



# LAFAYETTE PARISH

HAZARD MITIGATION UPDATE 2021





# LAFAYETTE PARISH MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

*Prepared for:*

**Lafayette Parish**



*Prepared by:*

**Stephenson Disaster Management Institute**

**Mr. Brant Mitchell, CEM**

**Mrs. Lauren Morgan, MEPP**

**Mr. Chris Rippetoe, CFM**

**Dr. Joseph B. Harris, PhD\***

Louisiana State University – Louisiana Emerging Technology Center  
Baton Rouge, LA 70803



\*Western Carolina University, Emergency and Disaster Management Program (Dept. of Criminology and Criminal Justice)

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## ACKNOWLEDGMENTS

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## Lafayette City-Parish Consolidated Government

City of Broussard

City of Carencro

Town of Duson

City of Lafayette

City of Scott

City of Youngsville

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Josh Guillory	Lafayette Consolidated Government
Craig Stansbury	Lafayette Parish OHSEP
Linda Lavergne	Lafayette Parish OHSEP
Melanie Jumonville	Lafayette Consolidated Government
Stephanie Weeks	Lafayette Consolidated Government
Mary Sliman	Lafayette Consolidated Government
Melinda Felps	Lafayette Consolidated Government
Don Chauvin	City of Carencro
Lowell Duhon	Lafayette Consolidated Government
Chad Nepveux	Lafayette Consolidated Government
Ray Bourque	City of Broussard
Glenn Brasseaux	City of Carencro
Johnny Paul Thibodeaux	Town of Duson
Jan-Scott Richard	City of Scott
Ken Ritter	City of Youngsville
Joey Pons	University of Louisiana at Lafayette
Steven Picou	Lafayette Regional Airport
Desiree Early	Lafayette School Board
Thomas Glover	Lafayette Police Department
Mark Garber	Lafayette Sheriff's Office
Robert Benoit	Lafayette Fire Department
Donnie Simon	Louisiana Department of Health
Troy Guidry	Acadian Ambulance Service, Inc.
Warren Abadie	Lafayette Consolidated Government
Pam Deville	Cajundome
Pamela Granger	McBade Engineers & Consultants, LLC

Tammy Vincent	City of Scott
Chris Andrus	Lafayette Fire Department
Mel Bertrand	City of Broussard
Missy Lacassin	City of Broussard
Sally Angers	City of Youngsville
Anna Doucet	C.H. Fenstermaker & Associates, L.L.C.
Gary O'Neal	C.H. Fenstermaker & Associates, L.L.C.
Kim Alleman	Town of Duson
Jessica Cornay	City of Lafayette & Lafayette C-PCG
Fred Trahan	City of Lafayette & Lafayette C-PCG
Brian Smith	City of Lafayette & Lafayette C-PCG
Jeanne Hornsby	C.H. Fenstermaker & Associates, L.L.C.
Walter Comeaux	City of Broussard/Comeaux

The 2021 Lafayette Parish Hazard Mitigation Plan Update was written by the Stephenson Disaster Management Institute, Louisiana State University. Further comments should be directed to the Lafayette Parish Office of Homeland Security and Emergency Preparedness: 1810 W. Willow St., Scott, LA 70583.



## Contents

<b>1. Introduction .....</b>	<b>1</b>
History .....	2
Geography and Population .....	3
Geography .....	3
Population .....	5
Economy.....	5
Hazard Mitigation .....	6
General Strategy .....	8
2021 Plan Update.....	9
<b>2. Hazard Identification and Parish-Wide Risk Assessment .....</b>	<b>11</b>
Prevalent Hazards to the Community .....	11
Previous Occurrences .....	12
Probability of Future Hazard Events .....	13
Inventory of Assets for the Entire Parish .....	14
Critical Facilities of the Parish .....	15
Future Development Trends .....	21
Future Hazard Impacts.....	22
Assessing Vulnerability Overview .....	23
Quantitative Methodology .....	23
Qualitative Methodology .....	23
Priority Risk Index and Hazard Risk .....	24
Land Use.....	26
Hazard Identification.....	27
Drought .....	27
Excessive Heat.....	30
Flooding.....	33
Sinkholes .....	58
Thunderstorms.....	61
Tornadoes .....	72
Tropical Cyclones .....	77
Wildfires .....	91
Winter Weather .....	99
<b>3. Capability Assessment .....</b>	<b>103</b>
Policies, Plans and Programs .....	103

Building Codes, Permitting, Land Use Planning and Ordinances .....	104
Administration, Technical, and Financial .....	104
Education and Outreach .....	105
Flood Insurance and Community Rating System .....	106
NFIP Worksheets.....	108
<b>4. Mitigation Strategy.....</b>	<b>109</b>
Introduction .....	109
Goals .....	112
2021 Mitigation Actions and Update on Previous Plan Actions .....	113
Lafayette City-Parish Consolidated Government Mitigation Actions .....	114
City of Broussard Mitigation Actions .....	154
City of Carencro Mitigation Actions.....	171
Town of Duson Mitigation Actions .....	199
City of Lafayette Mitigation Actions .....	213
City of Scott Mitigation Actions .....	236
City of Youngsville Mitigation Actions .....	265
Action Prioritization .....	288
<b>Appendix A: Planning Process.....</b>	<b>289</b>
Purpose .....	289
The Lafayette Parish Hazard Mitigation Plan Update.....	289
Planning .....	290
Coordination .....	290
Neighboring Community, Local and Regional Planning Process Involvement .....	291
Program Integration.....	293
Meeting Documentation and Public Outreach Activities .....	294
Meeting #1: Hazard Mitigation Plan Update Kick-Off.....	294
Meeting #2: Hazard Mitigation Plan Update Initial Planning Meeting.....	294
Meeting #3: Lafayette Drainage District Committee Meeting .....	295
Meeting #4: Hazard Mitigation Plan Steering Committee Meeting – Planning Process .....	295
Meeting #5: Hazard Mitigation Plan Steering Committee Meeting – Mitigation Actions.....	299
Meeting #6: Risk Assessment Presentation to Steering Committee .....	302
Meeting #7: Public Meeting.....	304
Outreach Activity #1: Public Opinion Survey .....	308
Outreach Activity #2: Incident Questionnaire .....	308
<b>Appendix B: Plan Maintenance.....</b>	<b>309</b>

Purpose .....	309
Monitoring, Evaluating, and Updating the Plan.....	309
Responsible Parties .....	309
Methods for Monitoring and Evaluating the Plan and Plan Evaluation Criteria.....	309
2021 Plan Version Plan Method and Schedule Evaluation .....	311
Incorporation into Existing Planning Programs .....	311
Continued Public Participation .....	314
<b>Appendix C: Critical Facilities.....</b>	<b>315</b>
Critical Facilities within the Lafayette Parish Planning Area .....	315
<b>Appendix D: Plan Adoption .....</b>	<b>321</b>
<b>Appendix E: State Required Worksheets .....</b>	<b>323</b>
Mitigation Planning Team.....	323
Capability Assessment .....	326
Lafayette City-Parish Consolidated Government.....	326
City of Broussard .....	329
City of Carencro.....	332
Town of Duson .....	335
City of Lafayette .....	338
City of Scott .....	341
City of Youngsville .....	344
Building Inventory.....	347
Vulnerable Populations.....	348
National Flood Insurance Program (NFIP) .....	352
<b>Appendix F: Community Rating System.....</b>	<b>355</b>
Introduction To The Community Rating System (CRS) .....	355
Louisiana CRS Communities .....	355
CRS Activity Introduction.....	356
Activity 510: Floodplain Management Planning.....	358
Resources .....	422
Federal Agencies .....	422
Professional Associations.....	422
Other Institutions.....	423
Element 512.a Checklist .....	424



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

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

- Lafayette City-Parish Consolidated Government (Lafayette C-PCG)<sup>1</sup>
- City of Broussard
- City of Carencro
- Town of Duson
- City of Lafayette
- City of Scott
- City of Youngsville

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

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

Every community faces different hazards, and every community has different resources and interests to bring to bear on its problems. Because there are many ways to deal with natural hazards and many agencies that

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<sup>1</sup> For purposes of this planning document, the term "Lafayette City-Parish Consolidated Government" refers to the unincorporated portions of Lafayette Parish. It may also be referenced as Lafayette C-PCG where space is a limiting factor.

can help, there is no one solution for managing or mitigating their effects. Planning is one of the best ways to correct these shortcomings and produce a program of activities that will best mitigate the impact of local hazards and meet other local needs. A well-prepared plan will ensure that all possible activities are reviewed and implemented so that the problem is addressed by the most appropriate and efficient solutions. It can also ensure that activities are coordinated with each other and with other goals and programs, preventing conflicts and reducing the costs of implementing each individual activity.

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

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

## History

Research indicates that Paleo-Indian populations may have begun to inhabit portions of Louisiana as early as 12,000-10,000 B.C.<sup>2</sup> By the time of European contact in the late 15<sup>th</sup> century, there were many indigenous groups of people living throughout the region, including a tribe known by their adversaries as the Atakapas, or “man eaters”, due to their purported cannibalistic practices.<sup>3</sup> In 1682, French explorer René-Robert Cavelier, Sieur de La Salle, descended the Mississippi River from Canada in an attempt to found a French colony near the river's mouth. As a result of his explorations, all the lands drained by the Mississippi River were claimed for France. These lands were given the name *Louisiane* in honor of King Louis XIV. Prior to the arrival of the Acadians in 1765, present-day Lafayette Parish, located in the Attakapas region of southwest Louisiana, was fairly remote, saw minimal European contact, and was known for its prime grazing land.<sup>4</sup>

The first migration of Acadian settlers to the region began at the twilight of the French colonial regime (1699-1766). In an enterprising move to make the land profitable with as little supervision possible, the initial land benefactors of the region entered into a cattle/land agreement with several leaders from the newly arrived Acadians. The production of cattle was considered vitally important to the support of New Orleans during times of war with the British, since the remoteness of the region provided unexposed communication and supply lines to New Orleans.<sup>5</sup> In addition to the cattle in the contract, the Acadians were given farming tools, seed rice, corn flour, hardtack, hulled rice, salt pork, and beef to support themselves for six months. This marked the beginning of a population “boom” in the Attakapas region.<sup>6</sup>

The major land route in the region at the time was the Old Spanish Trail. The Spanish Trail was the seventeenth century roadway that linked Spanish colonial St. Augustine, Florida with San Antonio, Texas, and

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<sup>2</sup> Robert W. Neuman, *An Introduction to Louisiana Archaeology*, Louisiana State University Press, Baton Rouge, 1984

<sup>3</sup> Kniffen, Gregory, & Stokes, *The Historic Indian Tribes of Louisiana: From 1542 to Present*, Louisiana State University Press, Baton Rouge, 1987

<sup>4</sup> John R. Swanton, *The Indian Tribes of North America*, *Bureau of American Ethnology Bulletin 145*, Smithsonian Institution, Washington, D.C., 1952

<sup>5</sup> Carl Brasseaux (ed.), *Allons A La Louisiane: Acadian Immigration, 1765-1769, A Refuge for All Ages: Immigration in Louisiana History*, vol. 1, Center for Louisiana Studies, Lafayette, 1996

<sup>6</sup> Grover Rees, *Dauterive Compact: Foundation of the Acadian Cattle Industry*, *Attakapas Gazette* 11:91-126, 1976

San Diego, California. Its 2,817-mile route cuts through present day Broussard, Lafayette, Rayne, and Crowley, Louisiana. This trail eventually became the old stage road connecting Brashear City (present-day Morgan City) with Vermilionville (present-day Lafayette), Opelousas, and other cities to the north. This road, also known as Route 2, was paved and reclassified as U.S. Route 90 in 1924 under the Huey P. Long administration.

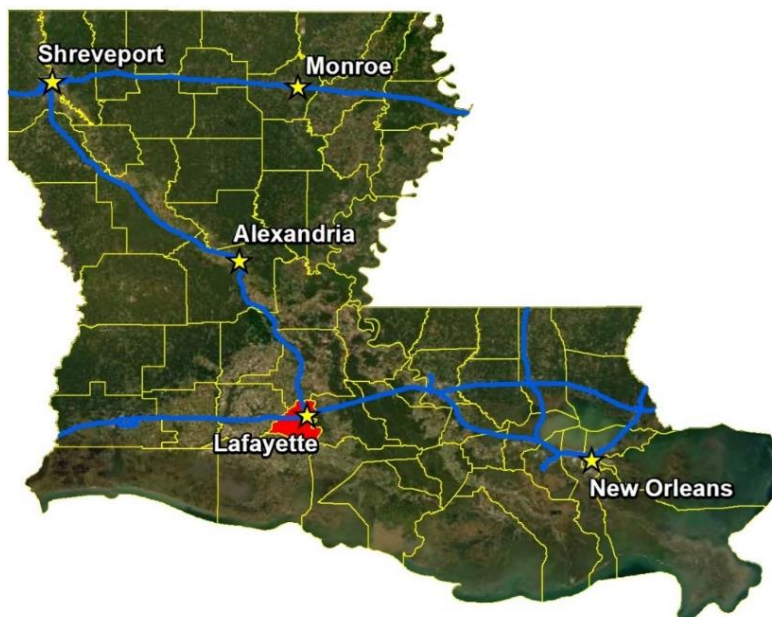
Lafayette Parish was created officially when it was cleaved from St. Martin Parish in 1823. It was named for the Marquis de Lafayette who fought in the American Revolution. Jean Mouton, an Acadian, designed the parish seat, Lafayette in 1821. By 1824, individual parishes were formed in Louisiana. These areas matched the jurisdictions of the predominant Roman Catholic Church here also called Parishes. Lafayette (the city) incorporated in 1836 with the name of Vermilionville. The area prospered with agriculture and cattle until it was ravaged by both Yellow Fever and the Civil War in the mid 1800's.<sup>7</sup>

By 1881, the railroad came extending its route from New Orleans to Houston and the area once again began to grow and prosper. The name of Vermilionville was changed to Lafayette in 1884. Both the parish government and the government of the City of Lafayette are now consolidated into one entity.

## Geography and Population

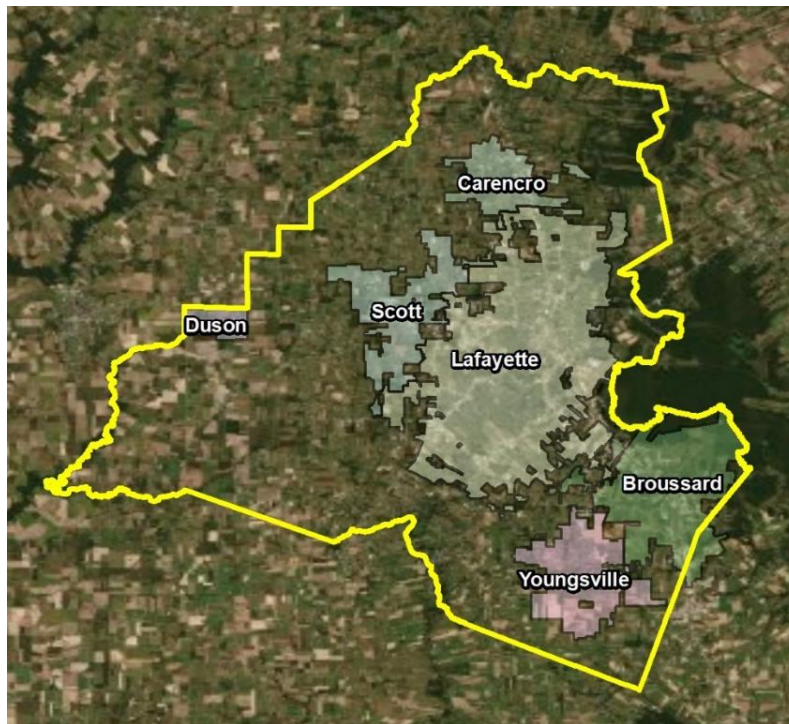
### Geography

Lafayette Parish is located in south-central Louisiana, approximately 35 miles north of the Gulf of Mexico (*Figure 1-1*). Although Lafayette Parish is one of the smallest parishes in Louisiana in terms of area, consisting of approximately 268 square miles, it is currently the sixth most populated parish in the state. Neighboring parishes are St. Martin Parish to the east, St. Landry Parish to the north, Vermilion Parish to the south and Acadia Parish to the west. The parish is situated in the west-central portion of the Atchafalaya-Teche-Vermilion Basin. The City of Lafayette is the major urban area and is located in the eastern part of the parish along the Vermilion River. The extreme western and southwestern portions of Lafayette Parish are included within the Calcasieu-Mermentau Basin, which is primarily flat and prairie-like.



*Figure 1-1: Location of Lafayette Parish in the State of Louisiana*

<sup>7</sup> Carl Brasseaux, *Lafayette: Where Yesterday Meets Tomorrow*, Windsor Publications, Chatsworth, 1990



*Figure 1-2: Incorporated Jurisdictions within Lafayette Parish*

The primary waterway which passes through the planning area is the Vermilion River. The next closest major waterway is located 50 miles east of Lafayette, at the convergence of the Mississippi River and the Gulf Intra-coastal Waterway, with a channel depth of 45 ft. The Port of Lake Charles is located 70 miles west of Lafayette, with a channel depth of 40 feet.

Two physiographic areas make up Lafayette Parish: the terrace upland, and the Mississippi River alluvial plain. Over 90% of the parish is in the terrace upland, which is comprised mostly of alluvial deposits known geologically as the Prairie Formation. Much of the area has a good potential as cropland and pasture.<sup>8</sup>

Lafayette Parish weather is typically warm and humid. Variations in daily temperature are determined by distance from the Gulf of Mexico and, to a much lesser degree, by differences in elevation. The average annual temperature for the state as a whole is 68°F. January is typically the coldest month for Louisiana, averaging approximately 54°F, while July is typically the warmest at an average of 83°F. Winter months are usually mild with cold spells of short duration. For Lafayette Parish in particular, the summer months are usually quite warm, with an average daily maximum temperature in July and August of 92°F. Winters are typically mild. Snowfall averages less than one inch per year. Average annual rainfall for the area is 60.5 inches. Lafayette Parish is susceptible to the normal weather dangers, such as thunderstorms and flooding, but due to its location within the state and its proximity to the Gulf of Mexico, the parish is highly susceptible to tropical cyclones. Hurricane season lasts from June 1st to November 30th, with most hurricanes forming in August, September, and October.

<sup>8</sup> Murphy, Daigle, & Roetker, *Soil Survey of Lafayette Parish, Louisiana*, U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C., 1977



Lafayette Parish is located in Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) Region 4 (*Figure 1-3*).

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



*Figure 1-3: Louisiana Homeland Security Regions*

### Population

The population of Lafayette Parish is estimated at 244,390 (2019 estimate) with a population percent change from April 1, 2010 – July 1, 2019 of 10.2%.

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

	2010 Census	2016 Estimate	2019 Estimate	Percent Change 2010 -2019
<b>Total Population</b>	221,778	241,275	244,390	10.20%
<b>Population Density (Pop/Sq. Mi.)</b>	824.6	-----	-----	-----
<b>Total Housing Units</b>	93,729	101,377	105,058	12.09%
<b>Total Households</b>	86,504	-----	91,543	5.83%
<b>Persons Per Household</b>	-----	-----	2.59	-----

### Economy

Lafayette Parish is the center of the gulf oil and gas industry. Lafayette Parish receives revenues from agriculture, oil and gas production, and wholesale and retail trade. Chief crops include rice, soybeans, sugarcane, beef cattle, and vegetable and cattle farming. The economic base of the planning area consists of companies in the oil and gas, medical, manufacturing, retail, information technology, transportation/distribution, and public administration fields. Its hard-working labor force, excellent transportation network, abundant raw materials, and land for commercial and industrial development make the area an ideal prospect for business investment. Industry data for business patterns in Lafayette Parish can be found in the table on the next page.

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

Business Description	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)
Retail Trade	1063	17,505	473,398
Manufacturing	287	6,548	393,885
Health Care and Social Assistance	1209	26,238	1,197,685
Mining, Quarrying, Oil and Gas Extraction	279	7289	587,380
Transportation and Warehousing	235	3,845	224,583
Construction	538	6,380	407,809
Administration/Support and Waste	377	5,618	340,538
Real Estate and Rental and Leasing	511	3,093	196,512
Wholesale Trade	506	7,490	454,094
Other Services (except Public Administration)	567	4,912	145,929
Accommodation and Food Services	723	16,165	285,109
Financial and Insurance	547	3,998	274,873
Professional, Scientific, and Technical Services	1325	8,309	572,309
Information	113	2296	114,148
Educational Services	98	1,972	93,929
Arts, Entertainment, and Recreation	105	1401	24,801
Agriculture, Forestry, Fishing and Hunting	14	49	1,517
Utilities	8	349	25,625
Management of Companies and Enterprises	74	2816	221,204
Industries Not Classified	10	16	183

## Hazard Mitigation

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

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

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

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

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

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



*Figure 1-4: The Four Phases of Emergency Management and their Relation to Future Hazard Mitigation*  
(Source: Louisiana State Hazard Mitigation Plan 2014)

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

The 2021 Lafayette Parish Hazard Mitigation Plan (HMP) maintains much of the information from the 2016 plan version, but it now incorporates the order and methodologies of the 2019 Louisiana State Hazard Mitigation Plan.

The sections in the 2016 Lafayette Parish HMP were as follows:

- Section One Introduction
- Section Two Hazard Identification and Risk Assessment
- Section Three Capability Assessment
- Section Four Mitigation Strategy
- Appendix A Planning Process
- Appendix B Plan Maintenance
- Appendix C Parish Critical Facilities
- Appendix D Plan Adoption
- Appendix E State Required Worksheets
- Appendix F Community Rating System

This plan update also coheres with the Plain Writing Act of 2010, which requires federal agencies to use clear communication that is accessible, consistent, understandable, and useful to the public. While the State of Louisiana and its political subdivisions are not required to meet such standards, the Act aligns with best practices in hazard mitigation. Since successful hazard mitigation relies on full implementation and cooperation at all levels of government and community, a successful hazard mitigation plan must also be easily used at all of these levels. Nevertheless, the Lafayette Parish Hazard Mitigation Steering Committee recognized the benefits from the successful analysis and mitigation planning executed in previous plan updates, as well as improvements to be made in the 2021 update. This plan update remains coherent with those documents, retaining language and content when needed, deleting it when appropriate, and augmenting it when constructive.

## 2021 Plan Update

This 2021 plan update proceeds with the previous goals of the Lafayette Parish Hazard Mitigation Plan. The current goals are as follows:

1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact;
2. Improve data collection, use, and sharing to reduce the impact of hazards;
3. Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities;
4. Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure;
5. Maintain continuity of operations during and after natural hazard events.

This plan update makes a number of textual changes throughout, but the most obvious changes are data related and structural edits. First, the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information's (NCEI) Storm Events Database was used in the analysis, which provides historical hazard data from 1950 to 2020. The steering committee was also instrumental in providing detailed data where appropriate to more accurately reflect hazard impacts on the parish and jurisdictions. Furthermore, all of the sections were updated to reflect the most current information and the most current vision of the plan update. The most significant changes are the newly developed hazard profiles and risk assessments, as well as the removal of much repetition between sections from the previous plan updates. Aside from the update to the risk assessment and the mitigation strategy sections, there have been no changes made based on community priorities.

The 2021 plan update is organized in the same format as the 2016 update, with one minor change to this 2021 update as outlined below:

- Section One Introduction
- Section Two Hazard Identification and Parish-wide Risk Assessment
- Section Three Capability Assessment
- Section Four Mitigation Strategies
- Appendix A Planning Process
- Appendix B Plan Maintenance
- Appendix C Critical Facilities
- Appendix D Plan Adoption
- Appendix E State Required Worksheets
- Appendix F Floodplain Management Activity 510



*Table 1-3: 2021 Plan Update Crosswalk*

Plan Update Crosswalk	
2016 Update	2021 Update
Section 1: Introduction	Section 1: Introduction
Section 2: Hazard Identification and Risk Assessment	Section 2: Hazard Identification and Risk Assessment
Section 3: Capability Assessment	Section 3: Capability Assessment
Section 4: Mitigation Strategy	Section 4: Mitigation Strategy
Appendix A: Planning Process	Appendix A: Planning Process
Appendix B: Plan Maintenance	Appendix B: Plan Maintenance
Appendix C: Essential Facilities	Appendix C: Critical Facilities
Appendix D: Plan Adoptions	Appendix D: Plan Adoptions
Appendix E: State Required Worksheets	Appendix E: State Required Worksheets
Appendix F: Community Rating System	Appendix F: Floodplain Management Activity 510

Despite numerous changes in this plan update, the plan remains consistent in its emphasis on the types of hazards that pose the most risk to loss of life, injury, and property in Lafayette Parish and its communities. The extent of this risk is dictated primarily by its geographic location. Most significantly, Lafayette Parish remains at high risk of water inundation from various sources, including flooding and tropical cyclone activity. The entire parish is also at high risk of damages from high winds and wind-borne debris. The 2016 flooding events, along with the 2020 hurricane season were both felt heavily in all parts of Lafayette Parish. Other hazards threaten the parish and/or its communities, although not to such great degrees and not in such widespread ways. In all cases, the relative social vulnerability of areas threatened and affected plays a significant role in how governmental agencies and their partners (local, parish, state and federal) prepare for and respond to disasters.

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

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

This section assesses the various hazard risks that Lafayette 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 Lafayette Parish Hazard Mitigation Plan published in 2016, as well as the hazards that were identified in the state's 2019 Hazard Mitigation Plan that were 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 Previous Plan	Considered Medium or High Risk in the State's HM Plan	Profiled in the 2021 Update
<b>Coastal Hazards</b>	*		
<b>Excessive Heat</b>			X
<b>Drought</b>	X		X
<b>Earthquakes</b>	*		
<b>Flooding</b>	X	X	X
<b>Sinkholes</b>	X		X
<b>Thunderstorms (Hail, Lightning, &amp; Wind)</b>	X	X	X
<b>Tornadoes</b>	X	X	X
<b>Tropical Cyclones</b>	X	X	X
<b>Wildfires</b>	X		X
<b>Winter Weather</b>	X		X

\*Hazard Discounted in Previous Plan

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

- a) Drought
- b) Excessive Heat
- c) Flooding
- d) Sinkholes
- e) Thunderstorms (Hail, Lightning, & Wind)
- f) Tornadoes
- g) Tropical Cyclones
- h) Wildfires
- i) Winter Weather

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

- Flooding from rivers and waterways, rainstorms, 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)
  - e) Coastal
- High wind damage most commonly resulting from tropical cyclones, thunderstorms, and tornadoes
- Property damage resulting from all profiled natural hazards

The potential destructive power of tropical cyclones was determined to be the most prevalent hazard to the parish, although the parish and its jurisdictions are more regularly impacted by minor flooding events not meeting the threshold for federal declaration. Seventeen of the twenty-six disaster declarations received by the Lafayette Parish planning area resulted from tropical cyclones, which validates this as the most significant hazard in terms of impact. While the issue of hurricanes will serve as a main focus during the mitigation planning process, this document will place equal emphasis on flooding events and the effects from those events on the communities. 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 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 the Lafayette Parish planning area is included in the hurricane risk assessment.

The Lafayette Parish planning area is also susceptible to tornadoes. Tornadoes can spawn from tropical cyclones or severe weather systems that pass-through Lafayette 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 the Lafayette Parish planning area since 1965. Information includes names, dates, and types of disaster.

*Table 2-2: Lafayette Parish Major Disaster Declarations.*

Disaster Number	Year	Declaration
208	9/10/1965	Tropical Cyclone – Betsy
315	10/13/1971	Tropical Cyclone – Hurricane Edith
448	9/23/1974	Tropical Cyclone – Hurricane Carmen
3031	2/22/1977	Drought and Freezing
534	5/2/1977	Severe Storm, Flood
622	5/21/1980	Severe Storm, Flood
728	10/31/1984	Severe Storm, Flood
835	7/17/1989	Tropical Cyclone – TS Allison
956	8/25/1992	Tropical Cyclone – Hurricane Andrew
978	2/2/1993	Severe Storm, Flood
1380	6/5/2001	Tropical Cyclone – TS Allison
1437	10/3/2002	Tropical Cyclone – Hurricane Lili
3172	2/1/2003	Loss of Space Shuttle Columbia
1521	6/8/2004	Severe Storm, Flood
1548	9/15/2004	Tropical Cyclone – Hurricane Ivan
1603	8/29/2005	Tropical Cyclone – Hurricane Katrina
1607	9/24/2005	Tropical Cyclone – Hurricane Rita
1786	9/2/2008	Tropical Cyclone – Hurricane Gustav
4080	8/29/2012	Tropical Cyclone – Hurricane Isaac
4277	8/14/2016	Severe Storm, Flood
4345	10/16/2017	Tropical Cyclone – Tropical Storm Harvey
4458	8/27/2019	Tropical Cyclone – Hurricane Barry
4484	3/24/2020	COVID-19 Pandemic
3527	6/7/2020	Tropical Cyclone – Tropical Storm Cristobal
3538	8/23/2020	Tropical Cyclone – Tropical Storms Laura and Marco
4559	8/28/2020	Tropical Cyclone – Hurricane Laura

### Probability of Future Hazard Events

The probability of a hazard event occurring in the Lafayette Parish planning area 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 National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information's (NCEI) Storm Events Database, which provides historical hazard data from 1950 to 2020. In staying consistent with the state plan, the Storm Events Database was evaluated for the last thirty years (1990 – 2020) to determine future probability of a hazard occurring. While the 30-year record used by the State was adopted for the purpose of determining the overall probability, to assist with determining estimated losses, unless otherwise stated, the full 70-year record was used when Hazus was not available to

determine losses. This full record was used to provide a more extensive record for loss determination. 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.

The following table shows the annual probability for each hazard occurring across the parish:

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

Hazard	Probability						
	Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngsville
<b>Drought</b>	13%	13%	13%	13%	13%	13%	13%
<b>Excessive Heat</b>	3%	3%	3%	3%	3%	3%	3%
<b>Flooding*</b>	40%	12%	44%	12%	52%	20%	24%
<b>Sinkholes</b>	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%
<b>Thunderstorms (Hail)</b>	100%	100%	100%	100%	100%	100%	100%
<b>Thunderstorms (Lightning)</b>	50%	50%	50%	50%	50%	50%	50%
<b>Thunderstorms (Wind)</b>	100%	100%	100%	100%	100%	100%	100%
<b>Tornadoes</b>	80%	80%	80%	80%	80%	80%	80%
<b>Tropical Cyclones</b>	39%	39%	39%	39%	39%	39%	39%
<b>Wildfires</b>	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%
<b>Winter Storms</b>	37%	37%	37%	37%	37%	37%	37%

\*There is a 100% annual probability that a flooding event will occur at some location within the Lafayette Parish Planning Area

As shown in the table above, hailstorms and high winds have the highest chance of occurrence in the parish (100%). These are followed by tornadoes (80%), flooding for the City of Lafayette (52%), lightning (50%), flooding for Carencro (44%), flooding for Lafayette City-Parish Consolidated Government (40%), tropical cyclones (39%), winter storms (37%), flooding for the incorporated area of Youngsville (24%), flooding for the incorporated area of Scott (20%), drought (13%), and flooding for the incorporated areas of Broussard and Duson (12%). Excessive heat events have an annual chance of occurrence of 3%, while wildfires and sinkholes have an annual chance of occurrence of less than 1% for the entire parish.

### Inventory of Assets for the Entire Parish

As part of the Risk Assessment, the planning team identified critical facilities throughout the parish. Several methods were used to assist in identifying these 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 \$23,686,714,000 in structures throughout the parish. The tables on the next page provide the total estimated value for each type of structure by occupancy.



*Table 2-4: Estimated Total of Potential Losses throughout Lafayette Parish.**(Source: Hazus)*

Occupancy	Lafayette Parish	Lafayette C-PCG	Broussard	Carencro
<b>Agricultural</b>	\$51,971,000	\$27,433,000	\$1,938,000	\$1,472,000
<b>Commercial</b>	\$4,201,117,000	\$1,262,733,000	\$134,210,000	\$67,524,000
<b>Government</b>	\$132,338,000	\$5,370,000	\$1,257,000	\$11,550,000
<b>Industrial</b>	\$942,738,000	\$388,592,000	\$64,825,000	\$12,563,000
<b>Religion</b>	\$267,638,000	\$73,434,000	\$8,431,000	\$3,377,000
<b>Residential</b>	\$17,916,132,000	\$7,460,844,000	\$548,877,000	\$288,762,000
<b>Education</b>	\$174,780,000	\$38,819,000	\$5,546,000	\$6,905,000
<b>Total</b>	<b>\$23,686,714,000</b>	<b>\$9,257,225,000</b>	<b>\$765,084,000</b>	<b>\$392,153,000</b>

*Table 2-5: Estimated Total of Potential Losses throughout Lafayette Parish (cont.).**(Source: Hazus)*

Occupancy	Duson	Lafayette	Scott	Youngsville
<b>Agricultural</b>	\$396,000	\$19,214,000	\$693,000	\$825,000
<b>Commercial</b>	\$3,163,000	\$2,659,663,000	\$50,579,000	\$23,245,000
<b>Government</b>	\$3,277,000	\$106,168,000	\$2,116,000	\$2,600,000
<b>Industrial</b>	\$514,000	\$438,008,000	\$29,109,000	\$9,127,000
<b>Religion</b>	\$548,000	\$175,734,000	\$1,880,000	\$4,234,000
<b>Residential</b>	\$45,157,000	\$8,759,564,000	\$378,082,000	\$434,846,000
<b>Education</b>	\$272,000	\$119,449,000	\$2,465,000	\$1,324,000
<b>Total</b>	<b>\$53,327,000</b>	<b>\$12,277,800,000</b>	<b>\$464,924,000</b>	<b>\$476,201,000</b>

### Critical Facilities of the Parish

The figures on the following pages show the locations and names of the critical facilities within the parish.

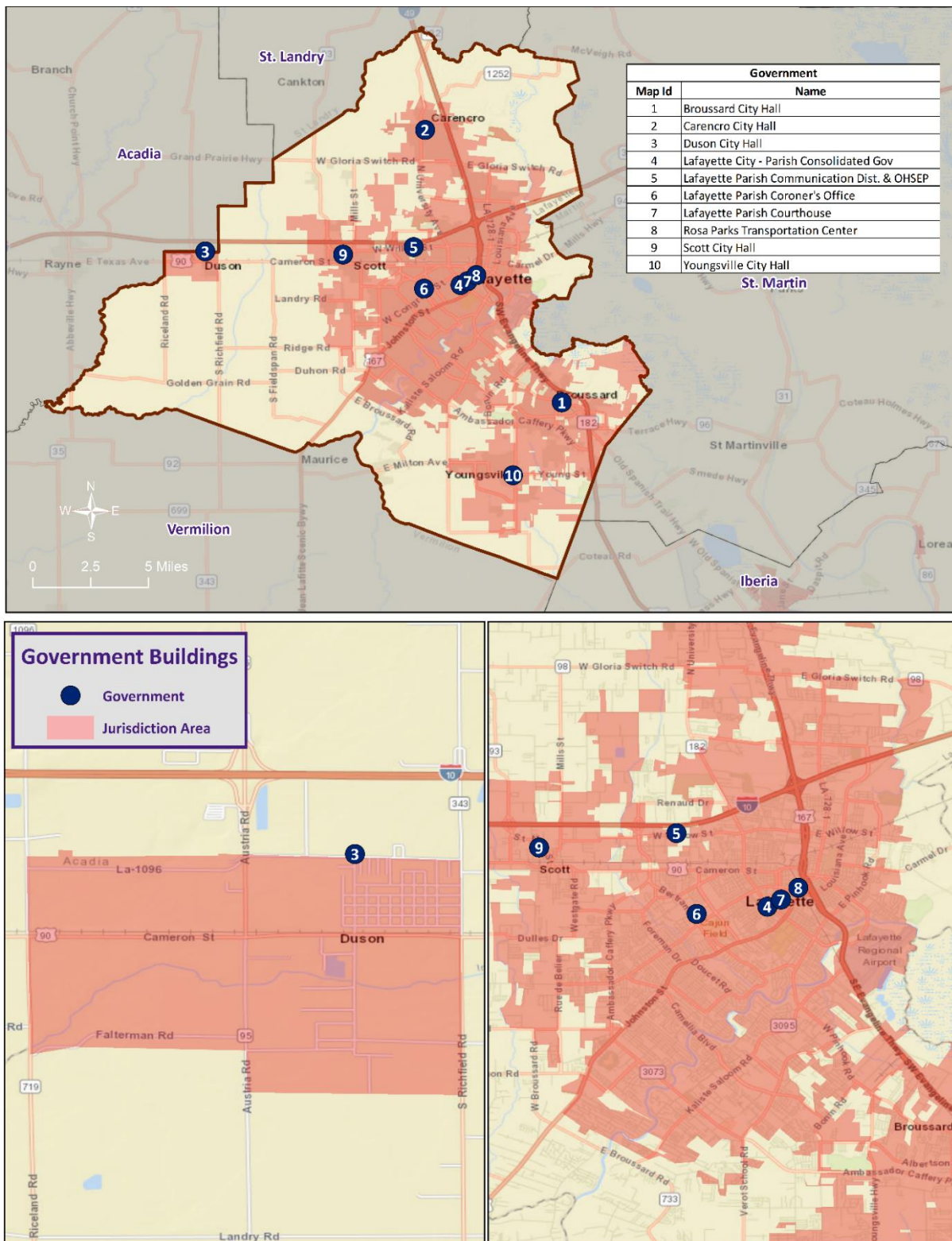


Figure 2-1: Government Buildings in Lafayette Parish Planning Area.

