration	Carried Over
G7: Physical Security	Maintain physical security of parish and municipal facilities.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted
G8: Problem and Security Gap Identification	Identify problems and security gaps for all structures and infrastructure identified on the Critical Facility List	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted
G9: All-Hazard Warning System	Acquire all-hazard warning system to ensure proper citizen notification of tornadoes, levee failure, hurricanes, and coastal/tropical storms.	HMGP, local, and regional	Existing designated full-time personnel in Parish administration	Carried Over
G10: Critical Facility Review	Review critical facilities and hazard categories and then assess structural need or necessary upgrades to make Parish facilities and infrastructure more hazard resistant.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Carried Over
G11: GIS Database	Develop and update a parish-wide GIS database that incorporates Parish infrastructure, critical facilities, land use, and hazard zones, and provide annual updates of the database	No additional funds required	Sheriff's Office, OHSEP, LEPC	Carried Over
G12: Safe Rooms	Construct safe rooms	HMGP	Parish and Municipal administrative staff	Ongoing
G13: Wind Hardening	Wind harden critical facilities	HMGP	Parish and Municipal administrative staff	Completed
G14: Wind Retrofitting	Wind retrofit critical facilities using window film, screen, or shutters	HMGP	Parish and Municipal administrative staff	Completed

G15: Generators	Purchase generators for critical facilities	HMGP	Parish and Municipal administrative staff	Completed
G16: Floodplain Management Plan	Develop a comprehensive floodplain management plan.	Federal Grants, Parish Funds	Existing municipal and parish administration	Carried Over
G17: No Adverse Impact Approach	Adopt a "No Adverse Impact" approach to floodplain management	No additional funds required	Existing municipal and parish administration	Carried Over
G18: International Building Code	Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.	No additional funds required	One current full-time member of the parish and each municipality	Ongoing
G19: Drainage System Improvement	Improve current drainage systems in the municipalities and the unincorporated areas of the parish	HMGP, state, local, other federal funds	Existing municipal and parish administration	Ongoing
G20: Levee System Improvement	Evaluate and improve local levee systems	State, local, federal funds	Existing municipal and parish administration	Carried Over
G21: Hazard Mitigation Section	Add hazard mitigation section to parish emergency guidebook	No additional funds required	OHSEP	Ongoing
G22: Hazard Mitigation Workshops	Arrange and hold hazard mitigation workshops for homeowners	No additional funds required	Parish Grant Consultants	Carried Over
G23: Communication with Government	Maintain and foster communications with the Governor's Office of Homeland Security and Emergency Preparedness	No additional funds required	OHSEP and Municipal Governments	Ongoing
G24: Federal Funding Opportunities	Examine Federal funding opportunities at conferences, workshops, and following disasters on hazard events.	No additional funds required	All Parish and Municipal staff	Ongoing

## Town of Maringouin

Jurisdiction-Specific Action	Action Description	Funding Source	Responsible Party, Agency, or Department	Status
M1: Community Rating System	Attain Community Rating System (CRS) status for unincorporated areas of Iberville Parish and within the municipalities.	Local	Existing designated full-time personnel in parish and municipal governments.	Carried Over

M2: Public Awareness Campaign	Implement a public awareness campaign to inform and educate residents on flood insurance following flood events.	Local	Existing designated full-time personnel in parish and municipal governments.	Ongoing
M3: New Building Codes	Encourage adherence to building codes and construction standards for new construction parish-wide specific to wind and flood-related hazards through incentive programs and also introduce new codes to protect new buildings and infrastructure.	Local and Regional	Existing municipal and parish administration	Ongoing
M4: Drainage Study	Complete a drainage study of Iberville Parish to determine areas that have greater risk from stormwater flooding and poor drainage.	Local and Regional	Parish Engineer, Municipal Engineers, Engineering Consultant	Carried Over
M5: Drainage Canal Lining	Line drainage canals with concrete and/or widen to ensure proper conveyance of stormwater, including Tircuit Canal, Price Street Canal, Hwy 933 Ditch, Church Street, and Bowie Street Ditch	HMGP, local, and regional	Existing municipal and parish administration	Carried Over
M6: New Pump Stations	Install new pump stations to improve conveyance of stormwater including at Hwy 386, Bayou Blue, Bayou Pigeon, Hwy 77 between Gross Tete and Plaquemine, Carville, Sunshine Sewer Plant	HMGP, local, and regional	Existing municipal and parish administration	Carried Over
M7: Physical Security	Maintain physical security of parish and municipal facilities.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted
M8: Problem and Security Gap Identification	Identify problems and security gaps for all structures and infrastructure identified on the Critical Facility List	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted

M9: All-Hazard Warning System	Acquire all-hazard warning system to ensure proper citizen notification of tornadoes, levee failure, hurricanes, and coastal/tropical storms.	HMGP, local, and regional	Existing designated full-time personnel in Parish administration	Carried Over
M10: Critical Facility Review	Review critical facilities and hazard categories and then assess structural need or necessary upgrades to make Parish facilities and infrastructure more hazard resistant.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Carried Over
M11: GIS Database	Develop and update a parish-wide GIS database that incorporates Parish infrastructure, critical facilities, land use, and hazard zones, and provide annual updates of the database	No additional funds required	Sheriff's Office, OHSEP, LEPC	Carried Over
M12: Safe Rooms	Construct safe rooms	HMGP	Parish and Municipal administrative staff	Ongoing
M13: Wind Hardening	Wind harden critical facilities	HMGP	Parish and Municipal administrative staff	Carried Over
M14: Wind Retrofitting	Wind retrofit critical facilities using window film, screen, or shutters	HMGP	Parish and Municipal administrative staff	Carried Over
M15: Generators	Purchase generators for critical facilities	HMGP	Parish and Municipal administrative staff	Completed
M16: Floodplain Management Plan	Develop a comprehensive floodplain management plan.	Federal Grants, Parish Funds	Existing municipal and parish administration	Ongoing
M17: No Adverse Impact Approach	Adopt a "No Adverse Impact" approach to floodplain management	No additional funds required	Existing municipal and parish administration	Ongoing
M18: Internal Building Code	Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.	No additional funds required	One current full-time member of the parish and each municipality	Ongoing
M19: Drainage System Improvement	Improve current drainage systems in the municipalities and the unincorporated areas of the parish	HMGP, state, local, other federal funds	Existing municipal and parish administration	Ongoing
M20: Levee System Improvement	Evaluate and improve local levee systems	State, local, federal funds	Existing municipal and parish administration	Carried Over

M21: Hazard Mitigation Section	Add hazard mitigation section to parish emergency guidebook	No additional funds required	OHSEP	Ongoing
M22: Hazard Mitigation Workshops	Arrange and hold hazard mitigation workshops for homeowners	No additional funds required	Parish Grant Consultants	Carried Over
M23: Communication with Government	Maintain and foster communications with the Governor's Office of Homeland Security and Emergency Preparedness	No additional funds required	OHSEP and Municipal Governments	Ongoing
M24: Federal Funding Opportunities	Examine Federal funding opportunities at conferences, workshops, and following disasters on hazard events.	No additional funds required	All Parish and Municipal staff	Ongoing

City of Plaquemine				
Jurisdiction-Specific Action	Action Description	Funding Source	Responsible Party, Agency, or Department	Status
P1: Community Rating System	Attain Community Rating System (CRS) status for unincorporated areas of Iberville Parish and within the municipalities.	Local	Existing designated full-time personnel in parish and municipal governments.	Carried Over
P2: Public Awareness Campaign	Implement a public awareness campaign to inform and educate residents on flood insurance following flood events.	Local	Existing designated full-time personnel in parish and municipal governments.	Ongoing
P3: New Building Codes	Encourage adherence to building codes and construction standards for new construction parish-wide specific to wind and flood-related hazards through incentive programs and also introduce new codes to protect new buildings and infrastructure.	Local and Regional	Existing municipal and parish administration	Ongoing
P4: Drainage Study	Complete a drainage study of Iberville Parish to determine areas that have greater risk from stormwater flooding and poor drainage.	Local and Regional	Parish Engineer, Municipal Engineers, Engineering Consultant	Carried over

P5: Repetitive Loss Structures	Elevate, acquire, or pilot reconstruct all repetitive and severe repetitive losses in the unincorporated areas and the municipalities that would inundate in the event of a flood or levee failure event.	HMGP	Existing municipal and parish administration	Completed
P6: Clearing and Dredging	Clear and dredge Bayou Plaquemine, Bayou Breaux, White Castle Canal, and Merrell Canal.	Local, Regional, and Federal	Existing municipal and parish administration	Ongoing
P7: Drainage Canal Lining	Line drainage canals with concrete and/or widen to ensure proper conveyance of stormwater, including Tircuit Canal, Price Street Canal, Hwy 933 Ditch, Church Street, and Bowie Street Ditch	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
P8: New Pump Stations	Install new pump stations to improve conveyance of stormwater including at Hwy 386, Bayou Blue, Bayou Pigeon, Hwy 77 between Gross Tete and Plaquemine, Carville, Sunshine Sewer Plant	HMGP, local, and regional	Existing municipal and parish administration	Completed
P9: Physical Security	Maintain physical security of parish and municipal facilities.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted
P10: Problem and Security Gap Identification	Identify problems and security gaps for all structures and infrastructure identified on the Critical Facility List	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted
P11: All-Hazard Warning System	Acquire all-hazard warning system to ensure proper citizen notification of tornadoes, levee failure, hurricanes, and coastal/tropical storms.	HMGP, local, and regional	Existing designated full-time personnel in Parish administration	Ongoing
P12: Critical Facility Review	Review critical facilities and hazard categories and then assess structural need or necessary upgrades to make Parish facilities and infrastructure more hazard resistant.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing

P13: GIS Database	Develop and update a parish-wide GIS database that incorporates Parish infrastructure, critical facilities, land use, and hazard zones, and provide annual updates of the database	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
P14: Safe Rooms	Construct safe rooms	HMGP	Parish and Municipal administrative staff	Carried over
P15: Wind Hardening	Wind harden critical facilities	HMGP	Parish and Municipal administrative staff	Completed
P16: Wing Retrofitting	Wind retrofit critical facilities using window film, screen, or shutters	HMGP	Parish and Municipal administrative staff	Completed
P17: Generators	Purchase generators for critical facilities	HMGP	Parish and Municipal administrative staff	Completed
P18: Backup Power Plants	Construct backup power plants	Local, State, and Federal Funds	Municipal administrative staff	Ongoing
P19: Floodplain Management Plan	Develop a comprehensive floodplain management plan.	Federal Grants, Parish Funds	Existing municipal and parish administration	Ongoing
P20: No Adverse Impact Approach	Adopt a "No Adverse Impact" approach to floodplain management	No additional funds required	Existing municipal and parish administration	Ongoing
P21: International Building Code	Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.	No additional funds required	One current full-time member of the parish and each municipality	Ongoing
P22: Drainage System Improvement	Improve current drainage systems in the municipalities and the unincorporated areas of the parish	HMGP, state, local, other federal funds	Existing municipal and parish administration	Ongoing
P23: Local Levee Improvement	Evaluate and improve local levee systems	State, local, federal funds	Existing municipal and parish administration	Ongoing
P24: Hazard Mitigation Section	Add hazard mitigation section to parish emergency guidebook	No additional funds required	OHSEP	Ongoing
P25: Hazard Mitigation Workshops	Arrange and hold hazard mitigation workshops for homeowners	No additional funds required	Parish Grant Consultants	Carried over
P26: Communication with Government	Maintain and foster communications with the Governor's Office of Homeland Security and Emergency Preparedness	No additional funds required	OHSEP and Municipal Governments	Ongoing

P27: Federal Funding Opportunities	Examine Federal funding opportunities at conferences, workshops, and following disasters on hazard events.	No additional funds required	All Parish and Municipal staff	Ongoing
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Village of Rosedale				
Jurisdiction-Specific Action	Action Description	Funding Source	Responsible Party, Agency, or Department	Status
R1: Community Rating System	Attain Community Rating System (CRS) status for unincorporated areas of Iberville Parish and within the municipalities.	Local	Existing designated full-time personnel in parish and municipal governments.	Carried Over
R2: Public Awareness Campaign	Implement a public awareness campaign to inform and educate residents on flood insurance following flood events.	Local	Existing designated full-time personnel in parish and municipal governments.	Ongoing
R3: New Building Codes	Encourage adherence to building codes and construction standards for new construction parish-wide specific to wind and flood-related hazards through incentive programs and also introduce new codes to protect new buildings and infrastructure.	Local and Regional	Existing municipal and parish administration	Ongoing
R4: Levee Maintenance Program	Develop a local levee maintenance program for levees that are not under the jurisdiction of the USACE, Pontchartrain Levee Board, or Atchafalaya Levee Board jurisdiction to prevent levee failure on the local level.	Local and Regional	Public Works and Rosedale employees	Ongoing
R5: Drainage Study	Complete a drainage study of Iberville Parish to determine areas that have greater risk from stormwater flooding and poor drainage.	Local and Regional	Parish Engineer, Municipal Engineers, Engineering Consultant	Ongoing