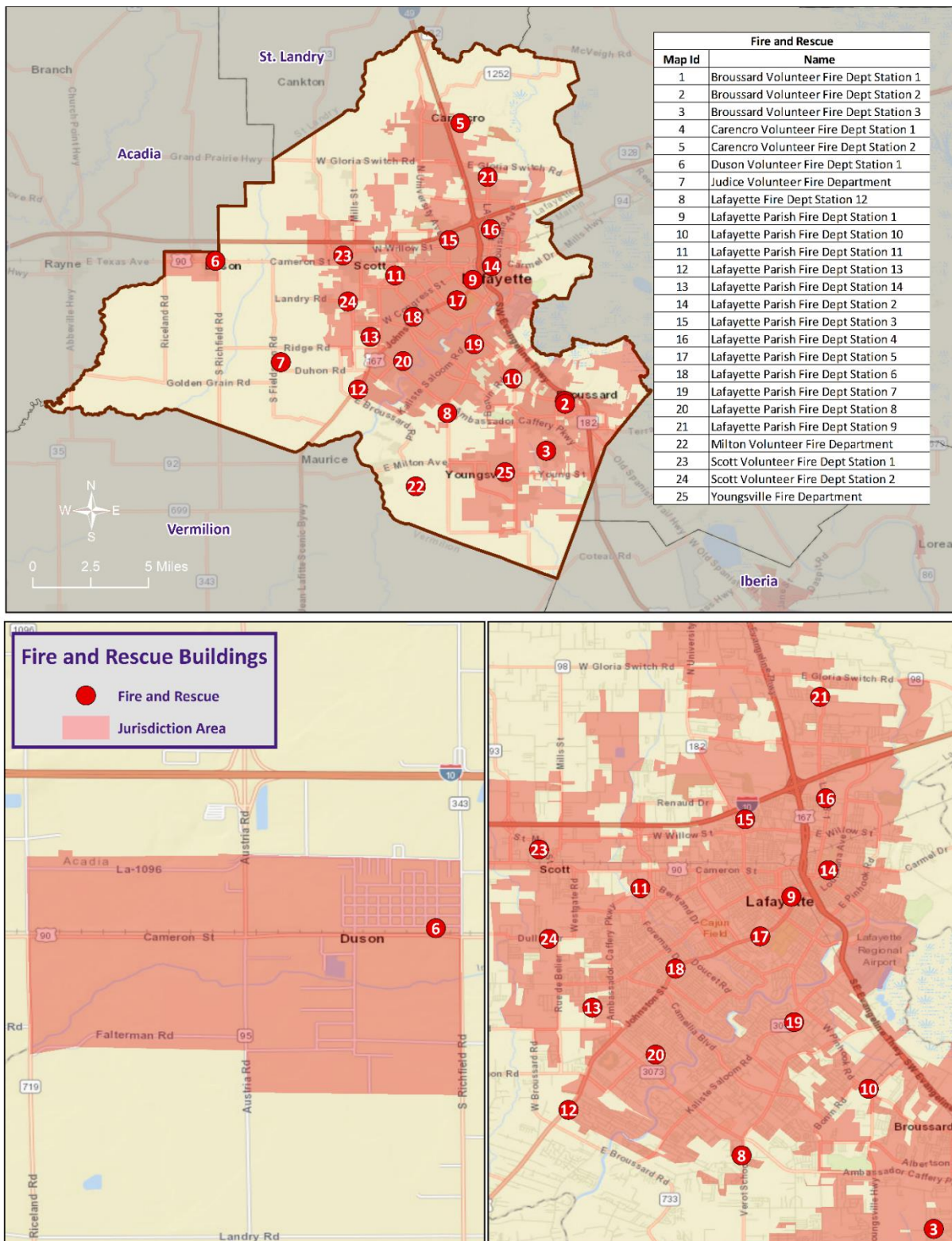


Figure 2-2: Fire and Rescue Facilities in Lafayette Parish Planning Area.



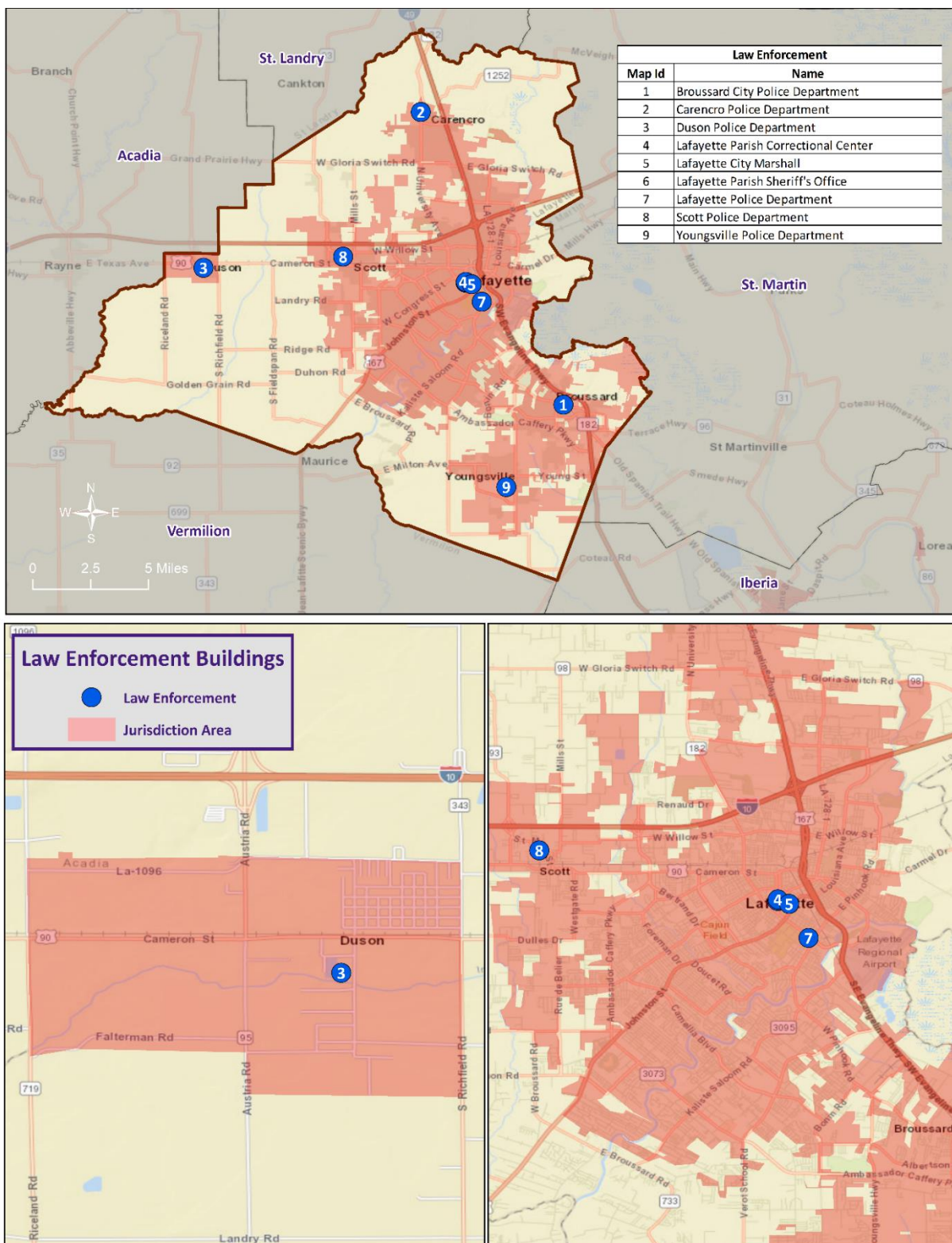


Figure 2-3: Law Enforcement in Lafayette Parish Planning Area.

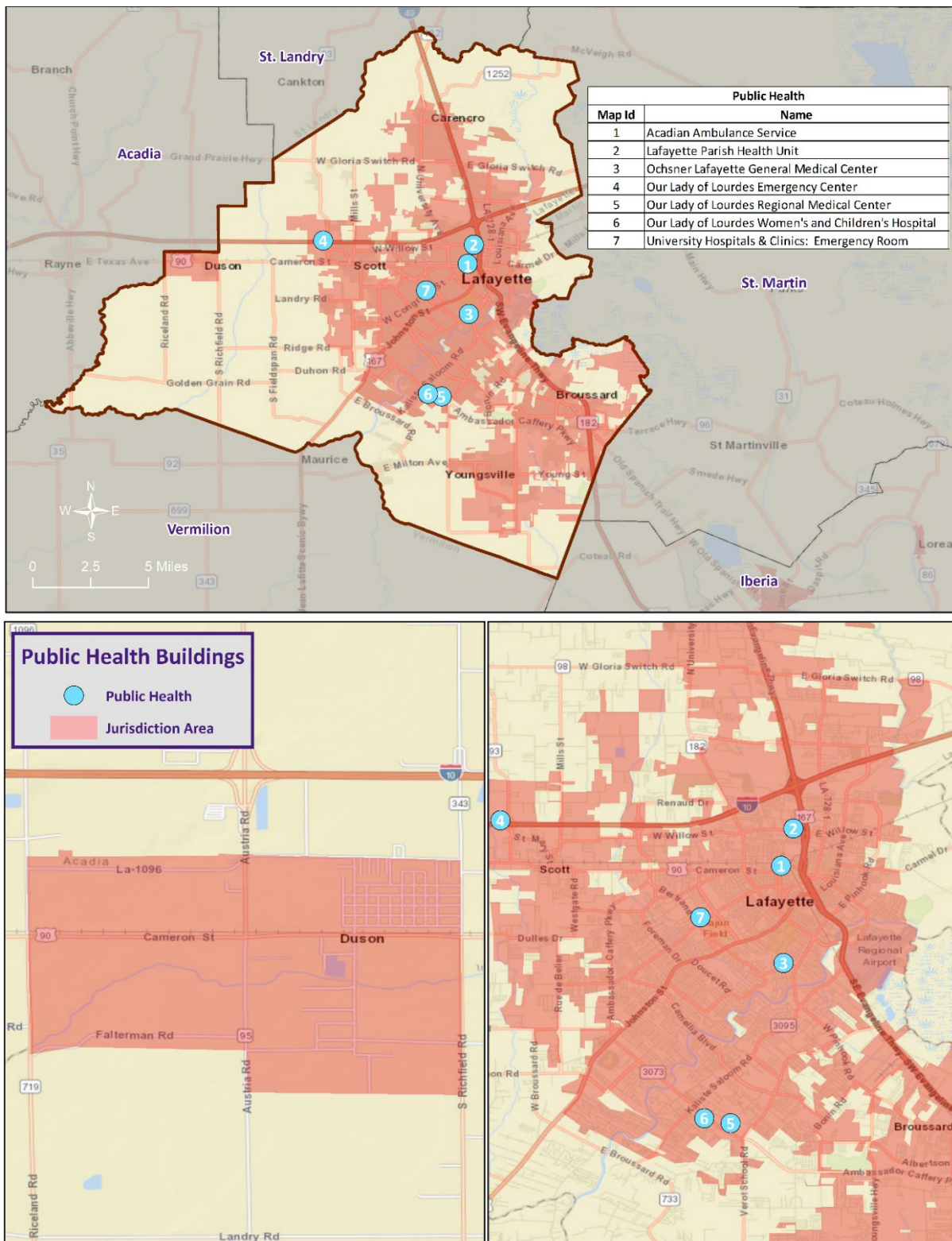


Figure 2-4: Public Health Facilities in Lafayette Parish Planning Area.



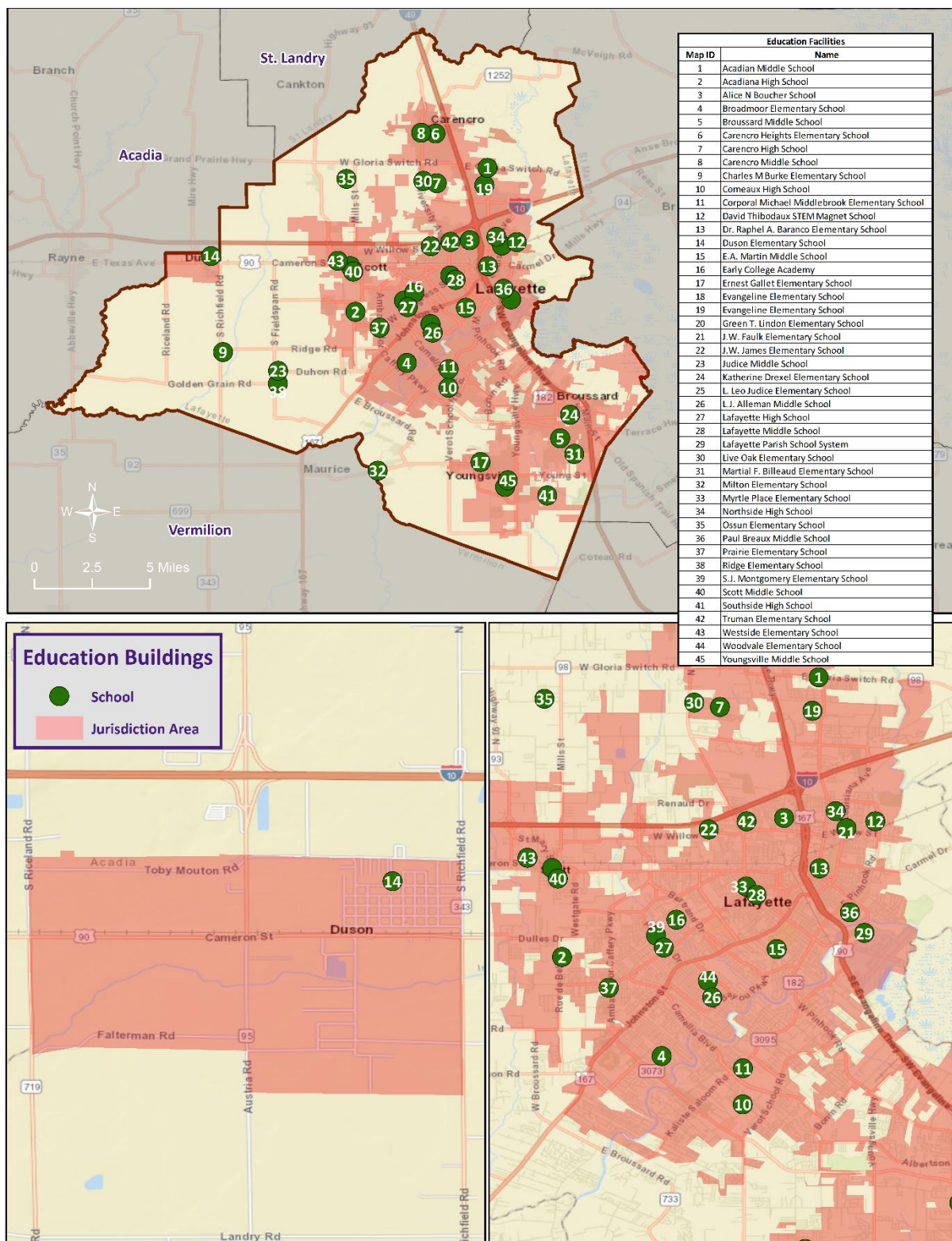


Figure 2-5: Educational Facilities in Lafayette Parish Planning Area.

### Future Development Trends

Lafayette Parish experienced a growth in population and housing between the years of 2000 and 2019, increasing in population from 190,503 with 78,122 housing units in the year 2000 to a population of 244,390 with 105,058 housing units in the year 2019. Youngsville experienced the largest population growth within the parish, growing from a populace of 8,105 in 2010 to 14,704 in 2018 (81.4% overall growth). This is followed by Broussard at 54.9% overall growth, Carencro at 25.65 overall growth, Lafayette City-Parish Consolidated Government at 6.2% overall growth, the City of Lafayette at 4.6% overall growth, and then Scott at 0.7% overall growth from 2010 to 2019. The incorporated area of Duson experienced a decline in population during this same time period.

Youngsville also experienced the largest growth of housing units from 2010 to 2019, growing from 2,870 in 2010 to 4,551 in 2019. The incorporated area of Broussard experienced the second largest growth in housing units during this time period with a 5.5% average annual growth rate, followed by the incorporated area of Scott with a 3.8% average annual growth rate, the incorporated area of Carencro with a 2.4% average annual growth rate, Lafayette City-Parish Consolidated Government with a 1.2% average annual growth rate, the City of Lafayette with a 0.8% average annual growth rate, and then the incorporated area of Duson with an average annual growth rate of 0.4%. 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 2019:

*Table 2-6: Population Growth Rate for Lafayette Parish.*

Total Population	Lafayette Parish Total	Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngsville
<b>1-Apr-00</b>	190,503	53,702	6,890	6,120	1,672	110,257	7,870	3,992
<b>1-Apr-10</b>	221,578	66,797	8,197	7,526	1,716	120,623	8,614	8,105
<b>1-Jul-19</b>	244,390	70,965	12,700	9,449	1,712	126,185	8,675	14,704
<b>Population Growth between 2000 – 2010</b>	16.3%	24.4%	19.0%	23.0%	2.6%	9.4%	9.5%	103.0%
<b>Average Annual Growth Rate between 2000 – 2010</b>	1.6%	2.4%	1.9%	2.3%	0.3%	0.9%	0.9%	10.3%
<b>Population Growth between 2010 – 2019</b>	10.3%	6.2%	54.9%	25.6%	-0.2%	4.6%	0.7%	81.4%
<b>Average Annual Growth Rate between 2010 – 2019</b>	1.14%	0.69%	6.10%	2.84%	-0.03%	0.51%	0.08%	9.05%



Table 2-7: Housing Growth Rate for Lafayette Parish.

Total Housing Units	Lafayette Parish Total	Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngsville
1-Apr-00	78,122	21,125	2,346	2,401	724	46,865	3,154	1,507
1-Apr-10	93,656	26,405	3,351	3,233	775	53,356	3,666	2,870
1-Jul-19	105,058	29,255	5,018	3,922	803	57,430	4,079	4,551
Housing Growth between 2000 – 2010	19.9%	25.0%	42.8%	34.7%	7.0%	13.9%	16.2%	90.4%
Average Annual Growth Rate between 2000 – 2010	2.0%	2.5%	4.3%	3.5%	0.7%	1.4%	1.6%	9.0%
Housing Growth between 2010 – 2019	12.2%	10.8%	49.7%	21.3%	3.6%	7.6%	11.3%	58.6%
Average Annual Growth Rate between 2010 – 2019	1.4%	1.2%	5.5%	2.4%	0.4%	0.8%	3.8%	19.5%

### Future Hazard Impacts

Hazard impacts were estimated for five years and ten years in the future (2025 and 2030). 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 within Lafayette Parish from the present until 2030. A summary of estimated future impacts is shown in the table below. Dollar values are expressed in future costs and assume an annual rate of inflation of 1.02%.

Table 2-8: Estimated Future Impacts, 2018-2030.

(Source: Hazus, US Census Bureau)

Hazard / Impact	Total in Parish (2018)	Hazard Area (2018)	Hazard Area (2025)	Hazard Area (2030)
<b>Flood Damage</b>				
Structures	105,058	38,353	38,623	38,816
Value of Structures	\$23,686,714,000	\$8,647,257,318.75	\$9,349,071,348.79	\$9,884,977,439
# of People	244,634	89,219	89,845	90,295
<b>Tropical Cyclones</b>				
Structures	105,058	105,058	105,796	106,326
Value of Structures	\$23,686,714,000	\$23,686,714,000	\$25,609,134,901.56	\$27,077,097,960
# of People	244,390	244,390	246,106	247,339

Population and housing numbers have continued to increase steadily since the last update to the Lafayette Parish Hazard Mitigation Plan. However, Lafayette Parish is extremely vigilant in offsetting the rapid development seen around the parish with appropriate mitigative actions. Initiatives such as active floodplain management have regulated the development of flood prone areas to continue supporting and encouraging safer communities within Lafayette Parish. Strict enforcement of building codes for all new

development is an additional step taken by the parish in its effort to decrease its vulnerability and increase the resiliency of the parish against natural hazards. The development that has occurred since 2016 has not in any knowing way altered the jurisdiction's vulnerability to natural hazards.

### Assessing Vulnerability Overview

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

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

### Quantitative Methodology

The quantitative methodology consists of utilizing a detailed GIS-based approach informed through the development of comprehensive hazard and infrastructure databases. This data-centric approach forms the foundation for our quantitative vulnerability assessment. GIS technology allowed for the identification and analysis of potentially at-risk community assets such as people and infrastructure. This analysis was completed for hazards that can be spatially defined in a meaningful manner (i.e., hazards with an official and scientifically determined geographic extent) and for which GIS data were readily available.

### Qualitative Methodology

The qualitative assessment relies less on technology, but more on historical and anecdotal data regarding expected hazard impacts. The qualitative assessment completed for Lafayette Parish is based on the Priority Risk Index (PRI). The purpose of the PRI is to prioritize all potential hazards, and then group them into three categories of high, moderate, or low risk to identify and prioritize mitigation opportunities. The PRI is a good practice to use when prioritizing hazards because it provides a standardized numerical value for hazards to be compared. PRI scores were calculated using five categories:

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

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

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

### Priority Risk Index and Hazard Risk

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

*Table 2-9: Summary of the Priority Risk Index.*

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

*Table 2-10: Associated Risk Factor with PRI Value Range.*

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

*Table 2-11: Risk Assessment for Lafayette Parish.*

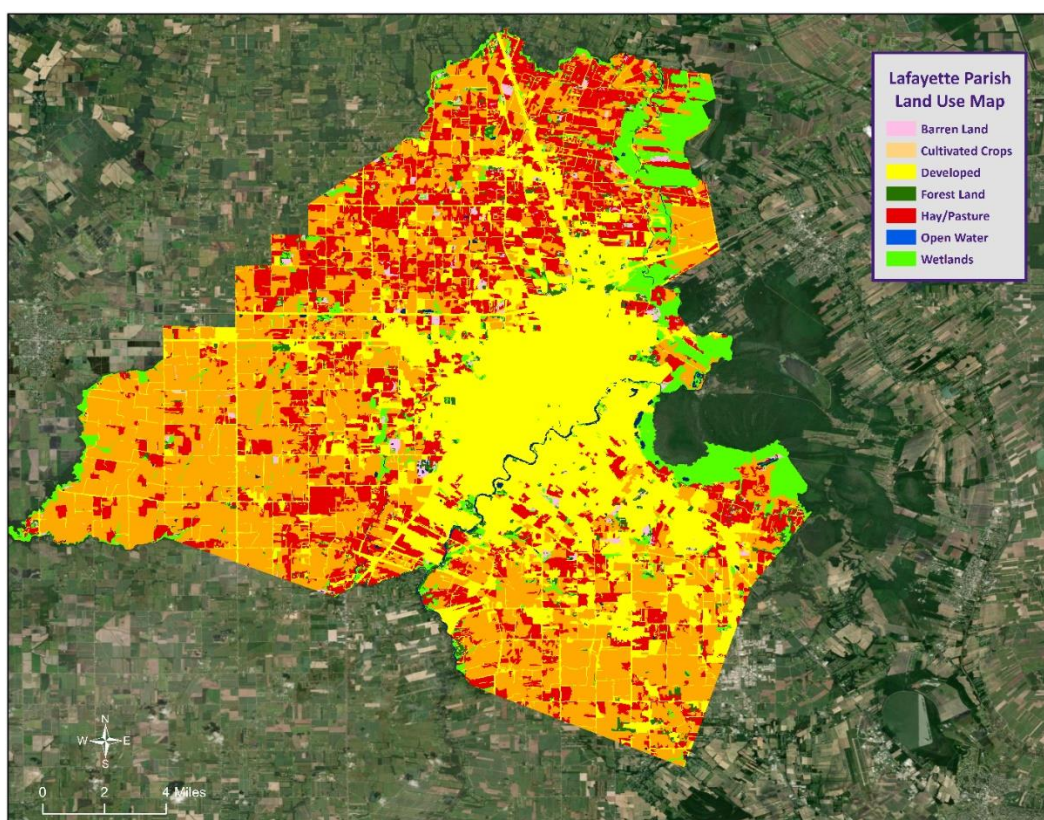
Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	Overall Risk
Drought	3	2	4	2	3	2.8
Excessive Heat	2	1	4	1	3	2.15
Flooding	3	4	3	4	3	3.4
Sinkholes	1	2	1	4	2	1.85
Thunderstorms - Hail	4	2	3	3	1	2.7
Thunderstorms - Lightning	3	2	2	3	1	2.25
Thunderstorms - Wind	4	2	3	3	1	2.7
Tornadoes	3	3	2	4	3	2.95
Tropical Cyclones	3	4	4	1	4	3.3
Wildfires	1	3	3	4	2	2.5
Winter Storms	3	3	4	2	3	3.05

## Land Use

The Lafayette Parish planning area land use table is provided below. Residential, commercial, and industrial areas account for 32% of the parish's land use. At 97,823 acres, agricultural land is the largest category, accounting for 57% of the land in the parish. The parish also consists of wetlands (8%), forest land (2%), and water areas (1%).

*Table 2-12: Lafayette Parish Land Use.  
(Source: USGS Land Use Map)*

Land Use	Acres	Percentage
<b>Agricultural Land, Cropland, and Pasture</b>	97,823	57%
<b>Wetlands</b>	14,024	8%
<b>Forest Land (Not including forested wetlands)</b>	3,425	2%
<b>Urban/Development</b>	55,837	32%
<b>Water</b>	1,185	1%



*Figure 2-6: Lafayette Parish Land Use Map.  
(Source: USGS Land Use Map)*



## Hazard Identification

### Drought

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

Drought is a unique and insidious hazard. Unlike other natural hazards, no specific threshold of "dryness" exists for declaring a drought. In addition, the definition of drought depends on stakeholder needs. For instance, the onset (and relief) of agricultural drought is quick, as crops need water every few days; once they get rainfall, they improve. Conversely, hydrologic drought sets in (and is alleviated) only over longer time periods. A few dry days will not drain a reservoir, but a few rain showers cannot replenish it either. Moreover, different geographical regions define drought differently based on the deviation from local, normal precipitation.

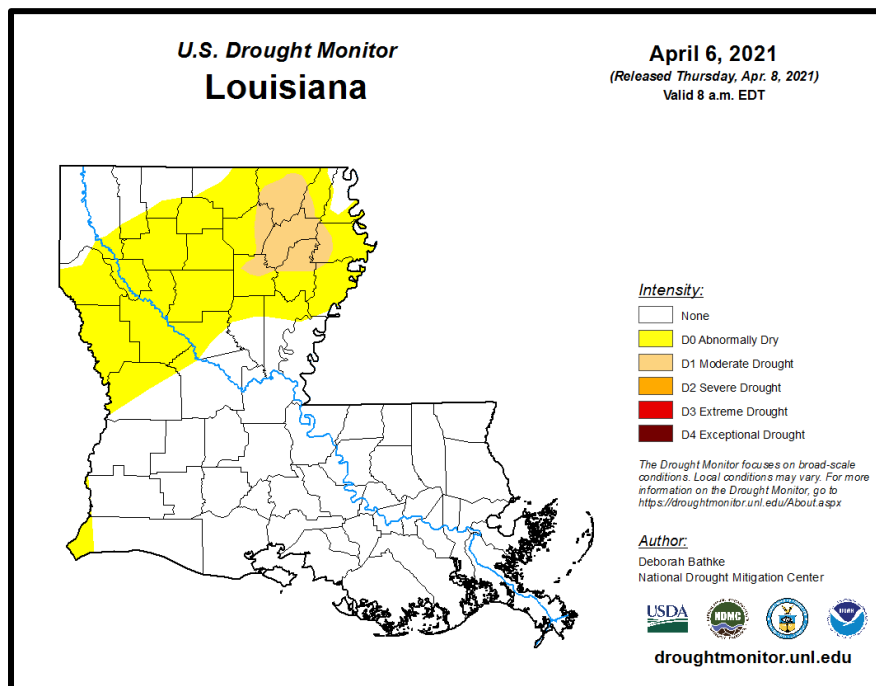
Drought can occur anywhere, triggered by changes in the local-to-regional-scale atmospheric circulation over an area, or by broader-scale circulation variations such as the expansion of semi-permanent oceanic high-pressure systems or the stalling of an upper-level atmospheric ridge in place over a region. The severity of a drought depends upon the degree and duration of moisture deficiency, as well as the size of the affected area. Periods of drought also tend to be associated with other hazards, such as wildfires and/or heat waves. Lastly, drought is a slow onset event, causing less direct—but tremendous indirect—damage. Depletion of aquifers, crop loss, and livestock and wildlife mortality rates are examples of direct impacts. Since the groundwater found in aquifers is the source of about 38% of all county and city water supplied to households (and comprises 97% of the water for all rural populations that are not already supplied by cities and counties), drought can potentially have direct, disastrous effects on human populations. The indirect consequences of drought, such as unemployment, reduced tax revenues, increased food prices, reduced outdoor recreation opportunities, higher energy costs as water levels in reservoirs decrease and consumption increases, and water rationing are not often fully known. This complex web of impacts causes drought to affect people and economies well beyond the area physically experiencing the drought.

This hazard is often measured using the Palmer Drought Severity Index (PDSI, also known operationally as the Palmer Drought Index). The PDSI, first developed by Wayne Palmer in a 1965 paper for the U.S. Weather Bureau, measures drought through recent precipitation and temperature data with regard to a basic supply-and-demand model of soil moisture. It is most effective in long-term calculations. Three other indices used to measure drought are the Palmer Hydrologic Drought Index (PHDI), the Crop Moisture Index (CMI), which is derived from the PDSI, and the Keetch-Byram Drought Index (KBDI), created by John Keetch and George Byram in 1968 for the U.S. Forest Service. The KBDI is used mainly for predicting the likelihood of wildfire outbreaks. As a compromise, the PDSI is used most often for droughts since it is a medium-response drought indicator. The objective of the PDSI is to provide measurements of moisture conditions that are standardized so that comparisons using the index can be made between locations and between months. [Table 2-13](#) displays the range and Palmer classifications of the PDSI index while [Figure 2-7](#) displays the current drought monitor for the state of Louisiana and its parishes.

*Table 2-13: Palmer Drought Severity Index Classification and Range*

Range	Palmer Classifications
4.0 or more	Extremely Wet
3.0 to 3.9	Very Wet
2.0 to 2.9	Moderately Wet
1.0 to 1.99	Slightly Wet
0.5 to 0.99	Incipient Wet Spell
0.49 to -0.49	Near Normal
-0.5 to -0.99	Incipient Dry Spell
-1.0 to -1.99	Mild Drought
-2.0 to -2.99	Moderate Drought
-3.0 to -3.99	Severe Drought
-4.0 or less	Extreme Drought

The PDSI best measures the duration and intensity of drought-inducing circulation patterns at a somewhat long-term time scale, although not as long-term as the PHDI. Long-term drought is cumulative, so the intensity of drought during the current month is dependent on the current weather patterns in addition to the effects of cumulative patterns of previous months. Although weather patterns can change almost overnight from a long-term drought pattern to a long-term wet pattern, as a medium-response indicator, the PDSI responds relatively rapidly. Data compiled by the National Drought Mitigation Center indicates normal conditions currently exists within Lafayette Parish.



*Figure 2-7: United States Drought Monitor for the State of Louisiana and its Parishes.  
(Source: The National Drought Mitigation Center)*



### *Location*

Drought typically impacts a region and not one specific parish or jurisdiction. While the entire planning area can experience drought, the major impact of a drought event across the entire Lafayette Parish planning area is on the agricultural community. The worst-case drought scenario for the entire Lafayette Parish planning area would be a severe drought (D2).

### *Previous Occurrences / Extent*

Historically, there have been four drought incidents in Lafayette Parish. Drought events have ranged from Mild to Moderate per the National Climatic Data Center. Since the last update in 2016, there have been no drought events within the boundaries of the entire Lafayette Parish planning area.

### *Frequency / Probability*

Based on the four drought events since 1990, the annual chance of occurrence of a drought event within a given year is calculated at 13% for the entire Lafayette Parish planning area.

### *Estimated Potential Losses*

According to the NCEI Storm Events Database, there have been four drought events which have impacted the entire Lafayette Parish planning area., resulting in limited to no damage to crops in the parish. When examining the drought hazard, the main impact will primarily be on the crops. The following table presents an analysis of agricultural exposure which are susceptible to droughts by type for the entire Lafayette Parish planning area.

*Table 2-14: Agricultural Exposure by Crop Type for Droughts in Lafayette Parish Planning Area.  
(Source: LSU AG Center 2018 Parish Totals)*

Agricultural Exposure by Type for Drought					
Hay	Tomatoes	Soybeans	Sugarcane	Sweet Corn	Wheat
\$1,474,800	\$206,790	\$4,116,198	\$11,487,910	\$510,410	\$546,913

There have been no reported injuries or deaths as a direct result of drought in the entire Lafayette Parish planning area.

### *Vulnerability*

See [Appendix C: Critical Facilities](#) for parish and municipality buildings that are susceptible to drought.

### Excessive Heat

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

However, temperature alone is insufficient to describe the stress placed on humans (as well as flora and fauna) in hot weather. It is crucial to consider the effect of relative humidity since it is essential to the body's ability to perspire and cool. Once air temperature reaches 95° F, perspiration becomes a very significant biophysical mechanism to ensure heat loss. Perspiration is ineffective as a cooling mechanism if the water cannot evaporate (i.e., sweating in high relative humidity is reduced as compared to during dry conditions). To communicate this relationship between temperature and humidity, the National Weather Service (NWS) developed the Heat Index (HI), which provides a warning system based on a combination of air temperature and relative humidity. The HI is presented in [Figure 2-8](#) and [Table 2-15](#) summarizes the HI risk levels and protective measures. The NWS devised the index for shady, light wind conditions, and thus advises that the HI value can be increased by as much as 15 F° if a person is in direct sunlight, and that strong winds of hot, dry air can be extremely hazardous.

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

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

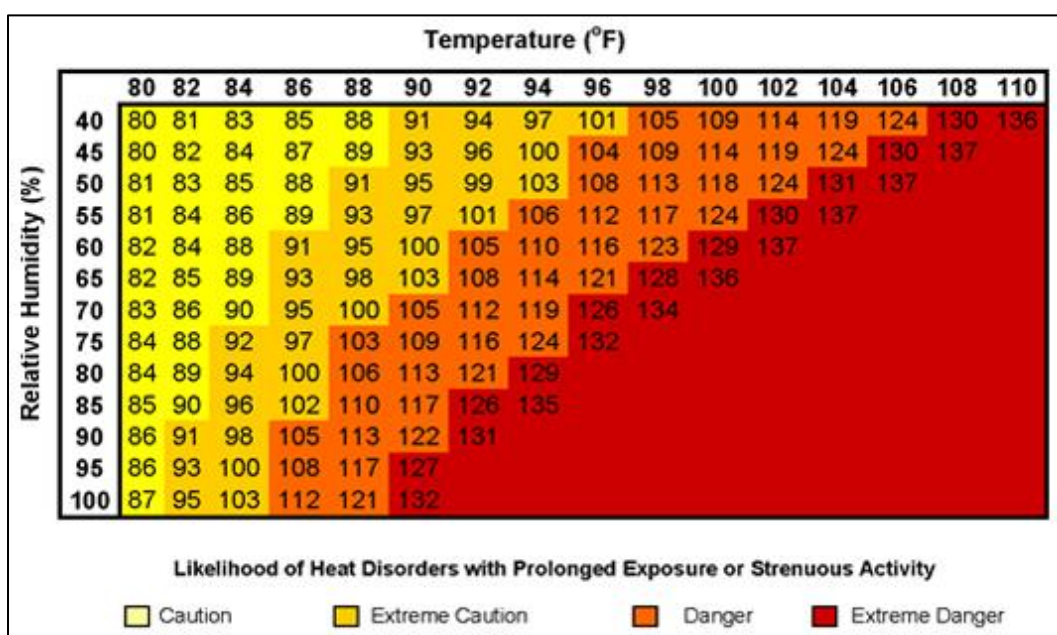


Figure 2-8: Heat Index Advisor based on Air Temperature (°F) and Relative Humidity.  
(Source: National Weather Service)

Table 2-15: Summary of Heat Index Risk Levels with Protective Measures  
(Source: National Weather Service)

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

#### Location

Excessive heat typically impacts a region and not one specific parish or jurisdiction. Because excessive heat is a climatological based hazard, it has the same probability of occurring throughout the entirety of the Lafayette Parish planning area. Based on historical data, the worst-case scenario for the Lafayette Parish planning area involving excessive heat would be a high risk level on the HI scale with temperatures ranging from 103°F to 115°F.

#### Previous Occurrences / Extent

Per the NCEI Storm Events Database, there has been one incident involving excessive heat in the Lafayette Parish planning area since 1990. There have been no incidents of an excessive heat event since the last HMP update.

*Frequency / Probability*

Based on historical data, the annual chance of occurrence of an excessive heat event occurring within a given year is calculated at 3% for the Lafayette Parish planning area.

*Estimated Potential Losses*

According to the NCEI Storm Events Database, there have been no excessive heat events which have impacted the Lafayette Parish planning area which has resulted in injuries or crop damages. There has been one death associated with an excessive heat event in which an 11-month old child was left in a car on June 25, 2012.

*Vulnerability*

See [Appendix C: Critical Facilities](#) for parish and municipality buildings that are susceptible to excessive heat.

## 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.

Historically, across the entire Lafayette Parish planning area, all types of flooding events have been observed except for coastal flooding. For purposes of this assessment, ponding, flash flood, and urban flooding are considered to be flooding as a result of storm water from heavy thunderstorm precipitation.

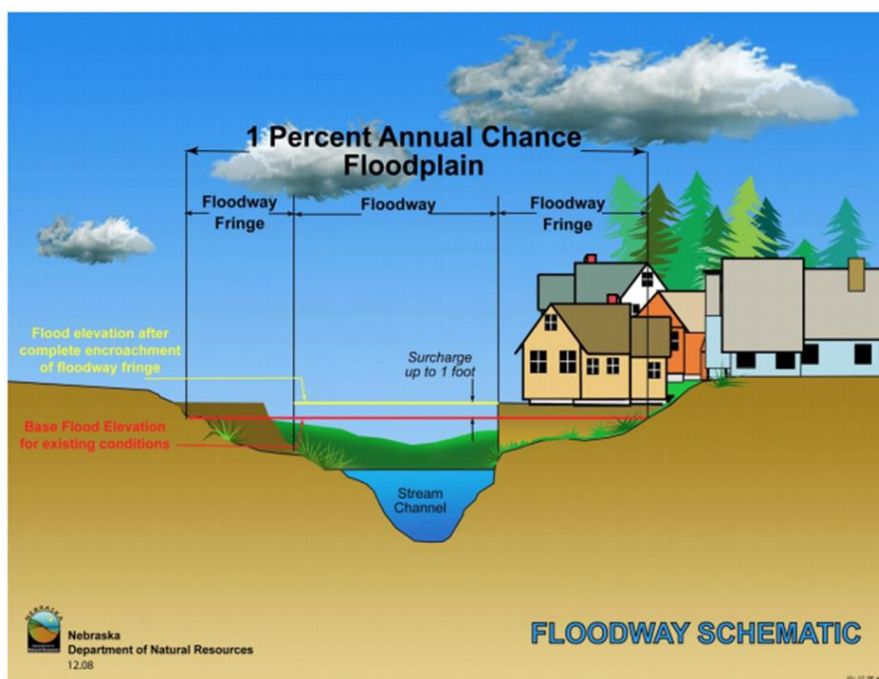
Based on stream gauge levels and precipitation forecasts, the National Weather Service (NWS) posts flood statements, watches, and warnings. The NWS issues the following weather statements with regard to flooding:

- **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 Vermilion River. Not only are the magnitudes of 100-year events different between rivers, but they can also be different along any stretch of a given river. A 100-year event upstream is different from one downstream due to the change 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, waterway, and time since floodplain and river characteristics change over time. 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 handled before it has time to completely dry. The longer these materials are saturated, the more moisture, sediment, and pollutants they absorb.

Soaking can also cause extensive damage to household goods. Wooden furniture may become warped, making it unusable, while other furnishings such as books, carpeting, mattresses, and upholstery usually are not salvageable. Electrical appliances and gasoline engines will flood, making them worthless until they are professionally dried and cleaned.

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

#### *Repetitive Loss Properties*

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

- 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:

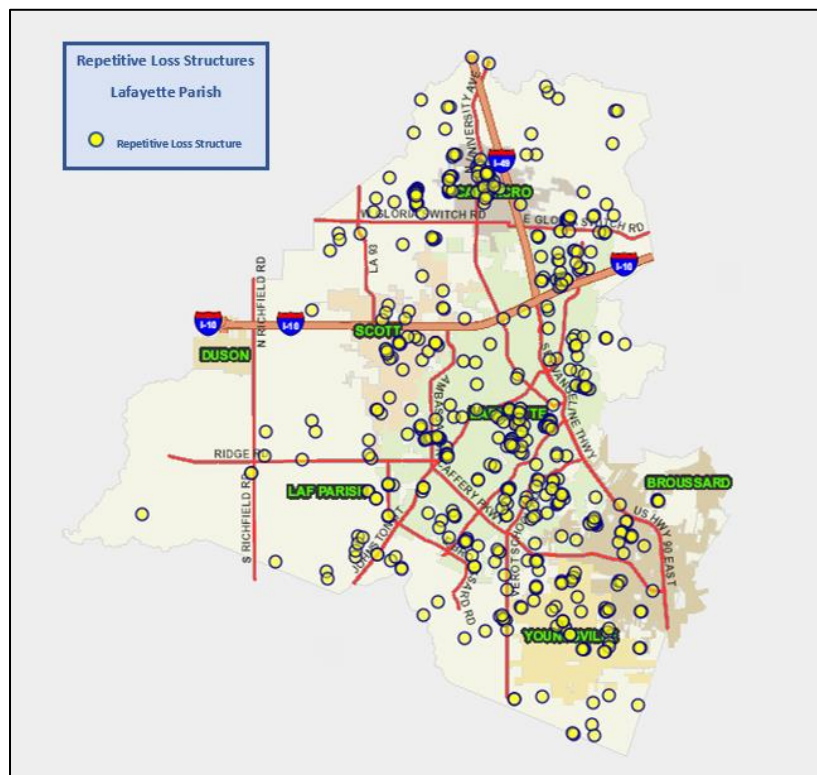
- a. It is covered under a contract for flood insurance made available under the NFIP; and
- b. It has incurred flood related damage –
  - 1) For which four or more separate claims payments have been made under flood insurance coverage with the amount of each claim exceeding \$5,000 and with the cumulative 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 the entire Lafayette Parish planning area are provided in the table below:

*Table 2-16: Repetitive Loss Structures for Lafayette Parish.*

Jurisdiction	Number of Structures	Residential	Commercial	Government	Total Claims	Total Claims Paid	Average Claim Paid
<b>Lafayette C-PCG</b>	211	206	5	0	683	\$19,069,105	\$27,919
<b>Broussard</b>	9	8	1	0	25	\$431,326	\$17,253
<b>Carencro</b>	36	35	1	0	122	\$1,678,108	\$13,755
<b>Duson</b>	1	1	0	0	2	\$27,925	\$13,963
<b>Lafayette</b>	137	126	11	0	447	\$14,077,731	\$31,493
<b>Scott</b>	26	17	9	0	86	\$653,499	\$7,599
<b>Youngsville</b>	26	26	0	0	69	\$1,135,849	\$16,462
<b>Total</b>	<b>444</b>	<b>417</b>	<b>23</b>	<b>0</b>	<b>1,434</b>	<b>\$37,073,543</b>	<b>\$18,349</b>

The repetitive loss structures were geocoded in order to provide an overview of where the repetitive loss structures are located throughout the parish. [Figure 2-10](#) shows the approximate location of the structures, while [Figure 2-11](#) shows where the highest concentration of repetitive loss structures is located. Through the repetitive loss map, it is clear the primary concentrated area of repetitive loss structures is focused in and around the City of Lafayette.



*Figure 2-10: Repetitive Loss Properties in the Lafayette Parish Planning Area.*

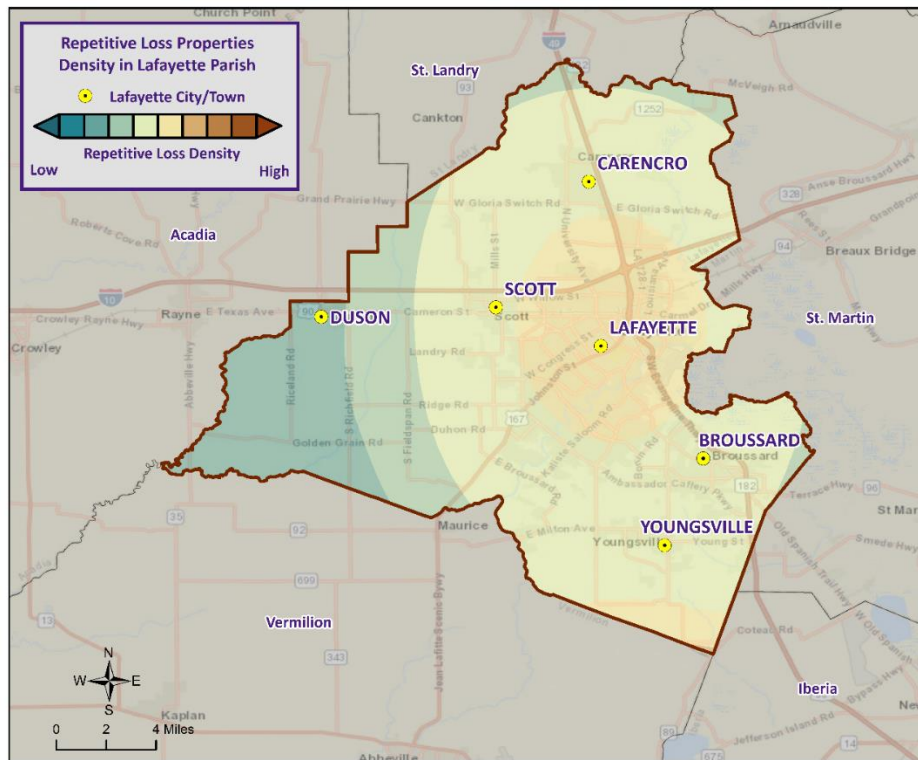


Figure 2-11: Repetitive Loss Property Densities in the Lafayette Parish Planning Area.

#### National Flood Insurance Program

Flood insurance statistics indicate that the entire Lafayette Parish planning area has 23,541 flood insurance policies with the NFIP, with total annual premiums of \$13,656,098. Lafayette City-Parish Consolidated Government and the jurisdictions of Broussard, Carencro, Duson, Lafayette, Scott, and Youngsville are all participants in the NFIP. Lafayette City-Parish Consolidated Government and all 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 the entire Lafayette Parish planning area are provided in the tables to follow.

Table 2-17: Summary of NFIP Policies for the Lafayette Parish Planning Area.

Location	No. of Insured Structures	Total Insurance Coverage Value	Annual Premiums Paid
Lafayette C-PCG	9,853	\$2,636,663,900	\$5,282,896
Broussard	1,333	\$408,062,700	\$712,095
Carencro	601	\$157,759,400	\$323,234
Duson	71	\$13,636,100	\$74,895
Lafayette	8,425	\$2,429,411,600	\$5,320,556
Scott	1,119	\$249,315,400	\$848,714
Youngsville	2,139	\$658,826,400	\$1,093,708
<b>Total</b>	<b>23,541</b>	<b>\$6,553,675,500</b>	<b>\$13,656,098</b>

*Table 2-18: Summary of Community Flood Maps for the Lafayette Parish Planning Area.*

CID	Community Name	Initial FHB Identified	Initial FIRM Identified	Current Effective Map Date	Date Joined the NFIP	Tribal
<b>220101#</b>	Lafayette C-PCG	11/15/1977	8/1/1980	12/21/2018	8/1/2008	No
<b>220102#</b>	Broussard	4/12/1974	3/16/1988	12/21/2018	3/16/1988	No
<b>220103#</b>	Carencro	3/26/1976	11/5/1980	12/21/2018	11/5/1980	No
<b>220104#</b>	Duson	4/5/1974	9/30/1981	12/21/2018	9/30/1981	No
<b>220105#</b>	Lafayette	3/1/1974	9/30/1980	12/21/2018	9/30/1980	No
<b>220106#</b>	Scott	6/14/1974	4/4/1983	12/21/2018	4/4/1983	No
<b>220358#</b>	Youngsville	4/5/1974	3/30/1982	12/21/2018	3/30/1982	No

According to the Community Rating System (CRS) list of eligible communities dated April 1, 2021, Lafayette City-Parish Consolidated Government and the jurisdictions of Carencro, Lafayette, and Scott all participate in the CRS program. The incorporated areas of Broussard, Duson, and Youngsville do not currently participate in the CRS program.

*Table 2-19: List of Areas within Lafayette Parish Planning Area that Participate in the Community Rating System.*

Community Number	Name	CRS Entry Date	Current Effective Date	Current Class	% Discount for SFHA	% Discount for Non-SFHA	Status
<b>220103</b>	Carencro	5/1/2009	4/1/2021	7	15	5	C
<b>220105</b>	Lafayette	10/1/2011	10/1/2011	8	10	5	C
<b>220101</b>	Lafayette C-PCG	10/1/2011	10/1/2011	8	10	5	C
<b>220106</b>	Scott	10/1/2012	5/1/2018	9	5	5	C

### *Threat to People*

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

Major health concerns are also associated with floods. Flood waters can transport materials such as dirt, oil, animal waste, and chemicals (e.g., farm, lawn, and industrial) that may cause illnesses of various degrees when coming in contact with humans. Flood 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 Lafayette 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 the entire Lafayette Parish planning area may experience.

**Flash Floods:** Flash floods are characterized by a rapid rise in water level, high velocity, and large amounts of debris. They are 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.

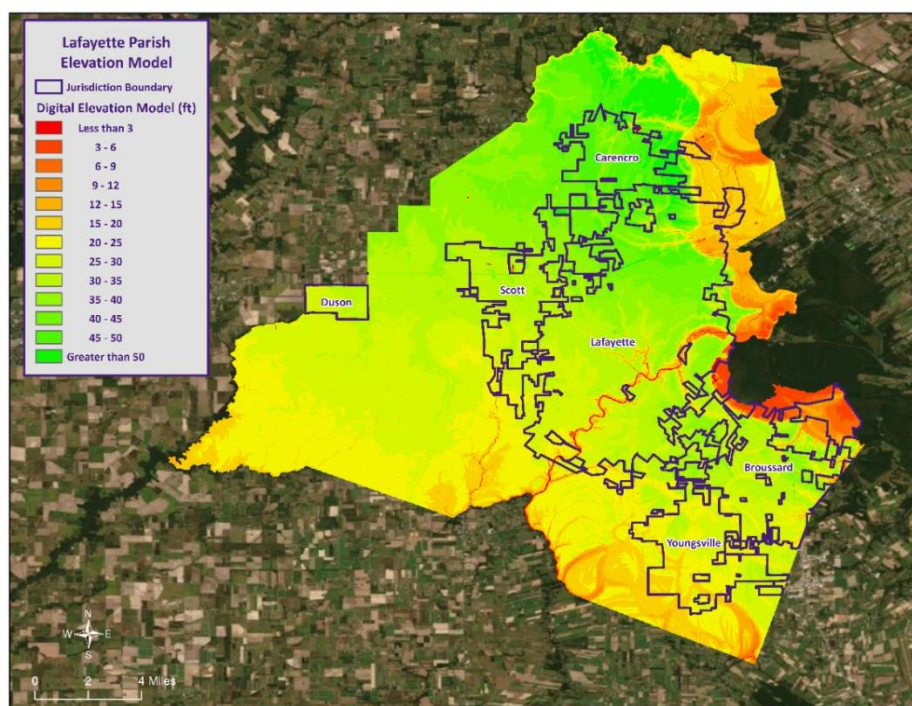
**Local Drainage or High Groundwater Levels:** Locally heavy precipitation may produce flooding in areas other than delineated floodplains or along recognizable drainage channels. If local conditions cannot accommodate intense precipitation through a combination of infiltration and surface runoff, water 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, by definition, is river-based. Most of the riverine flooding problems occur when rivers crest at flood stage levels, causing extensive flooding in low-lying areas.

The Lafayette Parish digital elevation model (DEM) in the figure on the next page is instructive in visualizing where the low-lying and high-risk areas are for the parish. Elevations in Lafayette Parish range from near sea level to 55 feet. The highest elevations in the parish are approximately 55 feet, located in the northern unincorporated areas of the parish and the incorporated area of Carencro. These higher elevations are sporadic throughout the parish and are not common for the majority of the area. The other incorporated areas range in elevation from 26 to 36 feet, with the incorporated areas of Scott, Duson, and Lafayette averaging 36 feet, the city of Broussard averaging 33 feet, and the city of Youngsville averaging 26 feet. The lowest elevations of the parish are located in the unincorporated areas of southern and eastern Lafayette Parish.





*Figure 2-12: Elevation throughout Lafayette Parish.*

### Community Profile

The following is a description of the entire Lafayette Parish planning area as it relates to water movement within and throughout the parish. This description was included in a Flood Insurance Study initially conducted for Lafayette City-Parish Consolidated Government in January 1996, but most recently revised as of December 2018.

Lafayette Parish is located in the southwest Louisiana Bayou country which has become famous the world over as the “Cajun Country.” The climate is characterized by warm summers and mild winters. The normal annual precipitation averages 60.48 inches. The parish covers approximately 270 square miles, of which about 300 acres is water. It is located about 35 miles from the Gulf of Mexico and is bordered by St. Martin Parish and St. Mary Parish on the east, St. Landry Parish to the north, Vermilion Parish on the south and Acadia Parish on the west. The oil industry plays a vital role in the parish economy, yet the area remains diversified, depending greatly upon agriculture and distribution of retail and wholesale trade. The population of Lafayette Parish in the year 2010 was reported to be 221,578 per U.S. Bureau of the Census (Reference 1[a]).

The Vermilion River is the major waterway in the parish. Its head of navigation lies within the City of Lafayette. The majority of streams in the parish contribute flow to the Vermilion River. The river flows through Lafayette Parish and Vermilion Parish. It passes near several communities and across the Intracoastal Waterway before it empties into Vermilion Bay, which connects the Gulf of Mexico. The drainage pattern of the Vermilion River system is complex in nature because it serves as a tributary to Bayou Teche via Bayou Fusilier in the upper reaches near Arnaudville, Louisiana. It is also connected to Bayou Teche through the privately owned Evangeline (Ruth) Canal. The Bayou Fusilier control structure, Keystone Dam, and the Evangeline Canal structures are used to regulate

the distribution of flows for irrigation and navigation purposes during low flows. The low marsh area on the left descending bank between Lafayette and Breaux Bridge serves as a ponding area during high flood stages. The elevation of this marsh varies between 10 and 15 feet.

Most of the development along the Vermilion River is located in high ridges to the west or right descending bank above the floodplain. Parks, golf courses, power plants, sewage disposal plants, and residential homes are located close to the channel.

Coulee Mine and Lateral No. 1 (East and West Channels) drain sparsely developed areas in the upper reaches and moderately developed areas in the lower reaches. This area is located on flat terrain approximately 20 to 35 feet in elevation.

Grand Avenue Coulee, which is located on a plateau 25 to 30 feet high, drains into the confined channel of the Vermilion River. The lower reaches of Breaux Bridge Coulee and Francois Coulee, which have elevations varying between 10 and 15 feet, cut across the flat floodplain of the Vermilion River. The upper reaches of Breaux Bridge Coulee and Jupiter Street Coulee have elevations varying between 30 and 40 feet.

There is commercial development located on U.S. Route 167, State Route, 182, St. Peter Street, and Romer Street. There is a mixture of commercial and light industrial development along Railroad Street. Commercial areas are expected to expand to accommodate new residential development. Much of the existing residential development is located in the floodplains of Beau Basin and Gaston Coulee, but large portions of land outside the floodplains are available for development.

The Memphis-Frost Association soils cover most of the parish. These are gently sloping to nearly level loamy soils that formed in loess. While the Memphis soils (on the gently sloping stream divides and drainage way side slopes) are well drained, the Frost soils (in long narrow depressions along drainage ways) are poorly drained. Open drainage ditches are provided throughout the community, and several hundred feet of storm sewer culverts are being installed.<sup>9</sup>

#### Location of Principle Flood Areas

The following is a description of principle flood areas throughout the entire Lafayette Parish planning area as described in the Flood Insurance Study referenced above.

During high flood stages, an unusual phenomenon occurs on the Vermilion River. When the river below Pinhook Bridge is unable to carry high flows, the direction is reversed upstream toward the low marsh areas east of Lafayette Parish. This reversal is limited to the reach between Pinhook Bridge and Long Bridge where the left descending bank borders a low swamp area. When the stages downstream of Pinhook Bridge are relatively low, the direction of flow is in the normal downstream direction.

Backwater flooding along Beau Basin and Gaston Coulee occasionally causes flood problems in the City of Carencro. A survey of area residents revealed occasional serious flood problems, including water damage in homes. Although flooding of homes and

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<sup>9</sup> <https://map1.msc.fema.gov/data/22/S/PDF/22055CV001A.pdf?LOC=e5e4f4dc810fc858dcf9f3742a06b0a5>



businesses is relatively infrequent in most areas, floodwaters in yards, fields, and streets are not uncommon.

The history of flooding within the City of Scott indicates that flooding can occur during any season of the year. Floods occur due to limited stream capacities and because the nature of the terrain offers little relief. The existing channel capacities are exceeded by floods of low frequency that spread rapidly over the floodplains. Due to the flatness of the floodplains, they are entirely covered by floodwaters during the less frequent floods. After this condition occurs, increases in the discharges produce only minor increases in water-surface elevations. The principal sources of flooding in the City of Scott are from rainfall runoff and backwater from Lateral F, Lateral F2, and West Coulee Mine.

According to local officials, the main flooding problem the City of Broussard has is caused by Coulee Des Poches and Grenovillieres Swamp. In this FIS, Grenovillieres Swamp is considered to be the headwaters of Coulee Des Poches.

Grenovillieres Swamp flows near U.S. Route 90 in the eastern portion of the City of Broussard. The channel, deeply entrenched, flows in a northwestern direction from its headwaters. At a point approximately 2 miles downstream of the Southern Pacific Transportation Company spur, it confluences with a tributary to Coulee des Poches to form the main channel of Coulee Des Poches, which then flows in a northwestern direction discharging into the Vermilion River. Flooding along both Coulee Des Poches and Grenovillieres Swamp is limited to the immediate floodplain area.

Approximately 4,000 feet of Grenovillieres Swamp lies within the corporate limits of the City of Broussard. The remaining portion of Grenovillieres swamp and all of Coulee Des Poches lies in the City of Lafayette and Lafayette Parish.

#### Flood Protection Measures

As further noted in the Flood Insurance Study<sup>10</sup> conducted for entire Lafayette Parish planning area:

...channel improvements for the Vermilion River, Bayou Fusilier, and Bayou Teche, authorized under the Flood Control Act of August 18, 1941 (Reference 37), were started on March 20, 1944, and completed on March 27, 1957. These improvements were for navigation and flood control.

The City of Lafayette and Lafayette Parish have made numerous drainage improvements such as clearing and enlarging canals and permanent improvements such as concrete lining. Several proposals have been suggested for future drainage improvements by the Regional Planning Commission. In order to reduce flooding in the River Oaks subdivision, a pumping station was built on the right descending bank of the Vermilion River.

The City of Carencro has expended considerable effort to reduce local flooding through improvements of roadside ditches and culverts. While these improvements will relieve some local problems in minor storms, major relief can only be provided by improving flow on Beau Basin, the City of Carencro's major drain. Beau Basin has been studied by the

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<sup>10</sup> <https://map1.msc.fema.gov/data/22/S/PDF/22055CV001A.pdf?LOC=e5e4f4dc810fc858dcf9f3742a06b0a5>

Louisiana Department of Transportation and Development, Office of Public Works, and improvements within the corporate limits are said to be forthcoming; however, no date has been set, and no improvements to Beau basin outside the corporate limits have been proposed.

Non-structural measures of flood protection are being utilized to aid in the prevention of future flood damage. These are in the form of land-use regulations adopted from the Code of Federal Regulations that control building within areas that have a high risk of flooding.

The following are flood zone maps displaying 100- and 500-year flood zones for the entire Lafayette Parish planning area:

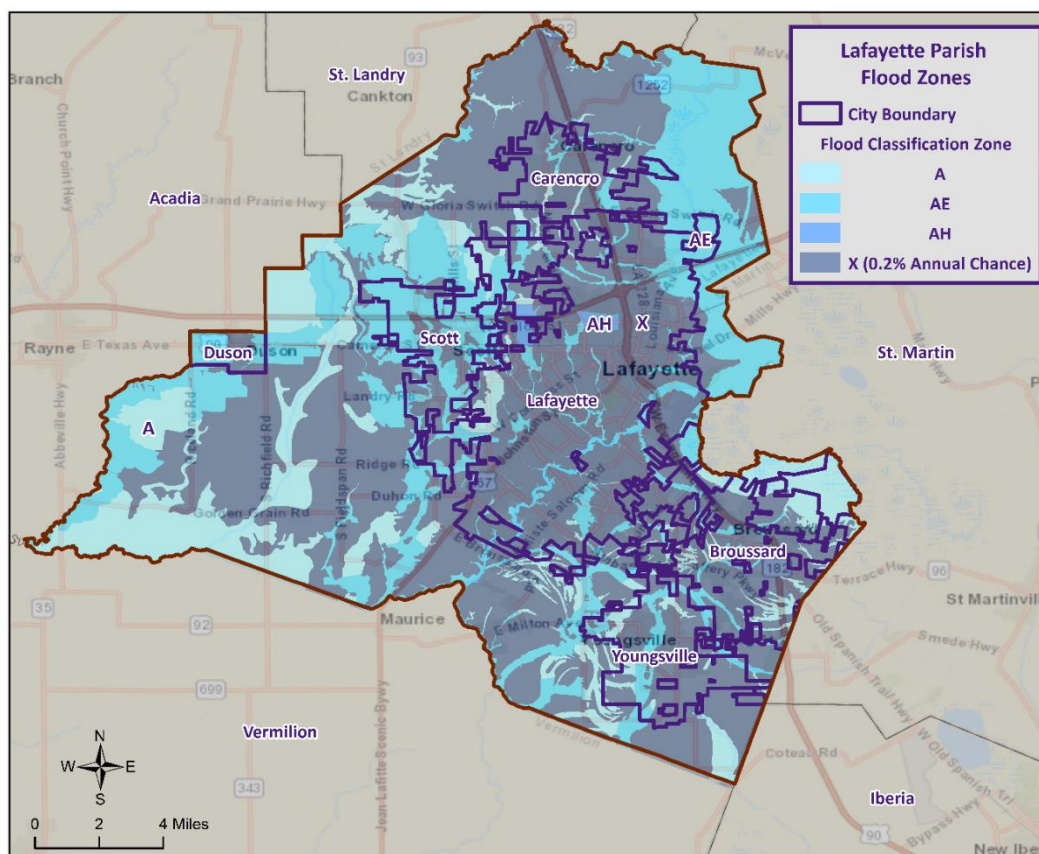


Figure 2-13: Lafayette Parish Planning Area within the Flood Zones.

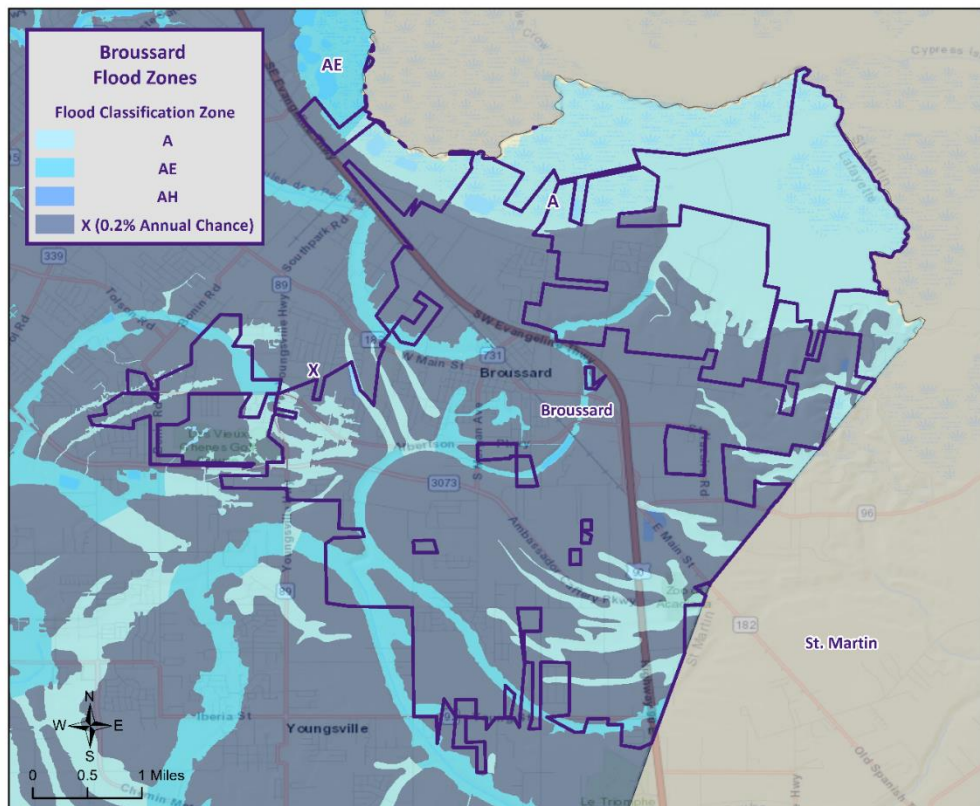


Figure 2-14: Areas of Broussard within the Flood Zones.

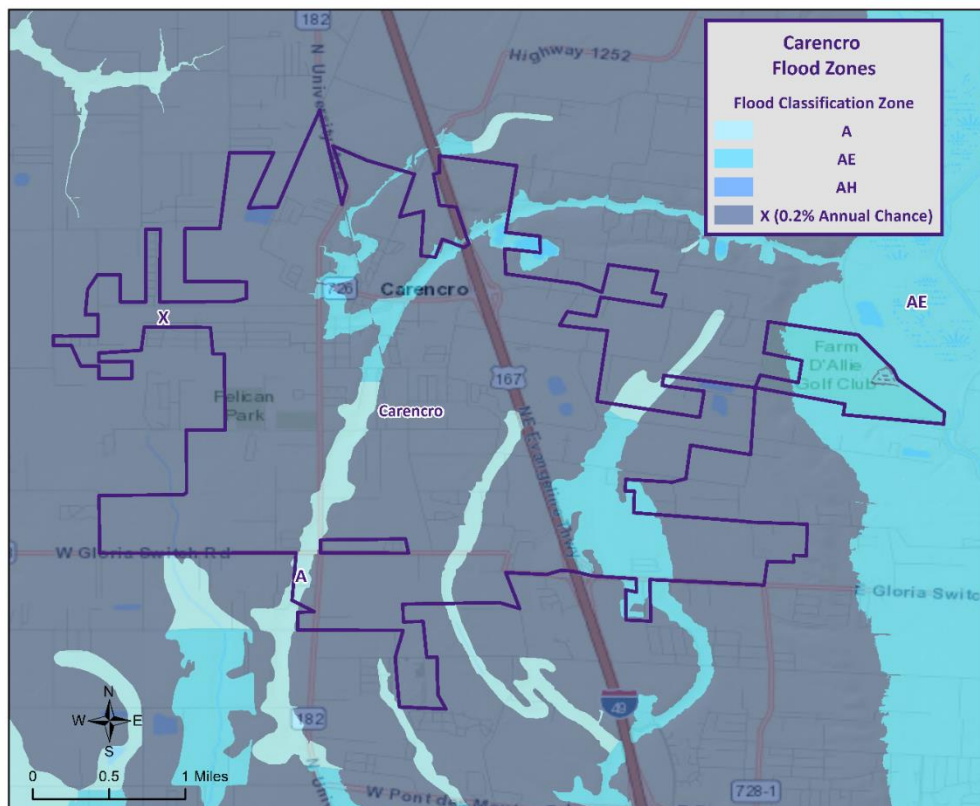


Figure 2-15: Areas of Carencro within the Flood Zones.



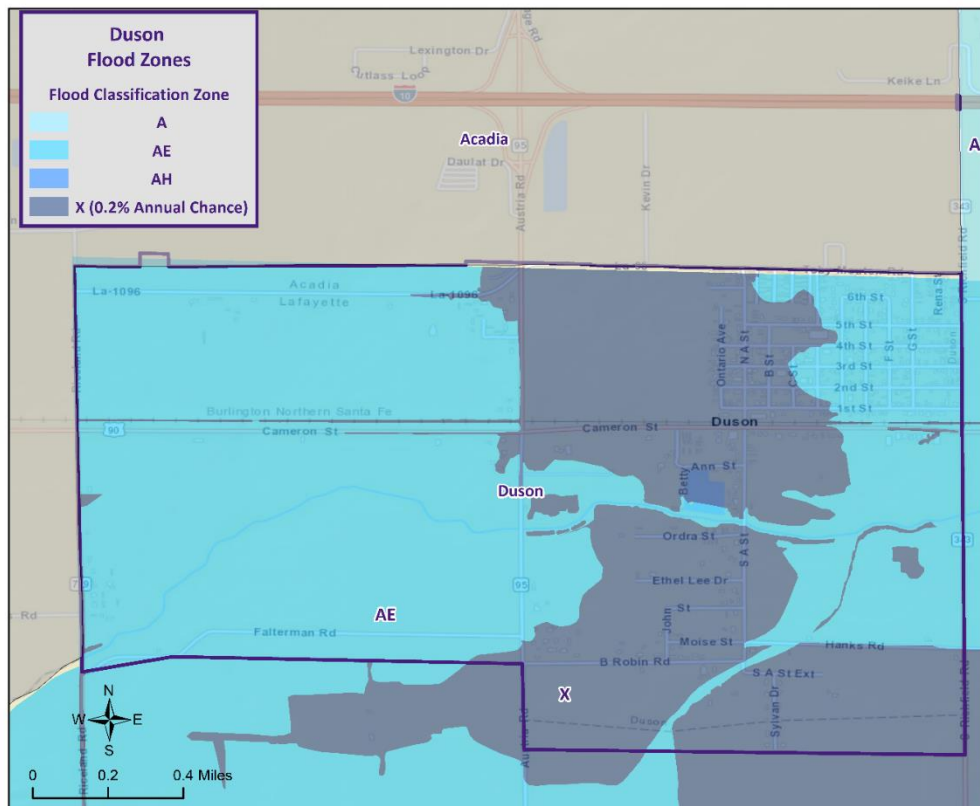


Figure 2-16: Areas of Duson within the Flood Zones.

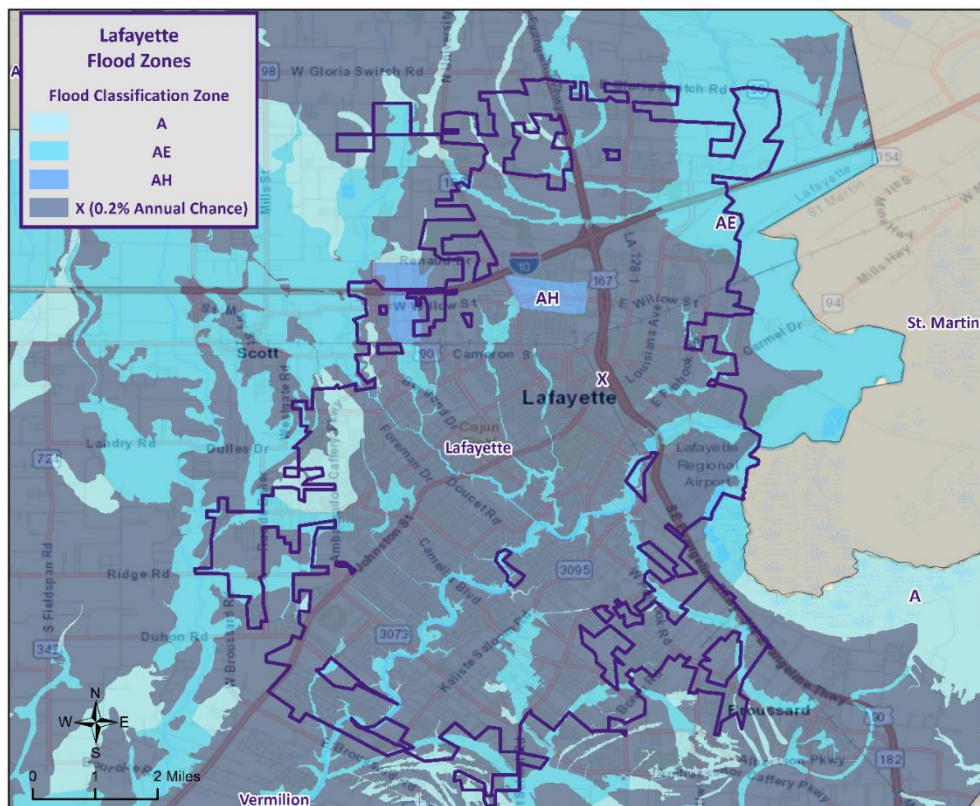


Figure 2-17: Areas of Lafayette within the Flood Zones.

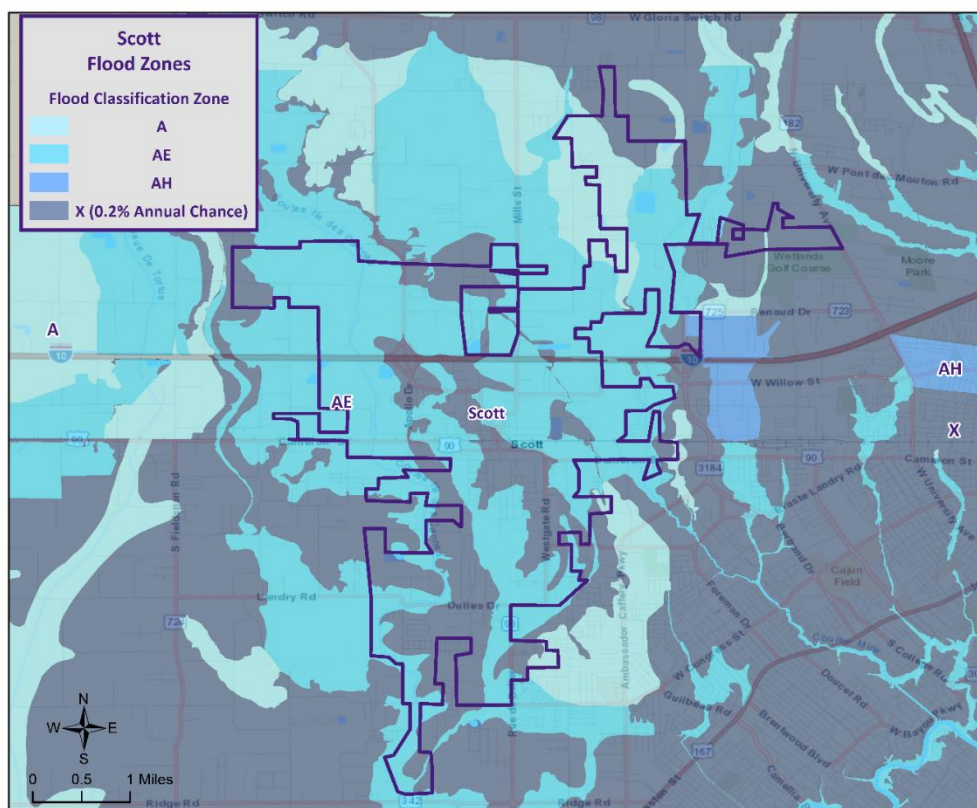


Figure 2-18: Areas of Scott within the Flood Zones.