R6: Culvert Upgrading	Upgrade culverts to ensure proper conveyance of stormwater, including along Jake Lane, Besson Lane, St. Francis Street, Augusta Culverts, Angelloz Subdivision, and Shady Lane Canal.	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
R7: New Pump Stations	Install new pump stations to improve conveyance of stormwater including at Hwy 386, Bayou Blue, Bayou Pigeon, Hwy 77 between Gross Tete and Plaquemine, Carville, Sunshine Sewer Plant	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
R8: New Drainage Canals	Dig new drainage canals including those at Griffland Terrace in Rosedale	Local and Regional	Existing municipal and parish administration	Ongoing
R9: Physical Security	Maintain physical security of parish and municipal facilities.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted
R10: Problem and Security Gap Identification	Identify problems and security gaps for all structures and infrastructure identified on the Critical Facility List	No additional funds required	Sheriff's Office, OHSEP, LEPC	Carried Over
R11: All-Hazard Warning System	Acquire all-hazard warning system to ensure proper citizen notification of tornadoes, levee failure, hurricanes, and coastal/tropical storms.	HMGP, local, and regional	Existing designated full-time personnel in Parish administration	Ongoing
R12: Critical Facility Review	Review critical facilities and hazard categories and then assess structural need or necessary upgrades to make Parish facilities and infrastructure more hazard resistant.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
R13: GIS Database	Develop and update a parish-wide GIS database that incorporates Parish infrastructure, critical facilities, land use, and hazard zones, and provide annual updates of the database	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
R14: Safe Rooms	Construct safe rooms	HMGP	Parish and Municipal administrative staff	Carried Over

R15: Wind Hardening	Wind harden critical facilities	HMGP	Parish and Municipal administrative staff	Ongoing
R16: Wind Retrofitting	Wind retrofit critical facilities using window film, screen, or shutters	HMGP	Parish and Municipal administrative staff	Ongoing
R17: Generators	Purchase generators for critical facilities	HMGP	Parish and Municipal administrative staff	Ongoing
R18: Floodplain Management Plan	Develop a comprehensive floodplain management plan.	Federal Grants, Parish Funds	Existing municipal and parish administration	Carried Over
R19: No Adverse Impact Approach	Adopt a "No Adverse Impact" approach to floodplain management	No additional funds required	Existing municipal and parish administration	Carried Over
R20: International Building Code	Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.	No additional funds required	One current full-time member of the parish and each municipality	Ongoing
R21: Drainage System Improvement	Improve current drainage systems in the municipalities and the unincorporated areas of the parish	HMGP, state, local, other federal funds	Existing municipal and parish administration	Ongoing
R22: Local Levee Improvement	Evaluate and improve local levee systems	State, local, federal funds	Existing municipal and parish administration	Ongoing
R23: Hazard Mitigation Section	Add hazard mitigation section to parish emergency guidebook	No additional funds required	OHSEP	Carried Over
R24: Hazard Mitigation Workshops	Arrange and hold hazard mitigation workshops for homeowners	No additional funds required	Parish Grant Consultants	Carried Over
R25: Communication with Government	Maintain and foster communications with the Governor's Office of Homeland Security and Emergency Preparedness	No additional funds required	OHSEP and Municipal Governments	Ongoing
R26: Federal Funding Opportunities	Examine Federal funding opportunities at conferences, workshops, and following disasters on hazard events.	No additional funds required	All Parish and Municipal staff	Ongoing

City of St. Gabriel				
Jurisdiction-Specific Action	Action Description	Funding Source	Responsible Party, Agency, or Department	Status
S1: Community Rating System	Attain Community Rating System (CRS) status for unincorporated areas of Iberville Parish and within the municipalities.	Local	Existing designated full-time personnel in parish and municipal governments.	Carried Over
S2: Public Awareness Campaign	Implement a public awareness campaign to inform and educate residents on flood insurance following flood events.	Local	Existing designated full-time personnel in parish and municipal governments.	Ongoing
S3: New Building Codes	Encourage adherence to building codes and construction standards for new construction parish-wide specific to wind and flood-related hazards through incentive programs and also introduce new codes to protect new buildings and infrastructure.	Local and Regional	Existing municipal and parish administration	Ongoing
S4: Drainage Study	Complete a drainage study of Iberville Parish to determine areas that have greater risk from stormwater flooding and poor drainage.	Local and Regional	Parish Engineer, Municipal Engineers, Engineering Consultant	Ongoing
S5: Clearing and Dredging	Clear and dredge Bayou Plaquemine, Bayou Breaux, White Castle Canal, and Merrell Canal.	Local, Regional, and Federal	Existing municipal and parish administration	Ongoing
S6: Drainage Canal Lining	Line drainage canals with concrete and/or widen to ensure proper conveyance of stormwater, including Tircuit Canal, Price Street Canal, Hwy 933 Ditch, Church Street, and Bowie Street Ditch	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
S7: Culvert Upgrading	Upgrade culverts to ensure proper conveyance of stormwater, including along Jake Lane, Besson Lane, St. Francis Street, Augusta Culverts, Angelloz Subdivision, and Shady Lane Canal.	HMGP, local, and regional	Existing municipal and parish administration	Ongoing

S8: New Pump Stations	Install new pump stations to improve conveyance of stormwater including at Hwy 386, Bayou Blue, Bayou Pigeon, Hwy 77 between Gross Tete and Plaquemine, Carville, Sunshine Sewer Plant	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
S9: Physical Security	Maintain physical security of parish and municipal facilities.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted
S10: Problem and Security Gap Identification	Identify problems and security gaps for all structures and infrastructure identified on the Critical Facility List	No additional funds required	Sheriff's Office, OHSEP, LEPC	Carried Over
S11: All-Hazard Warning System	Acquire all-hazard warning system to ensure proper citizen notification of tornadoes, levee failure, hurricanes, and coastal/tropical storms.	HMGP, local, and regional	Existing designated full-time personnel in Parish administration	Ongoing
S12: Critical Facility Review	Review critical facilities and hazard categories and then assess structural need or necessary upgrades to make Parish facilities and infrastructure more hazard resistant.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
S13: GIS Database	Develop and update a parish-wide GIS database that incorporates Parish infrastructure, critical facilities, land use, and hazard zones, and provide annual updates of the database	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
S14: Safe Rooms	Construct safe rooms	HMGP	Parish and Municipal administrative staff	Carried Over
S15: Wind Hardening	Wind harden critical facilities	HMGP	Parish and Municipal administrative staff	Ongoing
S16: Wind Retrofitting	Wind retrofit critical facilities using window film, screen, or shutters	HMGP	Parish and Municipal administrative staff	Ongoing
S17: Generators	Purchase generators for critical facilities	HMGP	Parish and Municipal administrative staff	Ongoing
S18: Floodplain Management Plan	Develop a comprehensive floodplain management plan.	Federal Grants, Parish Funds	Existing municipal and parish administration	Carried Over
S19: No Adverse Impact Approach	Adopt a "No Adverse Impact" approach to floodplain management	No additional funds required	Existing municipal and parish administration	Carried Over

S20: International Building Code	Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.	No additional funds required	One current full-time member of the parish and each municipality	Ongoing
S21: Drainage System Improvement	Improve current drainage systems in the municipalities and the unincorporated areas of the parish	HMGP, state, local, other federal funds	Existing municipal and parish administration	Ongoing
S22: Local Levee Improvement	Evaluate and improve local levee systems	State, local, federal funds	Existing municipal and parish administration	Ongoing
S23: Hazard Mitigation Section	Add hazard mitigation section to parish emergency guidebook	No additional funds required	OHSEP	Carried Over
S24: Hazard Mitigation Workshops	Arrange and hold hazard mitigation workshops for homeowners	No additional funds required	Parish Grant Consultants	Carried Over
S25: Communication with Government	Maintain and foster communications with the Governor's Office of Homeland Security and Emergency Preparedness	No additional funds required	OHSEP and Municipal Governments	Ongoing
S26: Federal Funding Opportunities	Examine Federal funding opportunities at conferences, workshops, and following disasters on hazard events.	No additional funds required	All Parish and Municipal staff	Ongoing

Town of White Castle				
Jurisdiction-Specific Action	Action Description	Funding Source	Responsible Party, Agency, or Department	Status
W1: Community Rating System	Attain Community Rating System (CRS) status for unincorporated areas of Iberville Parish and within the municipalities.	Local	Existing designated full-time personnel in parish and municipal governments.	Carried Over
W2: Public Awareness Campaign	Implement a public awareness campaign to inform and educate residents on flood insurance following flood events.	Local	Existing designated full-time personnel in parish and municipal governments.	Ongoing

W3: New Building Codes	Encourage adherence to building codes and construction standards for new construction parish-wide specific to wind and flood-related hazards through incentive programs and also introduce new codes to protect new buildings and infrastructure.	Local and Regional	Existing municipal and parish administration	Ongoing
W4: Drainage Study	Complete a drainage study of Iberville Parish to determine areas that have greater risk from stormwater flooding and poor drainage.	Local and Regional	Parish Engineer, Municipal Engineers, Engineering Consultant	Ongoing
W5: Clearing and Dredging	Clear and dredge Bayou Plaquemine, Bayou Breaux, White Castle Canal, and Merrell Canal.	Local, Regional, and Federal	Existing municipal and parish administration	Ongoing
W6: Drainage Canal Lining	Line drainage canals with concrete and/or widen to ensure proper conveyance of stormwater, including Tircuit Canal, Price Street Canal, Hwy 933 Ditch, Church Street, and Bowie Street Ditch	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
W7: Culvert Upgrading	Upgrade culverts to ensure proper conveyance of stormwater, including along Jake Lane, Besson Lane, St. Francis Street, Augusta Culverts, Angelloz Subdivision, and Shady Lane Canal.	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
W8: New Pump Stations	Install new pump stations to improve conveyance of stormwater including at Hwy 386, Bayou Blue, Bayou Pigeon, Hwy 77 between Gross Tete and Plaquemine, Carville, Sunshine Sewer Plant	HMGP, local, and regional	Existing municipal and parish administration	Ongoing
W9: Physical Security	Maintain physical security of parish and municipal facilities.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Deleted

W10: Problem and Security Gap Identification	Identify problems and security gaps for all structures and infrastructure identified on the Critical Facility List	No additional funds required	Sheriff's Office, OHSEP, LEPC	Carried Over
W11: All-Hazard Warning System	Acquire all-hazard warning system to ensure proper citizen notification of tornadoes, levee failure, hurricanes, and coastal/tropical storms.	HMGP, local, and regional	Existing designated full-time personnel in Parish administration	Ongoing
W12: Critical Facility Review	Review critical facilities and hazard categories and then assess structural need or necessary upgrades to make Parish facilities and infrastructure more hazard resistant.	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
W13: GIS Database	Develop and update a parish-wide GIS database that incorporates Parish infrastructure, critical facilities, land use, and hazard zones, and provide annual updates of the database	No additional funds required	Sheriff's Office, OHSEP, LEPC	Ongoing
W14: Safe Rooms	Construct safe rooms	HMGP	Parish and Municipal administrative staff	Carried Over
W15: Wind Hardening	Wind harden critical facilities	HMGP	Parish and Municipal administrative staff	Ongoing
W16: Wind Retrofitting	Wind retrofit critical facilities using window film, screen, or shutters	HMGP	Parish and Municipal administrative staff	Ongoing
W17: Generators	Purchase generators for critical facilities	HMGP	Parish and Municipal administrative staff	Ongoing
W18: Floodplain Management Plan	Develop a comprehensive floodplain management plan.	Federal Grants, Parish Funds	Existing municipal and parish administration	Carried Over
W19: No Adverse Impact Approach	Adopt a "No Adverse Impact" approach to floodplain management	No additional funds required	Existing municipal and parish administration	Carried Over
W20: International Building Code	Enforce the International Building Code requirements for all new construction to strengthen buildings against high wind damage.	No additional funds required	One current full-time member of the parish and each municipality	Ongoing

W21: Drainage System Improvement	Improve current drainage systems in the municipalities and the unincorporated areas of the parish	HMGP, state, local, other federal funds	Existing municipal and parish administration	Ongoing
W22: Local Levee Improvement	Evaluate and improve local levee systems	State, local, federal funds	Existing municipal and parish administration	Ongoing
W23: Hazard Mitigation Section	Add hazard mitigation section to parish emergency guidebook	No additional funds required	OHSEP	Carried Over
W24: Hazard Mitigation Workshops	Arrange and hold hazard mitigation workshops for homeowners	No additional funds required	Parish Grant Consultants	Carried Over
W25: Communication with Government	Maintain and foster communications with the Governor's Office of Homeland Security and Emergency Preparedness	No additional funds required	OHSEP and Municipal Governments	Ongoing
W26: Federal Funding Opportunities	Examine Federal funding opportunities at conferences, workshops, and following disasters on hazard events.	No additional funds required	All Parish and Municipal staff	Ongoing

## Unincorporated Iberville New Mitigation Actions

Iberville Unincorporated - New Mitigation Actions						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
I1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	High Wind, Tropical Cyclones, Tornadoes	New
I2: Drainage Improvement	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Flooding, High Wind, Tropical Cyclones	New
I3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or severe repetitive loss properties vulnerable to flooding or other hazards.	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Flooding, Tropical Cyclones, Sinkholes, Levee Failure	New
I4: Safe Room Projects	Construction of a safe room for first responders located in Iberville Parish. Other locations will be identified based on funding availability.	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Tornadoes, High Wind, Tropical Cyclones	New
I5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety through technical assistance, mail outs and training for Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), Levee Failure and Sinkholes as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New

I6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes	New
I7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Lightning	New
I8: Warning Systems	Update/upgrade public warning system components throughout Iberville Parish as necessary. Install audible and/or reverse 911 warning system(s)	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New
I9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals in Parish, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Levee Failure	New
I10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP	Tropical Cyclones, Flooding, Levee Failure	New
I11: Levee Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	FEMA HMGP, Local	1-5 years	Iberville Parish OHSEP and Mayors	Levee Failure, Flooding	New

## Village of Grosse Tete New Mitigation Actions

Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
G1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	High Wind, Tropical Cyclones, Tornadoes	New
G2: Drainage Improvement	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Flooding, High Wind, Tropical Cyclones	New
G3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or severe repetitive loss properties vulnerable to flooding or other hazards.	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Sinkholes, Levee Failure	New
G4: Safe Room Projects	Construction of a safe room for first responders located in Grosse Tete. Other locations will be identified based on funding availability.	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Tornadoes, High Wind, Tropical Cyclones	New
G5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety through technical assistance, mail outs and training for Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), and Sinkholes as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New