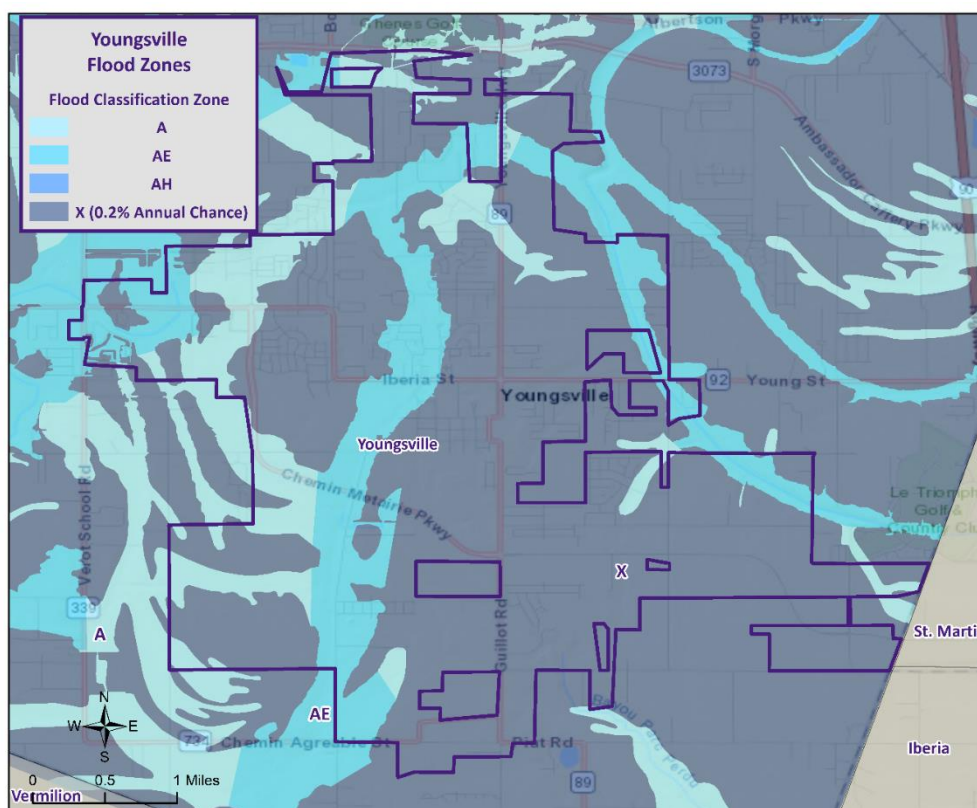


Figure 2-19: Areas of Youngsville within the Flood Zones.



### Previous Occurrences / Extents

As noted in the Flood Insurance Study<sup>11</sup> conducted for the Lafayette Parish planning area, significant floods are reported to have occurred as early as 1907. In researching rainfall records, using high-water stages on the Vermilion River and interviewing local citizens, it was determined that other significant floods occurred in 1927, 1940, 1946, 1947, 1953, 1955, 1959, 1961, 1964, 1966, 1969, 1971, 1977, 1980, 1982, 1989, 1993, 1995, 2001, and 2004.

The most severe flood in the study area occurred in August 1940 and approximated the Standard Project Flood (SPF). Studies of this flood showed extremely heavy 10 rainfall at Lafayette FAA Airport daily rainfall station. For the four-day period of August 6-9, a rainfall of 27.33 inches was recorded; for the 10-day period of August 1-10, a rainfall of 37.36 inches was recorded. As this immense quantity of water began to run off, the slope of the ground and flat terrain, together with obstructed embankments, caused the flood to spread overland. The waters generally began throughout most of the flooded areas. In certain areas, most notably those lying to the north and west of St. Martinville, water continued to rise for several days. This area between the Teche and Vermilion ridges is normally drained by the Vermilion River. On this occasion, however, the Vermilion River, unable to carry the flow pouring in from the north and west, reversed its flow and begin to flow into the low marsh areas and to pour in excess water through the Evangeline Canal into Bayou Teche.

A significant flood also occurred in the parish in December 1971. Significant amounts of rainfall started falling on December 1 and continued through December 6. The rainfall accumulation recorded for this period was 10.07 inches. The heaviest concentration was the rainfall of 5.09 inches that occurred on December 5. Observed amounts of rainfall at the recording gage were 5.80 and 8 inches for 24- hour and 48-hour durations, respectively. This prolonged rainfall caused higher stages than previous rainfalls of higher intensity and shorter duration.

The most recent flood to occur in the area was in April 1977. Rainfall for this flood was similar to the 1971 flood. Inspections on the ground and aerial over flights indicated that the 1977 flood inundated approximately the same areas as the December 1971 flood. (Note: These statements were made per the 1985, 1988, 1996 FIS and have been updated over the years. Therefore, the FIS does not provide a comprehensive listing of recent flooding occurrences. A list of more recent flooding events, specifically those having occurred since the last HMP update, can be found in [Table 2-20](#) and [Table F-104](#))

According to the National Centers for Environmental Information, there have been 46 flooding events that have caused significant flooding in the areas of Lafayette City-Parish Consolidated Government and the incorporated jurisdictions between 1990 and 2020. The table on the next page contains a brief synopsis of the flooding events which occurred since the last Lafayette Parish HMP Update in 2016. Estimated damage amounts are NFIP claims totals provided by parish officials unless otherwise noted. For the August 2016 flood event, an additional 3031 Individual Assistance payments were made in the amount of 31,838,349 to homes and businesses that did not have flood insurance.

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<sup>11</sup> <https://map1.msc.fema.gov/data/22/S/PDF/22055CV001A.pdf?LOC=e5e4f4dc810fc858dcf9f3742a06b0a5>

*Table 2-20: Historical Floods in Lafayette Parish Planning Area since the 2016 Lafayette Parish HMP Update.*

Date	Extents	Type of Flooding	Estimated Damages	Location
April 20, 2016	Flooding was reported along Ambassador Parkway at multiple intersections. Flood waters was also reported entering a high school auditorium at the peak of the event.	Flash Flood	\$1,000 (NCEI)	LAFAYETTE
May 1, 2016	Media reported many streets across Lafayette during the event flooded including Ambassador Caffery and Dulles. Several homes in Carencro also flooded. Rainfall amounts ranged from around 4 inches up to 6 in the north side of Lafayette to Carencro and the parish line.	Flash Flood	\$2,360,789	BILLEAUD (Part of Lafayette City-Parish Consolidated Government located near the intersection of US Hwy 90 and LA Hwy 182 southeast of Broussard)
June 4, 2016	Heavy rain over the Lafayette area produced street flooding including along Ambassador Caffery Parkway and Dulles Drive. The flooding made the street impassable for a time.	Flash Flood	\$0 (NCEI)	LAFAYETTE
August 12, 2016	Street flooding along Ambassador Caffery and a few other poorly drained streets were first reported during the early morning of the 12th. High rainfall rates continued through the day with many streets being flooded and some structures by mid-morning. Widespread flooding of vehicles, structures, and high-water rescues began during the late morning across Lafayette Parish. The Vermilion River reached major flood stage by sunrise on the 13th and remained above major flood stage for 5 and a half days. Rainfall totals surpassed 20 inches in the southern section of the parish over the 12th and 13th. An estimated 9,376 structures flooded during the event.	Flash Flood	\$61,873,501	CARENCRO
August 13 & 14, 2016	Stream gages along the Vermilion River in Lafayette Parish crested during the 15th at the end of the flash flood event. Major flooding along the Vermilion continued through the 24th-25th and kept some neighborhoods flooded for a couple of weeks. At the Surrey Street Gage 10 feet is flood stage and the Vermilion crested at 17.6 feet which is the 2nd highest recorded crest.	Flood	\$129,860,301	MOUTON (Part of Lafayette City-Parish Consolidated Government generally bound by Carencro to the north, I-49 to the east, I-10 to the south, and Highway 182 to the west)
May 3, 2017	Heavy rain flooded many streets around Lafayette Parish. Some cars became flooded as water reached depths that was to the headlights. An elementary school also flooded	Flash Flood	\$171,837	DUSON

Date	Extents	Type of Flooding	Estimated Damages	Location
	in Scott. Rainfall totals ranged from 4 to 6 inches with Acadiana Regional Airport reporting 5.09 inches and 6.11 inches falling on Surrey Street at the Vermilion River.			
June 29, 2017	Heavy rain in thunderstorms moved across the portions of Acadiana and flooding streets around Carencro. Water closed many streets and approached neared homes. Swanky's Restaurant in Carencro reported 3 inches of water in the structure.	Flash Flood	\$1,477,955	VATICAN (Part of Lafayette City-Parish Consolidated Government located approximately 4 miles east of Carencro near the intersection of LA Hwy 93 and Vatican Road)
November 1, 2017	Multiple reports and photographs were received indicating flooding around the city of Lafayette. Multiple cars were stalled/flooded around the city with some structures almost taking water. Some roads were closed for multiple hours until flood waters receded.	Flash Flood	\$2,153,184	SCOTT
December 27, 2018	Numerous roadways became flooded or impassable in Lafayette and Scott after several inches of heavy rain. Flood waters also approached some businesses and homes.	Flash Flood	\$0	TORIAN
April 18, 2019	Flooding closed several roads in Scott and Lafayette.	Flash Flood	\$0 (NCEI)	SCOTT & LAFAYETTE
May 10, 2019	Several roads flooded and barricaded in Scott.	Flash Flood	\$0 (NCEI)	SCOTT
June 6, 2019	Significant street flooding was reported across Lafayette. Several cars were reported flooded or stalled on University Ave and around 20 roads were temporarily closed. Several businesses flooded in southern Lafayette Parish along Highway 90.	Flash Flood	\$4,988,438	OSSUN (Part of Lafayette City-Parish Consolidated Government located approximately 2.9 miles northeast of Scott near the intersection of LA Hwy 93 and LA Hwy 723)
July 14, 2019	Heavy rain from Barry resulted in flooding in Youngsville. One home had 4 inches of water inside the structure.	Flash Flood	\$281,495	YOUNGSVILLE

Based on previous flood events, the worst-case scenarios are comprised of 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 five feet can be expected in the areas of the Lafayette City-Parish Consolidated Government. The incorporated areas of Lafayette, Carencro, and Scott can expect flood depths from three to five feet, while the incorporated areas of Broussard, Youngsville, and Duson can expect flooding levels of approximately one to three feet.

#### Frequency / Probability

The NCEI Storm Events Database identified 46 flooding events within the Lafayette Parish planning area since 1990. The table below shows the probability and return frequency for each jurisdiction.

*Table 2-21: Annual Flood Probabilities for Lafayette Parish Planning Area.*

Jurisdiction	Annual Probability	Return Frequency
<b>Lafayette C-PCG</b>	40%	One event every 2 to 5 years
<b>Broussard</b>	12%	One event every 8 to 9 years
<b>Carencro</b>	44%	One event every 2 to 3 years
<b>Duson</b>	12%	One event every 8 to 9 years
<b>Lafayette</b>	52%	One event every 1 to 2 years
<b>Scott</b>	20%	One event every 5 years
<b>Youngsville</b>	24%	One event every 4 to 5 years

Based on historical record, the overall flooding probability for the entire Lafayette Parish planning area is 100% with 46 events occurring over a 30-year period.

#### Estimated Potential Losses

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

*Table 2-22: Estimated Losses in Lafayette Parish Planning Area from a 100-year Flood Event.  
(Source: Hazus)*

Jurisdiction	Estimated Total Losses from 100-Year Flood Event
<b>Lafayette C-PCG</b>	\$112,687,000
<b>Broussard</b>	\$25,786,000
<b>Carencro</b>	\$62,032,000
<b>Duson</b>	\$453,000
<b>Lafayette</b>	\$515,115,000
<b>Scott</b>	\$37,476,000
<b>Youngsville</b>	\$7,600,000
<b>Total</b>	<b>\$761,149,000</b>

The Hazus Flood model also provides a breakdown for seven primary sectors (Hazus occupancy) throughout the parish. The losses for Lafayette Parish by sector are listed in the following tables:

*Table 2-23: Estimated 100-year Flood Losses for Lafayette City-Parish Consolidated Government by Sector.*

*(Source: Hazus)*

Lafayette City-Parish Consolidated Government	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$283,000
Commercial	\$8,158,000
Government	\$57,000
Industrial	\$3,480,000
Religious / Non-Profit	\$501,000
Residential	\$100,008,000
Schools	\$200,000
<b>Total</b>	<b>\$112,687,000</b>

*Table 2-24: Estimated 100-year Flood Losses for Broussard by Sector.*

*(Source: Hazus)*

Broussard	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$4,376,000
Government	\$0
Industrial	\$12,000
Religious / Non-Profit	\$0
Residential	\$21,398,000
Schools	\$0
<b>Total</b>	<b>\$25,786,000</b>

*Table 2-25: Estimated 100-year Flood Losses for Carencro by Sector.*

*(Source: Hazus)*

Carencro	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$3,786,000
Government	\$0
Industrial	\$4,000
Religious / Non-Profit	\$81,000
Residential	\$58,141,000
Schools	\$20,000
<b>Total</b>	<b>\$62,032,000</b>



Table 2-26: Estimated 100-year Flood Losses for Duson by Sector.

(Source: Hazus)

Duson	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$23,000
Government	\$0
Industrial	\$38,000
Religious / Non-Profit	\$0
Residential	\$392,000
Schools	\$0
<b>Total</b>	<b>\$453,000</b>

Table 2-27: Estimated 100-year Flood Losses for Lafayette by Sector.

(Source: Hazus)

Lafayette	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$913,000
Commercial	\$156,661,000
Government	\$2,246,000
Industrial	\$23,540,000
Religious / Non-Profit	\$7,024,000
Residential	\$319,692,000
Schools	\$5,039,000
<b>Total</b>	<b>\$515,115,000</b>

Table 2-28: Estimated 100-year Flood Losses for Scott by Sector.

(Source: Hazus)

Scott	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$11,000
Commercial	\$8,169,000
Government	\$0
Industrial	\$10,106,000
Religious / Non-Profit	\$332,000
Residential	\$18,051,000
Schools	\$807,000
<b>Total</b>	<b>\$37,476,000</b>

Table 2-29: Estimated 100-year Flood Losses for Youngsville by Sector.

(Source: Hazus)

Youngsville	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$11,000
Commercial	\$16,000
Government	\$0
Industrial	\$15,000
Religious / Non-Profit	\$143,000
Residential	\$7,415,000
Schools	\$0
<b>Total</b>	<b>\$7,600,000</b>

## Threat to People

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

Table 2-30: Vulnerable Populations Susceptible to a 100-year Flood Event.

(Source: Hazus)

Number of People Exposed to Flood Hazards			
Location	# in Community	# in Hazard Area	% in Hazard Area
Lafayette C-PCG	66,797	22,570	33.8%
Broussard	8,197	1,169	14.3%
Carencro	7,526	6,123	81.4%
Duson	1,716	101	5.9%
Lafayette	120,623	41,948	34.8%
Scott	8,614	6,847	79.5%
Youngsville	8,105	2,133	26.3%
<b>Total</b>	<b>221,578</b>	<b>80,891</b>	<b>36.5%</b>

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

*Table 2-31: Vulnerable Populations Susceptible to a 100-year Flood Event in Lafayette City-Parish Consolidated Government.*  
(Source: Hazus)

Lafayette City-Parish Consolidated Government		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	22,570	33.8%
Persons Under 5 Years	1,596	7.1%
Persons Under 18 Years	3,932	17.4%
Persons 65 Years and Over	2,320	10.3%
White	15,657	69.4%
Minority	6,913	30.6%

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

Broussard		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	1,169	14.3%
Persons Under 5 Years	97	8.3%
Persons Under 18 Years	219	18.8%
Persons 65 Years and Over	108	9.2%
White	935	80.0%
Minority	234	20.0%

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

Carencro		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	6,123	81.4%
Persons Under 5 Years	503	8.2%
Persons Under 18 Years	1,067	17.4%
Persons 65 Years and Over	740	12.1%
White	3,274	53.5%
Minority	2,849	46.5%

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

Duson		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	101	5.9%
Persons Under 5 Years	9	8.6%
Persons Under 18 Years	20	19.4%
Persons 65 Years and Over	12	11.9%
White	70	68.8%
Minority	31	31.2%

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

Lafayette		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	41,948	34.8%
Persons Under 5 Years	2,546	6.1%
Persons Under 18 Years	6,594	15.7%
Persons 65 Years and Over	4,925	11.7%
White	26,754	63.8%
Minority	15,194	36.2%

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

Scott		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	6,847	79.5%
Persons Under 5 Years	525	7.7%
Persons Under 18 Years	1,191	17.4%
Persons 65 Years and Over	734	10.7%
White	5,388	78.7%
Minority	1,459	21.3%

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

Youngsville		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	2,133	26.3%
Persons Under 5 Years	196	9.2%
Persons Under 18 Years	460	21.6%
Persons 65 Years and Over	126	5.9%
White	1,915	89.8%
Minority	218	10.2%

#### Vulnerability

See [Appendix C: Critical Facilities](#) for parish and municipality buildings that are susceptible to flooding due to proximity within the 100-year flood plain.



## Sinkholes

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

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

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

In the United States, 20% of land 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.

## Location

Currently, there are no identifiable salt dome located within the boundaries of the Lafayette Parish planning area; however, there are two salt domes located in neighboring parishes whose two mile buffer cross into the Lafayette Parish planning area. [Figure 2-20](#) displays the location of the salt domes in proximity to the Lafayette Parish planning area. As previously noted, the location of the salt domes are outside of the boundaries of the Lafayette Parish planning area, but the two mile buffer for Bosc Bosco Salt Dome and Anse La Butte Salt Dome extend into the area of the Lafayette City-Parish Consolidated Government.

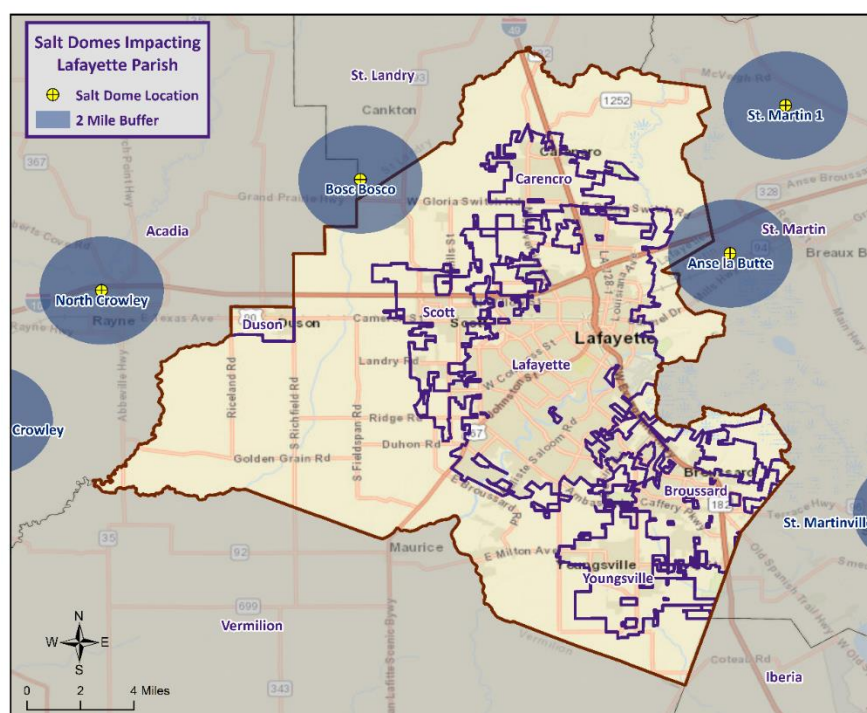


Figure 2-20: Salt Dome Locations in Lafayette Parish Planning Area.

#### Previous Occurrences / Extent

There have been no recorded incidents of sinkholes or salt dome collapses within the Lafayette Parish planning area to date.

#### Frequency / Probability

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

#### Estimated Potential Losses

The salt domes were analyzed to determine the number of people and houses that are potentially susceptible to losses from the formation of a sinkhole. The following table is based on analyzation of 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 the salt dome. Critical facilities were also analyzed to determine if they fell within the two-mile buffer of the salt dome. Total value for all occupancy groups from Hazus was used to estimate a total loss of all facilities located within two miles of the salt domes.

Table 2-38: Estimated Potential Losses from a Sinkhole Formation in Lafayette Parish Planning Area.  
(Source: U.S. 2010 Census Data and Hazus)

Salt Dome Name	Total Building Exposure	Critical Infrastructure Exposure	Number of People Exposed	Number of Houses Exposed
Bosc Bosco	\$36,356,000	0	907	341
Anse la Butte	\$2,612,000	0	834	336
<b>Total</b>	<b>\$38,968,000</b>	<b>0</b>	<b>1,741</b>	<b>677</b>

Due to the isolated locations of the sinkholes, there is little to no risk to the general population within the Lafayette Parish planning area, with the exception being the residents located within two miles of the Bosc Bosco Salt Dome and Anse la Butte Salt Dome. There is no risk associated with sinkholes in the incorporated areas of Broussard, Carencro, Duson, Lafayette, Scott, and Youngsville.

#### *Vulnerability*

See [\*Appendix C: Critical Facilities\*](#) 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 and therefore 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, multicell, 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 multicell 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, and warming 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) have the ability to issue advisory messages based on forecasts and observations. The following are the advisory messages that may be issued with definitions of each:

- **Severe Thunderstorm Watch:** Issued to alert people to the possibility of a severe thunderstorm developing in the area. Expected time frame for these storms is three to six hours.
- **Severe Thunderstorm Warning:** Issued when severe thunderstorms are imminent. This warning is highly localized and covers parts of one to several counties (parishes).

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

- Hail of 1 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 develops in the upper atmosphere initially as ice crystals that are bounced about by high-velocity updraft winds. The ice crystals grow through deposition of water vapor onto their surface, fall partially to a level in the cloud where the temperature exceeds the freezing point, melt partially, get caught in another updraft whereupon re-freezing and deposition grows another concentric layer of ice, and fall after developing enough weight, sometimes after several trips up and down the cloud. The size of hailstones varies depending on the severity and size of the thunderstorm. Higher surface temperatures generally mean stronger updrafts, which allows more massive hailstones to be supported by updrafts, leaving them suspended longer. This longer time means larger hailstone sizes. The tables on the next page display the TORRO Hailstorm Intensity Scale along with a spectrum of hailstone diameters and their everyday equivalents.



Table 2-39: 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 2-40: Spectrum of Hailstone Diameters and their Everyday Equivalent.

(Source: National Weather Service)

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

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

Hail rarely causes loss of life, although large hailstones can cause bodily injury.

#### 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 [Table 2-41](#).

*Table 2-41: 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 in the mountainous areas of the United States but are relatively insignificant in Louisiana. 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.

*Table 2-42* presents the Beaufort Wind Scale, first developed in 1805 by Sir Francis Beaufort, which aids in determining relative force and wind speed based on the appearance of wind effects.

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

Beaufort Wind Scale			
Force	Wind (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	
12	74+	Hurricane	

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 2-43: 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*

Hailstorms are a meteorological phenomenon that can occur anywhere. Therefore, the entire planning area for Lafayette Parish and its jurisdictions are equally at risk for hailstorms. The worst-case scenario for hailstorms is hail up to a 2" diameter.

##### *Previous Occurrences / Extents*

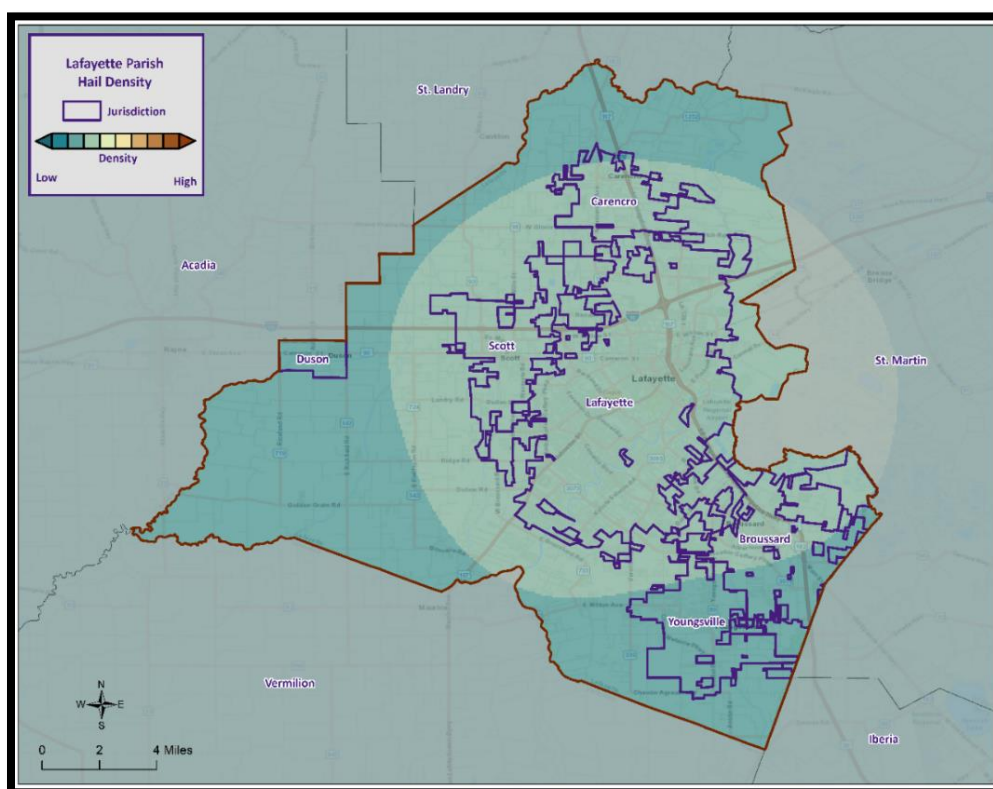
Historically, there have been 64 hail incidents in the Lafayette Parish planning area. Per the National Climatic Data Center, hailstone diameters have ranged from 0.75 inches to 2 inches in events since 1990. The most frequently recorded hail sizes have been 1.75-inch in diameter. There have been six significant hailstorm events in the Lafayette Parish planning area since the 2016 Lafayette Parish HMP update. The table on the next page provides a brief synopsis of those events.

*Table 2-44: Previous Occurrences for Hailstorm Events since the 2016 Hazard Mitigation Plan Update.  
(Source: NCEI Storm Events Database)*

Date	Hail Size (inches)	Property Damage	Crop Damage
May 1, 2016	1.5	\$0	\$0
March 25, 2017	1	\$0	\$0
March 29, 2017	1	\$0	\$0
April 2, 2017	1.25	\$0	\$0
April 19, 2017	0.88	\$0	\$0
May 5, 2020	1.75	\$0	\$0

### Frequency

Hailstorms occur frequently within the Lafayette Parish planning area, with an annual chance of occurrence calculated at 100% based on the records for the past 30 years (1990-2020). [Figure 2-21](#) displays the density of hailstorm events in the Lafayette Parish planning area, while [Figure 2-22](#) provides an overview of hailstorm size based on location.



*Figure 2-21: Density of Hailstorms by Diameter from 1950-2020.*

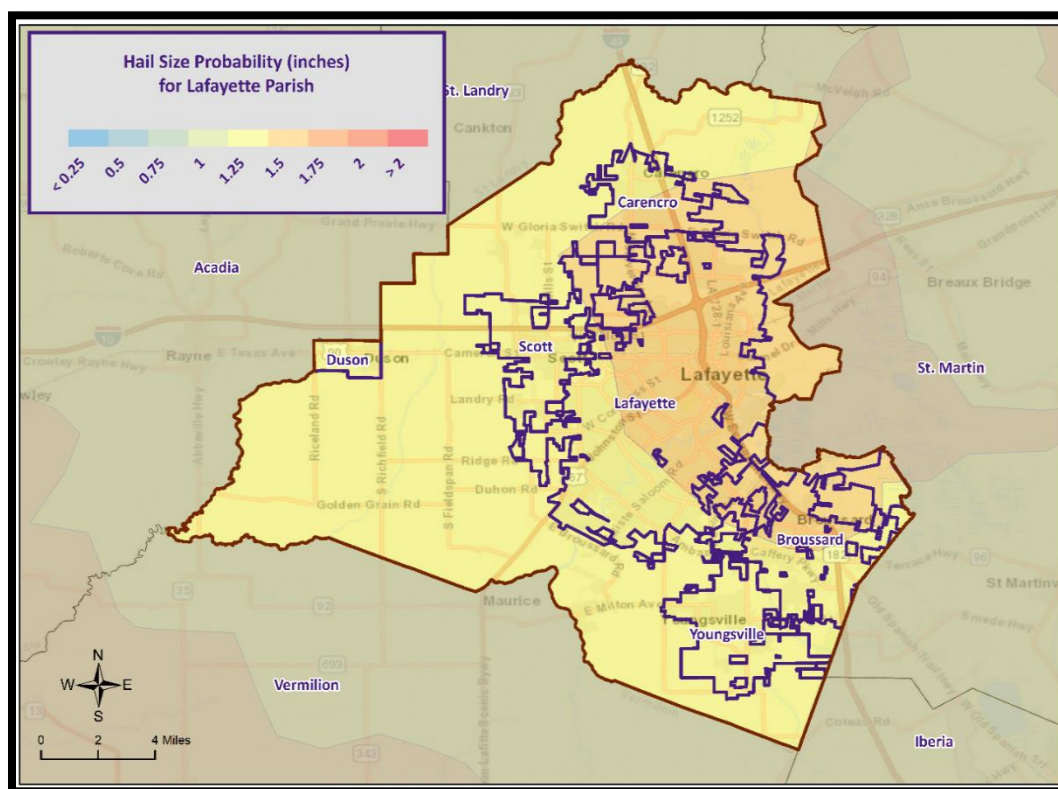


Figure 2-22: Hail Size Probability in Inches for Lafayette Parish Planning Area.

#### Estimated Potential Losses

Since 1990, there have been 64 significant hail events that have resulted in property damages according to NCEI Storm Events Database. The total property damages associated with those storms have totaled approximately \$5,000. To estimate the potential losses of a hailstorm event on an annual basis, the total damages recorded for hail events was divided by the total number of years of available hail data in the NCEI Storm Events Database (1990 - 2020). This provides an annual estimated potential loss of \$166 and \$93 per event. The following table provides an estimate of potential property losses for all jurisdictions within the Lafayette Parish planning area:

Table 2-45: Estimated Annual Losses for the Lafayette Parish Planning Area Resulting from Hailstorms.

Estimated Potential Annual Losses from Hailstorms						
Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngsville
\$50	\$6	\$6	\$1	\$91	\$6	\$6

There have been no reported injuries or fatalities as a result of a hail events over the 30-year record.

#### Vulnerability

See [Appendix C: Critical Facilities](#) for parish and municipality buildings that are susceptible to hailstorms.



## High Winds

### Location

Because high winds are a meteorological phenomenon that can occur anywhere, the entire planning area for Lafayette Parish is equally at risk from high winds. The worst-case scenario for thunderstorm high wind is wind speeds of approximately 100 mph.

### Previous Occurrences / Extents

There have been 79 thunderstorm high wind events within the Lafayette Parish planning area since 1990. Per the National Climatic Data Center, wind speeds associated with these events have ranged from 46 mph to 100 mph. There have been nine high wind speed events which impacted the Lafayette Parish planning area since the 2016 Lafayette Parish HMP update. Below is a brief synopsis of those events.

*Table 2-46: Previous Occurrences for Thunderstorm High Wind Events since the 2016 Hazard Mitigation Plan Update.*

*(Source: NCEI Storm Events Database)*

Date	Wind Speed (mph)	Property Damage	Crop Damage
February 23, 2016	58	\$2,000	\$0
May 19, 2017	58	\$3,000	\$0
June 5, 2018	58	\$2,000	\$0
November 1, 2018	58	\$3,000	\$0
December 27, 2018	58	\$5,000	\$0
April 7, 2019	58	\$7,000	\$0
May 19, 2019	62	\$0	\$0
January 11, 2020	100	\$500,000	\$0
September 28, 2020	57	\$5,000	\$0

### Frequency

High winds are a common occurrence across the entirety of the Lafayette Parish planning area, with an annual chance of occurrence calculated at 100% based on the records for the past 30 years (1990-2020). On the next page, [Figure 2-23](#) displays the thunderstorm wind speed probability for all jurisdictions within the Lafayette Parish planning area.

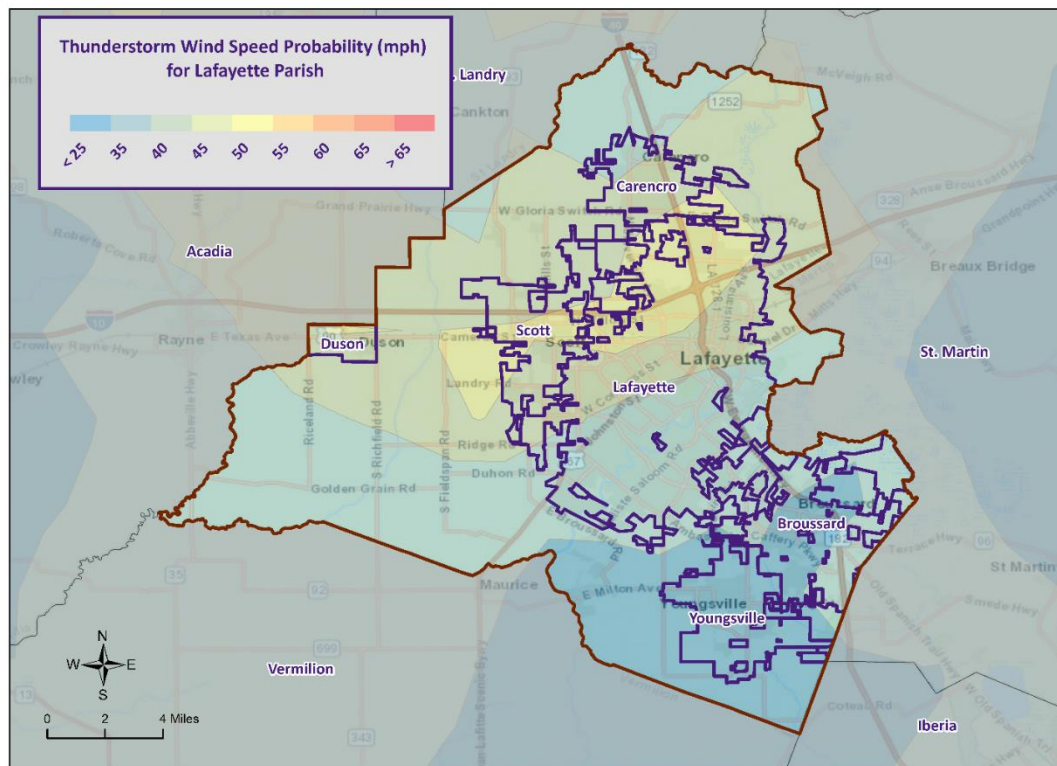


Figure 2-23: Thunderstorm High Wind Speed Probability in Miles Per Hour for Lafayette Parish Planning Area.

#### Estimated Potential Losses

Since 1990, there have been 79 significant wind events that have resulted in property damages according to NCEI Storm Events Database. The total property damage associated with these events totaled approximately \$2,197,000. 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 the NCEI Storm Events Database (1990 - 2020). This provides an annual estimated potential loss of \$73,233 and \$20,924 per event. The following table provides an estimate of potential property losses for all jurisdictions within the Lafayette Parish planning area:

Table 2-47: Estimated Annual Property Losses for the Lafayette Parish Planning Area resulting from Wind Damage.

Estimated Potential Annual Losses from High Winds						
Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngville
\$22,077	\$2,709	\$2,487	\$567	\$39,867	\$2,847	\$2,679

There has been one fatality and one injury as a result of a thunderstorm high wind event over the 30-year record.

#### Vulnerability

See [Appendix C: Critical Facilities](#) for parish and municipality buildings that are susceptible to thunderstorm high winds.

## Lightning

### Location

Like hail and high winds, lightning is a meteorological phenomenon that can occur anywhere within the Lafayette Parish planning area. The worst-case scenario for lightning events is a lightning activity level of 4, which is approximately 16 to 25 lightning strikes every 15 minutes.

### Previous Occurrences / Extent

Historically, there have been 15 lightning events in the Lafayette Parish planning area between the years 1990 and 2020. Since the last HMP update, there have been three significant lighting events within the boundaries of the Lafayette Parish planning area. [Table 2-48](#) provides an overview of the lightning events which impacted the Lafayette Parish planning area since the 2016 Lafayette Parish HMP update.

*Table 2-48: Previous Occurrences for Lightning Events since the 2016 Hazard Mitigation Plan Update.  
(Source: NCEI Storm Events Database)*

Location	Date	Property Damage	Crop Damage
YOUNGSVILLE	August 7, 2016	\$40,000	\$0
SCOTT	June 28, 2019	\$50,000	\$0
YOUNGSVILLE	June 28, 2019	\$175,000	\$0

### Frequency

Lightning can strike anywhere and is produced by every thunderstorm, so the chance of lightning occurring in the Lafayette Parish planning area is high. However, lightning that meets the definition used by the NCEI Storm Events Database that results in damages to property and injury or death to people is a less likely event. The planning area experienced 15 significant lightning events between the years 1990 and 2020, resulting in a 50% annual chance of occurrence.