G6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes	New
G7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Lightning	New
G8: Warning Systems	Update/upgrade public warning system components throughout Grosse Tete as necessary. Install audible and/or reverse 911 warning system(s)	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New
G9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals in Parish, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Levee Failure	New
G10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville Parish OHSEP	Tropical Cyclones, Flooding, Levee Failure	New
G11: Levee Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	FEMA HMGP, Local	1-5 years	Village of Grosse Tete/Iberville OHSEP	Levee Failure, Flooding	New

## Town of Maringouin New Mitigation Actions

Town of Maringouin						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
M1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	High Wind, Tropical Cyclones, Tornadoes	New
M2: Drainage Improvement	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Flooding, High Wind, Tropical Cyclones	New
M3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or severe repetitive loss properties vulnerable to flooding or other hazards.	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Sinkholes, Levee Failure	New
M4: Safe Room Projects	Construction of a safe room for first responders located in Maringouin. Other locations will be identified based on funding availability.	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Tornadoes, High Wnd, Tropical Cyclones	New
M5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety through technical assistance, mail outs and training for Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), and Sinkholes as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New

M6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes	New
M7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Lightning	New
M8: Warning Systems	Update/upgrade public warning system components throughout Maringouin as necessary. Install audible and/or reverse 911 warning system(s)	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New
M9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals in Parish, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Levee Failure	New
M10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville Parish OHSEP	Tropical Cyclones, Flooding, Levee Failure	New
M11: Levee Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	FEMA HMGP, Local	1-5 years	Town of Maringouin/Iberville OHSEP	Levee Failure, Flooding	New

## City of Plaquemine New Mitigation Actions

City of Plaquemine						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
P1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	High Wind, Tropical Cyclones, Tornadoes	New
P2: Drainage Improvement	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Flooding, High Wind, Tropical Cyclones	New
P3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or severe repetitive loss properties vulnerable to flooding or other hazards.	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Sinkholes, Levee Failure	New
P4: Safe Room Projects	Construction of a safe room for first responders located in Plaquemine. Other locations will be identified based on funding availability.	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Tornadoes, High Wind, Tropical Cyclones	New
P5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety through technical assistance, mail outs and training for Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), and Sinkholes as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New

P6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes	New
M7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Lightning	New
P8: Warning Systems	Update/upgrade public warning system components throughout Plaquemine as necessary. Install audible and/or reverse 911 warning system(s)	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New
P9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals in Parish, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Levee Failure	New
P10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville Parish OHSEP	Tropical Cyclones, Flooding, Levee Failure	New
P11: Levee Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	FEMA HMGP, Local	1-5 years	City of Plaquemine/Iberville OHSEP	Levee Failure, Flooding	New

## Village of Rosedale New Mitigation Actions

Village of Rosedale						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
R1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	High Wind, Tropical Cyclones, Tornadoes	New
R2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Flooding, High Wind, Tropical Cyclones	New
R3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or severe repetitive loss properties vulnerable to flooding or other hazards.	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Sinkholes, Levee Failure	New
R4: Safe Room Projects	Construction of a safe room for first responders located in Rosedale. Other locations will be identified based on funding availability.	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Tornadoes, High Wind, Tropical Cyclones	New
R5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety through technical assistance, mail outs and training for Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), and Sinkholes as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New

R6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail) , Sinkholes	New
M7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Lightning	New
R8: Warning Systems	Update/upgrade public warning system components throughout Rosedale as necessary. Install audible and/or reverse 911 warning system(s)	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail) , Sinkholes, Levee Failure	New
R9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals in Parish, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Levee Failure	New
R10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville Parish OHSEP	Tropical Cyclones, Flooding, Levee Failure	New
R11: Levee Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	FEMA HMGP, Local	1-5 years	Village of Rosedale/Iberville OHSEP	Levee Failure, Flooding	New

## City of St. Gabriel New Mitigation Actions

City of St. Gabriel						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
S1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	High Wind, Tropical Cyclones, Tornadoes	New
S2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Flooding, High Wind, Tropical Cyclones	New
S3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or severe repetitive loss properties vulnerable to flooding or other hazards.	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Sinkholes, Levee Failure	New
S4 Safe Room Projects	Construction of a safe room for first responders located in St. Gabriel. Other locations will be identified based on funding availability.	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Tornadoes, High Wind, Tropical Cyclones	New
S5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety through technical assistance, mail outs and training for Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), and Sinkholes as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New

S6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes	New
M7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Lightning	New
S8: Warning Systems	Update/upgrade public warning system components throughout St. Gabriel as necessary. Install audible and/or reverse 911 warning system(s)	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New
S9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals in Parish, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Levee Failure	New
S10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville Parish OHSEP	Tropical Cyclones, Flooding, Levee Failure	New
S11: Levee Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	FEMA HMGP, Local	1-5 years	City of St. Gabriel/Iberville OHSEP	Levee Failure, Flooding	New

## Town of White Castle New Mitigation Actions

Town of White Castle						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
W1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	High Wind, Tropical Cyclones, Tornadoes	New
W2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Flooding, High Wind, Tropical Cyclones	New
W3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or severe repetitive loss properties vulnerable to flooding or other hazards.	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Sinkholes, Levee Failure	New
W4 Safe Room Projects	Construction of a safe room for first responders located in White Castle. Other locations will be identified based on funding availability.	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Tornadoes, High Wind, Tropical Cyclones	New
W5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety through technical assistance, mail outs and training for Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), and Sinkholes as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Flooding, Tropical Cyclones, Tornadoes, Thunderstorms (lightning, high wind, hail), Sinkholes, Levee Failure	New

W6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail) , Sinkholes	New
M7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Lightning	New
W8: Warning Systems	Update/upgrade public warning system components throughout White Castle as necessary. Install audible and/or reverse 911 warning system(s)	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Tornadoes, Tropical Cyclones, Thunderstorms (lightning, high wind, hail) , Sinkholes, Levee Failure	New
W9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals in Parish, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Levee Failure	New
W10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville Parish OHSEP	Tropical Cyclones, Flooding, Levee Failure	New
W11: Levee Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	FEMA HMGP, Local	1-5 years	Town of White Castle/Iberville OHSEP	Levee Failure, Flooding	New

### Action Prioritization

During the prioritization process, each jurisdiction and the steering 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, many projects were prioritized with these factors in mind.

In all cases, the jurisdictions 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 steering committee met internally for mitigation action meetings to review and approve Iberville Parish and the jurisdiction's mitigation actions. On-going actions, as well as actions which can be undertaken by existing parish or local staff without need for additional funding, were given high priority. The actions with high benefit and low cost, political support, and public support but require additional funding from parish or external sources were given medium priority. The actions that require substantial funding from external sources with relatively longer completion time were given low priority. There have been no changes in financial, legal, or political priorities within the past 5 years, with the methodology and prioritization process remaining the same.

Iberville Parish and the participating jurisdictions will implement and administer the identified actions based off of 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, such as changing regulations. This plan is intended to offer priorities based on an examination of hazards.

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## Appendix A: Planning Process

### Purpose

The Hazard Mitigation Plan Update process prompts local jurisdictions to keep their hazard mitigation plan current and moving toward a more resilient community. The plan update builds on the research and planning efforts of previous plans while reviewing recent trends. The steering committee followed FEMA HMGP's hazard mitigation planning process per the FEMA HMGP 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 Iberville Parish Hazard Mitigation Plan Update

The Iberville Parish Hazard Mitigation Plan Update process began in October 2015 with a series of meetings and collaborations between the contractor (SDMI) and the participating jurisdictions. Update activities were intended to give each jurisdiction the opportunity to shape the plan to best fit their community's goals. Community stakeholders and the general public were invited to attend and contribute information to the planning process during specific time periods or meetings.

Iberville Parish includes the unincorporated areas of the parish, as well as six incorporated municipalities that participated in the plan update process – the Village of Grosse Tete, Town of Maringouin, City of Plaquemine, Village of Rosedale, City of St. Gabriel, and Town of White Castle. Iberville Parish Office of Homeland Security and Emergency Preparedness (OHSEP) invited communities' representatives to meetings, where they supplied critical infrastructure data and reviewed work-in-progress for the plan update.

Similar to the development of the original Hazard Mitigation Plan, the role of the steering committee members during the plan update was to attend the planning meetings and provide valuable information on the parish, develop parts of the plan update, and review the results of research conducted by SDMI. Tasks completed by the steering committee include:

- Reviewing and revising the list of potential hazards included in the plan update
- Assembling a list of critical facilities, such as hospitals, police stations, and shelters
- Updating mitigation goals and objectives
- Determining prudent mitigation measures
- Prioritization of identified mitigation measures

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

Date	Meeting or Outreach	Location	Public Invited	Purpose
10/2/2015	Initial Coordination	Telephone/ Email	No	Discuss with Parish HM coordinator and any Steering Committee members expectations and requirements of the project.
1/27/2016	Kick-Off Meeting	Plaquemine, LA	No	Discuss with the plan steering committee expectations and requirements of the project. Assign plan worksheets to jurisdictions.
4/13/2016	Risk Assessment Overview	Plaquemine, LA	No	Discuss and review the risk assessment with the steering committee discuss and review expectations for public meeting.
4/13/2016	Public Meeting	Plaquemine, LA	Yes	The public meeting allowed the public and community stakeholders to participate and provide input into the hazard mitigation planning process. Maps of the Iberville Parish communities were provide for the meeting attendees to identify specific areas where localized hazards occur.
Ongoing	Public Survey Tool	Online	Yes	This survey asked participants about public perceptions and opinions regarding natural hazards in Iberville Parish. In addition, we asked about the methods and techniques preferred for reducing the risks and losses associated with these hazards. Survey Results: <a href="https://www.surveymonkey.com/r/Iberville">https://www.surveymonkey.com/r/Iberville</a>
2 Week Period	Public Plan Review (Digital)		Yes	Parish Website and Iberville Parish OHSEP

## Planning

The plan update process consisted of several phases:

Phase	Month 1-2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9
Plan Revision	Shaded							
Data Collection	Shaded							
Risk Assessment	Shaded							
Public Input					Shaded	Shaded	Shaded	
Mitigation Strategy and Actions				Shaded		Shaded		
Plan Review by GOHSEP and FEMA HMGP							Shaded	
Plan Adoption								Yellow
Plan Approval								Green

## Coordination

The Iberville Parish OHSEP oversaw the coordination of the 2016 Hazard Mitigation Plan Update Steering Committee during the update process. The Iberville Parish OHSEP and participating jurisdictions were responsible for identifying members for the committee.

The Parish Director and SDMI were jointly responsible for inviting the Steering Committees and key stakeholders to all planned meetings and activities by email invitations and calendar invites. SDMI assisted the Parish Director with meeting notices, website and social media statements for notification to the media and general public for public meetings and public outreach activities.

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

## Neighboring Community, Local and Regional Planning Process Involvement

From the outset of the planning process, the Hazard Mitigation Team encouraged participation from a broad range of jurisdictional 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 Team meetings at the local and parish level
- Sharing local data and information
- Local action item development

- Plan document draft review
- Formal adoption of the Hazard Mitigation Plan document by each jurisdiction following provisional approval by The State of Louisiana and FEMA HMGP

The 2016 Hazard Mitigation Plan Update Steering Committee consisted of representatives from the following parish, municipal, or community stakeholders:

- Iberville Parish Government
- Iberville Office of Homeland Security and Emergency Preparedness
- Iberville Parish Public Works
- Village of Grosse Tete
- Town of Maringouin
- City of Plaquemine
- Village of Rosedale
- City of St. Gabriel
- Town of White Castle

The Parish of Pointe Coupee was invited by the Iberville Parish OHSEP via email to participate in all meetings and activities as well in an effort to collaborate with neighboring communities. In addition, the participation of the GOHSEP Region 2 Coordinator during the process also contributed to neighboring community representation.

As part of the coordination and planning process, each jurisdiction was provided the State Required Hazard Mitigation Plan Update Worksheet. Jurisdictions with the capability to complete and return these worksheets returned them to assist with the 2016 update. The completed worksheets can be found in Appendix E – State Required Plan Update Worksheets.