### Estimated Potential Losses

Since 1990, there have been 15 significant lightning events that have resulted in property damages according to NCEI Storm Events Database. The total property damages associated with those storms have totaled approximately \$5,528,000. To estimate the potential losses from a lightning event on an annual basis, the total damages recorded for lightning events was divided by the total number of years of available lightning data in the NCEI Storm Events Database (1990 - 2020). This provides an annual estimated potential loss of \$184,267 and \$368,533 per event. The following table provides an estimate of potential property losses for all jurisdictions within the planning area:

*Table 2-49: Estimated Annual Property Losses for the Lafayette Parish Planning Area resulting from Lightning Damage.*

Estimated Potential Annual Losses from Lightning						
Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngsville
\$55,549	\$6,817	\$6,259	\$1,427	\$100,311	\$7,163	\$6,740

Per the NCEI Storm Events Database, there have been no fatalities and two injuries as a result of lightning in the planning area.

### Vulnerability

See [Appendix C: Critical Facilities](#) for parish and municipality building exposure to lightning hazards.

## Tornadoes

Tornadoes (also called twisters and 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 tropical cyclones, when cold air overrides a layer of warm air, causing the warm air to rise rapidly, which usually occurs in a counterclockwise direction 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 2-50](#) 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 2-50: 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 2-51: Fujita and Enhanced Fujita Tornado Damage Scales.*

Scale	Typical Damage
<b>F0/EF0</b>	Light damage. Some damage to chimneys; branches broken off trees; shallow-rooted trees pushed over; sign boards damaged.
<b>F1/EF1</b>	Moderate damage. Peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos blown off roads.
<b>F2/EF2</b>	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars overturned; light-object missiles generated; cars lifted off ground.
<b>F3/EF3</b>	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.
<b>F4/EF4</b>	Devastating damage. Well-constructed houses leveled; structures with weak foundations blown away some distance; cars thrown and large missiles generated.
<b>F5/EF5</b>	Incredible damage. Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 100 meters (109 yards); trees debarked; incredible phenomena will occur.

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

- **Tornado Watch:** Issued to alert people to the possibility of a tornado developing in the area. A tornado has not been spotted but the conditions are favorable for tornadoes to occur.
- **Tornado Warning:** Issued when a tornado has been spotted or when Doppler radar identifies a distinctive “hook-shaped” area within a thunderstorm line.

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 on 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 missiles 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 the Lafayette Parish planning area with specific locations, tornadoes in general are a climatological based hazard and have the same approximate probability of occurring in every jurisdiction within the planning area. Because of this, all areas in the Lafayette Parish planning area are equally at risk for tornadoes.

#### *Previous Occurrences / Extent*

The NCEI Storm Events Database reports a total of 24 tornadoes or waterspouts occurring within the boundaries of the Lafayette Parish planning area since 1990, ranging in extent from F0 to F2 under the Fujita Scale and EF0 to EF2 on the Enhanced Fujita Scale. The planning area can expect future tornadoes up to an EF3 under the Enhanced Fujita Scale as a worst-case scenario.

The most destructive tornado to impact to the Lafayette Parish planning area was a F1 tornado which occurred on March 2, 1988. A line of thunderstorms moving eastward across southern Louisiana produced a F1 tornado that touched down at the airport, damaging or destroying 35 light aircraft and three hangars. Minor damage was sustained to an industrial park just south of the airport. The F1 tornado was responsible for over \$25 million in damage. The tornado responsible for the most injuries and fatalities occurred on November 7, 1957 when an F1 tornado injured 13 people and caused two fatalities.

Since the 2016 HMP Update, three tornadoes have occurred within the boundaries of the Lafayette Parish planning area. Below is a list and brief description of the impact for these events.

*Table 2-52: Tornadoes Within the Lafayette Parish Planning Area since the 2016 Update.*

Date	Impacts	Property Damage	Location	Magnitude
April 2, 2017	0.06-mile path with a 10 yard width. A security video from a car body shop caught a small but intense tornado. The tornado only removed 2 pieces of tin from the shop roof, however it lifted a car off the ground, spun the vehicle around, and then set it down. The tornado dissipated on Ashy Road. Estimated winds were 100 MPH.	\$5,000	PITETTE	EF1
August 29, 2017	0.14-mile path with a 25 yard path. A tornado briefly touched down near a field in Ridge.	\$0	RIDGE (Part of Lafayette City-Parish Consolidated Government located near the intersection of LA Hwy 343 and LA Hwy 342)	EF0
April 14, 2018	4.53-mile path with a 650 yard width. This tornado touched down between University Ave. and Patin Rd, damaging several homes before toppling a large advertising billboard and crossing I-49. The tornado damaged several businesses east of I-49 and continued ENE for several miles, crossing Hwy 1252 several times and downing multiple trees and branches. It ended along Arnaudville and Lantier Roads, rolling a metal outbuilding and RV, and damaging multiple roofs. Max estimated wind speed was 115 MPH.	\$750,000	CARENCRO	EF2

#### *Frequency / Probability*

Tornadoes occur frequently within the planning area, with an annual chance of occurrence calculated at 80% based on the records for the past 30 years (1990-2020). *Figure 2-24* displays the density of tornado touchdowns within the Lafayette Parish planning area and neighboring parishes.



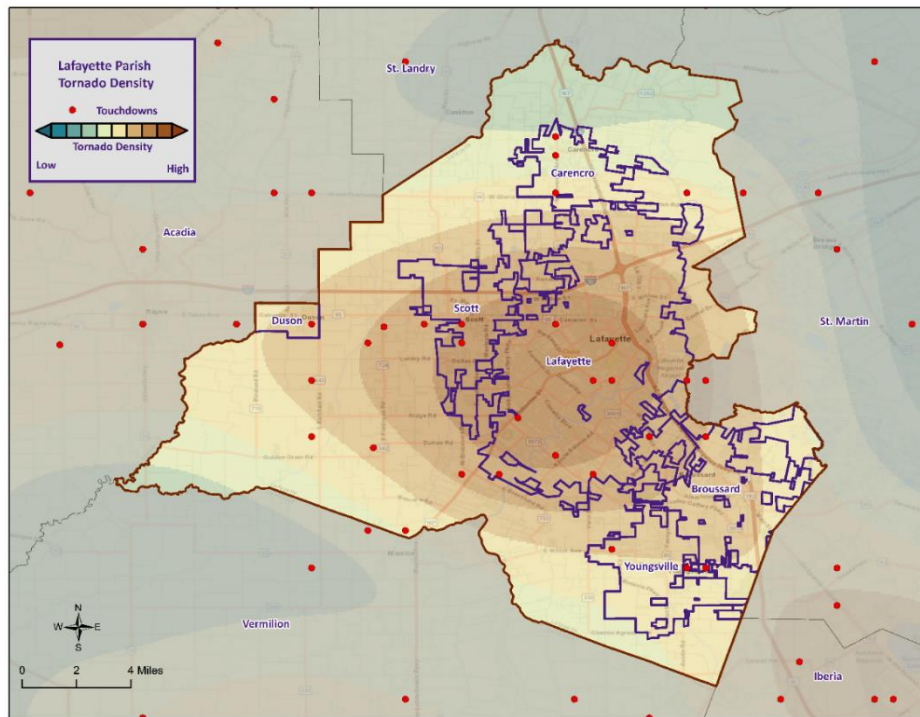


Figure 2-24: Location and Density of Tornadoes to Touchdown in the Lafayette Parish Planning Area.  
(Source: NOAA/SPC Severe Weather Database)

#### Estimated Potential Losses

According to the NCEI Storm Events Database, there have been 28 tornadoes that have caused some level of property damage. The total damage from the actual claims for property is approximately \$11,310,000 with an average cost of \$471,250 per tornado event. When annualizing the total cost over the 30-year record, total annual losses based on tornadoes are estimated to be \$377,000. The following table provides an annual estimate of potential losses for the entirety of the Lafayette Parish planning area.

Table 2-53 Estimated Annual Losses for Tornadoes Within the Lafayette Parish Planning Area.

Estimated Potential Annual Losses from Tornadoes						
Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngsville
\$113,651	\$13,947	\$12,805	\$2,920	\$205,232	\$14,656	\$13,790

Below, Table 2-54 presents an analysis of building exposure that are susceptible to tornadoes by general occupancy type along with the percentage of building stock that are mobile homes.

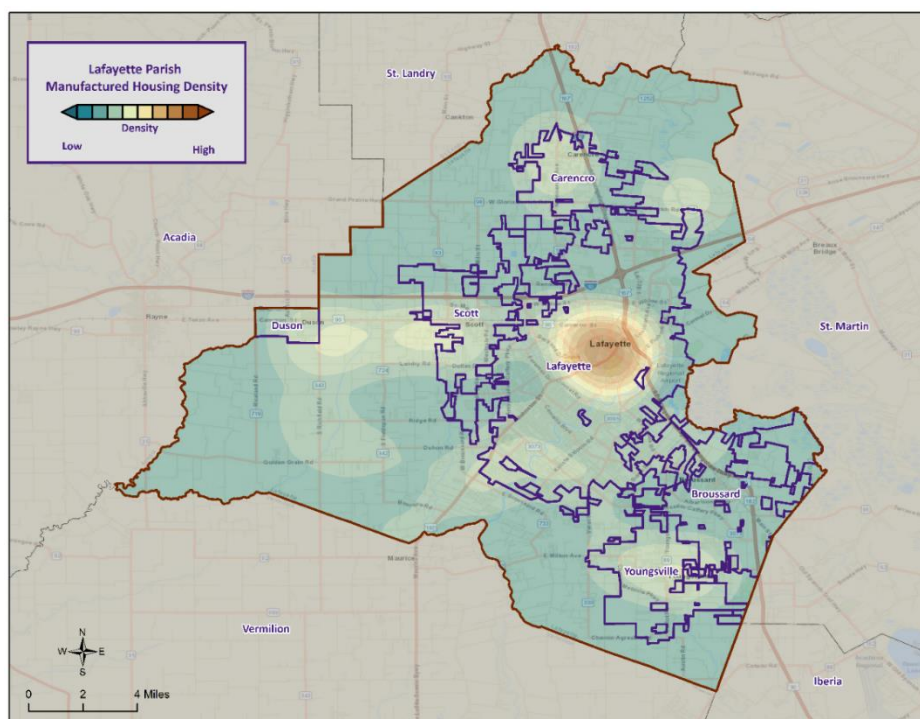
Table 2-54: Building Exposure by General Occupancy Type for Tornadoes in the Lafayette Parish Planning Area.

(Source: Hazus)

Building Exposure by General Occupancy Type for Tornadoes (\$1,000)							
Residential	Commercial	Industrial	Agricultural	Religion	Government	Education	Mobile Homes (%)
17,916,132	4,201,117	942,738	51,971	267,638	132,338	174,780	12.9%

The planning area has suffered through a total of 28 events in which tornadoes or waterspouts have accounted for 13 injuries and no fatalities during this 30-year period.

In assessing the overall risk to population, the most vulnerable population throughout the planning area are those residing in manufacturing housing. Approximately 12.9% of all housing in the Lafayette Parish planning area is comprised of manufactured housing. The density of manufactured housing can be seen in [Figure 2-25](#).



*Figure 2-25: Density of Manufactured Housing throughout the Lafayette Parish Planning Area.*

#### *Vulnerability*

See [Appendix C: Critical Facilities](#) for parish and municipality building exposure to tornadoes.

### Tropical Cyclones

Tropical cyclones are among the worst hazards faced by the state of Louisiana. 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, the table presents the Saffir-Simpson Hurricane Wind Scale, which categorizes tropical cyclones based on sustained winds.

Table 2-55: 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 freshwater 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 tropical cyclone event having the potential to devastate multiple parishes at once, tropical cyclones are a significant threat to the entire Lafayette Parish planning area. The worst-case scenario for a tropical cyclone event in the Lafayette Parish planning area is a Category 5 Hurricane.

#### *Previous Occurrences / Extents*

The Lafayette Parish planning area has experienced seven major tropical cyclone events since 2002. Hurricane Rita has been by far the worst hurricane to impact the planning area in recorded history. The table on the next page provides a list of tropical cyclones which have impacted the Lafayette Parish planning area since 2002.

*Table 2-56: Historical Tropical Cyclone Events in the Lafayette Parish Planning Area from 2002 – 2020.*

Date	Name	Storm Type at Time of Impact
2002	Lili	Hurricane – Cat 1
2005	Rita	Hurricane – Cat 3
2008	Gustav	Hurricane – Cat 2
2011	Lee	Tropical Storm
2012	Isaac	Tropical Storm
2019	Barry	Tropical Storm
2020	Laura	Tropical Storm

Since the last Lafayette Parish HMP update in 2016, there have been two tropical cyclone events which have impacted the parish. Below is a brief description of the events and the impact they had on the Lafayette Parish planning area.

#### [Hurricane Barry \(2019\)](#)

Hurricane Barry initial developed from a disturbance that moved from Georgia southwest to the northeast Gulf of Mexico on July 8-9, 2019. The weak low-pressure system continued to move west-southwest and strengthen and was eventually classified as Tropical Storm Barry on the morning of July 11<sup>th</sup>, 95 miles south-southeast of the mouth of the Mississippi River. Barry continued to move slowly west then northwest and briefly reached hurricane strength on the morning of July 13<sup>th</sup> before landfall in south-central Louisiana near Intracoastal City, Louisiana in Vermillion Parish. Tropical storm force winds reached the southeast Louisiana coast by midday on Friday, July 12<sup>th</sup> and spread slowly northwest reaching the Baton Rouge area during the evening of the 12<sup>th</sup>. Tropical storm wind impacts had ended across all of southeast Louisiana by midday on July 14<sup>th</sup>. Tropical storm force winds were primarily measured in gusts across southeast Louisiana. The exception was in Terrebonne and Assumption Parishes, close to the landfall location, where sustained tropical storm force winds and frequent gusts caused more significant power line and tree damage. A few tropical storm wind gusts were recorded in the metro New Orleans area but were not very impactful. No hurricane force wind gusts were recorded in southeast Louisiana.

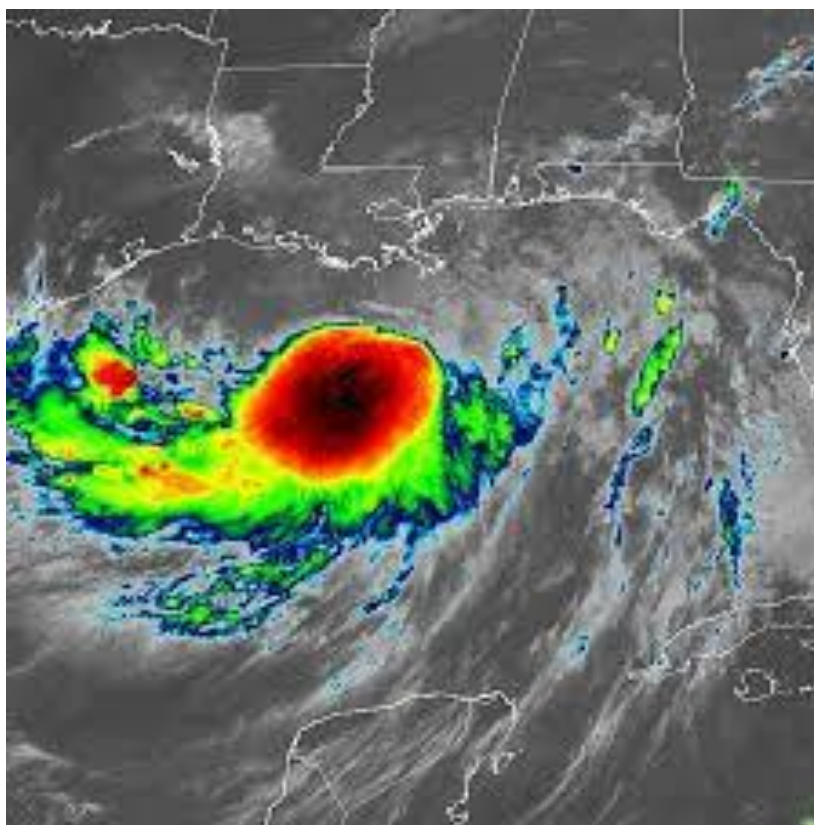
Mostly minor to moderate storm surge flooding occurred across coastal southeast Louisiana, including Lake Pontchartrain, and a small part of the Mississippi Coast. Terrebonne Parish had significant storm surge flooding in the lower portion of the parish with storm tides of five to eight feet, locally up to nine feet. Several local levees were overtopped on the morning of July 13<sup>th</sup> flooding roads and a few homes. The highest storm tide reading was 9.11 feet NAVD88 at a USGS tide gauge at Caillou Lake near Dulac, Louisiana.

Storm total rainfall was generally between four and eight inches with a maximum rainfall of 8.83 inches recorded northeast of Denham Springs, Louisiana in Livingston Parish. Isolated flash flooding of streets and secondary roadways occurred on July 13<sup>th</sup> in the greater Baton Rouge area, but flash flooding was not widespread or significant. The lower Mississippi River was at unusually high stages from late August with the state at the New Orleans Carrollton gauge near 16.5 feet. The combination of storm surge entering the lower Mississippi River with very high river stages prompted concern of potential overtopping of levees along the Mississippi River in lower Plaquemines Parish prompting some evacuations of the area.

In the Lafayette Parish planning area, tropical storm gusts caused scattered power outages and downed trees across the parish. The highest wind gusts recorded was at Lafayette Regional Airport with wind



gusts upwards of 45 knots. In a July 16, 2019 publication<sup>12</sup>, the Daily Advertiser reported that Tropical Storm Barry dumped between 5 and 8 inches of rain across the parish. It also noted that close to 5,000 Lafayette Utilities System customers were affected by the storm. In a report from the previous day, the Daily Advertiser noted that Youngsville saw localized street flooding and inundation to some yards, but there was no significant threat to homes, primarily due to recently developed retention ponds in the area<sup>13</sup>.



*Figure 2-26: Hurricane Barry Rain Bands in the Gulf Coast Area.  
(Source: NOAA)*

#### Hurricane Laura (2020)

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

On the morning of August 21<sup>st</sup>, Tropical Depression Thirteen strengthened into Tropical Storm Laura, which was the earliest twelfth named Atlantic storm, beating the previous record of Hurricane Luis of 1995 by eight days. As Laura moved westward, little additional strengthening took place as the center moved over the northern Lesser Antilles later that evening, and south of Puerto Rico on August 22<sup>nd</sup>. Early on August 23<sup>rd</sup>, Tropical Storm Laura made landfall across Hispaniola, traversed the entire island, and made landfall

<sup>12</sup> <https://www.theadvertiser.com/story/news/local/2019/07/16/hurricane-barry-aftermath-lafayette/1734248001/>

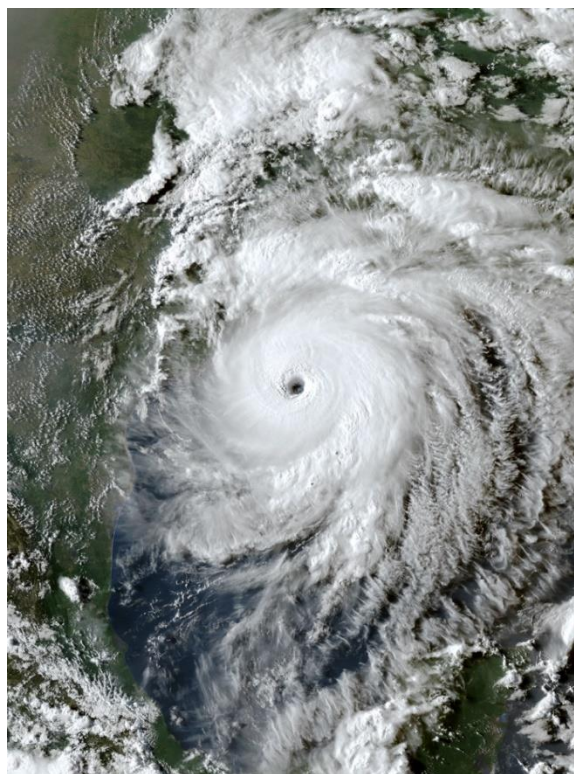
<sup>13</sup> <https://www.theadvertiser.com/story/news/2019/07/14/tropical-storm-barry-gives-youngsville-more-to-think-about-flooding/1730351001/>

across Eastern Cuba later that evening. Tropical Storm Laura continued west northwestward, traveling just south of the island with a second landfall across Western Cuba late on August 24<sup>th</sup>.

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

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

The National Weather Service in Lake Charles, Louisiana recorded a station record highest peak wind gust of 116 knots (133 mph) at 1:42 AM CDT before the Automated Surface Observing System (ASOS) wind equipment failed. However, the ASOS barometer sensor that was safely within the NWS building (which received very little damage) recorded a station record minimum sea level pressure of 956 millibars (28.23 inches of mercury) at 2:20 AM CDT when the eye of Hurricane Laura passed nearly overhead.



*Figure 2-27: Hurricane Laura in the Gulf Coast Area.  
(Source: NOAA)*

A total of 33 fatalities occurred throughout the state, with four of them associated with falling trees. These four fatalities included a 14-year-old girl in Vernon Parish, a 68-year-old man in Acadia Parish, a 51-year-old man in Jackson Parish, and a 64-year-old man in Allen Parish. Carbon monoxide poisoning from generators being inside homes, which is strongly discouraged, led to the deaths of twelve people in Calcasieu Parish and two people in Allen Parish. Another man died of drowning while aboard a sinking boat during the storm. Finally, one person died in Calcasieu Parish in a house fire, four people died in Calcasieu Parish, Natchitoches Parish, and Rapides Parish during the cleanup process, and eight others died in Beauregard Parish, Grant Parish, Rapides Parish, and Vernon Parish due to heat-related illnesses following the loss of electricity.

In the Lafayette Parish planning area, there was a voluntary evacuation for the parish. Scattered trees and power lines were blown down across the parish. Homes and businesses were damaged from wind and fallen trees. There was some minor flooding from the Vermilion River due to intense rainfall. Over 40% of the parish was without power immediately after the storm. Wind gusts ranged from 50 to 75 mph.

The following figure displays the wind zones that affect the Lafayette Parish planning area in relation to critical facilities throughout the parish.

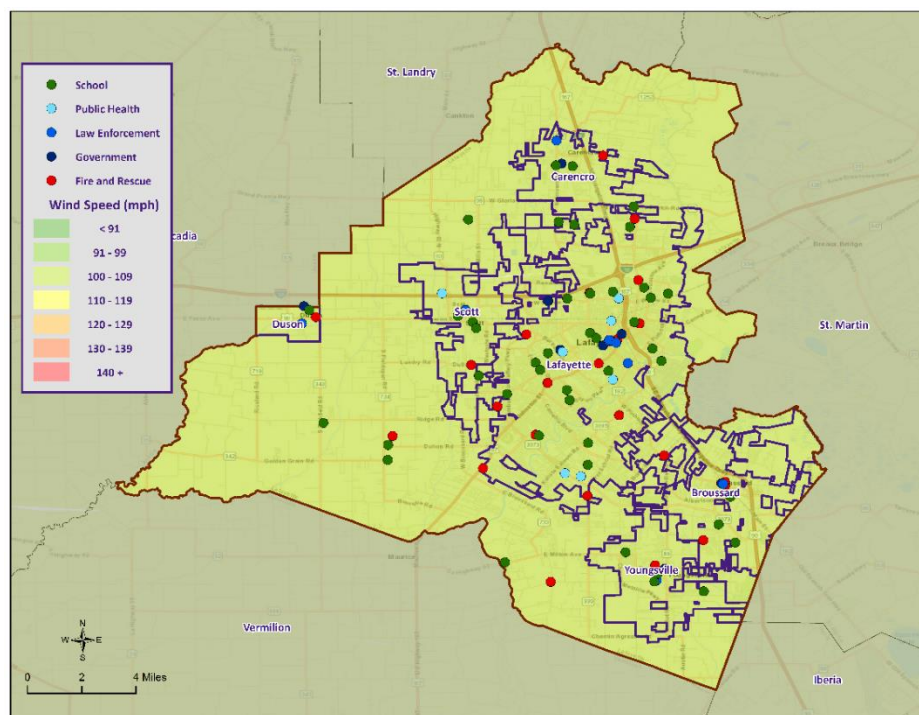


Figure 2-28: Winds Zones for Lafayette Parish in Relation to Critical Facilities

### Frequency / Probability

Tropical cyclones are large natural hazard events that regularly impact the Lafayette Parish planning area. 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, all of the jurisdictions within the Lafayette Parish planning area are highly vulnerable to tropical cyclones. The annual chance of occurrence for a tropical cyclone is estimated at 39% for the entirety of the planning area, with seven events having occurred within the last

18 years (2002 to 2020). This area has experienced several tropical cyclone events in the recent past and can expect more in the future.

#### *Estimated Potential Losses*

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

*Table 2-57: Total Estimated Losses for a 100-Year Hurricane Event  
(Source: Hazus)*

Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event
Lafayette C-PCG	\$163,372,151
Broussard	\$20,048,229
Carencro	\$18,407,096
Duson	\$4,196,994
Lafayette	\$295,019,822
Scott	\$21,068,127
Youngsville	\$19,823,215
<b>Total</b>	<b>\$541,935,634</b>

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

*Table 2-58: Ratio of Total Losses to Total Estimated Value of Assets for the Lafayette Parish Planning Area.  
(Source: Hazus)*

Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event	Total Estimated Value of Assets	Ratio of Estimated Losses to Total Value
Lafayette C-PCG	\$163,372,151	\$9,257,225,000	1.8%
Broussard	\$20,048,229	\$765,084,000	2.6%
Carencro	\$18,407,096	\$392,153,000	4.7%
Duson	\$4,196,994	\$53,327,000	7.9%
Lafayette	\$295,019,822	\$12,277,800,000	2.4%
Scott	\$21,068,127	\$464,924,000	4.5%
Youngsville	\$19,823,215	\$476,201,000	4.2%

Based on the Hazus Hurricane Model, estimated total losses for all jurisdictions included in the planning area ranged from 1.8% to 7.9% of the total estimated value of all assets.

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

*Table 2-59: Estimated Losses in Lafayette City-Parish Consolidated Government areas for a 100-Year Hurricane Event*  
(Source: Hazus)

Lafayette C-PCG	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$1,531,540
Commercial	\$58,590,201
Government	\$2,500,921
Industrial	\$12,021,527
Religious / Non-Profit	\$2,389,299
Residential	\$421,988,373
Schools	\$261,455
<b>Total</b>	<b>\$499,283,315</b>

*Table 2-60: Estimated Losses in Broussard for a 100-Year Hurricane Event*  
(Source: Hazus)

Broussard	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$61,497
Commercial	\$2,352,632
Government	\$100,422
Industrial	\$482,713
Religious / Non-Profit	\$95,940
Residential	\$16,944,526
Schools	\$10,498
<b>Total</b>	<b>\$20,048,229</b>

*Table 2-61: Estimated Losses in Carencro for a 100-Year Hurricane Event*  
(Source: Hazus)

Carencro	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$56,463
Commercial	\$2,160,047
Government	\$92,202
Industrial	\$443,198
Religious / Non-Profit	\$88,086
Residential	\$15,557,461
Schools	\$9,639
<b>Total</b>	<b>\$18,407,096</b>



*Table 2-62: Estimated Losses in Duson for a 100-Year Hurricane Event*  
(Source: Hazus)

Duson	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$12,874
Commercial	\$492,511
Government	\$21,023
Industrial	\$101,053
Religious / Non-Profit	\$20,085
Residential	\$3,547,250
Schools	\$2,198
<b>Total</b>	<b>\$4,196,994</b>

*Table 2-63: Estimated Losses in Lafayette for a 100-Year Hurricane Event*  
(Source: Hazus)

Lafayette	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$904,966
Commercial	\$34,620,165
Government	\$1,477,760
Industrial	\$7,103,359
Religious / Non-Profit	\$1,411,805
Residential	\$249,347,276
Schools	\$154,490
<b>Total</b>	<b>\$295,019,822</b>

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

Scott	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$64,626
Commercial	\$2,472,315
Government	\$105,531
Industrial	\$507,269
Religious / Non-Profit	\$100,821
Residential	\$17,806,533
Schools	\$11,033
<b>Total</b>	<b>\$21,068,127</b>



*Table 2-65: Estimated Losses in Youngsville for a 100-Year Hurricane Event  
(Source: Hazus)*

Youngsville	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$60,807
Commercial	\$2,326,227
Government	\$99,295
Industrial	\$477,295
Religious / Non-Profit	\$94,863
Residential	\$16,754,348
Schools	\$10,381
<b>Total</b>	<b>\$19,823,215</b>

#### *Threat to People*

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

*Table 2-66: Number of People Susceptible to a 100-Year Hurricane Event within the Lafayette Parish Planning Area  
(Source: Hazus)*

Number of People Exposed to Hurricane Hazards			
Location	# in Community	# in Hazard Area	% in Hazard Area
Lafayette C-PCG	66,797	66,797	100%
Broussard	8,197	8,197	100%
Carencro	7,526	7,526	100%
Duson	1,716	1,716	100%
Lafayette	120,623	120,623	100%
Scott	8,614	8,614	100%
Youngsville	8,105	8,105	100%
<b>Total</b>	<b>221,578</b>	<b>221,578</b>	<b>100%</b>

The Hazus Hurricane Model was also extrapolated to provide an overview of vulnerable populations throughout Lafayette Parish. These populations are illustrated in the following tables:

*Table 2-67: Vulnerable Populations in Lafayette City-Parish Consolidated Government Areas for a 100-Year Hurricane Event*  
(Source: Hazus)

Lafayette C-PCG		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	66,797	100.0%
Persons Under 5 Years	4,723	7.1%
Persons Under 18 Years	11,636	17.4%
Persons 65 Years and Over	6,867	10.3%
White	46,337	69.4%
Minority	20,460	30.6%

*Table 2-68: Vulnerable Populations in Broussard for a 100-Year Hurricane Event*  
(Source: Hazus)

Broussard		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	8,197	100.0%
Persons Under 5 Years	678	8.3%
Persons Under 18 Years	1,539	18.8%
Persons 65 Years and Over	755	9.2%
White	6,556	80.0%
Minority	1,641	20.0%

*Table 2-69: Vulnerable Populations in Carencro for a 100-Year Hurricane Event*  
(Source: Hazus)

Carencro		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	7,526	100.0%
Persons Under 5 Years	618	8.2%
Persons Under 18 Years	1,311	17.4%
Persons 65 Years and Over	910	12.1%
White	4,024	53.5%
Minority	3,502	46.5%

*Table 2-70: Vulnerable Populations in Duson for a 100-Year Hurricane Event  
(Source: Hazus)*

Duson		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	1,716	100.0%
Persons Under 5 Years	147	8.6%
Persons Under 18 Years	332	19.4%
Persons 65 Years and Over	204	11.9%
White	1,181	68.8%
Minority	535	31.2%

*Table 2-71: Vulnerable Populations in Lafayette for a 100-Year Hurricane Event  
(Source: Hazus)*

Lafayette		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	120,623	100.0%
Persons Under 5 Years	7,322	6.1%
Persons Under 18 Years	18,962	15.7%
Persons 65 Years and Over	14,161	11.7%
White	76,933	63.8%
Minority	43,690	36.2%

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

Scott		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	8,614	100.0%
Persons Under 5 Years	661	7.7%
Persons Under 18 Years	1,498	17.4%
Persons 65 Years and Over	923	10.7%
White	6,778	78.7%
Minority	1,836	21.3%

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

Youngsville		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	8,105	100.0%
Persons Under 5 Years	744	9.2%
Persons Under 18 Years	1,747	21.6%
Persons 65 Years and Over	479	5.9%
White	7,276	89.8%
Minority	829	10.2%

#### *Vulnerability*

See [Appendix C: Critical Facilities](#) for parish and municipality buildings that are susceptible to tropical cyclones.

## Wildfires

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

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

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

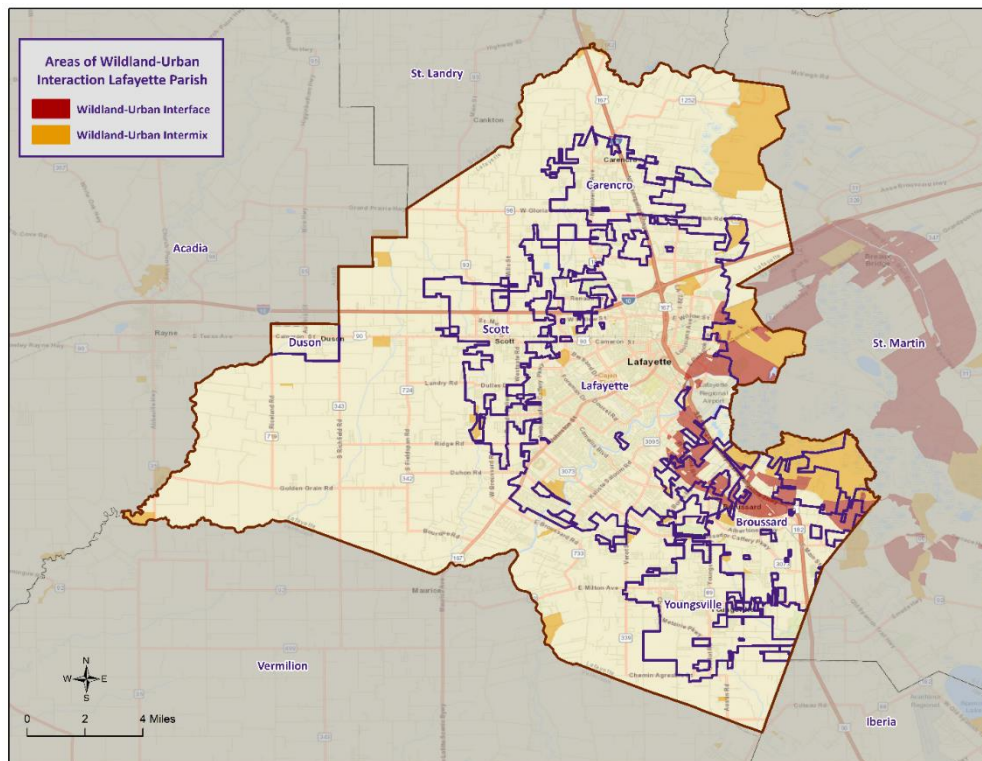
The Southern Group of State Foresters developed the Southern Wildfire Risk Assessment Portal to create awareness among the public and government sectors about the threat of wildfires in their areas. The Southern Wildfire Assessment Portal allows users to identify areas that are most prone to wildfires.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

*Table 2-74: Southern Group of State Foresters Wildfire Risk Assessment Fire Intensity Scale.  
(Source: Southern Wildfire Assessment Portal)*

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

### Location

Wildfires impact areas that are populated with forests and grasslands. The worse-case scenario for Lafayette City-Parish Consolidated Government and the jurisdictions of Broussard, Carencro, Duson, Lafayette, Scott, and Youngsville is a level 4 on the fire intensity scale. The following figure displays the areas of wildland-urban interface and intermix in the Lafayette Parish planning area.



*Figure 2-29: Wildland-Urban Interaction in the Lafayette Parish Planning Area.*



### *Previous Occurrences / Extents*

The NCEI Storm Events database reports no wildfire events occurring within the boundaries of the Lafayette Parish planning area between the years 1990 and 2020.

Based on the Southern Group of State Foresters Risk Assessment Portal, the following table outlines the intensity that each jurisdictional area could potential experience due to a wildfire event.

*Table 2-75: Potential Wildfire Intensity Levels for the Lafayette Parish Planning Area.  
(Source: Southern Wildfire Assessment Portal)*

Fire Intensity	
<b>Lafayette C-PCG</b>	Moderate Intensity Level 3
<b>Broussard</b>	Low to Moderate Level Intensity 2.5
<b>Carencro</b>	Lowest Intensity Level 1
<b>Duson</b>	Moderate Intensity Level 3
<b>Lafayette</b>	Low Intensity Level 2
<b>Scott</b>	Low Intensity Level 2
<b>Youngsville</b>	Moderate Intensity Level 3

### *Frequency / Probability*

Based on historical records, there have been no significant wildfire events within the boundaries of the Lafayette City-Parish Consolidated Government areas and the incorporated jurisdictions of Broussard, Carencro, Duson, Lafayette, Scott, and Youngsville; therefore, the annual chance of occurrence for wildfires is estimated at less than 1%.

### *Estimated Potential Loses*

According to the NCEI Storm Events database, there have been no wildfire events which have caused property damage, crop damage, injuries, or fatalities in the Lafayette Parish planning area. In assessing risk to population, the most vulnerable population throughout the parish consists of those residing in areas of wildland-urban interaction primarily found along the eastern boundary of the parish.

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

*Table 2-76: Total Building Exposure by Wildland-Urban Interaction Areas.  
(Source: Hazus)*

Jurisdiction	Estimated Total Building Exposure
<b>Lafayette C-PCG</b>	\$994,859,000
<b>Broussard</b>	\$631,397,000
<b>Carencro</b>	\$0
<b>Duson</b>	\$19,538,000
<b>Lafayette</b>	\$2,020,018,000
<b>Scott</b>	\$40,132,000
<b>Youngsville</b>	\$41,585,000
<b>Total</b>	<b>\$3,747,529,000</b>

Hazus also provides a breakdown by jurisdiction for seven primary sectors (Hazus occupancy) throughout the parish. Utilizing this information with the wildland-urban interaction areas allows for identifying the total exposure by jurisdiction. The total exposure for each jurisdiction by sector is listed in the following tables. These sectors are comprised of privately owned structures/facilities, as well as locally, state, and federally owned structures/facilities.