Below is a detailed list of the 2016 Hazard Mitigation Plan Update Steering Committee:

Name	Title	Agency	Address	Email	Phone
Laurie Doiron	Director	Iberville OHSEP/911	58030 Meriam St., Plaquemine, LA 70764	<a href="mailto:ldoiron@ibervilleparish.com">ldoiron@ibervilleparish.com</a>	225-687-5140
J. "Mitchell" Ourso, Jr.	Parish President	Iberville Parish Council	58050 Meriam St., Plaquemine, LA 70764	<a href="mailto:jburleigh@ibervilleparish.com">jburleigh@ibervilleparish.com</a>	225-687-5190
Mark Migliacio	Director	Iberville Parish Public Works	59705 Bayou Rd., Plaquemine, LA 70764	<a href="mailto:mmigliacio@ibervilleparish.com">mmigliacio@ibervilleparish.com</a>	225-776-3053
Michael Chauffe	Mayor	Village of Grosse Tete	18125 Willow St., Grosse Tete, LA 70740	<a href="mailto:gtmayor@grossetetela.com">gtmayor@grossetetela.com</a>	225-648-2131
Demi Vorise	Mayor	Town of Maringouin	77510 Landry Dr., Maringouin, LA 70757	<a href="mailto:tom@spillwaycable.com">tom@spillwaycable.com</a>	225-625-2630
Mary S. Gulotta	Mayor	City of Plaquemine	23640 Railroad Ave., Plaquemine, LA 70764	<a href="mailto:mngulotta@plaquemine.org">mngulotta@plaquemine.org</a>	225-687-3116

Name	Title	Agency	Address	Email	Phone
Lawrence Badeaux	Mayor	Village of Rosedale	76535 Rosedale Rd., Rosedale, LA 70773	<a href="mailto:mayor@rosedale.brcoxmail.com">mayor@rosedale.brcoxmail.com</a>	225-648-2333
Lionel Johnson, Jr.	Mayor	City of St. Gabriel	P.O. Box 597, St. Gabriel, LA 70776	<a href="mailto:mayor@stgabriel.us">mayor@stgabriel.us</a>	225-642-9600
Gerald Jemarr Williams	Mayor	Town of White Castle	P.O. Box 488, White Castle, LA 70788	<a href="mailto:mayorofwcla@gmail.com">mayorofwcla@gmail.com</a>	225-545-3012
James "Jimbo" Cox	Major	Iberville Sheriff Office	P.O. Box 239, Plaquemine, LA 70765	<a href="mailto:jlc31569@yahoo.com">jlc31569@yahoo.com</a>	225-687-5100
Mark Ward	Director	Pointe Coupee OHSEP	Neighboring Community	<a href="mailto:mward@pcpso.org">mward@pcpso.org</a>	

### 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 Iberville Parish programs and planning.

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

Opportunities to integrate the requirements of this Hazard Mitigation Plan into other local planning mechanisms will continue to be identified through future meetings of the parish and jurisdictions, and through the five-year review process described in the Plan Maintenance section. 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 city/town plans that require specific planning and administrative tasks (e.g. risk assessment, plan amendments, ordinance revisions, capital improvement projects, etc.).

The members of the Iberville Parish Hazard Mitigation Steering Committee will remain charged with ensuring that the goals and strategies of new and updated local planning documents for their jurisdictions 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 HMGP, the U.S. Army Corps of Engineers (USACE or Corps), 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 2005 Hazard Mitigation Plan was also used in the planning process. Other existing parish and jurisdiction data and plans reviewed and/or incorporated into the planning process include those listed below:

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

Further information on other plans and capabilities reviewed can be found in the Capabilities Assessment, Section 3.

### Meeting Documentation and Public Outreach Activities

The following pages contain information from the meetings and public outreach activities conducted during this Hazard Mitigation Plan Update for Iberville Parish.

#### Meeting #1: Coordination Discussion

**Date:** October 2, 2015

**Location:** Email

**Purpose:** Discuss with the Hazard Mitigation Lead for the parish (OHSEP Director) the expectations and requirements of the Hazard Mitigation Plan Update process and to establish an initial project timeline.

**Public Initiation:** No

**Invitees Included:** Iberville Parish OHSEP, SDMI Staff

## Meeting #2: Hazard Mitigation Plan Update Kick-Off

**Date:** January 27, 2016**Location:** Plaquemine, Louisiana**Purpose:** Discuss the expectations and requirements of the Hazard Mitigation Plan Update process and to establish and initial project timeline with the parish's Hazard Mitigation Plan Steering Committee. Assign each individual jurisdiction and the parish data collection for the plan update.**Public Initiation:** No**Invitees Included:**

Name	Title	Agency
Laurie Doiron	Director	Iberville OHSEP/911
J. "Mitchell" Ourso, Jr.	Parish President	Iberville Parish Council
Mark Migliacio	Director	Iberville Parish Public Works
Michael Chauffe	Mayor	Village of Grosse Tete
Demi Vorise	Mayor	Town of Maringouin
Mary S. Gulotta	Mayor	City of Plaquemine
Lawrence Badeaux	Mayor	Village of Rosedale
Lionel Johnson, Jr.	Mayor	City of St. Gabriel
Gerald Jemarr Williams	Mayor	Town of White Castle
James "Jimbo" Cox	Major	Iberville Sheriff Office
Mark Ward	Director	Pointe Coupee OHSEP

## Meeting #3: Risk Assessment Overview

**Date:** April 13, 2016**Location:** Plaquemine, LA**Purpose:** Members of the Hazard Mitigation Plan Update Steering Committee were invited and were presented the results of the most recent risk assessment and an overview of the public meeting presentation during this overview. The assessment was conducted based on hazards identified during previous plans.**Public Initiation:** No**Invitees Included:**

Name	Title	Agency
Laurie Doiron	Director	Iberville OHSEP/911
J. "Mitchell" Ourso, Jr.	Parish President	Iberville Parish Council
Mark Migliacio	Director	Iberville Parish Public Works
Michael Chauffe	Mayor	Village of Grosse Tete
Demi Vorise	Mayor	Town of Maringouin
Mary S. Gulotta	Mayor	City of Plaquemine
Lawrence Badeaux	Mayor	Village of Rosedale
Lionel Johnson, Jr.	Mayor	City of St. Gabriel
Gerald Jemarr Williams	Mayor	Town of White Castle
James "Jimbo" Cox	Major	Iberville Sheriff Office
Mark Ward	Director	Pointe Coupee OHSEP

## Meeting #4: Public Meeting

**Date:** April 13, 2016**Location:** Plaquemine, LA**Purpose:** The public meeting allowed the public and community stakeholders to participate and provide input into the hazard mitigation planning process. Maps of the Iberville Parish communities were provided for the meeting attendees to identify specific areas where localized hazards occur.**Public Initiation:** Yes**Invitees Included:**

Name	Title	Agency
Laurie Doiron	Director	Iberville OHSEP/911
J. "Mitchell" Ourso, Jr.	Parish President	Iberville Parish Council
Mark Migliacio	Director	Iberville Parish Public Works
Michael Chauffe	Mayor	Village of Grosse Tete
Demi Vorise	Mayor	Town of Maringouin
Mary S. Gulotta	Mayor	City of Plaquemine
Lawrence Badeaux	Mayor	Village of Rosedale
Lionel Johnson, Jr.	Mayor	City of St. Gabriel
Gerald Jemarr Williams	Mayor	Town of White Castle
James "Jimbo" Cox	Major	Iberville Sheriff Office
Mark Ward	Director	Pointe Coupee OHSEP

**\*\*Subject Matter Experts from parish government were present to answer specific questions about proposed projects from any citizens\*\***

**Meeting Public Notice**

IBERVILLE PARISH OFFICE OF HOMELAND SECURITY &amp; EMERGENCY PREPAREDNESS

**PUBLIC MEETING NOTICE****Iberville Parish to hold Public Meetings for Hazard Mitigation Plan Update**

Plaquemine, LA – Iberville Parish Office of Homeland Security & Emergency Preparedness is in the process of updating the Iberville Parish Hazard Mitigation Plan and are required to hold public meetings on the plan update. The Public meeting will be held from 10:00am – 11:00am on Wednesday, April 13th, at the Iberville Parish OHSEP/EOC.

Natural hazards have the potential to cause property loss, loss of life, economic hardship, and threats to public health and safety. While an important aspect of emergency management deals with disaster recovery (the actions that a community takes to repair damages), an equally important aspect of emergency management involves hazard mitigation - sustained actions taken to reduce long-term risk to life and property. They are things we do today to be more protected in the future. For example, elevating buildings in flood hazard areas, installing hurricane clips and storm shutters, relocating critical facilities out of hazard areas, using fire-resistant construction materials in wildfire hazard areas, etc. Hazard mitigation actions are essential to breaking the typical disaster cycle of damage, reconstruction, and repeated damage. With careful selection, they can be long-term, cost-effective means of reducing risk and helping to create a more sustainable and disaster-resilient community.

A hazard mitigation plan describes an area's vulnerability to the various natural hazards that are typically present, along with an array of actions and projects for reducing key risks. While natural disasters cannot be prevented from occurring, the continued implementation of mitigation strategies identified in the plan will gradually, but steadily, make our communities more sustainable and disaster-resilient.

The Disaster Mitigation Act of 2000 (DMA 2000) requires all states and local governments to have a hazard mitigation plan in order to be eligible to apply for certain types of federal hazard mitigation project grants. Hazard mitigation plans must be: (a) implemented on an ongoing basis, and (b) updated every five years to ensure that they remain applicable representations of local risk and locally-preferred risk reduction strategies.

Iberville Parish is in the beginning stages of updating its hazard mitigation plan. Public meeting will be held on April 13th for all citizens interested in learning about and participating in discussions concerning the Iberville Parish Hazard Mitigation Plan.

Residents of Iberville 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 <https://www.surveymonkey.com/r/iberville>

For more information, please contact: Laurie Doiron at [ldoiron@ibervilleparish.com](mailto:ldoiron@ibervilleparish.com)

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

**Date:** Ongoing throughout planning process

**Location:** Web Survey

**Public Initiation:** Yes

#### Outreach Activity #2: Incident Questionnaire

**Date:** Public Meeting Activity

**Location:** Public Meeting

**Public Initiation:** Yes

#### Outreach Activity #3: Mapping Activities

Public meeting attendees were asked to identify areas on jurisdictional maps provided that were “problem areas”. They were also asked to indicate any areas of new development. This activity gave the public an opportunity to interact with SDMI’s GIS Mapping section, as well as provide valuable input on areas that may flood repeatedly during rain events that may not get reported to local emergency managers as significant events.

#### Public Plan Review Documentation

The Iberville Parish Hazard Mitigation Draft Plan was placed on the Iberville Parish website to collect comments and feedback from the public. No feedback or comments were received. This outreach provided the public an opportunity to comment on the plan during the drafting stage and prior to plan approval.

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## Appendix B: Plan Maintenance

### Purpose

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

### Monitoring, Evaluating, and Updating the Plan

The Iberville Parish Planning Committee will be responsible for 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's comprehensive or capital improvement plans. 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 library and parish website. This section describes the whole update process which includes the following:

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

### Responsible Parties

Iberville Parish has developed a method to ensure that a regular review and update of the Hazard Mitigation Plan occurs. This will be the responsibility of the steering 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 steering committee.

Although the people filling the positions may change from year to year, the parish and its stakeholders will have representatives on the Steering Committee. The future Steering Committee will continue to be comprised of the same job functions as currently evident in the Steering 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

Iberville Parish has developed a method to ensure monitoring, evaluating, and updating of the HMP occurs during the five-year cycle of the plan. The planning committee will 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 Iberville 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 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 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 and objective 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) Are there any procedures that can be done more efficiently
- 4) Are there more ways to gain more diverse and widespread cooperation
- 5) Are there 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 indicate a substantial change in hazard profile and risk assessment in the parish.

Additionally, the public will be canvassed to solicit public input to continue Iberville 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 Public Library.

The review by the steering 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 Steering 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.

### 2016 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 2016 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 Iberville Parish Hazard Mitigation Plan Steering Committee and participating jurisdictions to determine additional implementation procedures when appropriate. This may include integrating the requirements of the Iberville Parish Hazard Mitigation Plan into each jurisdiction's planning documents, processes, or mechanisms as follows:

- Ordinances, Resolutions, Regulations
- Floodplain Ordinances
- Emergency Operations Plan
- Comprehensive Master Plan (Entire Parish)
- Economic Development Plan
- Stormwater Management Plan
- Continuity of Operations Plan
- Capital Improvement Plan
- Transportation Plan

Opportunities to integrate the requirements of this plan into other local planning mechanisms will continue to be identified through future meetings of the Iberville Parish Hazard Mitigation Steering 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.). The members of the steering committee will meet with Department Heads to discuss what should be included in the changes that are necessary before the changes are introduced to the city council or police jury meetings. Steering

committee members will remain charged with ensuring that the goals and strategies of new and updated local planning documents for their jurisdictions or agencies are consistent with the goals and actions of the Iberville Parish Hazard Mitigation Plan, and will not contribute to increased hazard vulnerability within the parish.

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 steering committee to be the most effective and appropriate method to ensure implementation of parish and local hazard mitigation actions.

On behalf of the jurisdictions of Unincorporated Iberville Parish, Village of Grosse Tete, Town of Maringouin, City of Plaquemine, Village of Rosedale, City of St. Gabriel, and Town of White Castle, Iberville 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 steering committee member and jurisdiction representation throughout the planning process as described above:

**Unincorporated Iberville Parish**

Comprehensive Master Plan/Updated as needed/ Iberville Parish Government  
Local Emergency Operations Plan/Updated as needed/ Iberville Parish OHSEP  
Capital Improvement Plan/Updated as needed/ Iberville Parish Government  
Economic Development Plan/Updated as needed/ Iberville Parish Government  
Continuity of Operations Plan/Updated as needed/ Iberville Parish OHSEP  
Transportation Plan/Updated as needed/ Iberville Parish Government  
Stormwater Management Plan/Updated as needed/ Iberville Parish Government

**Village of Grosse Tete**

Local Emergency Operations Plan/Updated as needed/ Iberville Parish OHSEP and Mayor of Grosse Tete

**Town of Maringouin**

There are no additional plans within this jurisdiction for the Hazard Mitigation Plan to be integrated.

**City of Plaquemine**

Capital Improvement Plan/Updated as needed/ Iberville Parish Government and Mayor of Plaquemine  
Economic Development Plan/Updated as needed/ Iberville Parish Government and Mayor of Plaquemine  
Local Emergency Operations Plan/Updated as needed/ Iberville Parish OHSEP and Mayor of Plaquemine  
Continuity of Operations Plan/Updated as needed/ Iberville Parish OHSEP and Mayor of Plaquemine  
Stormwater Management Plan/Updated as needed/ Iberville Parish Government and Mayor of Plaquemine

**Village of Rosedale**

Local Emergency Operations Plan/Updated as needed/ Iberville Parish OHSEP and Mayor of Rosedale

**City of St. Gabriel**

Local Emergency Operations Plan/Updated as needed/ Iberville Parish OHSEP and Mayor of St. Gabriel

**Town of White Castle**

Comprehensive Master Plan/Updated as needed/Iberville Parish Government and Mayor of White Castle

Capital Improvement Plan/Updated as needed/ Iberville Parish Government and Mayor of White Castle

Economic Development Plan/Updated as needed/ Iberville Parish Government and Mayor of White Castle

Redevelopment Plan/Updated as needed/ Iberville Parish Government and Mayor of White Castle

**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 will include at least one of the following:

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

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## Appendix C: Essential Facilities

## Iberville Parish Essential Facilities – All Jurisdictions

Iberville Unincorporated Essential Facilities								
Type	Name	Flooding	Sinkholes	Hail	Lightning	Wind	Tornado	Tropical Cyclones
Fire and Rescue	Bayou Blue Fire Rescue			X	X	X	X	X
	Bayou Blue Volunteer Fire Department	X		X	X	X	X	X
	Bayou Goula Fire Station			X	X	X	X	X
	Bayou Pigeon Fire Department 1	X		X	X	X	X	X
	Bayou Pigeon Volunteer Fire Station 2	X		X	X	X	X	X
	Bayou Sorrel Fire Department Station 2	X		X	X	X	X	X
	East Iberville Volunteer Fire Station 3			X	X	X	X	X
	White Castle Fire Department Station 3			X	X	X	X	X
Government	Iberville Parish Council on Aging			X	X	X	X	X
	Maintenance Facility			X	X	X	X	X
	Parks and Recreation Maintenance Facility			X	X	X	X	X
	LDOT - Maintenance Unit			X	X	X	X	X
Public Health	Iberville Medical Building			X	X	X	X	X
	River West Medical Complex Bldg B			X	X	X	X	X
Schools	Crescent Elementary & Junior High			X	X	X	X	X
	Dorseyville Elementary			X	X	X	X	X
	Iberville Math, Science, & Arts Academy			X	X	X	X	X

Grosse Tete Essential Facilities								
Type	Name	Flooding	Sinkholes	Hail	Lightning	Wind	Tornado	Tropical Cyclones
Fire and Rescue	Grosse Tete Fire Department			X	X	X	X	X
Government	Grosse Tete Town Hall			X	X	X	X	X
Law Enforcement	Village of Grosse Tete Police			X	X	X	X	X

Maringouin Essential Facilities								
Type	Name	Flooding	Sinkholes	Hail	Lightning	Wind	Tornado	Tropical Cyclones
Fire and Rescue	Fire Department			X	X	X	X	X
	Maringouin Volunteer Fire Department			X	X	X	X	X
Government	Maringouin Town Hall			X	X	X	X	X
Law Enforcement	Iberville Parish Sheriff's Office			X	X	X	X	X
	Maringouin Police Department			X	X	X	X	X
Public Health	Maringouin Medical Center			X	X	X	X	X

Plaquemine Essential Facilities								
Type	Name	Flooding	Sinkholes	Hail	Lightning	Wind	Tornado	Tropical Cyclones
Fire and Rescue	Central Fire Station			X	X	X	X	X
	Plaquemine Fire Department			X	X	X	X	X
Government	Iberville Chamber of Commerce			X	X	X	X	X
	Iberville Parish Arc Center			X	X	X	X	X
	Iberville Parish Council of Aging			X	X	X	X	X
	Council Records & Storage			X	X	X	X	X
	Iberville Parish Courthouse			X	X	X	X	X
	Office of Family Support			X	X	X	X	X
	Iberville Parish School Board			X	X	X	X	X
	LA Workforce Commission			X	X	X	X	X
	Municipal Utilities			X	X	X	X	X
	Office of Motor Vehicles			X	X	X	X	X
Plaquemine City Hall			X	X	X	X	X	
Law Enforcement	City of Plaquemine Police Station			X	X	X	X	X
Corrections	Iberville Parish Jail			X	X	X	X	X
Public Health	Maringouin Medical Center			X	X	X	X	X
Schools	Faith and Abundance Christian Academy			X	X	X	X	X
	Iberville Elementary School			X	X	X	X	X
	St. John Elementary School			X	X	X	X	X
	St. John Evangelist High School			X	X	X	X	X

Rosedale Essential Facilities								
Type	Name	Flooding	Sinkholes	Hail	Lightning	Wind	Tornado	Tropical Cyclones
Fire and Rescue	Rosedale Volunteer Fire Department			X	X	X	X	X
Government	Rosedale Town Hall			X	X	X	X	X
Law Enforcement	Rosedale Police Department			X	X	X	X	X
Schools	North Iberville Elementary/High School			X	X	X	X	X

St. Gabriel Essential Facilities								
Type	Name	Flooding	Sinkholes	Hail	Lightning	Wind	Tornado	Tropical Cyclones
Fire and Rescue	East Iberville Fire Department Station 1			X	X	X	X	X
	East Iberville Volunteer Fire Department			X	X	X	X	X
Government	Army Corps of Engineers			X	X	X	X	X
	St. Gabriel City Hall			X	X	X	X	X
Law Enforcement	Iberville Sheriff's Office Substation			X	X	X	X	X
	St. Gabriel Police Department			X	X	X	X	X
Corrections	LA Correctional Institute for Women	X	X	X	X	X	X	X
	Elayn Hunt Correctional Center			X	X	X	X	X
Schools	East Iberville Elementary			X	X	X	X	X
	East Iberville High			X	X	X	X	X
	Math, Science, and Arts Academy			X	X	X	X	X

White Castle Essential Facilities								
Type	Name	Flooding	Sinkholes	Hail	Lightning	Wind	Tornado	Tropical Cyclones
Fire and Rescue	White Castle Fire Department			X	X	X	X	X
Government	Council on Aging							
	White Castle City Hall			X	X	X	X	X
Law Enforcement	White Castle Police Department			X	X	X	X	X
Schools	White Castle High School			X	X	X	X	X

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## Appendix D: Plan Adoption

**RESOLUTION****A RESOLUTION ADOPTING THE IBERVILLE PARISH HAZARD MITIGATION PLAN 2016**

WHEREAS the Parish of Iberville Parish has prepared a multi-hazard mitigation plan hereby known as the Iberville Parish Mitigation Plan 2016 in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS TOWN OF MARINGOUIN has participated in the process to prepare a DMA compliant Hazard Mitigation Plan based in the FEMA guidance available in the How to Guides;

WHEREAS TOWN OF MARINGOUIN is participating in the Hazard Mitigation Plan prepared by the Iberville Parish Government under the oversight of a Steering Committee comprised of Parish-Wide representatives;

WHEREAS Iberville Parish and local city representatives and governments have participated in the mitigation planning process;

WHEREAS appropriate opportunity for input by public and community officials has been provided through meeting notices, open meetings and availability of draft documents;

WHEREAS the Plan has been recommended for adoption by the steering committee;

WHEREAS adoption of the Plan is required prior to further consideration for FEMA funding under the following programs:

- Pre-Disaster Mitigation
- Hazard Mitigation Grant Program
- Flood Mitigation Assistance Program

Therefore, the TOWN OF MARINGOUIN does hereby adopt the Iberville Parish Hazard Mitigation Plan Update 2016.

ADOPTED by a vote of 4 in favor and 0 against, and 0 abstaining, on this the 3<sup>rd</sup> day of October 2016

  
Mayor

  
Clerk

**CERTIFICATE**

I, Carolyn Marino, Clerk, do hereby certify that the foregoing resolution is a true and exact copy adopted by the TOWN OF MARINGOUIN at a meeting thereof legally held on the 3<sup>rd</sup> day of October, 2016

**RESOLUTION****A RESOLUTION TO ADOPT THE IBERVILLE PARISH HAZARD MITIGATION PLAN 2016**

WHEREAS, the Parish of Iberville has prepared a multi-hazard mitigation plan hereby known as the Iberville Parish Mitigation Plan 2016 in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS, the Village of Rosedale has participated in the process to prepare a DMA compliant Hazard Mitigation Plan based in the FEMA guidance available in the How to Guides; and

WHEREAS, the Village of Rosedale is participating in the Hazard Mitigation Plan prepared by the Iberville Parish Government under the oversight of a Steering Committee comprised of Parish-Wide representatives; and

WHEREAS, Iberville Parish and local municipal representatives and governments have participated in the mitigation planning process; and

WHEREAS, appropriate opportunity for input by public and community officials has been provided through meeting notices, open meetings and availability of draft documents; and

WHEREAS, the Plan has been recommended for adoption by the steering committee; and

WHEREAS, adoption of the Plan is required prior to further consideration for FEMA funding under the following programs:

Pre-Disaster Mitigation  
Hazard Mitigation Grant Program  
Flood Mitigation Assistance Program

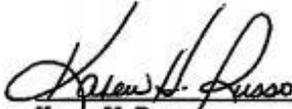
THEREFORE, BE IT RESOLVED by the Board of Aldermen of the Village of Rosedale that the Village of Rosedale does hereby adopt the Iberville Parish Hazard Mitigation Plan Update 2016.

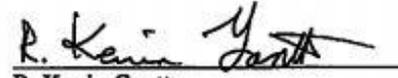
The above Resolution has been read and considered, and upon a motion by Alderman Doiron, seconded by Alderman Alexander, and a vote being taken, the following result was had:

YEAS: Gantt, Alexander, Doiron  
NAYS: None

WHEREUPON, the presiding officer declared the Resolution duly adopted on this 11<sup>th</sup> day of October, 2016.

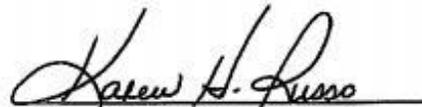
ATTESTED:

  
\_\_\_\_\_  
Karen H. Russo  
Village Clerk

  
\_\_\_\_\_  
R. Kevin Gantt  
Mayor Pro Tempore

CERTIFICATE

I, Karen H. Russo, Village Clerk, do hereby certify that the foregoing Resolution is a true and exact copy adopted by the Board of Aldermen of the Village of Rosedale at a meeting thereof legally held on October 11, 2016.

  
\_\_\_\_\_  
Karen H. Russo, Clerk  
Village of Rosedale

**RESOLUTION****A RESOLUTION ADOPTING THE IBERVILLE PARISH HAZARD MITIGATION PLAN 2016**

**WHEREAS** the Parish of Iberville Parish has prepared a multi-hazard mitigation plan hereby known as the Iberville Parish Mitigation Plan 2016 in accordance with the Disaster Mitigation Act of 2000; and

**WHEREAS** Village of Grosse Tete has participated in the process to prepare a DMA compliant Hazard Mitigation Plan based in the FEMA guidance available in the How to Guides;

**WHEREAS** Village of Grosse Tete is participating in the Hazard Mitigation Plan prepared by the Iberville Parish Government under the oversight of a Steering Committee comprised of Parish-Wide representatives;

**WHEREAS** Iberville Parish and local city representatives and governments have participated in the mitigation planning process;

**WHEREAS** appropriate opportunity for input by public and community officials has been provided through meeting notices, open meetings and availability of draft documents;

**WHEREAS** the Plan has been recommended for adoption by the steering committee;

**WHEREAS** adoption of the Plan is required prior to further consideration for FEMA funding under the following programs:

- Pre-Disaster Mitigation
- Hazard Mitigation Grant Program
- Flood Mitigation Assistance Program

Therefore, the Village of Grosse Tete does hereby adopt the Iberville Parish Hazard Mitigation Plan Update 2016.

ADOPTED by a vote of 3 for, (Alderman Kyle Booksh, Alderwoman Jeanie David and Alderman Marcus Hill) in favor and 0 against, and 0 abstaining, on this the 13<sup>th</sup> day of October 2016.

**CERTIFICATE**

I, Michael Chauffe, Mayor, do hereby certify that the foregoing resolution is a true and exact copy adopted by the Grosse Tete Board of Alderman at a meeting thereof legally held on the 13<sup>th</sup> day of October, 2016.



Michael Chauffe, Mayor  
Village of Grosse Tete

Selectman Lindon A. Rivet, Jr. moved, seconded by Selectman Ralph J. Stassi, Jr.:

A RESOLUTION ADOPTING THE IBERVILLE PARISH HAZARD MITIGATION PLAN 2016

**WHEREAS**, the Parish of Iberville Parish has prepared a multi-hazard mitigation plan hereby known as the Iberville Parish Mitigation Plan 2016 in accordance with the Disaster Mitigation Act of 2000; and

**WHEREAS**, the City of Plaquemine has participated in the process to prepare a DMA compliant Hazard Mitigation Plan based in the FEMA guidance available in the How to Guides;

**WHEREAS**, the City of Plaquemine is participating in the Hazard Mitigation Plan prepared by the Iberville Parish Government under the oversight of a Steering Committee comprised of Parish-Wide representatives;

**WHEREAS**, Iberville Parish and local city representatives and governments have participated in the mitigation planning process;

**WHEREAS**, appropriate opportunity for input by public and community officials has been provided through meeting notices, open meetings and availability of draft documents;

**WHEREAS**, the Plan has been recommended for adoption by the steering committee;

**WHEREAS**, adoption of the Plan is required prior to further consideration for FEMA funding under the following programs:

- Pre-Disaster Mitigation
- Hazard Mitigation Grant Program
- Flood Mitigation Assistance Program

**THEREFORE**, the City of Plaquemine does hereby adopt the Iberville Parish Hazard Mitigation Plan Update 2016.

The foregoing was adopted by the following votes:

Yeas: Lindon A. Rivet, Jr., Oscar S. Mellion, Ralph J. Stassi, Jr., Michael W. Rivet and Jimmie Randle, Jr.

Nays: None.