*Table 2-77: Estimated Exposure for Lafayette City-Parish Consolidated Government by Sector.*  
(Source: Hazus)

Lafayette C-PCG	Estimated Total Building Exposure by Sector
Agricultural	\$2,432,000
Commercial	\$185,319,000
Government	\$0
Industrial	\$73,598,000
Religious / Non-Profit	\$6,356,000
Residential	\$724,420,000
Schools	\$2,734,000
<b>Total</b>	<b>\$994,859,000</b>

*Table 2-78: Estimated Exposure for Broussard by Sector.*  
(Source: Hazus)

Broussard	Estimated Total Building Exposure by Sector
Agricultural	\$1,578,000
Commercial	\$101,858,000
Government	\$657,000
Industrial	\$53,973,000
Religious / Non-Profit	\$7,383,000
Residential	\$461,648,000
Schools	\$4,300,000
<b>Total</b>	<b>\$631,397,000</b>

Table 2-79: Estimated Exposure in Duson by Sector.

(Source: Hazus)

Duson	Estimated Total Building Exposure by Sector
Agricultural	\$81,000
Commercial	\$3,527,000
Government	\$0
Industrial	\$168,000
Religious / Non-Profit	\$509,000
Residential	\$15,253,000
Schools	\$0
<b>Total</b>	<b>\$19,538,000</b>

Table 2-80: Estimated Exposure in Lafayette by Sector.

(Source: Hazus)

Lafayette	Estimated Total Building Exposure by Sector
Agricultural	\$1,984,000
Commercial	\$417,538,000
Government	\$11,166,000
Industrial	\$109,333,000
Religious / Non-Profit	\$25,092,000
Residential	\$1,441,115,000
Schools	\$13,790,000
<b>Total</b>	<b>\$2,020,018,000</b>

Table 2-81: Estimated Exposure in Scott by Sector.

(Source: Hazus)

Scott	Estimated Total Building Exposure by Sector
Agricultural	\$0
Commercial	\$4,371,000
Government	\$0
Industrial	\$1,029,000
Religious / Non-Profit	\$1,259,000
Residential	\$33,473,000
Schools	\$0
<b>Total</b>	<b>\$40,132,000</b>

*Table 2-82: Estimated Exposure in Youngsville by Sector.*  
(Source: Hazus)

Youngsville	Estimated Total Building Exposure by Sector
Agricultural	\$0
Commercial	\$4,833,000
Government	\$0
Industrial	\$2,666,000
Religious / Non-Profit	\$0
Residential	\$34,086,000
Schools	\$0
<b>Total</b>	<b>\$41,585,000</b>

#### *Threat to People*

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

*Table 2-83: Population Located within a Wildland-Urban Interaction Areas.*  
(Source: 2010 U.S. Census Data)

Number of People Located in Wildland-Urban Interaction Areas			
Location	# in Community	# in Hazard Area	% in Hazard Area
Lafayette C-PCG	66,797	10,586	15.8%
Broussard	8,197	4,804	58.6%
Carencro	7,526	0	0.0%
Duson	1,716	247	14.4%
Lafayette	120,623	15,788	13.1%
Scott	8,614	520	6.0%
Youngsville	8,105	382	4.7%
<b>Total</b>	<b>221,578</b>	<b>32,327</b>	<b>14.6%</b>

The 2010 U.S. Census data was also extrapolated to provide an overview of populations located within wildland-urban interaction areas throughout the jurisdictions. The data is illustrated in the tables on the following pages.

*Table 2-84: Population in Lafayette City-Parish Consolidated Government Areas Located within a Wildland-Urban Interaction Area.  
(Source: 2010 Census Data)*

Lafayette City-Parish Consolidated Government		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	10,586	15.8%
Persons Under 5 Years	720	6.8%
Persons Under 18 Years	2,530	23.9%
Persons 65 Years and Over	1,164	11.0%
White	7,453	70.4%
Minority	3,133	29.6%

*Table 2-85: Population in Broussard Located within a Wildland-Urban Interaction Area.  
(Source: 2010 Census Data)*

Broussard		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	4,804	58.6%
Persons Under 5 Years	397	8.3%
Persons Under 18 Years	858	17.9%
Persons 65 Years and Over	442	9.2%
White	3,842	80.0%
Minority	962	20.0%

*Table 2-86: Population in Duson Located within a Wildland-Urban Interaction Area.  
(Source: 2010 Census Data)*

Duson		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	247	14.4%
Persons Under 5 Years	21	8.6%
Persons Under 18 Years	48	19.4%
Persons 65 Years and Over	29	11.9%
White	170	68.8%
Minority	77	31.2%

*Table 2-87: Population in Lafayette Located within a Wildland-Urban Interaction Area.  
(Source: 2010 Census Data)*

Lafayette		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	15,788	13.1%
Persons Under 5 Years	958	6.1%
Persons Under 18 Years	2,482	15.7%
Persons 65 Years and Over	1,854	11.7%
White	10,070	63.8%
Minority	5,718	36.2%

*Table 2-88: Population in Scott Located within a Wildland-Urban Interaction Area.  
(Source: 2010 Census Data)*

Scott		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	520	6.0%
Persons Under 5 Years	40	7.7%
Persons Under 18 Years	90	17.4%
Persons 65 Years and Over	56	10.7%
White	409	78.7%
Minority	111	21.3%

*Table 2-89: Population in Youngsville Located within a Wildland-Urban Interaction Area.  
(Source: 2010 Census Data)*

Youngsville		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	382	4.7%
Persons Under 5 Years	35	9.2%
Persons Under 18 Years	82	21.6%
Persons 65 Years and Over	23	5.9%
White	343	89.8%
Minority	39	10.2%

#### *Vulnerability*

See [Appendix C: Critical Facilities](#) for parish and municipality facilities that could potentially be exposed to a wildfire hazard. Buildings were determined based on whether they fall within the wildfire-urban interface and/or intermix.



### Winter Weather

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

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

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

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

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

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

*Table 2-90: Sperry-Piltz Ice Accumulation Index*

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

*Location*

Because a winter storm is a climatological based hazard and has the same probability of occurring across all of the adjacent parishes, the entire planning area for Lafayette Parish is equally at risk for winter storms. The worse-case scenario for the Lafayette Parish planning area is a level 2 on the Sperry-Piltz Ice Accumulation Index.

*Previous Occurrences / Extents*

The NCEI Storm Events Database reports 11 winter weather events occurring within the boundaries of the Lafayette Parish planning area between the years 1990 and 2020. Below is a brief synopsis of the winter weather events which occurred since the last Lafayette Parish HMP Update in 2016.

*Table 2-91: Previous Occurrences for Winter Storm Events*

Date	Synopsis	Property Damage	Crop Damage
December 8, 2017	One to two inches of snow fell around Lafayette. Portions of Interstate 10 were closed during the event as ice formed on overpasses. Schools were also closed.	\$0	\$0
January 16, 2018	A light dusting of snow and sleet over a thin glaze of ice occurred during the 16th. Accumulations were very light and generally less than a quarter inch, however area travel was interrupted, and area schools canceled classes for a couple days as bridges remained iced over.	\$0	\$0

*Frequency / Probability*

Based on historical records, there have been 11 significant winter weather events within the Lafayette City-Parish Consolidated Government areas and the incorporated jurisdictions of Broussard, Carencro, Duson, Lafayette, Scott, and Youngsville since 1990; therefore, the annual chance of occurrence for winter weather is estimated at 37%.

*Estimated Potential Losses*

Since 1990, there have been 11 winter weather events that have resulted in property damages according to NCEI Storm Events Database. The total property damages associated with those storms have totaled approximately \$10,000. To estimate the potential losses of a winter weather event on an annual basis, the total damages recorded for winter weather was divided by the total number of years of available winter weather in the NCEI Storm Events Database (1990 - 2020). This provides an annual estimated potential loss of \$333 and \$1,111 per event. The following table provides an estimate of potential property losses for the Lafayette Parish planning area:

*Table 2-92: Estimated Annual Losses Resulting from Winter Weather.*

Estimated Potential Annual Losses from Winter Weather						
Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngsville
\$100	\$12	\$11	\$3	\$181	\$13	\$12

There have been no reported injuries or fatalities as a result of winter weather over the 30-year record.

*Vulnerability*

See [Appendix C: Critical Facilities](#) for parish and municipality building exposure to winter weather.

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### 3. Capability Assessment

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

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

#### Policies, Plans and Programs

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

*Table 3-1: Planning and Regulatory Capabilities*

Planning and Regulatory								
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.								
	Lafayette C-PCG	Broussard	Carenno	Duson	Lafayette	Scott	Youngsville	Comments
Plans	Yes / No							
Comprehensive / Master Plan	Yes	Yes	No	No	Yes	Yes	Yes	
Capital Improvements Plan	Yes	No	Yes	No	No	Yes	Yes	
Economic Development Plan	Yes	Yes	No	No	Yes	Yes	Yes	
Local Emergency Operations Plan	Yes	Yes	Yes	No	Yes	Yes	Yes	
Continuity of Operations Plan	Yes	No	No	No	No	No	No	
Transportation Plan	Yes	No	No	No	Yes	Yes	No	
Stormwater Management Plan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Community Wildfire Protection Plan	No	No	No	No	No	No	No	
Other plans (redevelopment, recovery, coastal zone management)	Yes	No	No	No	Yes	No	No	
Building Code, Permitting and Inspections	Yes / No							
Building Code	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	No	Yes	No	No	No	No	
Fire Department ISO/PIAL rating	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Site plan review requirements	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Land Use Planning and Ordinances	Yes / No							
Zoning Ordinance	Yes	Yes	Yes	Yes	Yes	Yes	No	
Subdivision Ordinance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Floodplain Ordinance	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	Yes	Yes	Yes	No	Yes	Yes	Yes	
Flood Insurance Rate Maps	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Acquisition of land for open space and public recreation uses	No	Yes	Yes	No	Yes	Yes	Yes	
Other	Yes	No	Yes	No	Yes	Yes	Yes	

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

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

The Lafayette City-Parish Consolidated Government provides oversight for building permits and codes, land use planning, and all parish ordinances.

As of the 2021 update, Lafayette City-Parish Consolidated Government and the incorporated communities ensure that all adopted building codes are enforced and in compliance relating to the construction of any structure within the boundaries of the parish. Building permits are required prior to beginning any type of construction or renovation projects, installation of electrical wiring, plumbing or gas piping, moving manufactured/modular or portable buildings, and reroofing or demolitions.

The Lafayette City-Parish Consolidated Government is also responsible for enforcing the parish ordinances related to health and safety, property maintenance standards, and condemnation of unsafe structures.

The Lafayette City-Parish Consolidated Government meets regularly to consider any proposed ordinance changes, and to take final actions on proposed changes.

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

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

### Administration, Technical, and Financial

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



Table 3-2: Administration and Technical Capabilities

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

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

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

Table 3-3: Financial Capabilities

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

## Education and Outreach

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

The jurisdictions within the Lafayette Parish planning area have existing education and outreach programs to implement mitigation activities, as well as communicate risk and hazard related information to its

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

*Table 3-4: Education and Outreach Capabilities*

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

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

### Flood Insurance and Community Rating System

Participation in the CRS strengthens local capabilities by lowering flood insurance premiums for jurisdictions that exceed NFIP minimum requirements. As noted in the CRS Eligible Communities List effective April 1, 2021, Lafayette City-Parish Consolidated Government is rated as a Class 8 community, the City of Carencro is rated as a Class 7 community, the City of Lafayette is rated as a Class 8 community, and the City of Scott is rated as a Class 9 community. However, the jurisdictions of Lafayette City-Parish Consolidated Government, the City of Lafayette, and the City of Scott have been officially notified that each will become a Class 7 community effective October 1.

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

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

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

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

SFHA (Zones A, AE, A1-A30, V, V1-V30, AO, and AH): Discount varies depending on class.  
 SFHA (Zones A99, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, and AR/AO): 10% discount for Classes 1-6; 5% discount for Classes 7-9.\*  
 Non-SFHA (Zones B, C, X, D): 10% discount for Classes 1-6; 5% discount for Classes 7-9.

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

As of April 2021, 352 communities in the State of Louisiana participate in the Federal Emergency Management Agency's National Flood Insurance Program (NFIP). Of these communities, 46 (or 13%) participate in the Community Rating System (CRS). Jefferson Parish leads the state with a rating of Class 5, followed by three cities with a rating of Class 6: the Cities of Gretna and Kenner in Jefferson Parish and the City of Mandeville in St.

Tammany Parish. 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. Once the parish has obtained a CRS rating and is a participant, the parish will receive CRS credit for this plan when it is adopted. To retain that credit, though, the parish must submit an evaluation report on progress toward implementing this plan to FEMA by October 1 of each year. That report must be made available to the media and the public. Second, the parish must annually recertify to FEMA that it is continuing to implement its CRS credited activities. Failure to maintain the same level of involvement in flood protection can result in a loss of CRS credit points and a resulting increase in flood insurance rates to residents.

In 2011<sup>14</sup>, the National Flood Insurance Program (NFIP) completed a comprehensive review of the Community Rating System (CRS) that resulted in the release of a new CRS Coordinator's Manual. The changes to the 2013 CRS Coordinator's Manual are the result of a multi-year program evaluation that included input from a broad group of contributors to evaluate the CRS and refine the program to meet its stated goals. The changes helped to drive new achievements in the following six core flood loss reduction areas important to the NFIP: (1) reduce liabilities to the NFIP Fund; (2) improve disaster resiliency and sustainability of communities; (3) integrate a Whole Community approach to addressing emergency management; (4) promote natural and beneficial functions of floodplains; (5) increase understanding of risk, and; (6) strengthen adoption and enforcement of disaster-resistant building codes.

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

<sup>14</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 2017 manual could likely identify activities deserving credit they had not previously received. Due to the changes in both activities and CRS points, community CRS coordinators should speak with their ISO/CRS Specialist to understand how the 2017 manual will impact their community and when.

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

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

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

## NFIP Worksheets

Parish NFIP worksheets can be found in [Appendix E: State Required Worksheets](#).

## 4. Mitigation Strategy

### Introduction

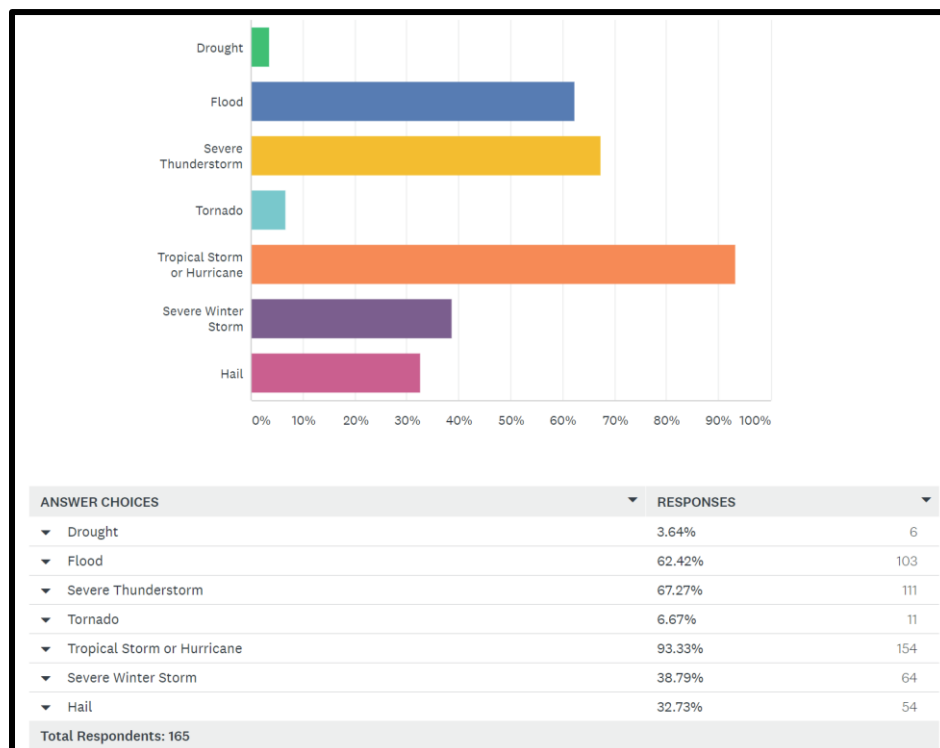
The Hazard Mitigation Strategy for Lafayette City-Parish Consolidated Government and its incorporated communities have a common guiding principle and is the demonstration of the parish's commitment to reduce risks from hazards. The strategy also serves as a guide for parish and local decision makers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

Officials from all jurisdictions within the planning area confirmed the goals, objectives, actions and projects over the period of the hazard mitigation plan update process. The mitigation actions and projects in this 2021 HMP update are a product of analysis and review of the Lafayette Parish Hazard Mitigation Plan Steering Committee under the coordination of the Lafayette Parish Office of Homeland Security and Emergency Preparedness. The committee was presented a list of projects and actions, new and from the 2016 plan, for review from January 2021 – March 2021.

An online public opinion survey of Lafayette Parish residents was conducted between December 2020 and April 2021. The survey was designed to capture public perceptions and opinions regarding natural hazards in the Lafayette Parish planning area. In addition, the survey collected information regarding the methods and techniques preferred by the respondents for reducing the risks and losses associated with local hazards.

When asked which natural disasters citizens or someone in their household had experienced in the last five years, the following responses were recorded:

1. Tropical Storm/Hurricane
2. Severe Thunderstorm
3. Flood

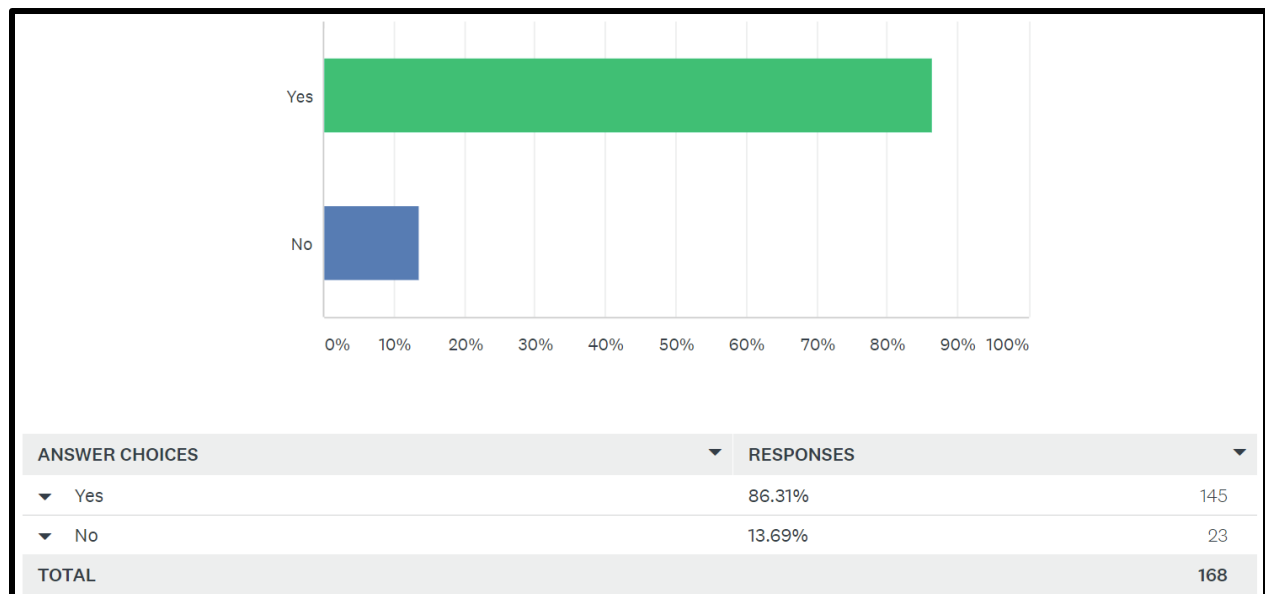


The survey results also indicated which natural disasters citizens were *concerned* with being affected by in the Lafayette Parish planning area. The top three natural disasters selected for “very concerned” were:

1. Tropical Storm or Hurricane
2. Flooding
3. Severe Thunderstorm

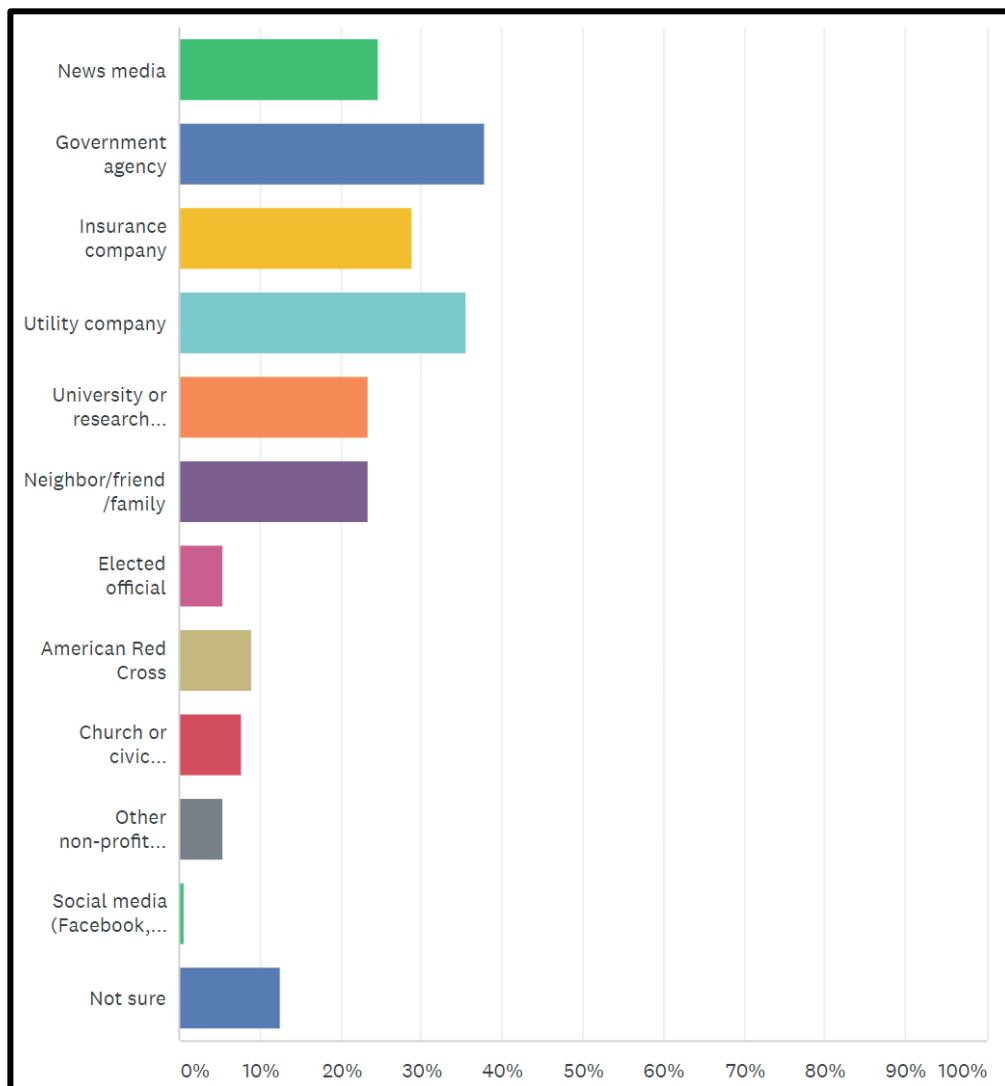
	NOT CONCERNED	NOT VERY CONCERNED	NEUTRAL	SOMEWHAT CONCERNED	VERY CONCERNED	TOTAL	WEIGHTED AVERAGE
▼ Drought	32.10% 52	24.69% 40	19.75% 32	14.20% 23	9.26% 15	162	2.44
▼ Flood	1.18% 2	1.76% 3	2.94% 5	26.47% 45	67.65% 115	170	4.58
▼ Severe Thunderstorm	1.19% 2	6.55% 11	17.26% 29	38.69% 65	36.31% 61	168	4.02
▼ Tornado	2.37% 4	13.02% 22	26.04% 44	33.73% 57	24.85% 42	169	3.66
▼ Tropical Storm or Hurricane	0.00% 0	1.76% 3	1.76% 3	22.35% 38	74.12% 126	170	4.69
▼ Severe Winter Storm	9.52% 16	22.62% 38	20.83% 35	31.55% 53	15.48% 26	168	3.21
▼ Hail	2.45% 4	15.34% 25	31.90% 52	36.20% 59	14.11% 23	163	3.44

The survey also asked if citizens had received information about making their homes safer from disasters. The following responses were recorded:





Always important to decision makers is how citizens best receive emergency information. According to the survey, the citizens within the Lafayette Parish planning area MOST trust the following entities in the dissemination of emergency related information:



The results shown above are related to the manner in which the general population receives information on how to make their home safer from natural disasters. These results are encouraging because it shows that the public has high confidence in the information being disseminated by local government agencies. Implementation of the outreach activities put forth by parish officials and offices seem to have been executed in a successful manner.

This activity confirms that the goals and action items developed by the Lafayette Parish Hazard Mitigation Plan Steering Committee are representative of the outlook of the community at large. Full survey results can be found here:

<https://www.surveymonkey.com/results/SM-LVLW9V9L9/>

## 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 Lafayette 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, Lafayette Parish can make progress toward reducing identified risks.

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

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

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

The goals are as follows:

1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact
2. Improve data collection, use, and sharing to reduce the impact of hazards
3. Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
4. Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
5. Maintain continuity of operations during and after natural hazard events

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

After the adoption of the 2016 Lafayette Parish Hazard Mitigation Plan, large portions of South Louisiana were impacted by a flooding event whose ramifications are still being felt by the population. Because of this event, Lafayette Parish and its jurisdictions reprioritized its efforts and became much more aggressive in seeking funding for flood mitigation efforts, particularly related to drainage. Pressure was placed on political leaders throughout the parish and jurisdictions to ensure that money and resources were sought and made available to mitigate against such events in the future.

The Hazard Mitigation Plan Steering Committee reviewed and evaluated the potential action and project lists in which consideration was given to a variety of factors. Such factors include determining a project's eligibility for federal mitigation grants as well as its ability to be funded. This process required evaluation of each project's engineering feasibility, cost effectiveness, and environmental and cultural factors.

### 2021 Mitigation Actions and Update on Previous Plan Actions

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

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

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

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

## Lafayette City-Parish Consolidated Government Mitigation Actions

*Previous Action Update*

Lafayette City-Parish Consolidated Government							
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Goals	Status
Public Education	Continue and expand efforts to educate the public regarding all hazards, including direct mail, technical assistance, and development / implementation of general advertising campaign. Distribute public awareness information regarding flood hazards, SFHA's and potential mitigation measures using the local newspaper, utility bill inserts, inserts in the phone book, a parish hazard awareness website, and an educational program for school age children or "how to" classes in retrofitting by local merchants. Integrate "Disaster Resistance Education" into the public school curriculum. Provide public education on the importance of maintaining the ditches. Benefits: An informed public is better able to respond and protect themselves in times of hazards.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices, Parish School Board	All Hazards	1,2,3,4,5	In Progress and Ongoing

**Comment on Status:** In September & October 2018, the Development and Planning Department conducted outreach efforts to inform Lafayette citizens of the upcoming FEMA flood maps, as well as provide them with valuable flood insurance information, mitigation information and property protection brochures. The Department coordinated with the City of Scott, City of Broussard and City of Carencro to hold three well attended public meetings in September 2018 where FEMA representatives, LADOTD, and National Flood Insurance Representatives attended to answer questions from the public about flood insurance, flood mapping and general flood concerns. The new FEMA Flood Maps were successfully adopted on November 5, 2018 and took effect on December 21, 2018 after over 10 years in process, due to appeals and protests. To help everyone in Lafayette Parish be better prepared for hurricanes and tropical storms, Lafayette Utilities System has published the 2020 edition of the Hurricane Handbook. This 40-page handbook features a variety of in-depth information including a directory of important phone numbers, evacuation routes, a hurricane tracking map, emergency planning information and checklist for individuals and businesses, generator and chainsaw safety, and much more. The LUS Hurricane Handbook is available at approximately 15 locations throughout the parish. LCG Environmental Quality has presented the Enviroscape presentation to 9 schools in 2020 alone, and has been doing this for several years. The Enviroscape Presentation is a 3-D Model of watershed components and functions. 456 rain barrels have been distributed in 2020 through the Annual Rain Barrel Program. Since 2018, LCG EQ department recruits artists to submit designs that depict the importance of protecting our waterways, and allow a panel to choose which designs will be painted onto pre-selected storm drains in at least two high-pedestrian areas. LCG will use various marketing materials and media outlets to promote stormwater pollution prevention and the importance of the Vermilion River. Litter Poster Contest

<b>Business Hazards</b>	Work with local businesses to identify hazards to their business and mitigation actions that can be taken to protect Parish's economy.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	1,3,5	In Progress and Ongoing
<b>Employee Hazards</b>	Work with parish and municipal employees to identify potential ways to mitigate the impact of hazards upon employees, assets and infrastructure.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	1,2,3,4,5	In Progress and Ongoing
<b>Flood Insurance</b>	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Floodplain Managers or Designee	All Hazards	1	In Progress and Ongoing
<b>Comment on Status:</b> Continue to have flood insurance flyers in the main lobby and at city hall. Also, bring flyers to real estate offices to set out in lobby. Continue to provide FIRM and preliminary FIRM information to citizens at the Development & Planning office, local libraries and LCG website. Using GIS, LCG is working on targeted outreach to promote flood insurance by identifying areas of Special Flood Hazard Area and all NFIP policies and locating the areas that have low participation. Created LCG Specific flood handout and it is kept in the lobby and also put on the website. 2018-2019: Have started using social media to promote the purchase of flood insurance.							
<b>Community Rating System</b>	Work to improve Community Rating System (CRS) rating.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Floodplain Managers or Designee	Floods	1,2,3,4,5	In Progress and Ongoing
<b>Comment on Status:</b> In 2021, nearly 8,000 properties that carry flood insurance within Lafayette Parish will see lower flood insurance due to the efforts of Lafayette Consolidated Government's Floodplain Management division. The division facilitated the improvement of its Community Rating by achieving a Class 7 status, giving policyholders a 15% discount on flood insurance premiums. Factors that led to increase: a. Increase in outreach projects (57 points to 135 points) b. Providing more detailed flood map information (30 points to 90 points) c. Preserving more land as open space (88 points to 115 points) d. Increasing development standards (220 points to 513 points) e. Acquisition of Repetitive Loss Homes (39 points to 87 points) f. Providing more flood information on the website (35 points to 77 points) Goal to be a Class 5 by 2025.							
<b>Insurance Partnerships</b>	Develop partnerships with insurance companies to promote building codes	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards		Remove

<b>FIRMS/DFIRM</b>	Work with FEMA to update FIRMS / DFIRMS	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Public Works, City/Town Mayors' Offices	Flooding (Flash and Riverine)		Completed and Ongoing
<b>Comment on Status:</b> In November 2018, after nearly a 10 year process, LCG adopted the Current Effective FIRM. In 2018, LCG signed a contract with Engineering Firm CH Fenstermaker & Associates to restudy North University Avenue Coulee. The study includes the development of representative hydrologic and hydraulic models that account for major channel improvements as well as land use changes that have occurred since the publication of prior models. Submitted in October 2020, Awaiting FEMA approval							
<b>Update Mitigation Requirements</b>	Continue to include and update mitigation requirements in floodplain development regulations.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	Flooding (Flash and Riverine)	1,2,3,4,5	In Progress and Ongoing
<b>Comment on Status:</b> New drainage regulations put into place in October 2017 that require that any development causing post-development runoff that exceeds the development area's pre-development runoff rate must mitigate the increase through drainage improvements such that the post-development runoff shall be 15% less than the predevelopment runoff (85% of the pre-development runoff) for developments greater than two and half (2.5) acres. Additionally, developments up to and including two and a half (2.5) acres in area are required to retain the applicable design storm event. In 2017, LCG also adopted "Zero Net Fill", which requires developers to provide compensatory storage for any fill placed within the floodplain to offset any storage loss.							
<b>Auxiliary Power Sources</b>	Identify and prioritize auxiliary power sources for critical infrastructure.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Utilities Service, Private Energy Providers	All Hazards	5	In Progress and Ongoing
<b>Hazardous Materials Training</b>	Train First Responders (EMS Personnel) in hazardous materials incidents.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Fire and Volunteer Departments, City/Town Mayor's Offices	Hazardous Materials Incidents	5	In Progress and Ongoing
<b>Terrorism Review</b>	Conduct parish-wide terrorism critical infrastructure review.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Terrorism	5	In Progress and Ongoing
<b>Preparedness Coordination</b>	Coordination of all preparedness and mitigation efforts; hosting disaster response drills; regular attendance at networking and coordination meetings.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	5	In Progress and Ongoing
<b>NIMS and ICS Training</b>	Work to provide training to emergency personnel Parish-wide in NIMS and ICS.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	5	In Progress and Ongoing



<b>Monitoring and Communications Enhancement</b>	Work to enhance monitoring and communications systems to improve ability to predict and prepare for flood events, including connection with Lafayette Parish Flood Warning System.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure)	1,2,3,4,5	In Progress and Ongoing
<b>Comment on Status:</b> Lafayette Parish Office of Homeland Security & Emergency Preparedness has created an online self-reporting application for post disaster damage assessment at <a href="http://www.lafayetteohsep.org">http://www.lafayetteohsep.org</a> LCG created a GIS Dashboard for closed roads and sand bag locations during flood events.							
<b>International Building Codes</b>	Implement and enforce International Building Codes.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards		Completed and Ongoing
<b>Comment on Status:</b> On March 12, 2019, Lafayette City Parish council adopted an ordinance (Ordinance No. O-039-2019), to adopt the following codes 1) International Building Code 2015 2) International Residential Code 2015 3) International existing Building Code 2015 4) national Electrical Code 2014 5) International Mechanical Code 2015 6) International Plumbing Code 2015 7) International Fuel/Gas Code 2015. The ordinance also included an automatic adoption clause for future code updates.							
<b>Insurance Partnerships</b>	Develop partnerships with insurance companies to promote building codes.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards		Deleted
<b>Lafayette Emergency Operation Center Hardening</b>	Wind harden and upgrade the Lafayette Emergency Operation Center at 800 South Buchanan Street, by expanding the site to accommodate increasing demand, adding new monitoring equipment and to become more disaster resistant.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish President, Office of Homeland Security and Emergency Preparedness	Floods / Hurricanes and Tropical Systems/ Thunderstorms, Lightning, High Winds / Hail/ Tornadoes		Completed
<b>Comment on Status:</b> New EOC center completed in 2021.							
<b>Larger Volume Pumps and Pipes</b>	Along Beau Basin Coulee, Coulee Acadiana Lat. 8A, Coulee Mine, LaFamme Road Coulee and Ille de Cannes Coulee increase the drainage capacity of the drainage laterals by installing larger volume pumps and larger pipes.	LWI, FEMA, State, Local, HUD	1-5 Years	Department of Public Works	Flooding (Flash and Riverine)/ Hurricanes and Tropical Systems	4, 5	In Progress and Ongoing

<b>Repetitive Loss Area Drainage</b>	Determine the most feasible drainage projects for each repetitive loss area, as seen on Map 3, to reduce its flood potential (e.g. Beau Basin Coulee and Ille de Cannes Coulee, which are located in the unincorporated areas of the Parish) and implement the identified interior localized drainage project.	LWI, FEMA, State, Local, HUD	1-5 Years	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager / Community Development and Capital Projects	Flooding (Flash and Riverine)/ Hurricanes and Tropical Systems	2,3,4,5	In Progress and Ongoing
<p><b>Comment on Status:</b> As a part of the scoring system for the 2018 drainage initiative, repetitive loss is taken into consideration and scored higher than areas that were not a repetitive loss area. These projects have been rated by the number of addresses affected and cost per address, percentage area in a flood zone, number of FEMA and repetitive loss claims, complexity of each project, and any foreseen permitting issues. See Appendix H for original projects and Appendix I 2018-2019 Progress Report for each project.</p> <p>≥ 11 repetitive losses in a given drainage basin was given 10 points as part of the cumulative rating</p> <p>9 - 10 repetitive losses in a given drainage basin was given 8 points as part of the cumulative rating</p> <p>6 -8 repetitive losses in a given drainage basin was given 6 points as part of the cumulative rating</p> <p>3-5 repetitive losses in a given drainage basin was given 4 points as part of the cumulative rating</p> <p>1-2 repetitive losses in a given drainage basin was given 2 points as part of the cumulative rating</p> <p>0 repetitive losses in a given drainage basin was given 0 points as part of the cumulative rating</p>							
<b>Repetitive Loss Structure Improvements</b>	Pursue elevation, acquisition, and flood proofing projects and structural solutions to flooding for repetitive loss structures and severe repetitive loss structures.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure) / Hurricanes and Tropical Systems	1,2,3,4	In Progress and Ongoing
<p><b>Comment on Status:</b> In FY18, LCG started to utilize Hazard Mitigation Assistance-FMA funds to address repetitively flooded properties through residential elevations and acquisitions. The elevation and acquisition grant application that LCG submitted under the FY18 FMA Notice of Funding Opportunity has been approved and homeowner Kickoff Meetings took place in February 2021 &amp; Construction activities for the 13 properties included in the grant are expected to begin in 2021. LCG submitted two applications under FY 19 FMA NOFO to elevate or acquire 24 structures and submitted three grant applications under FY 20 FMA NOFO to elevate or acquire 50 structures. Since 2016, a total of 8 structures have been mitigated, via elevation or acquisition through the Hazard Mitigation Assistance-HMGP and approximately 6 others have been mitigated by utilizing Increased Cost of Compliance.</p>							
<b>Update Comprehensive Drainage Plan</b>	Update the comprehensive drainage plan ensuring future protection for areas in the Parish that experience flooding and drainage problems.	LWI, FEMA, State, Local, HUD	1 year	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager	Flooding (Flash and Riverine)	2,3,4,5	In Progress and Ongoing
<b>Retention and Detention Ponds</b>	Pursue the development of retention and detention ponds to reduce flooding impacts.	LWI, FEMA, State, Local, HUD	ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure) / Hurricanes and Tropical Systems	3, 4 ,5	In Progress and Ongoing

**Comment on Status:** In January 2020, LCG submitted 9 applications for various drainage projects throughout the parish, as well as detention projects to the Louisiana Watershed Initiative. All but 1 was approved to move on to the Full Application. One of the projects, we have decided to use local funding as it was decided this is in immediate need. In October 2020, LCG submitted an application for funding through the Louisiana DOTD Statewide Flood Control to construct a 40 acre detention pond along Coulee Mine East with a control structure to limit the discharge to Coulee Mine and hold storm water in the pond for storm events.