Absent: Timothy L. Martinez.

**CERTIFICATE**

I, Roxane M. Richard, hereby certify that I am the duly qualified Assistant City Clerk of the City of Plaquemine, Parish of Iberville, State of Louisiana.

I further certify that the above is a true copy of the resolution adopted by the City of Plaquemine, through its Mayor and Board of Selectmen in a Special Meeting, on the 25<sup>th</sup> day of October, 2016.

IN FAITH WHEREOF, witness my official signature and the impress of the official seal of the City of Plaquemine, Parish of Iberville, State of Louisiana, on this 27<sup>th</sup> day of October, 2016.



CITY OF PLAQUEMINE

*Roxane M. Richard*

Roxane M. Richard  
Assistant City Clerk

**A RESOLUTION ADOPTING THE IBERVILLE PARISH HAZARD MITIGATION PLAN UPDATE 2016**

WHEREAS, the Parish of Iberville, State of Louisiana, has prepared a multi-hazard mitigation plan hereby known as the Iberville Parish Mitigation Plan 2016 in accordance with the Disaster Mitigation Act (DMA) of 2000; and

WHEREAS, the Town of White Castle, Louisiana has taken part in the process to prepare a DMA compliant Hazard Mitigation Plan using the FEMA guidance available in the How to Guides; and

WHEREAS, the Town of White Castle, Louisiana is participating in the Hazard Mitigation Plan prepared by the Iberville Parish Government under the oversight of a Steering Committee comprised of Parish-Wide representatives; and

WHEREAS, Iberville Parish and local city representatives and governments have participated in the mitigation planning process; and

WHEREAS, appropriate opportunity for input by public and community officials has been provided through meeting notices, open meetings and availability of draft documents; and

WHEREAS, the Hazard Mitigation Plan has been recommended for adoption by the Steering Committee; and

WHEREAS, adoption of the Plan is required prior to further consideration for FEMA funding under the following programs:

- Pre-Disaster Mitigation
- Hazard Mitigation Grant Program
- Flood Mitigation Assistance Program.

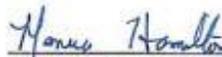
Now Therefore Be It Resolved that the Board of Aldermen for the Town of White Castle, Louisiana does hereby adopt the Iberville Parish Hazard Mitigation Plan Update 2016.

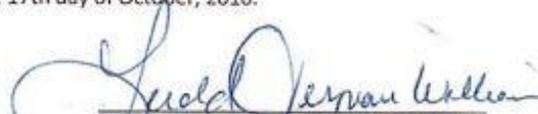
The Resolution was adopted on a motion by Alderman **Barbara O'Bear** and seconded by Alderman **Kipp Knight**

Roll Call Vote: 5 yeas: Aldermen Elliot Martin, Alderwoman Shalanda Allen, Alderman Broderick Landry, Alderman Kipp Knight and Alderwoman Barbara O'Bear ; 0 nays: ; and 0 abstentions.

**CERTIFICATE**

We, the duly qualified and acting officers of the Board of Aldermen for the Town of White Castle, Louisiana do hereby certify that the foregoing resolution is a true and exact copy adopted by the Board at a meeting thereof legally held on the 17th day of October, 2016.

  
\_\_\_\_\_  
Mónica Hamilton, Clerk  
Town of White Castle, LA

  
\_\_\_\_\_  
The Honorable Gerald J. Williams, Mayor  
Town of White Castle, LA

Lionel Johnson, Jr.  
Mayor



*City Council:*  
Deborah Alexander  
Freddie "Carl" Frazier, Sr.  
Ronald Grace  
Melvin Hasten, Sr.  
Kelvin York, Sr.

*Police Chief:*  
Kevin Ambeau, Sr.

**CITY OF ST. GABRIEL**

*"A City of Pride, Progress & Possibilities"*

**RESOLUTION 2016-1020-0001**

**A RESOLUTION ADOPTING THE IBERVILLE PARISH HAZARD MITIGATION PLAN 2016**

**WHEREAS** the Parish of Iberville Parish has prepared a multi-hazard mitigation plan hereby known as the Iberville Parish Mitigation Plan 2016 in accordance with the Disaster Mitigation Act of 2000; and

**WHEREAS** the City of City Gabriel has participated in the process to prepare a DMA compliant Hazard Mitigation Plan based in the FEMA guidance available in the How to Guides;

**WHEREAS** the City of City Gabriel is participating in the Hazard Mitigation Plan prepared by the Iberville Parish Government under the oversight of a Steering Committee comprised of Parish-Wide representatives;

**WHEREAS** Iberville Parish and local city representatives and governments have participated in the mitigation planning process;

**WHEREAS** appropriate opportunity for input by public and community officials has been provided through meeting notices, open meetings and availability of draft documents;

**WHEREAS** the Plan has been recommended for adoption by the steering committee;

**WHEREAS** adoption of the Plan is required prior to further consideration for FEMA funding under the following programs:

- Pre-Disaster Mitigation
- Hazard Mitigation Grant Program
- Flood Mitigation Assistance Program

**THEREFORE**, On a Motion by Councilman Frazier and seconded by Councilwoman Alexander on a unanimous decision with none absent the City of City Gabriel does hereby adopt the Iberville Parish Hazard Mitigation Plan Update 2016.

  
Lionel Johnson, Jr.  
Mayor

**CERTIFICATE**

I, Leman Raphael, City Clerk, do hereby certify that the foregoing resolution is a true and exact copy adopted by the City of St. Gabriel Council at a meeting thereof legally held on the 20<sup>th</sup> day of October, 2016.

  
(Signature)

P.O. Box 597 • 5035 Iberville Street • St. Gabriel, LA • Tel: (225) 642-9600 • Fax: (225) 642-9670 • Website:  
[www.cityofstgabriel.us](http://www.cityofstgabriel.us)

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STATE OF LOUISIANA  
PARISH OF IBERVILLE

RESOLUTION IPC# 2016-013

**RESOLUTION ADOPTING THE IBERVILLE PARISH  
HAZARD MITIGATION PLAN 2016**

The following resolution was introduced by Councilman Reeves, and seconded by Councilman Dominique.

WHEREAS the Parish of Iberville Parish has prepared a multi-hazard mitigation plan hereby known as the Iberville Parish Mitigation Plan 2016 in accordance with the Disaster Mitigation Act of 2000; and

WHEREAS the Iberville Parish Council has participated in the process to prepare a DMA compliant Hazard Mitigation Plan based in the FEMA guidance available in the How to Guides;

WHEREAS the Iberville Parish Council is participating in the Hazard Mitigation Plan prepared by the Iberville Parish Government under the oversight of a Steering Committee comprised of Parish-Wide representatives;

WHEREAS Iberville Parish and local city representatives and governments have participated in the mitigation planning process;

WHEREAS appropriate opportunity for input by public and community officials has been provided through meeting notices, open meetings and availability of draft documents;

WHEREAS the Plan has been recommended for adoption by the steering committee;

WHEREAS adoption of the Plan is required prior to further consideration for FEMA funding under the following programs:

- Pre-Disaster Mitigation
- Hazard Mitigation Grant Program
- Flood Mitigation Assistance Program

Therefore, the Iberville Parish Council does hereby adopt the Iberville Parish Hazard Mitigation Plan Update 2016.

The foregoing resolution having been submitted to a vote was adopted on the 18<sup>th</sup> day of October, 2016, by the following vote on roll call:

YEAS: Ourso, Dominique, Jackson, Reeves, Lewis, Markins, Bradford, Kelley, Vallet.

NAYS: None.

ABSTAIN: None.

ABSENT: Taylor, Lewis, Morgan.

The resolution was declared adopted by the Chairman on October 18, 2016.

IBERVILLE PARISH COUNCIL

BY:   
MATTHEW H. JEWELL, CHAIRMAN

ATTEST:

  
KIRSHA D. BARKER, CLERK

CERTIFICATE

I, Kirsha D. Barker, do hereby certify that I am the duly qualified and appointed Council Clerk of the Parish Council, Parish of Iberville, State of Louisiana.

I further certify that the above constitutes a true and correct copy of a resolution adopted by the Iberville Parish Council in regular session on the 18<sup>th</sup> day of October, 2016.

IN FAITH WHEREOF, witness my official signature and the impress of the official seal of the Parish of Iberville, State of Louisiana, on this 18<sup>th</sup> day of October, 2016.

  
KIRSHA D. BARKER  
IBERVILLE PARISH COUNCIL CLERK

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## Appendix E: State Required Worksheets

During the planning process (Appendix A) the Hazard Mitigation Plan Update Steering Committee was provided state-required plan update process worksheets to be filled out by each jurisdiction. The worksheets were presented at the Kickoff Meeting by the contractor as tools for assisting in the update of the Hazard Mitigation Plan. The plan update worksheets allowed for collection of information such as planning team members, community capabilities, critical infrastructure and vulnerable populations and NFIP information. The following pages contain documentation of the worksheets.

### Mitigation Planning Team

Name	Title	Agency	Address	Email	Phone
Laurie Doiron	Director	Iberville OHSEP/911	58030 Meriam St., Plaquemine, LA 70764	<a href="mailto:ldoiron@ibervilleparish.com">ldoiron@ibervilleparish.com</a>	225-687-5140
J. "Mitchell" Ourso, Jr.	Parish President	Iberville Parish Council	58050 Meriam St., Plaquemine, LA 70764	<a href="mailto:jburleigh@ibervilleparish.com">jburleigh@ibervilleparish.com</a>	225-687-5190
Mark Migliacio	Director	Iberville Parish Public Works	59705 Bayou Rd., Plaquemine, LA 70764	<a href="mailto:mmigliacio@ibervilleparish.com">mmigliacio@ibervilleparish.com</a>	225-776-3053
Michael Chauffe	Mayor	Village of Grosse Tete	18125 Willow St., Grosse Tete, LA 70740	<a href="mailto:gtmayor@grossetetela.com">gtmayor@grossetetela.com</a>	225-648-2131
Demi Vorise	Mayor	Town of Maringouin	77510 Landry Dr., Maringouin, LA 70757	<a href="mailto:tom@spillwaycable.com">tom@spillwaycable.com</a>	225-625-2630
Mary S. Gulotta	Mayor	City of Plaquemine	23640 Railroad Ave., Plaquemine, LA 70764	<a href="mailto:msgulotta@plaquemine.org">msgulotta@plaquemine.org</a>	225-687-3116
Lawrence Badeaux	Mayor	Village of Rosedale	76535 Rosedale Rd., Rosedale, LA 70773	<a href="mailto:mayor@rosedale.brcoxmail.com">mayor@rosedale.brcoxmail.com</a>	225-648-2333
Lionel Johnson, Jr.	Mayor	City of St. Gabriel	P.O. Box 597, St. Gabriel, LA 70776	<a href="mailto:mayor@stgabriel.us">mayor@stgabriel.us</a>	225-642-9600
Gerald Jemarr Williams	Mayor	Town of White Castle	P.O. Box 488, White Castle, LA 70788	<a href="mailto:mayorofwcla@gmail.com">mayorofwcla@gmail.com</a>	225-545-3012
James "Jimbo" Cox	Major	Iberville Sheriff Office	P.O. Box 239, Plaquemine, LA 70765	<a href="mailto:jlc31569@yahoo.com">jlc31569@yahoo.com</a>	225-687-5100
Mark Ward	Director	Pointe Coupee OHSEP	Neighboring Community	<a href="mailto:mward@pcpsso.org">mward@pcpsso.org</a>	

## Capability Assessment

## Iberville Unincorporated

<b>Planning and Regulatory</b>		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
<b>Iberville Unincorporated Areas</b>		
<b>Plans</b>	<b>Yes/No</b>	<b>Comments</b>
Comprehensive / Master Plan	Yes	
Capital Improvements Plan	Yes	
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan	Yes	
Transportation Plan	Yes	
Stormwater Management Plan	Yes	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	No	
<b>Building Code, Permitting and Inspections</b>		
Building Code	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	
Site plan review requirements	Yes	
<b>Land Use Planning and Ordinances</b>		
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	No	
Other	No	
<b>Administration and Technical</b>		

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

Administration	Yes/No	Comments
Planning Commission	Yes	
Mitigation Planning Committee	Yes	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	
<b>Staff</b>		
Chief Building Official	Yes - Independent Contractor	
Floodplain Administrator	Yes	
Emergency Manager	Yes	
Community Planner	No	
Civil Engineer	No	Contract
GIS Coordinator	Yes	
Grant Writer	No	
Other	No	
<b>Technical</b>		
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	
Hazard Data & Information	Yes	
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	Utility Assistance Program

## 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 Emergency Planning Committee
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	Yes	Emergency Guidebooks/Newsletter/Utility Department
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	
Other	No	

## Village of Grosse Tete

**Planning and Regulatory**

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

<b>Grosse Tete</b>		
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	
<b>Building Code, Permitting and Inspections</b>		
Building Code	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	
Site plan review requirements	Yes	
<b>Land Use Planning and Ordinances</b>		
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	No	
<b>Administration and Technical</b>		

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)	Yes	Assistance from Iberville Parish
<b>Staff</b>		
Chief Building Official	No	WBR Community Development
Floodplain Administrator	Yes	Pam George
Emergency Manager	Yes	Michael Chauffe
Community Planner	No	
Civil Engineer	Yes	Hess Engineers, Jessie Thompson
GIS Coordinator	No	
Grant Writer	Yes	Janet Marionneaux
Other	No	
<b>Technical</b>		
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Provided by Iberville Parish
Hazard Data & Information	No	
Grant Writing	Yes	Janet Marionneaux
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	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)	No	
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	Yes	
Public/Private partnership initiatives addressing disaster-related issues	Yes	Louisiana Municipal Association
Other	No	

## Town of Maringouin

**Planning and Regulatory**

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

<b>Maringouin</b>		
Plans	Yes/No	Comments
Comprehensive / Master Plan	no	
Capital Improvements Plan	no	
Economic Development Plan	no	
Local Emergency Operations Plan	no	use Parish plan
Continuity of Operations Plan	no	
Transportation Plan	no	
Stormwater Management Plan	no	Parish
Community Wildfire Protection Plan	no	
Other plans (redevelopment, recovery, coastal zone management)	No	Mayor uses the Parish plans
<b>Building Code, Permitting and Inspections</b>		
Building Code	Yes	permits handles by IBTS
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	handled by IBTS
Fire Department ISO/PIAL rating	no	
Site plan review requirements	Yes	IBTS
<b>Land Use Planning and Ordinances</b>		
Zoning Ordinance	no	
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	No	
<b>Administration and Technical</b>		

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)	Yes	Parish
<b>Staff</b>		
Chief Building Official	no	
Floodplain Administrator	Yes	Utilizes parish floodplain administrator
Emergency Manager	no	
Community Planner	no	
Civil Engineer	no	
GIS Coordinator	no	
Grant Writer	no	
Other	no	
<b>Technical</b>		
Warning Systems / Service (Reverse 911, outdoor warning signals)	no	Parish
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	yes, Facility Planning
Authority to levy taxes for specific purposes	no	
Fees for water, sewer, gas, or electric services	Yes	Water, sewer & gas
Impact fees for new development	no	
Stormwater Utility Fee	no	
Community Development Block Grant (CDBG)	No	
Other Funding Programs	No	LGAP

## 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	no	

## City of Plaquemine

**Planning and Regulatory**

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

<b>Plaquemine</b>		
<b>Plans</b>	<b>Yes/No</b>	<b>Comments</b>
Comprehensive / Master Plan	No	
Capital Improvements Plan	yes	
Economic Development Plan	yes	
Local Emergency Operations Plan	yes	
Continuity of Operations Plan	yes	
Transportation Plan	no	
Stormwater Management Plan	yes	
Community Wildfire Protection Plan	no	relies on Iberville Parish
Other plans (redevelopment, recovery, coastal zone management)	No	
<b>Building Code, Permitting and Inspections</b>		
Building Code	yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	yes	
Site plan review requirements	yes	
<b>Land Use Planning and Ordinances</b>		
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	
<b>Administration and Technical</b>		

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

Administration	Yes/No	Comments
Planning Commission	yes	
Mitigation Planning Committee	yes	relies on Iberville Parish
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	yes	
<b>Staff</b>		
Chief Building Official	yes	
Floodplain Administrator	yes	Utilizes parish floodplain manager
Emergency Manager	yes	
Community Planner	yes	
Civil Engineer	yes	
GIS Coordinator	yes	
Grant Writer	yes	
Other	No	
<b>Technical</b>		
Warning Systems / Service (Reverse 911, outdoor warning signals)	no	relies on Iberville Parish
Hazard Data & Information	No	
Grant Writing	yes	
Hazus Analysis	No	
Other	No	

## Financial

Identify whether your jurisdiction has access to or is eligible to use 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	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	No	

## Village of Rosedale

**Planning and Regulatory**

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

<b>Rosedale</b>		
<b>Plans</b>	<b>Yes/No</b>	<b>Comments</b>
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	
<b>Building Code, Permitting and Inspections</b>		
Building Code	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	
Site plan review requirements	Yes	
<b>Land Use Planning and Ordinances</b>		
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	No	
Other	No	
<b>Administration and Technical</b>		

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)	Yes	
<b>Staff</b>		
Chief Building Official	Yes	
Floodplain Administrator	Yes	
Emergency Manager	Yes	
Community Planner	No	
Civil Engineer	Yes	Contract basis only
GIS Coordinator	No	
Grant Writer	Yes	Contract basis only
Other	No	
<b>Technical</b>		
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	
Hazard Data & Information	No	
Grant Writing	Yes	Contract basis only
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	Yes	
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.	No	
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	No	
Natural Disaster or safety related school program	No	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

City of St. Gabriel

## Planning and Regulatory

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

<b>St. Gabriel</b>		
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	
<b>Building Code, Permitting and Inspections</b>		
Building Code	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	
Site plan review requirements	Yes	
<b>Land Use Planning and Ordinances</b>		
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	No	
Other	No	
<b>Administration and Technical</b>		

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

Administration	Yes/No	Comments
Planning Commission	Yes	
Mitigation Planning Committee	Yes	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	
<b>Staff</b>		
Chief Building Official	Yes	
Floodplain Administrator	Yes	
Emergency Manager	Yes	
Community Planner	no	
Civil Engineer	Yes	
GIS Coordinator	no	
Grant Writer	no	
Other	no	
<b>Technical</b>		
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	
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	Yes	
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.	No	
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	No	
Natural Disaster or safety related school program	No	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

## Town of White Castle

<b>Planning and Regulatory</b>		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
<b>White Castle</b>		
<b>Plans</b>	<b>Yes/No</b>	<b>Comments</b>
Comprehensive / Master Plan	Yes	Iberville Parish Wide Plan
Capital Improvements Plan	Yes	Town's Master Plan
Economic Development Plan	Yes	Town's Master Plan
Local Emergency Operations Plan	No	
Continuity of Operations Plan	No	
Transportation Plan	No	
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	Yes. Redevelopment plans.	
<b>Building Code, Permitting and Inspections</b>		
Building Code	Yes	SBCCI/ICC
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	3	
Site plan review requirements	No	
<b>Land Use Planning and Ordinances</b>		
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	Yes	
Other		
<b>Administration and Technical</b>		

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	Planning and Zoning Committee
Mitigation Planning Committee	No	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	
<b>Staff</b>		
Chief Building Official	No	
Floodplain Administrator	Yes	Utilizes Parish floodplain manager
Emergency Manager	No	
Community Planner	Yes	
Civil Engineer	Yes	Outsourced engineering firm
GIS Coordinator	No	
Grant Writer	Yes	Outsourced professional
Other	No	
<b>Technical</b>		
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Sirens located in town
Hazard Data & Information	No	
Grant Writing	Yes	Outsourced professional
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	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)	No	
Other Funding Programs	Yes	Sales and use taxes

## 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)	Yes	
Natural Disaster or safety related school program	No	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

## Building Inventory

Critical Facility (If Yes, Mark X)	Name of Building	Purpose of Building	Address	City	Lat	Long	Assessed Value	Date Built	Construction Type
Iberville									
X	Iberville Parish Courthouse	Civil Government	23640 Railroad Avenue	Plaquemine	30.2871 7271	- 91.2365 3106	\$3,562,245.00	1964	Brick
X	Iberville Parish Health Unit	Public Health	24705 Plaza Dr.	Plaquemine				1956	Brick
X	Iberville Parish Maintenance Facility	Civil Government	59805 Bayou Road	Plaquemine	30.2701 9456	- 91.2597 3888	\$2,350,350.00	1976- 77	Concrete
X	Iberville Parish Jail	Prisons and Correctional Facilities	59605 Bayou Road	Plaquemine	30.2713 367	- 91.2584 6825	\$2,757,510.00	1975	Concrete
X	Iberville EOC/E-911	Emergency Operations/911 Center	58030 Meriam St.	Plaquemine			\$1,500,000.00	1974	Brick
X	Bayou Blue Fire Rescue	Fire Search and Rescue	22855 Louisiana 386	Grosse Tete	30.2499 9477	- 91.3218 1737	\$17,325.00	1990	Metal
X	Bayou Blue Fire Station #2	Fire Search and Rescue	27550 Intracoastal Rd.	Plaquemine			\$300,000.00	1994	Metal
X	Bayou Goula Fire Station	Fire Search and Rescue	56700 Cpl Herman Brown Jr St	Bayou Goula	30.2101 5253	- 91.1708 4403	\$353,535.00	1988	Metal
X	Bayou Pigeon Fire Department Station 1	Fire Search and Rescue	38305 Louisiana 75	Plaquemine	30.0804 0331	- 91.2998 7101	\$395,535.00	NA	Metal
X	Bayou Pigeon Volunteer Fire Station 2	Fire Search and Rescue	Nearby: 39155-39159 Bayou Pigeon Road	Plaquemine	30.0713 0028	- 91.2927 6063	\$183,120.00	N/A	Metal

X	Bayou Sorrel Fire Dept.	Fire Search and Rescue	33175 Hwy. 75	Plaquemine			\$30,000.00	1991	Metal
X	Bayou Sorrel Fire Department Station 2	Fire Search and Rescue	Nearby: 32656-33050 Gracie Street	Plaquemine	30.1689 0166	- 91.3504 4052	\$129,780.00	N/A	Metal
X	East Iberville Volunteer Fire Station	Fire Search and Rescue	2075 Hwy 30	Sunshine	30.2899 9496	- 91.1724 2577	\$150,255.00	1982	Metal
X	East Iberville Fire Dept./Carville #2	Fire Search and Rescue	4405 Hwy. 75	St. Gabriel			N/A	1993	Metal
X	East Iberville Fire Dept./Sunshine #3	Fire Search and Rescue	1505 Hwy. 75	Sunshine			\$136,815.00	1987	Metal
X	White Castle Fire Station	Fire Search and Rescue	32535 Bowie St	White Castle			\$512,505.00	1968	Brick
	White Castle Fire Station #2	Fire Search and Rescue	32055 Hwy 405	White Castle	30.1736 94	- 91.1473 7378	\$168,000.00	1972	Metal
X	White Castle Fire Substation #3	Fire Search and Rescue	57660 Hwy. 404	White Castle			\$332,955.00	1994	Metal
	Plaquemine High School	Evacuation Shelter	59595 Belleview Rd.	Plaquemine			\$1,500,000.00	1973	Brick
	White Castle High	Evacuation Shelter	32695 Graham St.	White Castle			\$12,286,080.00	1992	Brick
	East Iberville High	Evacuation Shelter/POD	3825 Hwy. 75	St. Gabriel			\$600,000	1990	Brick
	Iberville Parish Water Dist. 3 & 4	Public Utilities	65200 Belleview Rd.	Plaquemine			N/A	1992	Metal
X	Grosse Tete Fire Department	Fire Search and Rescue	22855 Louisiana 386	Grosse Tete	30.4106 6836	- 91.4329 6206	\$17,325.00	2010	Brick
X	Bayou Blue Volunteer Fire Dept	Fire Search and Rescue	Nearby: 22240 Louisiana 386	Grosse Tete	30.3574 1465	- 91.4069 3887	\$621,075.00		Metal

	Maringouin Volunteer Fire Dept	Fire Search and Rescue	10660 2nd Street	Maringouin	30.4802 3309	- 91.5195 818	\$26,250.00	1950s	Metal
	North Iberville Fire Training Center	Fire Search and Rescue	Nearby: 77701-77999 Jacob Street	Maringouin	30.4806 0964	- 91.5188 9948	\$22,725.00		Metal
	Maringouin Volunteer Fire Department	Fire Search and Rescue	10660 2nd Street	Maringouin	30.4898 6943	- 91.5167 9464	\$26,250.00		Metal
	Fire Department	Fire Search and Rescue	3696 Louisiana 78	Maringouin	30.4911 7932	- 91.5180 8759	\$326,235.00		Metal
	Iberville Parish Sheriff's Office	Law Enforcement	77180 Ridgewood Drive	Maringouin	30.4896 547	- 91.5119 7749	\$20,385.00	1996	Brick
	Iberville Parish Council on Aging	Civil Government	Nearby: 77335 Wheelock Lane	Maringouin	30.4791 1441	- 91.5058 694	\$484,380.00		Metal
	Iberville Optional Education Center	Education	58060 Plaquemine St	Plaquemine				1990	Brick
	Iberville Math, Science, and Arts Academy	Education		Plaquemine	30.2629 3738	- 91.2169 6896	\$15,148,350.00	2007	Brick
	Sam A. Distefano Sr. Education Center	Education	Nearby: 23501-23599 Constitution Street	Plaquemine	30.2886 3739	- 91.2370 8122	\$26,595.00		Concrete
	Iberville Elementary School	Education	58650 Iron Farm Road	Plaquemine	30.2785 0396	- 91.2437 2873	\$1,117,800.00	1993	Brick
	St. John Elementary School	Education	58645 Osage Avenue	Plaquemine	30.2758 7873	- 91.2412 4307	\$796,500.00	1967	Concrete
	Crescent Elementary & Junior High	Education	62575 Bayou Road	Plaquemine	30.2482 8981	- 91.2934 9491	\$985,635.00	1970	Brick

X	Plaquemine Fire Department	Fire Search and Rescue	58165 Meriam Street	Plaquemine	30.2964 8382	- 91.2386 1658	\$300,405.00	1970	Concrete
X	Plaquemine Fire Station /Northside	Fire Search and Rescue	23090 Jacob St	Plaquemine	30.2963 743	- 91.2384 314	\$237,430	1990	Concrete
X	Plaquemine Fire Station /Southside	Fire Search and Rescue	58230 Robertson St	Plaquemine	30.2797 009	- 91.2350 452	\$234,970	1960	
	Iberville Parish Sheriff's Office	Law Enforcement	58050 Meriam Street	Plaquemine	30.2856 0941	- 91.1107 5062	\$228,960.00	1964	Brick
	Iberville Parish Jail	Prisons and Correctional Facilities	59605 Bayou Road	Plaquemine	30.2713 367	- 91.2584 6825	\$2,757,510.00	1975	Concrete
	Iberville Parish Arc Center	Civil Government	8595 Picardy Avenue	Plaquemine	30.2647 6001	- 91.2479 0947	\$1,390,770.00	1978	Concrete
	Iberville Parish Office of Family Support	Civil Government	169 Knapp hall	Plaquemine	30.2860 0457	- 91.2412 8754	\$1,709,910.00		Concrete
	Iberville Chamber of Commerce	Civil Government	23520 Eden Street	Plaquemine	30.2889 6277	- 91.2324 6513	\$381,780.00		Concrete
	Iberville Parish Council Records & Storage	Civil Government	58650 Belleview Drive	Plaquemine	30.2693 192	- 91.2442 1372	\$1,228,230.00	2008	Concrete
	Iberville Parish School Board	Civil Government	Nearby: 58030 Plaquemine Street	Plaquemine	30.2891 7637	- 91.2373 1051	\$1,426,680.00		Concrete
	Iberville Parish Council on Aging	Civil Government	23405 Church Street	Plaquemine	30.2873 3537	- 91.2375 7533	\$1,341,225.00	2008	Brick

	Iberville Parish Parks & Rec Maintenance Facility	Civil Government	Nearby: 24930 Louisiana 1	Plaquemine	30.2775 2999	- 91.2244 8724	\$504,630.00		Concrete
X	Water Plant	Civil Government	58145 Capt.T.T.Harris	Plaquemine	30.2851 47	- 91.2369 53	\$2,832,500	1951 (est)	Concrete
X	Waste water Treatment Plant #1	Civil Government	59000 W.W. Harleaux	Plaquemine	30.2775 568	- 91.2511 608	\$1,682,505	1980	Concrete
X	Waste water Treatment Plant #2	Civil Government	22815 Warren St.	Plaquemine	30.2996 024	- 91.2372 333	\$1,654,180	1960	Concrete
	North Iberville Elementary/High School	Education	None	Rosedale	30.4578 4482	- 91.4783 4156	\$1,610,145.00	1972	Brick
	East Iberville Elementary	Education	3285 Louisiana 75	Saint Gabriel	30.2609 9768	- 91.1037 8542	\$250,000	1995	Masonry
	East Iberville High	Education	3285 Louisiana 75	Saint Gabriel	30.2604 1398	- 91.1035 558	\$600,000	1995	Concrete
	Math, Science & Arts Academy	Education	1400 Gordon Simon LeBlanc Dr	Saint Gabriel	30.2890 735	- 91.1121 1707	\$45,000	2009	Masonry
X	East Iberville Volunteer Fire Department	Fire Search and Rescue	2075 Hwy 30	Saint Gabriel	30.2849 2594	- 91.1110 1816	\$50,000.00	2007	Wood
X	East Iberville Fire Department Station No. 1	Fire Search and Rescue	4401 Highway 75	Saint Gabriel	30.2382 3655	- 91.1116 5165	\$50,000.00	1979	Steel
	Dorseyville Elementary	Education	31505 Louisiana 1	White Castle	30.1762 6792	- 91.1604 0597	\$8,146,440.00	1953	Brick

X	White Castle High School	Education	32695 Graham Street	White Castle	30.1661 0604	- 91.1460 1026	\$12,286,080.00	1992	Brick
X	White Castle Fire Dept. Station	Fire Search and Rescue	32535 Bowie Street	White Castle	30.1227 5418	- 91.1856 0304	\$334,215.00	1968	Brick
	White Castle Fire Dept Training Facility	Fire Search and Rescue	36795 Fifty Foot Rd	White Castle	30.1049 8098	- 91.1690 4071	\$515,235.00	1979	Varies
X	Town Of White Castle Council On Aging	Civil Government	55050 Latino Street	White Castle	30.1729 659	- 91.1453 5277	\$393,120.00		Brick
<b>Grosse Tete</b>									
	Acadian Ambulance Services	Emergency Medical Services	Nearby: 76701-77043 Solari Lane	Grosse Tete	30.4144 6974	- 91.4328 3133	\$7,600.00		Metal
X	Village of Grosse Tete Police	Law Enforcement	18125 Willow Street	Grosse Tete			\$41,325.00	1974	
X	Grosse Tete Town Hall	Civil Government	18125 Willow Street	Grosse Tete	30.4106 1966	- 91.4324 5307	\$41,325.00	1974	Concrete
	Healthcare First Medical Clinic	Hospital or Medical Center	18015 Willow Street	Grosse Tete	30.4113 2278	- 91.4345 2076	\$13,905.00		
<b>Maringouin</b>									
X	Maringouin Police Department	Law Enforcement	77180 Ridgewood Drive	Maringouin	30.4891 752	- 91.5224 1237	\$20,385.00	1900	Brick
X	Maringouin Town Hall	Civil Government	Nearby: 10510 Church Street	Maringouin	30.4906 0033	- 91.5209 1662	\$41,445.00	1940	Wood

	Maringouin Medical Center	Hospital or Medical Center	77695 Wagley Road	Maringouin	30.4920 0561	- 91.5258 2068	\$75,200.00		Concrete
	Maringouin Community Center	Rentals	10450 Lions Avenue	Maringouin					Brick
<b>Plaquemine</b>									
	Louisiana Assistive Technology Center	Education		Plaquemine	30.2889 9402	- 91.2378 0447	\$1,432,890.00		Concrete
	Acadian Ambulance Services	Emergency Medical Services	Nearby: 59400-59498 River West Drive	Plaquemine	30.2612 3763	- 91.2473 7571	\$290,250.00		
	Municipal Utilities	Civil Government	25395 Louisiana 1	Plaquemine	30.2850 7753	- 91.2379 1234	\$397,845.00		Concrete
	Plaquemine Caring Nursing Home	Nursing Home	59215 River West Drive	Plaquemine	30.2629 5144	- 91.2431 5504	\$6,833,970.00		Concrete
	Comfort Care Hospice	Nursing Home	23827 Eden Street	Plaquemine	30.2870 8727	- 91.2326 7335	\$970,785.00		Concrete
	Mark Meadows Eye Laser & Surgery Center	Ambulatory Surgical Facility	59335 River West Drive # A	Plaquemine	30.2625 7219	- 91.2453 1219	\$950,130.00		Concrete
	Iberville Oschner Medical Complex	Hospital or Medical Center	25455 Hwy 1	Plaquemine	30.2624 9849	- 91.2472 7854	\$588,870.00	2014	Brick
	Iberville Medical Building	Hospital or Medical Center	59690 Belleview Drive	Plaquemine	30.2628 5719	- 91.2442 7564	\$4,229,010.00		Concrete

X	Plaquemine police dept.	Law Enforcement	23540 Railroad Ave	Plaquemine	30.2888 537	- 91.2357 479	\$1,359,600	1990	Concrete
X	Utility Directors office	Civil Government	58190 W.W. Haleaux	Plaquemine	30.2848 939	- 91.2377 818	\$275,000	2005	Concrete
X	Ware House	Civil Government	58155 Capt. T.T. Harris St.	Plaquemine	30.2850 056	- 91.2372 086	\$1,118,000	1960	Concrete
X	City Hall	Civil Government	2364 Railroad Ave.	Plaquemine	30.2877 172	- 91.2354 66	\$747,780	1949	Concrete
<b>Rosedale</b>									
	Rosedale Volunteer Fire Department	Fire Search and Rescue	10660 2nd Street	Rosedale	30.4414 5465	- 91.4525 2106	\$343,245.00	1995	Brick
	Rosedale Police Department/Jail	Law Enforcement	76535 LA Hwy 76	Rosedale	30.4414 9087	- 91.4525 6501	\$343,245.00	1998	Brick
	Rosedale Town Hall	Civil Government	76535 Rosedale Road	Rosedale	30.4413 4105	- 91.4529 2281	\$416,205.00	1998	Brick
<b>St. Gabriel</b>									
X	St. Gabriel Police Department	Law Enforcement	1641 Hwy 30	Saint Gabriel	30.2920 8623	- 91.1141 4415	\$60,000	2016	Masonry
X	St. Gabriel City Hall	Civil Government	5045 Iberville St	St. Gabriel	30.2963 0932	- 91.1212 9924	\$1,500,000	1955	Masonry

X	St. Gabriel Health Clinic	Hospital or Medical Center	5760 Monticello St	Saint Gabriel	30.2585 3746	- 91.1016 4025	\$70,000	2009	Wood
<b>White Castle</b>									
X	White Castle Police Department	Law Enforcement	32535 Bowie Street	White Castle	30.1691 6667	- 91.1467 5671	\$515,235.00	1968	Frame
X	White Castle Town Hall	Civil Government	32525 Bowie Street	White Castle	30.1695 019	- 91.1466 0707	\$1,162,485.00	1965	Concrete

## Vulnerable Populations

# Vulnerable Populations Worksheet

## Iberville Parish

Name	Street	City	Zip Code	Latitude	Longitude
<b>All Hospitals (Private or Public)</b>					
Oschner Health Center	9001 Summa Avenue	Plaquemine	70809	30.26249849	-91.24727854
River West Medical Complex Bldg B	Nearby: 59201-59399 River West Drive	Plaquemine	70764	30.26264928	-91.24495528
Iberville Medical Building	59690 Belleview Drive	Plaquemine	70764	30.26285719	-91.24427564
Maringouin Medical Center	77695 Wagley Road	Maringouin	70757	30.49200561	-91.52582068
<b>Nursing Homes (Private or Public)</b>					
Plaquemine Caring Nursing Home	59215 River West Drive	Plaquemine	70764	30.26295144	-91.24315504
Comfort Care Hospice	23827 Eden Street	Plaquemine	70764	30.28708727	-91.23267335
Plaquemine Manor	59355 Riverwest Dr.	Plaquemine	70764		
<b>Mobile Home Parks</b>					
Choctaw Mobile Home Park	59655 Louisiana 1148	Plaquemine	70764	30.32094174	-91.2848823
Unknown	Nearby: Dusty Lane	Plaquemine	70764	30.27267107	-91.2326435
Unknown Campground	Nearby: 32700-33472 Louisiana 75	Plaquemine	70764	30.1610352	-91.33602392
Champagne's Trailer Park	Hwy. 1148	Plaquemine	70764		
McClure's Trailer Park	Lucky Street	Plaquemine	70764		
Seneca's Trailer Park	Comeaux Drive	Plaquemine	70764		
Riverbend Trailer Park	Walker St.	Plaquemine	70764		
Daigles Trailer Park	Hwy. 69	White Castle	70788		
Osbourne Trailer Park	Homestead Drive	Plaquemine	70764		
Tullier's Trailer Park	Walker St.	Plaquemine	70764		

## National Flood Insurance Program (NFIP)

Iberville Parish

# National Flood Insurance Program (NFIP)

	Iberville Parish	Grosse Tete	Maringouin	Plaquemine	Rosedale	St. Gabriel	White Castle
<b>Insurance Summary</b>							
How many NFIP polices are in the community? What is the total premium and coverage?	855 Total Policies, \$570,327 Premium and \$200,839,600 Coverage	3 Total Policies, \$1,051 Premium and \$735,000 Coverage	12 Total Policies, \$5,546 Premium and \$2,846,500 Coverage	116 Total Policies, \$81,144 Premium and \$36,902,200 Coverage	12 Total Policies, \$6,340 Premium and \$2,589,000 Coverage	46 Total Policies, \$25,176 Premium and \$13,406,000 Coverage	7 Total Policies, \$2,468 Premiums and \$1,890,000 Coverage
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?	362 Total Claims, \$2,392,005 Amount of Claims, 38 From Substantial Damage	2 Total Claims, \$2,536 Amount of Claims, Unknown	1 Total Claim, \$1,700 Amount of Claims, Unknown	27 Total Claims, \$191,178 Amount of Claims, Unknown	4 Total Claims, \$26,704 Amount of Claims, Unknown	None	1 Total Claim, \$6,246 Amount of Claims, None
How many structures are exposed to flood risk with in the community?	Zone A: 1,452 Zone AE: 626 Total: 2078	None	none	Unknown	Unknown	Unknown	Unknown

Describe any areas of flood risk with limited NFIP policy coverage.	None	None	none	None	None	None	None
<b>Staff Resources</b>							
Is the Community FPA or NFIP Coordinator certified?	No	No	No	No	Unknown	No	No
Is flood plain management an auxiliary function?	Yes- of the building inspector	Yes	Yes	Yes	yes	Yes	Yes
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Permit review/inspections provide by a certified building official	Permit Review, inspections	n/a	Permit Review, inspections	Unknown	Permit Review, inspections	Permit Review, inspections
What are the barriers to running an effective NFIP program in the community, if any?	Low income residents unable to afford flood insurance and elevation certificates	Funding and staffing	funding, man power	funding, man power	Unknown	funding and staffing	funding and staffing
<b>Compliance History</b>							
Is the community in good standing with the NFIP?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Are there any outstanding compliance issues(i.e., current violations)?	1 on Intracoastal	No	none	Unknown	Unknown	Unknown	Unknown
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact(CAC)?	CA: 1/31/13 CAC:10/12/12	Unknown	I don't know	Unknown	Unknown	Unknown	Unknown
Is a CAV or CAC scheduled or needed? If so when?	No	No	No	No	No	No	No
<b>Regulation</b>							
When did the community enter the NFIP?	4/20/73 for E, 6/1/78 for R	3/1/1978	9/1/1978	8/26/1977	2/15/1978	7/12/2001	12/16/1977

Are the FIRMs digital or paper?	Both	Both	Both	Both	Both	Both	Both
Do floodplain development regulations meet or exceed FEMA HMGP or State minimum requirements? If so, in what ways?	Yes - ordinance mirrors federal regulations	Yes	Yes	Yes	Yes	Yes	Yes
<b>Community Rating System (CRS)</b>							
Does the community participate in CRS?	No	No	No	No	No	No	No
What is the community's CRS Class Ranking?	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Does the plan include CRS planning requirements?	No	No	No	No	No	No	No