<b>Safe Rooms</b>	Pursue opportunities to mitigate structures to use as safe rooms or construct safe rooms throughout the parish.	LWI, FEMA, State, Local, HUD	1-5 years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Hurricanes and Tropical Systems / Tornados / High Wind	3, 4, 5	Not Started – Carried Over
<b>Public Building Wind Hardening</b>	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage and helps assure that the public buildings can be used, occupied and operable during or after storms.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/Lafayette Parish Government	High Wind, Hail, Tropical Cyclone, Tornado	3,4,5	Not Started – Carried Over
<b>Drainage Projects</b>	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.	LWI, FEMA, State, Local, HUD	ongoing	City of Lafayette/Lafayette Parish Government	Flooding, High Wind, Tropical Cyclone	3,4	In Progress and Ongoing
<p><b>Comment on Status:</b> Day to Day Maintenance 2020: 227,557 Linear Feet of Roadside Ditch Excavation, 7,150 Linear feet of Off-Road Channel Excavation, 616 Cubic yards of silt and debris removed from roadside ditches, 121,764 linear feet of flushing, 2,108 feet of damaged culverts replaced.</p> <p>2019: Administered federal grants for drainage improvements to Coulee Ile des Cannes, Derby Heights, L&amp;C Bayou Carencro and Ile des Cannes and in the City of Carencro; working toward the enhancement of flood protection in the parish by administering FEMA and HUD-funded drainage improvement projects. While these projects are ongoing, Public Works continues to manage our day-to-day drainage maintenance needs, including roadside ditch and coulee excavation projects, cleaning litter traps and storm drains, repairing sinkholes, and flushing out culvert. See Appendix F</p>							
<b>Residential Elevations and Acquisitions for Repetitive Loss and Severe Repetitive Loss Properties</b>	Elevation or acquisition-demolition of properties. Benefits: Relieves property owners of the continual flooding problems. Saves flood relief and damage	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/Lafayette Parish Government	Flooding, Tropical Cyclone	1,3,4	In Progress and Ongoing

	repayment for each property.						
<b>Comment on Status:</b> In FY18, LCG started to utilize Hazard Mitigation Assistance-FMA funds to address repetitively flooded properties through residential elevations and acquisitions. The elevation and acquisition grant application that LCG submitted under the FY18 FMA Notice of Funding Opportunity has been approved and homeowner Kickoff Meetings took place in February 2021 & Construction activities for the 13 properties included in the grant are expected to begin in 2021. LCG submitted two applications under FY 19 FMA NOFO to elevate or acquire 24 structures and submitted three grant applications under FY 20 FMA NOFO to elevate or acquire 50 structures. Since 2016, a total of 8 structures have been mitigated, via elevation or acquisition through the Hazard Mitigation Assistance-HMGP and approximately 6 others have been mitigated by utilizing Increased Cost of Compliance.							
<b>Safe Room Projects</b>	Construction of a safe room for first responders located in Lafayette. Other locations will be identified based on funding availability.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/Lafayette Parish Government	Tornado, High Wind, Hail, Tropical Cyclone, Flooding	3,4,5	Not Started Carried Over
<b>Public Outreach</b>	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, and Sinkhole hazards, as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/Lafayette Parish Government	Drought, Flooding, Thunderstorm, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, Sinkhole	1,2,4	In Progress and Ongoing
<b>Comment on Status:</b> To help everyone in Lafayette Parish be better prepared for hurricanes and tropical storms, Lafayette Utilities System has published the 2020 edition of the Hurricane Handbook. This 40-page handbook features a variety of in-depth information including a directory of important phone numbers, evacuation routes, a hurricane tracking map, emergency planning information and checklist for individuals and businesses, generator and chainsaw safety, and much more. The LUS Hurricane Handbook is available at approximately 15 locations throughout the parish.							
<b>Generators for Continuity of Operations and Government</b>	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/Lafayette Parish Government	Tornados, Winter Weather, tropical cyclone, Thunderstorm (lightning, high wind, hail), Sinkhole	3,4,5	In Progress and Ongoing
<b>Comment on Status:</b> The HMGP grant for Lafayette Parish's Hurricane Barry allocation is to purchase 14 generators. 6 for Duson, 2 for Lafayette, 1 for Carencro, 1 for Scott, 2 for Broussard, 2 for Youngsville. The total amount of the grant application is \$700,214, which is 75% reimbursable with a 25% match							

<b>Installation of Lightning Rods and Surge Protectors at Critical Facilities</b>	install lightning rods and/or surge protectors; Benefits: will help to ensure minimal down time or equipment failures at Critical Facilities	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/Lafayette Parish Government	Lightning, Thunderstorms	3,4,5	Not Started – Carried Over
<b>Potable Water</b>	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, Local	1-5 years	City of Lafayette/Lafayette Parish Government	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Drought	3,4,5	Not Started – Carried Over

*New Mitigation Actions*

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Elevated building in floodplain
LEAD AGENCY	Lafayette Parish Sheriff's Office
SUPPORTING AGENCIES	None
TIMELINE	15 to 18 months
COST ESTIMATE	\$1,566,400.00
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure 5) Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	Elevated building so that floor is 10ft. in the air
Type of Mitigation Action	Structural and Infrastructure Projects
How Action Aligns with Risk Reduction	Current Building is ground level in a flood plain
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Bridge Replacements
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director
SUPPORTING AGENCIES	Lafayette Consolidated Government- Traffic, Roads, & Bridges Director
TIMELINE	1-5 years
COST ESTIMATE	\$2 million per bridge
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	Replace bridges throughout the parish with the critical locations listed below.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Removal and/or replacement of bridges can improve the conveyance and capacity of a channel. Additionally, bridges have critical economic importance, since they support access to emergency services (e.g. hospitals) and utilities (e.g. water supply). Ultimately, protecting bridges enhances the resilience of cities and communities
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

### Additional Supporting Information:

#### Critical Bridge Locations:

Anderson Road, Acadian Hills Lane, Andover Road, Austria Road, Bajat Road, Beau Pre Road, Canberra Drive, Coussan Road, Crestlawn Drive, E Butcher Switch Road, E Martial Road, E Peck Boulevard, Failla Road, Galbert Road, Gendarme Road, Giselle Place, Jenkins Road, Lajaunie Road, Maryview Farm Road, Meche Road, Ranch Road, Rim Road, Rue des Etoiles Road, Serenity Road, Stutes Road, Switerland Road, Tolson Road, Veterinarian Road

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Concrete Lined Coulee Renovations-Parishwide
LEAD AGENCY	Lafayette Consolidated Government Public Works- Director
SUPPORTING AGENCIES	None
TIMELINE	1-5 years
COST ESTIMATE	\$1 m
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	Repair concrete panels that have failed to prevent erosion, protect utilities and structures
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Stops erosion and keeps drainage system flowing
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Coulee Bend Drainage Improvements
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director
SUPPORTING AGENCIES	none
TIMELINE	1-5 years
COST ESTIMATE	\$7 million
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	Coulee Bend flows from west to east underneath I-49 and along I-10. The channel crossing under I-49 is very restrictive and could potentially cause flooding in heavy rain events. The project would improve the culvert under I-49, and the channel would be concrete-lined to protect against erosion.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Enhancement/conversion of stormwater management sites from existing borrow pits
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director
SUPPORTING AGENCIES	None
TIMELINE	5 years
COST ESTIMATE	\$1 million per site
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure. 5) Maintain continuity of operations during and after natural hazard events.
PRIORITY	Medium
Action Description	To reduce the water surface elevation and flooding throughout the parish. Pursuing two sites currently
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in floodclaims.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Study and evaluate Channel Diversion Systems
LEAD AGENCY	Lafayette Consolidated Government Public Works- Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Drainage - Director
TIMELINE	3 years
COST ESTIMATE	\$300,000
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	Medium
Action Description	To study and determine where there is capacity to reduce flooding in an area by diverting a channel
Type of Mitigation Action	Structure and Infrastructure Projects Local Plans and Regulations
How Action Aligns with Risk Reduction	Diversion channels mitigate the impacts of a flood by offering an alternative route for excess water. Diversion channels can redistribute water from one region to another region that is experiencing severe drought.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Enhancement/extension of waterway gauge program
LEAD AGENCY	Lafayette Consolidated Government Public Works- Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Traffic, Roads & Bridges-Director
TIMELINE	Continual
COST ESTIMATE	\$50,000/year
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	Goals 1-5
PRIORITY	Medium
Action Description	To expand and improve hydraulic data for flood predictions, advanced warning, scour at bridges, debris locations, roadclosures. Active installations occurring presently.
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Provides critical information that can protect property and save lives, as well as be used in the future for planning and development purposes.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Green Infrastructure focused Climate Resilient Mitigation Activities
LEAD AGENCY	Lafayette Consolidated Government Public Works- Director
SUPPORTING AGENCIES	Lafayette Consolidated Government- Development & PlanningDirector
TIMELINE	3-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	3) Improve capabilities, coordination, and opportunities at themunicipal and parish level to plan and implement hazard mitigation projects, programs, and activities 4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Identify, design, and implement climate resilient mitigation activities, especially those that involve green infrastructure.
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Green Infrastructure involves the design and installation of nature-based solutions. Generally, it provides cost-effective, low-impact solutions to natural hazards, especially flooding. Green infrastructure can also help reduce the Urban Heat Island effect. Often times, the installation and implementation of these solutions work in concert with and are complementary to existing graywater systems and canopies available to stakeholder municipalities.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones, Thunderstorms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Heating and Cooling Stations
LEAD AGENCY	Lafayette Parish Office of Homeland Security and Emergency Preparedness
SUPPORTING AGENCIES	Lafayette Consolidated Government
TIMELINE	1-5 years
COST ESTIMATE	\$500,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	2) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact 3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
PRIORITY	Low
Action Description	Designate climate-controlled centers to shelter residents in the event of utilities failures due to extreme weather, especially extreme cold or heat
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	This project would ensure that in times of extreme weather, residents could take shelter in climate-controlled environments, thus reducing the risk of heat or cold induced health problems
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones, Thunderstorms, Tornadoes, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Public/Private partnership to manage private retention facilities
LEAD AGENCY	Lafayette Consolidated Government Public Works- Director
SUPPORTING AGENCIES	None
TIMELINE	3 years
COST ESTIMATE	\$50,000 per site
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	To determine on a site by site basis how to enhance or retrofit flood control with existing private retention/detention ponds
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces Flooding
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Tropical Cyclones

#### Additional Supporting Information:

Over 100 private ponds within Lafayette Parish

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Isaac Verot Coulee Channel Improvements
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director
SUPPORTING AGENCIES	none
TIMELINE	1-5 years
COST ESTIMATE	\$9 million
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	The drainage channel has historically overtopped its banks during heavy rain events, resulting in the flooding of nearby homes. The project will clean and improve the drainage channel. The hardening will increase the hydraulic efficiency.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Micro Grids
LEAD AGENCY	Lafayette Utilities System Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	1-5 years
COST ESTIMATE	\$10 million
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	<p>The proposed System would provide continuity of operationsto the following FEMA-identified Community Lifelines using Community-identified risks to:</p> <ul style="list-style-type: none"> <li>• Safety &amp; Security (LEO, Fire, SAR, Governments, Community Safety)</li> <li>• Safety &amp; Security (LEO, Fire, SAR, Governments, Community Safety)</li> <li>• Food, Water &amp; Shelter – Food, Water, Shelter &amp; Agriculture</li> <li>• Health &amp; Medical – Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management</li> <li>• Energy – Power Grid, Fuel (Government &amp; Community)</li> <li>• Communications – Infrastructure, Responder Comms, Alerts, Warnings and Messages, Finance, 911 &amp; Dispatch</li> <li>• Transportation – Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime</li> <li>• Hazardous Materials – Facilities, HAZMAT, Pollutants &amp; Contaminants</li> </ul>
Type of Mitigation Action	Structure and Infrastructure Actions
How Action Aligns with Risk Reduction	This action ensures more continuity of critical systems during hazard events.
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Restrict open and flood prone areas from development and use for drainage
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Development & Planning-Director
TIMELINE	10 years
COST ESTIMATE	\$150,000 per site
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	To preserve naturally functioning retention areas, to enhance them, and to create them from vacant properties that are currently in a SFHA
Type of Mitigation Action	Natural System Protection, Local Plans and Regulations
How Action Aligns with Risk Reduction	Open spaces such as parks can help provide additional pervious surface areas to allow for infiltration and reduce flooding
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Pursue Retention/Detention Ponds
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director
SUPPORTING AGENCIES	Cities of Youngsville, Carencro, Broussard, Scott
TIMELINE	1-5 years
COST ESTIMATE	\$10 million each
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure. 5) Maintain continuity of operations during and after natural hazard events.
PRIORITY	High
Action Description	Pursue and construct retention/detention Ponds along Beau Bassin Coulee, Coulee Ile des Cannes, Indian Bayou, Coulee Mine, Isaac Verot Coulee, Anselm Coulee, Bayou Parc Perdu, Bayou LaSalle, Cypress Bayou, Bayou Tortue, Darby Coulee, Acadiana Coulee, Bayou Vermilion
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

### Additional Supporting Information:

Status Update: In January 2020, LCG submitted 9 applications for various drainage projects throughout the parish, as well as detention projects to the Louisiana Watershed Initiative. All but 1 was approved to move on to the Full Application. One of the projects, we have decided to use local funding as it was decided this is in immediate need. In October 2020, LCG submitted an application for funding through the Louisiana DOTD Statewide Flood Control to construct a 40 acre detention pond along Coulee Mine East with a control structure to limit the discharge to Coulee Mine and hold storm water in the pond for storm events. Beginning to acquire property for pond construction throughout the parish



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	River Oaks Subdivision pump station upgrade
LEAD AGENCY	Lafayette Consolidated Government Public Works- Director
SUPPORTING AGENCIES	None
TIMELINE	10 years
COST ESTIMATE	\$10,000,000
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
ASSOCIATED GOALS	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	Medium
Action Description	Enhance the reliability and efficiency of the pump station for the River Oaks subdivision to handle local flooding as well as riverine flooding
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	The enhanced pump station would increase capacity to alleviate the short, high intensity storm and ensure redundancy for large riverine events.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

Approximately 40 homes experience flooding from the Bayou Vermilion and sheet flow during short, high intensity storms. The enhanced pump station would increase capacity to alleviate the short, high intensity storm and ensure redundancy for large riverine events

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Drainage/Road improvements of roads subject to repetitive and extended flooding/closure
LEAD AGENCY	Lafayette Consolidated Government Public Works- Director
SUPPORTING AGENCIES	Police, Fire
TIMELINE	10 years
COST ESTIMATE	\$50 million
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure. 5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	To improve the drainage or elevate the roadway to preserve the integrity of the roadway for emergency vehicles during an event
Type of Mitigation Action	Structure and Infrastructure Projects, Preparedness and Response Actions
How Action Aligns with Risk Reduction	Reduce Flooding in the surrounding areas. Roads have critical economic importance, since they support access to emergency services (e.g. hospitals) and utilities (e.g. water supply). Ultimately, protecting roads enhances the resilience of cities and communities
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Creation of a comprehensive stormwater management plan
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director; Lafayette Consolidated Government Drainage- Director
SUPPORTING AGENCIES	City of Broussard, City of Youngsville, City of Scott, City of Carencro, Town of Duson
TIMELINE	1 year
COST ESTIMATE	\$600,000
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	2) Improve data collection, use, and sharing to reduce the impact of hazards 3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities 4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	The primary purpose of which is to develop a comprehensive stormwater management plan for the Parish that is reflective of the many factors and facets currently affecting the drainage throughout the Parish as well as to plan for mitigation measures and future growth.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	The plan will be an important informational tool to address the management of the drainage system and existing long-term drainage needs to reduce the risk of flooding for the residents of Lafayette Parish
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Timberwood Subdivision flood control project
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director
SUPPORTING AGENCIES	none
TIMELINE	5 years
COST ESTIMATE	\$1 million
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	Medium
Action Description	29 homes have unusually slow drainage which limits access to the area. This action is to study, design and re-construct the drainage system that does not function efficiently
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Walker Road Drainage Improvements
LEAD AGENCY	Lafayette Consolidated Government Public Works-Director
SUPPORTING AGENCIES	Railroad
TIMELINE	Ongoing
COST ESTIMATE	\$6 million
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	Low
Action Description	Replace undersized Railroad crossing and install sub-surface drainage system
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduce BFE, reduce obstructions in the channel, reduce erosion
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Draft a Standalone Floodplain Management Plan
LEAD AGENCY	Lafayette Consolidated Government Development & Planning-Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	2-3 years
COST ESTIMATE	\$100,000
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	<p>1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact</p> <p>2) Improve data collection, use, and sharing to reduce the impact of hazards</p> <p>3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities</p> <p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.</p> <p>5) Maintain continuity of operations during and after natural hazard events.</p>
Priority	High
Action Description	<p>A Floodplain Management Plan is an overall strategy of programs, projects, and measures aimed at reducing the adverse impacts of flood hazards on the community. The FMP identifies and addresses the impacts caused by flood hazards and provides specific mitigation measures to help protect the properties and their occupants. The floodplain management plan is an important component of the City-Parish's participation in the National Flood Insurance Program (NFIP) and the Community Rating System (CRS). Developing a floodplain management plan is among the activities that earn CRS credit toward reduced flood insurance rates. The CRS program sets forth requirements that floodplain management plans be updated on a five-year cycle and that progress on meeting plan objectives be reviewed annually.</p>
Type of Mitigation Action	<p>Local Plans and Regulations</p> <p>Education and Awareness Programs</p>

How Action Aligns with Risk Reduction	The FMP would describe the flood hazard in Lafayette Parish and present measures to mitigate those hazards. The purpose of these measures is to reduce or alleviate the loss of life, personal injury, and property damage that can result from flooding. They involve long- and short-term strategies such as planning, policy changes, programs, projects, and other activities to mitigate the impacts of flood
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Grant Funding Assistance Programs
LEAD AGENCY	Lafayette Consolidated Government Development & Planning-Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	5-10 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	Development of local programs that will provide non-federal match to projects for FEMA Hazard Mitigation Assistance and other federal funding sources.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	By removing structures from the floodplain and raising structures above the BFE, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in floodclaims.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Repetitive Loss Area Analysis (RLAA)
LEAD AGENCY	Lafayette Consolidated Government Development & Planning-Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	1-2 years
COST ESTIMATE	\$50,000
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	<p>1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact</p> <p>2) Improve data collection, use, and sharing to reduce the impact of hazards</p> <p>3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities</p> <p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.</p>
PRIORITY	High
Action Description	Examine the FEMA SRL and RL data sets and NFIP Claims data to determine and prioritize the most cost effective, feasible mitigation projects for each specific area, based on flood depth, type of construction, and other data. (RLAA)
Type of Mitigation Action	<p>Structure and Infrastructure Projects</p> <p>Local Plans and Regulations</p> <p>Education and Awareness Programs</p>
How Action Aligns with Risk Reduction	RLAAs generate specific guidance on mitigation solutions for individual buildings or areas and help property owners reduce their risk of future flooding by providing an understanding of flood risk, flooding sources, and resources for mitigation.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Add a provision to conduct geologic testing in areas identified as having sinkholes as a requirement within the subdivision and land development ordinances
LEAD AGENCY	Lafayette Consolidated Government Development & Planning Director
SUPPORTING AGENCIES	None
TIMELINE	1-5 years
COST ESTIMATE	\$0
POSSIBLE FUNDING SOURCE(S)	Staff time, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	low
Action Description	Add a provision to conduct geologic testing in areas identified as having sinkholes as a requirement within the subdivision and land development ordinances
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Risk of sinkholes reduced
Current Status of Action	New
Hazard Addressed	Sinkholes

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Incentivize Hazard Mitigation
LEAD AGENCY	Lafayette Office of Homeland Security and Emergency Preparedness
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	<p>1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact</p> <p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.</p> <p>5) Maintain continuity of operations during and after natural hazard events</p>
PRIORITY	Medium
Action Description	<p>Incentives and disincentives can be used to promote hazard mitigation through the following measures:</p> <ul style="list-style-type: none"> <li>• Using special tax assessments to discourage builders from constructing in hazardous areas.</li> <li>• Using insurance incentives and disincentives (i.e., incentives for best practices).</li> <li>• Providing tax incentives for development of low-risk hazard parcels.</li> <li>• Waiving permitting fees for home construction projects related to mitigation.</li> <li>• Using tax abatements, public subsidies, and other incentives to encourage private mitigation practices.</li> <li>• Reducing or deferring the tax burden for undeveloped hazard areas facing development pressure.</li> <li>• Encouraging infill development through tax incentives, streamlined approval processes, etc.</li> </ul>

Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Promotion of resilience by communities to attract and retain quality developers and businesses. Reductions in the amount of damaged and contaminated materials and contents following a disaster event, which initially may pose health hazards and then will require disposal of at existing landfills or by incineration
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Inventory all water wells in the vicinity of the sinkholes to encourage abandonment.
LEAD AGENCY	Lafayette Consolidated Government Development & Planning Director
SUPPORTING AGENCIES	None
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	Staff time, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Low
Action Description	Inventory all water wells in the vicinity of the sinkhole to encourage abandonment.
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Risk of sinkholes reduced
Current Status of Action	New
Hazard Addressed	Sinkholes

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Enhance Emergency Response Systems
LEAD AGENCY	Lafayette Parish Office of Homeland Security and Emergency Preparedness Director
SUPPORTING AGENCIES	Lafayette Consolidated Government- Public Works Director
TIMELINE	3-5 years
COST ESTIMATE	50,000; staff hours
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 3: Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
PRIORITY	Medium
Action Description	Continually update and improve hazard warning systems, evacuation plans, and hazard response operations. Take specialcare to improve systems and incorporate new tools and technologies as they become available. Support professional development of emergency service workers by providing new training opportunities.
Type of Mitigation Action	Emergency Services Activities
How Action Aligns with Risk Reduction	Continually maintaining and improving emergency service systems ensure that these services are as efficient and convenient as possible for residents in the event of an emergency.
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Storms, Wildfires, Winter Weather

#### Additional Supporting Information:



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Environmental Public Outreach
LEAD AGENCY	Lafayette Consolidated Government-Public Works Director
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$40,000, staff hours
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 1: Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact.
PRIORITY	Medium
Action Description	Environmental public outreach to inform on the benefits of preserving our wetlands for stormwater management and natural ecosystems services. Additionally, this educational activity should inform the public of the benefit of preserving trees to increase stormwater retention and reduce the urban heat island effect. Public outreach may include, but is not limited to, school education programs, library outreach, and public postings.
Type of Mitigation Action	Public Information Activities Natural Resource Protection
How Action Aligns with Risk Reduction	Environmental public outreach allows residents to have a more comprehensive understanding of our wetland systems and the natural and man-made causes of flooding. Furthermore, it allows residents an understanding of how preserving greenery can reduce urban heat. When residents understand the ecosystem benefits of green space, they may be more likely to support initiatives to preserve it.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Preventative Land Use Planning and Regulations
LEAD AGENCY	Lafayette Consolidated Government Development & Planning Director
SUPPORTING AGENCIES	Acadiana Planning Commission
TIMELINE	3-5 years
COST ESTIMATE	\$200,000; staff hours
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Parish Funds, FEMA, State Mitigation Grants
GOAL ALIGNMENT	Goal 3: Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities Goal 4: Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Integrate hazard mitigation, especially flood mitigation, into land use planning systems and regulatory tools. Planning systems and documents include, but are not limited to, comprehensive city plans, small area site plans, watershed plans, and climate adaptation plans.  Regulatory tools may include, but are not limited to, zoning, stormwater management regulations, building codes, and ordinances
Type of Mitigation Action	Local Plans and Regulations

How Action Aligns with Risk Reduction	<p>Integrating hazard mitigation into land use planning keeps people and property out of harm's way in the future. For example, overlaying vulnerability maps, floodplain maps, and comprehensive plans allows for more thorough analysis of which land is suitable for future development. This process folds land suitability analysis into comprehensive planning. Planning that involves analysis of potential future climatic conditions, like watershed planning and climate change adaptation planning, allows for more informed decision making about development. Specifically, it informs decision makers on which areas will be most flood-prone in the future, so development can be directed away from these areas.</p> <p>Regulatory tools are useful in enforcing flood-smart development. Zoning can be used to ensure flood-prone areas are not densely developed. It can also help preserve natural spaces that provide stormwater storage. Building codes and ordinances can mandate that buildings are elevated above Base Flood Elevation. Regulations can dictate permeable surface requirements. Codes and regulations can also be used to preserve trees, which both provide cooling benefits during heat events and help absorb stormwater.</p>
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Sinkholes, Thunderstorms, Tornadoes, Tropical Storms, Wildfires, Winter Weather

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LAFAYETTE CITY-PARISH CONSOLIDATED GOVERNMENT	
	DESCRIPTION
MITIGATION ACTION	Capacity Building in Management of Disaster Risk Reduction Projects
LEAD AGENCY	Lafayette Consolidated Government- Public Works Director
SUPPORTING AGENCIES	NA
TIMELINE	1-5 years
COST ESTIMATE	\$2,400,000
POSSIBLE FUNDING SOURCE(S)	Parish Funds, Municipal Funds
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	Expand capacity to effectively manage mitigation projects and grants.
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	Dedicated preparation for management costs ensures that the funding and manpower is continually available to oversee hazard mitigation projects
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Sinkholes, Thunderstorms, Tornadoes, Wildfires, Winter Storms

#### Additional Supporting Information:

## City of Broussard Mitigation Actions

*Previous Action Update*

City of Broussard							
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Goal	Status
<b>B1 Public Building Wind Hardening</b>	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP and Parish	1-5 years	City of Broussard/ Lafayette Parish Government	High Wind, Hail, Tropical Cyclone, Tornado	3,4,5	Not Started – Carried Over
<b>B2 Drainage Projects</b>	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.	HMGP and Parish	1-5 years	City of Broussard/ Lafayette Parish Government	Flooding, High Wind, Tropical Cyclone	3,4	In Progress
<b>B3 Residential elevations and acquisitions for repetitive loss and severe repetitive loss properties</b>	Elevation or acquisition-demolition of properties. Benefits: Relieves property owners of the continual flooding problems. Saves flood relief and damage repayment for each property.	HMGP and Parish	1-5 years	City of Broussard/ Lafayette Parish Government	Flooding, Tropical Cyclone	1,3,4	In Progress
<b>B4 Safe Room Projects</b>	Construction of a safe room for first responders located in Broussard. Other locations will be identified based on funding availability.	HMGP and Parish	1-5 years	City of Broussard/ Lafayette Parish Government	Tornado, high wind, hail, tropical cyclone, flooding	3,4,5	Deleted

<b>B5 Mitigation Public Outreach</b>	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for flooding, tropical cyclone, tornadoes and wildfire hazards, as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	HMPG and Parish	1-5 years	City of Broussard/ Lafayette Parish Government	Drought, Flooding, Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, Sinkhole	1,2,4	In Progress
<b>B6: Generators for continuity of operations and government</b>	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA, Local	1-5 years	City of Broussard/ Lafayette Parish Government	Tornados, Winter Weather, tropical cyclone, thunderstorms (lightning, high wind, hail), Sinkhole	3,4,5	In Progress
<b>B7 Installation of lightning rods and surge protectors at Critical Facilities</b>	install lightning rods and/or surge protectors; Benefits: will help to ensure minimal down time or equipment failures at Critical Facilities	HMPG and Parish	1-5 years	City of Broussard/ Lafayette Parish Government	Lightning, Thunderstorms	3,4,5	Not Started – Carried Over
<b>B8: Potable Water</b>	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, Local	1-5 years	City of Broussard/ Lafayette Parish Government	Tropical Cyclone, thunderstorms (lightning, high wind, hail), tornados, Drought	3,4,5	In Progress

*New Mitigation Actions*

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Drainage/Road improvements of roads subject to repetitive and extended flooding/closures
LEAD AGENCY	Mayor - City of Broussard
SUPPORTING AGENCIES	Police and Fire
TIMELINE	10 years
COST ESTIMATE	\$2 million
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, Local, other
GOALS AND OBJECTIVES	<p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.</p> <p>5) Maintain continuity of operations during and after natural hazard events</p>
PRIORITY	Medium
Action Description	To improve the drainage or elevate the roadway to preserve the integrity of the roadway for emergency vehicles during an event
Type of Mitigation Action	Structure and Infrastructure projects, Preparedness and Response Actions
How Action Aligns with Risk Reduction	Reduce Flooding in the surrounding areas. Roads have critical economic importance, since they support access to emergency services and utilities. Ultimately, protecting roads enhances the resilience of the cities and communities
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones, Winter Weather

**Additional Supporting Information:**



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Public/Private partnership to manage private retention facilities
LEAD AGENCY	Mayor – City of Broussard
SUPPORTING AGENCIES	none
TIMELINE	3 years
COST ESTIMATE	\$50,000 per site
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, Local, Other
ASSOCIATED GOALS	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	To determine on a site by site basis how to enhance or retrofit flood control with existing private retention/detention ponds
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces Flooding
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Enhancement/extension of waterway gauge program
LEAD AGENCY	Mayor – City of Broussard
SUPPORTING AGENCIES	None
TIMELINE	Continual
COST ESTIMATE	\$50,000/year
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, Local, Other
ASSOCIATED GOALS	1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact 2) Improve data collection, use, and sharing to reduce the impact of hazards 3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities 4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure 5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	To expand and improve hydraulic data for flood predictions, advanced warning, scour at bridges, debris locations, road closures. Active installations occurring presently.
Type of Mitigation Action	Education and Awareness Programs Preparedness and Response Actions
How Action Aligns with Risk Reduction	Provides critical information that can protect property and save lives, as well as be used in the future for planning and development purposes.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Coulee Fortune Drainage Improvements
LEAD AGENCY	City of Broussard
SUPPORTING AGENCIES	Lafayette Consolidated Government
TIMELINE	1-5 years
COST ESTIMATE	\$7 million
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, Local, other
ASSOCIATED GOALS	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Coulee Fortune flows through the city. The flow is restricted in many locations from sediment and road crossings
Type of Mitigation Action	Structure and Infrastructure projects, Natural System Protection
How Action Aligns with Risk Reduction	By improving drainage in flood prone areas, residents will suffer fewer flooded structures and therefore, less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in flood claims
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Bridge Replacements
LEAD AGENCY	Mayor – City of Broussard
SUPPORTING AGENCIES	None
TIMELINE	1-10 years
COST ESTIMATE	\$1 million/bridge
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, Local, Other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	Replace bridges throughout the city
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Removal and/or replacement of bridges can improve the conveyance and capacity of a channel. Additionally, bridges have critical economic importance, since they support access to emergency services (e.g. hospitals) and utilities (e.g. water supply). Ultimately, protecting bridges enhances the resilience of cities and communities
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Capacity Building in Management of Disaster Risk Reduction Projects
LEAD AGENCY	Mayor - City of Broussard
SUPPORTING AGENCIES	None
TIMELINE	1-5 years
COST ESTIMATE	\$2 Million
POSSIBLE FUNDING SOURCE(S)	State, Parish, Local, other
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	Expand capacity to effectively manage mitigation projects and grants
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	Dedicated preparation for management costs ensures that the funding and manpower is continually available to oversee hazard mitigation projects.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Rain Gauges
LEAD AGENCY	Mayor - City of Broussard
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$250,000
POSSIBLE FUNDING SOURCE(S)	State, Parish, Local, other
GOAL ALIGNMENT	2) Improve data collection, use, and sharing to reduce the impact of hazards
PRIORITY	High
Action Description	Place rain gauges in strategic locations in the city to assure more accurate measurements on the level or rainfall. Creation of a linked/networked system or grid of rain-gauge data that can work in concert to provide government/first-responders real-time information to aid in effective disaster-related decision-making for resource deployment and/or public safety and health strategies
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	When rain gauge data is available, the city and its residents have access to more accurate data and can make more informed decisions during both disaster response and long-term planning.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Tornadoes, Tropical Cyclones, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Non-Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor - City of Broussard
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$7 Million
POSSIBLE FUNDING SOURCE(S)	FEMA, State, Parish, Local, others
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Non – Localized Flood Risk Reduction Projects aim to reduce flooding and flood damage specifically in areas that are hydraulically linked to regional drainage basins.
Type of Mitigation Action	Structure and Infrastructure Projects Natural Systems Protection
How Action Aligns with Risk Reduction	This project would focus on enhancing hydraulic capacity regionally. Various flood reduction methods and a combination of projects could be used.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Mitigating for Excessive Heat
LEAD AGENCY	Mayor - City of Broussard
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$1 Million
POSSIBLE FUNDING SOURCE(S)	National, State, arish, Local, other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Conceptualize, plan, and implement both structural and non- structural mitigation measures to address and mitigate excessive heat hazards.
Type of Mitigation Action	Local Plans and Regulations Natural System Protection Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Mitigating for extreme heat through a combination of green and blue infrastructure and home retrofits makes households and communities more prepared to withstand heat waves.
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Micro Grids
LEAD AGENCY	Mayor - City of Broussard / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$8 Million
POSSIBLE FUNDING SOURCE(S)	FEMA, State, Parish, Local, other
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	<p>The proposed system would provide continuity of operations to the following FEMA-identified Community Lifelines using Community-identified risks to:</p> <ul style="list-style-type: none"> <li>• Safety &amp; Security</li> <li>• Food, Water &amp; Shelter</li> <li>• Health &amp; Medical</li> <li>• Energy</li> <li>• Communications</li> <li>• Transportation</li> <li>• Hazardous Materials</li> </ul>
Type of Mitigation Action	Structure and Infrastructure Actions
How Action Aligns with Risk Reduction	This action ensures more continuity of critical systems during a hazard event.
Current Status of Action	New
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor - City of Broussard / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$1 Million
POSSIBLE FUNDING SOURCE(S)	FEMA, State, Parish, Local, other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Localized Flood Risk Reduction Projects include any projects that reduce flooding and decrease flood damage within an isolated and confined drainage or catchment area. Such projects may involve pursuing neighborhood level green infrastructure instillations.
Type of Mitigation Action	Structure and Infrastructure Projects Natural Systems Protection
How Action Aligns with Risk Reduction	Localized Flood Risk Reduction projects, such as localized green infrastructure, decreases risk of localized flooding and flood loss.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Infrastructure Retrofits
LEAD AGENCY	Mayor - City of Broussard / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-5 years
COST ESTIMATE	\$11 Million
POSSIBLE FUNDING SOURCE(S)	Federal Infrastructure Grants, FEMA, State, Parish, Local, other
GOAL ALIGNMENT	<p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.</p> <p>5) Maintain continuity of operations during and after natural hazard events</p>
PRIORITY	Medium
Action Description	Infrastructure retrofits entail the improvement of existing infrastructure to better prepare it to withstand natural hazards.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Retrofitting Infrastructure ensures that critical systems like electricity, transportation, water resources (drinking, wastewater & drainage) networks are more likely to remain functional and/or return to normal operation more quickly at reduced costs in a post-disaster scenario.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Plan and Implement Mitigation of Historic Sites
LEAD AGENCY	Mayor - City of Broussard
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	3-5 years
COST ESTIMATE	\$1 Million
POSSIBLE FUNDING SOURCE(S)	Federal Infrastructure Grants, FEMA, State, Parish, Local, other
GOAL ALIGNMENT	<p>1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact</p> <p>3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities</p>
PRIORITY	Medium
Action Description	Infrastructure retrofits entail the improvement of existing infrastructure to better prepare it to withstand natural hazards
Type of Mitigation Action	<p>Local Plans and Regulations</p> <p>Structure and Infrastructure Projects</p> <p>Education and Awareness Programs</p>
How Action Aligns with Risk Reduction	This action protects the municipality's important historic sites from harm. By mitigating historic sites, the municipality can better protect the region's rich history for future generations.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tropical Cyclones, Tornadoes, Winter Storms, Wildfires

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Drainage Master Plan
LEAD AGENCY	Mayor - City of Broussard / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$300,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State, Parish, Local, other
GOAL ALIGNMENT	<p>3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities.</p> <p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure</p>
PRIORITY	Medium
Action Description	The Drainage Master Plan aims to develop a comprehensive and wide-range plan to address the condition and function of the drainage system, and to recommend actions to improve the drainage system.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	This project would allow the city to take inventory of the existing drainage system in order to better identify areas that require mitigation actions to decrease the risk of flooding and flood loss.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF BROUSSARD	
	DESCRIPTION
MITIGATION ACTION	Green Infrastructure focused Climate Resilient Mitigation Activities
LEAD AGENCY	Mayor - City of Broussard
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	3-5 years
COST ESTIMATE	N/A
POSSIBLE FUNDING SOURCE(S)	FEMA, State, Parish, Local, other
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Identify, design, and implement climate resilient mitigation activities, especially those that involve green infrastructure.
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Green Infrastructure generally provides cost-effective, low-impact solutions to natural hazards such as flooding and urban heat islands featuring the design and installation of nature-based solutions work in concert with and are complementary to existing graywater systems and canopies available to stakeholder municipalities
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones

#### Additional Supporting Information:



## City of Carencro Mitigation Actions

## Previous Action Update

City of Carencro							
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Goals	Status
<b>Public Education</b>	Continue and expand efforts to educate the public regarding all hazards, including direct mail, technical assistance, and development / implementation of general advertising campaign. Distribute public awareness information regarding flood hazards, SFHA's and potential mitigation measures using the local newspaper, utility bill inserts, inserts in the phone book, a parish hazard awareness website, and an educational program for school age children or "how to" classes in retrofitting by local merchants. Integrate "Disaster Resistance Education" into the public school curriculum. Provide public education on the importance of maintaining the ditches. Benefits: An informed public is better able to respond and protect themselves in times of hazards.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices, Parish School Board	All Hazards	1,2	In Progress and Ongoing
<b>Business Hazards</b>	Work with local businesses to identify hazards to their business and mitigation actions that can be taken to protect Parish's economy.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	2,3	In Progress and Ongoing
<b>Employee Hazards</b>	Work with parish and municipal employees to identify potential ways to mitigate the impact of hazards upon employees, assets and infrastructure.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	2,3,4,5	In Progress and Ongoing
<b>Flood Insurance</b>	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood	FEMA, State, Local	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning	All Hazards	1,2	In Progress and Ongoing

	insurance through the National Flood Insurance Program (NFIP).			and Codes, City/Town Floodplain Managers or Designee			
<b>Community Rating System</b>	Work to improve Community Rating System (CRS) rating.	FEMA, State, Local	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Floodplain Managers or Designee	Floods	1	In Progress and Ongoing
<b>Insurance Partnerships</b>	Develop partnerships with insurance companies to promote building codes	FEMA, State, Local	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards	1	In Progress and Ongoing
<b>FIRMs/DFIRMs</b>	Work with FEMA to update FIRMs / DFIRMs	FEMA, State, Local	Ongoing	Lafayette City-Parish Public Works, City/Town Mayors' Offices	Flooding (Flash and Riverine)	2	In Progress and Ongoing
<b>Update Mitigation Requirements</b>	Continue to include and update mitigation requirements in floodplain development regulations.	FEMA, State, Local	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	Flooding (Flash and Riverine)	1,3,4	In Progress
<b>Auxiliary Power Sources</b>	Identify and prioritize auxiliary power sources for critical infrastructure.	FEMA, State, Local	Ongoing	Lafayette Utilities Service, Private Energy Providers	All Hazards	4,5	In Progress and Ongoing
<b>Hazardous Materials Training</b>	Train First Responders (EMS Personnel) in hazardous materials incidents.	FEMA, State, Local	Ongoing	Lafayette Fire and Volunteer Departments, City/Town Mayor's Offices	Hazardous Materials Incidents	1,3	Completed and On Going
<b>Terrorism Review</b>	Conduct parish-wide terrorism critical infrastructure review.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Terrorism	3,4	In Progress and Ongoing
<b>Preparedness Coordination</b>	Coordination of all preparedness and mitigation efforts; hosting disaster response drills; regular attendance at networking and coordination meetings.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	3,4	In Progress and Ongoing

<b>NIMS and ICS Training</b>	Work to provide training to emergency personnel Parish-wide in NIMS and ICS.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	1	In Progress
<b>Monitoring and Communications Enhancement</b>	Work to enhance monitoring and communications systems to improve ability to predict and prepare for flood events, including connection with Lafayette Parish Flood Warning System.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure)	1,2,3	In Progress
<b>International Building Codes</b>	Implement and enforce International Building Codes.	FEMA, State, Local	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards	4	Completed and Ongoing
<b>Insurance Partnerships</b>	Develop partnerships with insurance companies to promote building codes.	FEMA, State, Local	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards	1	In Progress and Ongoing
<b>Lafayette Emergency Operation Center Hardening</b>	Wind harden and upgrade the Lafayette Emergency Operation Center at 800 South Buchanan Street, by expanding the site to accommodate increasing demand, adding new monitoring equipment and to become more disaster resistant.	FEMA, State, Local	LCG	Lafayette Parish President, Office of Homeland Security and Emergency Preparedness	Floods / Hurricanes and Tropical Systems/ Thunderstorms, Lightning, High Winds / Hail/ Tornadoes	4,5	In Progress
<b>Larger Volume Pumps and Pipes</b>	Along Beau Basin Coulee, Coulee Acadiana Lat. 8A, Coulee Mine, LaFamme Road Coulee and Ille de Cannes Coulee increase the drainage capacity of the drainage laterals by installing larger volume pumps and larger pipes.	FEMA, State, Local	LCG	Department of Public Works	Flooding (Flash and Riverine)/ Hurricanes and Tropical Systems	4,5	In Progress and Ongoing

<b>Repetitive Loss Area Drainage</b>	Determine the most feasible drainage projects for each repetitive loss area, as seen on Map 3, to reduce its flood potential (e.g. Beau Basin Coulee and Ile de Cannes Coulee, which are located in the unincorporated areas of the Parish) and implement the identified interior localized drainage project.	FEMA, State, Local	Ongoing	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager / Community Development and Capital Projects	Flooding (Flash and Riverine)/ Hurricanes and Tropical Systems	3	In Progress and Ongoing
<b>Repetitive Loss Structure Improvements</b>	Pursue elevation, acquisition, and flood proofing projects and structural solutions to flooding for repetitive loss structures and severe repetitive loss structures.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure) / Hurricanes and Tropical Systems	3,4	In Progress and Ongoing
<b>Update Comprehensive Drainage Plan</b>	Update the comprehensive drainage plan ensuring future protection for areas in the Parish that experience flooding and drainage problems.	FEMA, State, Local	LCG	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager	Flooding (Flash and Riverine)	3,4	In Progress and Ongoing
<b>Retention and Detention Ponds</b>	Pursue the development of retention and detention ponds to reduce flooding impacts.	FEMA, State, Local	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure) / Hurricanes and Tropical Systems	4,5	In Progress and Ongoing
<b>Safe Rooms</b>	Pursue opportunities to mitigate structures to use as safe rooms or construct safe rooms throughout the parish.	FEMA, State, Local	1-5 years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Hurricanes and Tropical Systems / Tornados / High Wind	3,4,5	Carried Over - Not Started
<b>C1 Public Building Wind Hardening</b>	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP and Parish	1-5 years	City of Carencro/ Lafayette Parish Government	High Wind, Hail, Tropical Cyclone, Tornado	3,4,5	Carried Over - Not Started

<b>C2 Drainage Projects</b>	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.	HMGP and Parish	1-5 years	City of Carencro/ Lafayette Parish Government	Flooding, High Wind, Tropical Cyclone	3,4	In Progress
<b>C3 Residential elevations and acquisitions for repetitive loss and severe repetitive loss properties</b>	Elevation or acquisition-demolition of properties. Benefits: Relieves property owners of the continual flooding problems. Saves flood relief and damage repayment for each property.	HMGP and Parish	1-5 years	City of Carencro/ Lafayette Parish Government	Flooding, Tropical Cyclone	1,3,4	In Progress
<b>C4 Safe Room Projects</b>	Construction of a safe room for first responders located in Carencro. Other locations will be identified based on funding availability.	HMGP and Parish	1-5 years	City of Carencro/ Lafayette Parish Government	Tornado, High Wind, Hail, Tropical Cyclone, Flooding	3,4,5	Carried Over - Not Started
<b>C5 Mitigation Public Outreach</b>	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, and Sinkhole hazards, as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	HMPG and Parish	1-5 years	City of Carencro/ Lafayette Parish Government	Drought, Flooding, Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, Sinkhole	1,2,4	In Progress

<b>C6: Generators for continuity of operations and government</b>	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA, Local	1-5 years	City of Carencro/ Lafayette Parish Government	Tornados, Winter Weather, Tropical Cyclone, Thunderstorms (lightning, high wind, hail), Sinkhole	3,4,5	In Progress
<b>C7: Installation of lightning rods and surge protectors at Critical Facilities</b>	install lightning rods and/or surge protectors; Benefits: will help to ensure minimal down time or equipment failures at Critical Facilities	HMPG and Parish	1-5 years	City of Carencro/ Lafayette Parish Government	Lightning, Thunderstorms	3,4,5	In Progress
<b>C8: Potable Water</b>	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, Local	1-5 years	City of Carencro/ Lafayette Parish Government	Tropical Cyclone, Thunderstorms (lightning, high wind, hail), Tornados, Drought	3,4,5	In Progress

*New Mitigation Actions*

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Capacity Building in Management of Disaster Risk Reduction Projects
LEAD AGENCY	Mayor - City of Carencro
SUPPORTING AGENCIES	N/A
TIMELINE	1-5 years
COST ESTIMATE	\$2,400,000
POSSIBLE FUNDING SOURCE(S)	Parish Funds, Municipal Funds
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	Expand capacity to effectively manage mitigation projects and grants
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	Dedicated preparation for management costs ensures that the funding and manpower is continually available to oversee hazard mitigation projects.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

**Additional Supporting Information:**



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Regional Detention Ponds
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Parish Floodplain Managers
TIMELINE	2-4 years
COST ESTIMATE	\$3,500,000
POSSIBLE FUNDING SOURCE(S)	Municipal funds, FEMA grants, Louisiana Watershed Initiative Funding
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Pursue the development and/or expansion of detention ponds, especially, but not limited to, these locations: Veterans Drive Detention Pond and St. Charles Street Detention Pond.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	Detention basins or ponds are excavated areas that are designed to fill with stormwater during or immediately following rain events. The outfall from the pond acts to limit the flow of water, enabling the pond to fill and detain the stormwater as it slowly discharges into a channel. This slowing down of stormwater reduces the likelihood that channels within the drainage system become filled beyond capacity and overtop their banks.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

### Additional Supporting Information:

Approximate cost estimates are as follow:

- Veterans Drive Detention Pond: \$2,500,000
- St. Charles Street Detention Pond: \$1,000,000

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Drainage Master Plan
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$300,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	<p>5) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities</p> <p>6) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure</p>
PRIORITY	High
Action Description	The Drainage Master Plan aims to develop a comprehensive and wide-ranging plan to address the condition and function of the drainage system, and to recommend actions to improve the drainage system.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	This project would allow the City to take inventory of the existing drainage system in order to better identify areas that require mitigation actions to decrease the risk of flooding and flood loss.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Flood Mitigation for Lift Stations
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	NA
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure 5) Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	Mitigation Lift Stations so that in a flood event, the station is still capable of operation. Mitigation actions may include elevation of the existing station above the established BFE or Flood of Record, improving capacity via replacement with more resilient and/or larger stations, constructing ring barriers around the stations themselves, diverting floodwater from the lift station prior to inundation, etc. A networked, real-time data system will link lift stations and other critical infrastructure to aid government/first responder stakeholders in real-time disaster-based decision making for public safety and public-health strategies.
Type of Mitigation Action	Structure and Infrastructure Projects Preparedness and Response Actions
How Action Aligns with Risk Reduction	Lift stations pump wastewater or sewage from a lower to higher elevation and maintaining continuity of these functions is important for public health and safety during a flood event. By mitigating these stations for flood damage, a scenario in which these pumps fail is avoided.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Green Infrastructure focused Climate Resilient Mitigation Activities
LEAD AGENCY	Mayor - City of Carencro
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	3-5 years
COST ESTIMATE	NA
POSSIBLE FUNDING SOURCE(S)	Federal Infrastructure Grants, FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Identify, design, and implement climate resilient mitigation activities, especially those that involve green infrastructure.
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Green Infrastructure generally provides cost-effective, low-impact solutions to natural hazards such as flooding and urban heat islands featuring the design and installation of nature-based solutions. Oftentimes, the installation and implementation of these solutions work in concert with and are complementary to existing graywater systems and canopies available to stakeholder municipalities.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Heating and Cooling Stations
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$75,000
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Various FEMA grant funding
GOAL ALIGNMENT	3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
PRIORITY	Medium
Action Description	Designate climate-controlled centers to shelter residents in the event of utilities failures due to extreme weather, especially extreme cold or heat.
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	This project would ensure that in times of extreme weather, residents could take shelter in climate-controlled environments, thus reducing the risk of heat or cold induced health problems.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Plan and Implement Mitigation of Historic Sites
LEAD AGENCY	Mayor - City of Carencro
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	3-5 years
COST ESTIMATE	\$1,000,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds, HUD CDBG, National and State Historic Preservation Funding
GOAL ALIGNMENT	<p>1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact</p> <p>3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities</p>
PRIORITY	Medium
Action Description	Pursue hazard mitigation for historical sites. Historical preservation hazard mitigation may include the following actions: conduct public meetings to understand what sites are of historical importance to residents, taking inventory of historical sites within the municipality, writing and enforcing ordinances that help mitigate historic sites, pursuing funding for mitigation of historic sites, implementing mitigation. This would also allow critical infrastructure, such as historical sites, to also be retrofitted as well.
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects Education and Awareness Programs
How Action Aligns with Risk Reduction	This action protects the municipality's important historic sites from harm. By mitigating historic sites, the municipality can better protect the region's rich history for future generations.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Storms

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Infrastructure Retrofits
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-5 years
COST ESTIMATE	\$11,000,000
POSSIBLE FUNDING SOURCE(S)	Federal Infrastructure Grants, FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	<p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure</p> <p>5) Maintain continuity of operations during and after natural hazard events</p>
PRIORITY	Medium
Action Description	Infrastructure retrofits entail the improvement of existing infrastructure to better prepare it to withstand natural hazards.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Retrofitting Infrastructure ensures that critical systems like electricity, transportation, water resources (drinking, wastewater & drainage) networks are more likely to remain functional and/or return to normal operation more quickly at reduced costs in a post-disaster scenario.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$1,100,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Localized Flood Risk Reduction Projects include any projects that reduce flooding and decrease flood damage within an isolated and confined drainage or catchment area. Such project may involve pursuing neighborhood level green infrastructure instillations.
Type of Mitigation Action	Structure and Infrastructure Projects Natural Systems Protection
How Action Aligns with Risk Reduction	Localized Flood Risk Reduction projects, such as localized green infrastructure, decreases risk of localized flooding and flood loss.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Micro Grids
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$8,500,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	<p>The proposed System would provide continuity of operations to the following FEMA-identified Community Lifelines using Community-identified risks to:</p> <ul style="list-style-type: none"> <li>• Safety &amp; Security (LEO, Fire, SAR, Governments, Community Safety) Food, Water &amp; Shelter – Food, Water, Shelter &amp; Agriculture</li> <li>• Health &amp; Medical – Medical Care, Public Health, Patient Movement, Medical Supply Chain, Fatality Management</li> <li>• Energy – Power Grid, Fuel (Government &amp; Community)</li> <li>• Communications – Infrastructure, Responder Comms, Alerts, Warnings and Messages, Finance, 911 &amp; Dispatch</li> <li>• Transportation – Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime</li> <li>• Hazardous Materials – Facilities, HAZMAT, Pollutants &amp; Contaminants</li> </ul>
Type of Mitigation Action	Structure and Infrastructure Actions
How Action Aligns with Risk Reduction	This action ensures more continuity of critical systems during a hazard event.
Current Status of Action	New
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Mitigating for Excessive Heat
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$1,000,000
POSSIBLE FUNDING SOURCE(S)	Municipal funds, National and State hazard mitigation funds, CDBGblock grants
GOAL ALIGNMENT	3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities;
PRIORITY	Medium
Action Description	Conceptualize, plan, and implement both structural and non- structural mitigation measures to address and mitigate extremeheat hazards.
Type of Mitigation Action	Local Plans and Regulations Natural System Protection Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Mitigating for extreme heat through a combination of green and blue infrastructure and home retrofits makes households and communities more prepared to withstand heat waves.
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Non - Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$7,700,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Non-localized Flood Risk Reduction Projects aim to reduce flooding and flood damage specifically in areas that are hydraulically linked to regional drainage basins.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	This project would focus on enhancing hydraulic capacity regionally. Various flood reduction methods and a combination of projects could be used.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Property Acquisition and Structure Demolition
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Comprehensive Plan Facilitator
TIMELINE	1-5 years
COST ESTIMATE	\$4,000,000
POSSIBLE FUNDING SOURCE(S)	NA
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, futurestructures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Property acquisition entails the procurement of high-risk structuresby a local government so that they can be better managed and mitigated for the threat of hazards.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	FEMA has confirmed that Property Acquisition & Structural Demolition as a part of Residential Mitigation Projects is the single most effective means of Residential Mitigation itself. By purchasingand demolishing high-risk homes and structures, this project ensures that emergency personnel and neighboring structures will not be in an unnecessarily dangerous situation if a disaster strikes the high-risk structure.
Current Status of Action	New
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Rain Gauges
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$250,000
POSSIBLE FUNDING SOURCE(S)	Parish Funds, Municipal Funds
GOAL ALIGNMENT	2) Improve data collection, use, and sharing to reduce the impact of hazards
PRIORITY	High
Action Description	Place rain gauges in strategic locations in the city to assure more accurate measurements on the level or rainfall. Creation of a linked/networked system or grid of rain-gauge data that can work in concert to provide government/first-responders real-time information to aid in effective disaster-related decision-making for resource deployment and/or public safety and health strategies
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	When rain gauge data is available, the city and its residents have access to more accurate data and can make more informed decisions during both disaster response and long-term planning.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Tropical Cyclones, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Enhance Emergency Response Systems
LEAD AGENCY	Mayor - City of Carencro
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	3-5 years
COST ESTIMATE	\$50,000; staff hours
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 3: Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
PRIORITY	Medium
Action Description	Continually update and improve hazard warning systems, evacuation plans, and hazard response operations. Take specialcare to improve systems and incorporate new tools and technologies as they become available. Support professional development of emergency service workers by providing new training opportunities.
Type of Mitigation Action	Emergency Services Activities
How Action Aligns with Risk Reduction	Continually maintaining and improving emergency service systems ensures that these services are as efficient and convenient as possible for residents in the event of an emergency.
Current Status of Action	New
Hazard Addressed	Drought, Flooding,Thunderstorms, Tornados, Tropical Cyclones, Wildfires, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Environmental Public Outreach
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$40,000, staff hours
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 1: Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact.
PRIORITY	Medium
Action Description	Environmental public outreach to inform on the benefits of preserving our wetlands for stormwater management and natural ecosystem services. Public outreach may include, but is not limited to, school education programs, library outreach, and public postings.
Type of Mitigation Action	Public Information Activities
How Action Aligns with Risk Reduction	Environmental public outreach allows residents to have a more comprehensive understanding of our wetland systems and the natural and man-made causes of flooding.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Maintain Flood Maps and Watershed Models
LEAD AGENCY	Parish Floodplain Managers
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	3-5 years
COST ESTIMATE	\$200,000
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Parish Funds, FEMA, State Mitigation Grants
GOAL ALIGNMENT	Goal 2: Improve data collection, use, and sharing to reduce the impact of hazards
PRIORITY	High
Action Description	Update floodplain maps regularly, as well as watershed maps and models, and models to predict future flooding conditions.
Type of Mitigation Action	Preventative Activities
How Action Aligns with Risk Reduction	Having up-to-date maps and models allows for more informed decision making and planning. Localized floodplain maps that are updated more often than the national standard allow more accurate data. Regularly updated watershed maps and models allow for a more comprehensive understanding of which areas are likely to flood in the present and future. This information can be used to make more informed decisions about land use and building regulations.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Preserve and Restore Wetland Areas
LEAD AGENCY	Comprehensive Plan Facilitator, City of Carencro
SUPPORTING AGENCIES	Lafayette Consolidated Government Parks and Recreation, Floodplain Managers
TIMELINE	3-5 years
COST ESTIMATE	\$2,000,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 4: Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Low
Action Description	Protect natural systems that provide flood mitigation benefits like stormwater storage. Activities may include protecting and restoring wetland areas and incorporating environmental corridors into urban planning.
Type of Mitigation Action	Natural and Beneficial Functions Activities; Local Plans and Regulations
How Action Aligns with Risk Reduction	Preserving wetlands from development keeps property out of flood-prone areas. Furthermore, it allows those wetland areas to continue providing floodwater storage, drainage, and water filtration services.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Preventative Land Use Planning and Regulations
LEAD AGENCY	Comprehensive Plan Facilitator, City of Carencro
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Parish Floodplain Managers, Lafayette Consolidated Government Department of Parks and Recreation
TIMELINE	3-5 years
COST ESTIMATE	\$200,000; staff hours
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Parish Funds, FEMA, State Mitigation Grants
GOAL ALIGNMENT	Goal 3: Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities; Goal 4: Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Integrate hazard mitigation, especially flood mitigation, into land use planning systems and regulatory tools. Planning systems and documents include, but are not limited to, comprehensive city plans, small area site plans, watershed plans, and climate adaptation plans.  Regulatory tools may include, but are not limited to, zoning, stormwater management regulations, building codes, and ordinances.
Type of Mitigation Action	Preventative Activities

How Action Aligns with Risk Reduction	<p>Integrating hazard mitigation into land use planning keeps people and property out of harm's way in the future. For example, overlaying vulnerability maps, floodplain maps, and comprehensive plans allows for more thorough analysis of which land is suitable for future development. This process folds land suitability analysis into comprehensive planning. Planning that involves analysis of potential future climatic conditions, like watershed planning and climate change adaptation planning, allows for more informed decision making about development. Specifically, it informs decision makers on which areas will be most flood-prone in the future, so development can be directed away from these areas.</p> <p>Regulatory tools are useful in enforcing flood-smart development. Zoning can be used to ensure flood-prone areas are not densely developed. It can also help preserve natural spaces. Building codes and ordinances can mandate that buildings are elevated above the Base Flood Elevation. Regulations can dictate permeable surface requirements.</p>
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones Tornados, Winter Weather, Thunderstorms, Drought, Wildfires

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Pursue Protect Property Activities
LEAD AGENCY	Parish Floodplain Managers
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	3-5 years
COST ESTIMATE	Staff hours
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Parish Funds, FEMA, State Mitigation Grants
GOAL ALIGNMENT	Goal 4: Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Pursue property protection and mitigation activities on a case-by-case basis at the building or neighborhood level. Property protection measures may include building acquisition, dry and wet floodproofing, home elevation programs, and promoting flood insurance.
Type of Mitigation Action	Property Protection
How Action Aligns with Risk Reduction	Property protection and property mitigation activities either fortify property or move it out of harm's way. Building acquisitions and buy-out programs move repetitive loss properties out of high-risk areas. Dry and wet floodproofing fortify buildings against floodwater. Home elevation programs elevate buildings above the Base Flood Elevation. Promoting flood insurance allows home and business owners to insure their property in the event of a flood.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF CARENCRO	
	DESCRIPTION
MITIGATION ACTION	Targeted Outreach to Small and Local Businesses
LEAD AGENCY	Mayor - City of Carencro / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$100,000; staff time
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 1: Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact. Goal 5: Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	Targeted outreach to small and local businesses to encourage and support hazard mitigation, especially flood mitigation. Educate and encourage business owners on their mitigation options. Encourage business continuity planning.
Type of Mitigation Action	Public Information Activities
How Action Aligns with Risk Reduction	Healthy, hazard-ready local businesses help make economies more resilient and recovery more rapid. When local businesses can stay open immediately after a hazard event, it allows residents to more easily return to their community and start the process of hazard recovery.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires Winter Weather

#### Additional Supporting Information:

## Town of Duson Mitigation Actions

*Previous Action Update*

Town of Duson							
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Goal	Status
D1 Public Building Wind Hardening	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP and Parish	1-5 years	Town of Duson/ Lafayette Parish Government	High Wind, Hail, Tropical Cyclone, Tornado	3,4,5	Carried Over – Not Started
D2 Drainage Projects	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.	HMGP and Parish	1-5 years	Town of Duson/ Lafayette Parish Government	Flooding, High Wind, Tropical Cyclone	3,4	Ongoing
D3 Residential elevations and acquisitions for repetitive loss and severe repetitive loss properties	Elevation or acquisition-demolition of properties. Benefits: Relieves property owners of the continual flooding problems. Saves flood relief and damage repayment for each property.	HMGP and Parish	1-5 years	Town of Duson/ Lafayette Parish Government	Flooding, Tropical Cyclone	1,3,4	Ongoing
D4 Safe Room Projects	Construction of a safe room for first responders located in Duson. Other locations will be identified based on funding availability.	HMGP and Parish	1-5 years	Town of Duson/ Lafayette Parish Government	Tornado, high wind, hail, tropical cyclone, flooding	3,4,5	Carried Over - Not Started

D5 Mitigation Public Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, and Sinkhole hazards, as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	HMPG and Parish	1-5 years	Town of Duson/ Lafayette Parish Government	Drought, Flooding, Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather	1,2,4	Ongoing
D6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA, Local	1-5 years	Town of Duson/ Lafayette Parish Government	Tornados, Winter Weather, Tropical Cyclone, Thunderstorms (lightning, high wind, hail)	3,4,5	Carried Over - Not Started
D7 Installation of lightning rods and surge protectors at Critical Facilities	install lightning rods and/or surge protectors; Benefits: will help to ensure minimal down time or equipment failures at Critical Facilities	HMPG and Parish	1-5 years	Town of Duson/ Lafayette Parish Government	Thunderstorms	3,4,5	Ongoing
D8: 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, Local	1-5 years	Town of Duson/ Lafayette Parish Government	Tropical Cyclone, Thunderstorms (lightning, high wind, hail), Tornadoes, Drought	3,4,5	Ongoing

*New Mitigation Actions*

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor, Town of Duson
SUPPORTING AGENCIES	n/a
TIMELINE	1-5 years
COST ESTIMATE	\$1,400,000
POSSIBLE FUNDING SOURCE(S)	HMGP, FEMA, Louisiana Watershed initiative, Parish, and Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Localized Flood Risk Reduction Projects include any projects that reduce flooding and decrease flood damage within an isolated and confined drainage or catchment area. Such project may involve pursuing neighborhood level green infrastructure installations.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	Localized Flood Risk Reduction projects, such as localized green infrastructure, decreases risk of localized flooding and flood loss.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Micro Grids
LEAD AGENCY	Mayor - Town of Duson
SUPPORTING AGENCIES	N/A
TIMELINE	1-3 years
COST ESTIMATE	\$8,500,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	<p>The proposed System would provide continuity of operations to the following FEMA-identified Community Lifelines using Community-identified risks to:</p> <ul style="list-style-type: none"> <li>• Safety &amp; Security (LEO, Fire, SAR, Governments, Community Safety)Food, Water &amp; Shelter – Food, Water, Shelter &amp; Agriculture</li> <li>• Health &amp; Medical – Medical Care, Public Health, Patient Movement,Medical Supply Chain, Fatality Management</li> <li>• Energy – Power Grid, Fuel (Government &amp; Community)</li> <li>• Communications – Infrastructure, Responder Comms, Alerts,Warnings and Messages, Finance, 911 &amp; Dispatch</li> <li>• Transportation – Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime</li> <li>• Hazardous Materials – Facilities, HAZMAT, Pollutants &amp; Contaminants</li> </ul>
Type of Mitigation Action	Structure and Infrastructure Actions
How Action Aligns with Risk Reduction	This action ensures more continuity of critical systems during a hazard event.
Current Status of Action	New
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Non - Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor, Town of Duson
SUPPORTING AGENCIES	N/A
TIMELINE	1-5 years
COST ESTIMATE	\$8,500,000
POSSIBLE FUNDING SOURCE(S)	HMGP, FEMA, Louisiana Watershed Initiative, Parish, and Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Non-localized Flood Risk Reduction Projects aim to reduce flooding and flood damage specifically in areas that are hydraulically linked to regional drainage basins.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	This project would focus on enhancing hydraulic capacity regionally. Various flood reduction methods and a combination of projects could be used.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Property Acquisition and Structure Demolition
LEAD AGENCY	Mayor, Town of Duson
SUPPORTING AGENCIES	N/A
TIMELINE	1-5 years
COST ESTIMATE	\$8,500,000
POSSIBLE FUNDING SOURCE(S)	HMGP, FEMA, Parish, and Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, futurestructures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Property acquisition entails the procurement of high-risk structuresby a local government so that they can be better managed and mitigated for the threat of hazards.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	FEMA has confirmed that Property Acquisition & Structural Demolition as a part of Residential Mitigation Projects is the single most effective means of Residential Mitigation itself. By purchasing and demolishing high-risk homes and structures, this project ensures that emergency personnel and neighboring structures will not be in an unnecessarily dangerous situation if a disaster strikethe high-risk structure.
Current Status of Action	New
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Regional Detention Ponds
LEAD AGENCY	Mayor, Town of Duson
SUPPORTING AGENCIES	N/A
TIMELINE	1-5 years
COST ESTIMATE	\$10,000,000
POSSIBLE FUNDING SOURCE(S)	HMGP, FEMA, Louisiana Watershed initiative, Parish, and Municipal funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Pursue the development and/or expansion of detention ponds
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	Detention basins or ponds are excavated areas that are designed to fill with stormwater during or immediately following rain events. The outfall from the pond acts to limit the flow of water, enabling the pond to fill and detain the stormwater as it slowly discharges into a channel. This slowing down of stormwater reduces the likelihood that channels within the drainage system become filled beyond capacity and overtop their banks.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Capacity Building in Management of Disaster Risk Reduction Projects
LEAD AGENCY	Mayor, Town of Duson
SUPPORTING AGENCIES	N/A
TIMELINE	1-5 years
COST ESTIMATE	\$2,100,000
POSSIBLE FUNDING SOURCE(S)	HMGP, FEMA, Parish, and Municipal Funds
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	Expand capacity to effectively manage mitigation projects and grants
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	Dedicated preparation for management costs ensures that the funding and manpower is continually available to oversee hazard mitigation projects.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Flood Mitigation for Lift Stations
LEAD AGENCY	Mayor, Town of Duson
SUPPORTING AGENCIES	N/A
TIMELINE	2-3 years
COST ESTIMATE	\$2,800,000
POSSIBLE FUNDING SOURCE(S)	HMGP, FEMA, Louisiana Watershed Initiative, Parish, and Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure 5) Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	Mitigation Lift Stations so that in a flood event, the station is still capable of operation. Mitigation actions may include elevation of the existing station above the established BFE or Flood of Record, improving capacity via replacement with more resilient and/or larger stations, constructing ring barriers around the stations themselves, diverting floodwater from the lift station prior to inundation, etc. A networked, real-time data system will link lift stations and other critical infrastructure to aid government/first responder stakeholders in real-time disaster-based decision making for public safety and public-health strategies.
Type of Mitigation Action	Structure and Infrastructure Projects Preparedness and Response Actions
How Action Aligns with Risk Reduction	Lift stations pump wastewater or sewage from a lower to higher elevation and maintaining continuity of these functions is important for public health and safety during a flood event. By mitigating these stations for flood damage, a scenario in which these pumps fail is avoided.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Heating and Cooling Stations
LEAD AGENCY	Mayor, Town of Duson
SUPPORTING AGENCIES	N/A
TIMELINE	1-3 years
COST ESTIMATE	\$100,000
POSSIBLE FUNDING SOURCE(S)	HMGP, FEMA, Parish, and Municipal Funds
GOAL ALIGNMENT	3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
PRIORITY	Medium
Action Description	Designate climate-controlled centers to shelter residents in the event of utilities failures due to extreme weather, especially extreme cold or heat.
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	This project would ensure that in times of extreme weather, residents could take shelter in climate-controlled environments, thus reducing the risk of heat or cold induced health problems.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Infrastructure Retrofits
LEAD AGENCY	Mayor, Town of Duson
SUPPORTING AGENCIES	N/A
TIMELINE	2-5 years
COST ESTIMATE	\$8,800,000
POSSIBLE FUNDING SOURCE(S)	HMGP, FEMA, Parish, and Municipal Funds
GOAL ALIGNMENT	<p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure</p> <p>5) Maintain continuity of operations during and after natural hazard events</p>
PRIORITY	Medium
Action Description	Infrastructure retrofits entail the improvement of existing infrastructure to better prepare it to withstand natural hazards.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Retrofitting Infrastructure ensures that critical systems like electricity, transportation, water resources (drinking, wastewater & drainage) networks are more likely to remain functional and/or return to normal operation more quickly at reduced costs in a post-disaster scenario.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

**Additional Supporting Information:**



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Green Infrastructure focused Climate Resilient Mitigation Activities
LEAD AGENCY	Mayor – Town of Duson
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	3-5 years
COST ESTIMATE	NA
POSSIBLE FUNDING SOURCE(S)	Federal Infrastructure Grants, FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Identify, design, and implement climate resilient mitigation activities, especially those that involve green infrastructure.
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Green Infrastructure generally provides cost-effective, low-impact solutions to natural hazards such as flooding and urban heat islands featuring the design and installation of nature-based solutions. Oftentimes, the installation and implementation of these solutions work in concert with and are complementary to existing graywater systems and canopies available to stakeholder municipalities.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Adopt Water Conservation Ordinances during Drought Conditions
LEAD AGENCY	Mayor – Town of Duson
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	1-5 years
COST ESTIMATE	NA
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Low
Action Description	Draft and adopt local ordinances restricting the use of public water resources for non-essential uses
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Ordinances restricting use of public water resources during times of drought will reduce the strain on the town water system and will allow for the continual operation of critical facilities without interruption of water supply
Current Status of Action	New
Hazard Addressed	Drought

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUSON	
	DESCRIPTION
MITIGATION ACTION	Retrofit Water Supply Systems
LEAD AGENCY	Mayor – Town of Duson
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	1-5 years
COST ESTIMATE	NA
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Low
Action Description	Retrofit water supply systems to improve water supply and delivery systems in during times of drought through the development of new or upgrading of existing water systems to eliminate breaks and leaks.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Addressing the potential issues of breaks/leaks in the town's water supply systems will more efficiently and effectively deliver water to town infrastructure and reduce the chances of system interruption during times of drought.
Current Status of Action	New
Hazard Addressed	Drought

**Additional Supporting Information:**

## City of Lafayette Mitigation Actions

## Previous Action Update

City of Lafayette							
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Goals	Status
Public Education	Continue and expand efforts to educate the public regarding all hazards, including direct mail, technical assistance, and development / implementation of general advertising campaign. Distribute public awareness information regarding flood hazards, SFHA's and potential mitigation measures using the local newspaper, utility bill inserts, inserts in the phone book, a parish hazard awareness website, and an educational program for school age children or "how to" classes in retrofitting by local merchants. Integrate "Disaster Resistance Education" into the public school curriculum. Provide public education on the importance of maintaining the ditches. Benefits: An informed public is better able to respond and protect themselves in times of hazards.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices, Parish School Board	All Hazards	1,2,3,4,5	In Progress and Ongoing

**Comment on Status:** In September & October 2018, the Development and Planning Department conducted outreach efforts to inform Lafayette citizens of the upcoming FEMA flood maps, as well as provide them with valuable flood insurance information, mitigation information and property protection brochures. The Department coordinated with the City of Scott, City of Broussard and City of Carencro to hold three well attended public meetings in September 2018 where FEMA representatives, LADOTD , and National Flood Insurance Representatives attended to answer questions from the public about flood insurance, flood mapping and general flood concerns. The new FEMA Flood Maps were successfully adopted on November 5, 2018 and took effect on December 21, 2018 after over 10 years in process, due to appeals and protests. To help everyone in Lafayette Parish be better prepared for hurricanes and tropical storms, Lafayette Utilities System has published the 2020 edition of the Hurricane Handbook. This 40-page handbook features a variety of in-depth information including a directory of important phone numbers, evacuation routes, a hurricane tracking map, emergency planning information and checklist for individuals and businesses, generator and chainsaw safety, and much more.

The LUS Hurricane Handbook is available at approximately 15 locations throughout the parish. LCG Environmental Quality has presented the Enviroscope presentation to 9 schools in 2020 alone, and has been doing this for several years. The Enviroscope Presentation is a 3-D Model

of watershed components and functions. 456 rain barrels have been distributed in 2020 through the Annual Rain Barrel Program. Since 2018, LCG EQ department recruits artists to submit designs that depict the importance of protecting our waterways, and allow a panel to choose which designs will be painted onto pre-selected storm drains in at least two high-pedestrian areas. LCG will use various marketing materials and media outlets to promote stormwater pollution prevention and the importance of the Vermilion River. Litter Poster Contest

<b>Business Hazards</b>	Work with local businesses to identify hazards to their business and mitigation actions that can be taken to protect Parish's economy.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	1,3,5	In Progress and Ongoing
<b>Employee Hazards</b>	Work with parish and municipal employees to identify potential ways to mitigate the impact of hazards upon employees, assets and infrastructure.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	1,2,3,4,5	In Progress and Ongoing
<b>Flood Insurance</b>	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Floodplain Managers or Designee	All Hazards	1	In Progress and Ongoing

**Comment on Status:** Continue to have flood insurance flyers in the main lobby and at city hall. Also, bring flyers to real estate offices to set out in lobby. Continue to provide FIRM and preliminary FIRM information to citizens at the Development & Planning office, local libraries and LCG website. Using GIS, LCG is working on targeted outreach to promote flood insurance by Identifying areas of Special Flood Hazard Area and all NFIP policies and locating the areas that have low participation. Created LCG Specific flood handout and it is kept in the lobby and also put on the website. 2018-2019: Have started using social media to promote the purchase of flood insurance.

<b>Community Rating System</b>	Work to improve Community Rating System (CRS) rating.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Floodplain Managers or Designee	Floods	1,2,3,4,5	In Progress and Ongoing
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**Comment on Status:** In 2021, nearly 8,000 properties that carry flood insurance within Lafayette Parish will see lower flood insurance due to the efforts of Lafayette Consolidated Government's Floodplain Management division. The division facilitated the improvement of its Community Rating by achieving a Class 7 status, giving policyholders a 15% discount on flood insurance premiums. Factors that led to increase:

- Increase in outreach projects (57 points to 135 points)
- Providing more detailed flood map information (30 points to 90 points)
- Preserving more land as open space (88 points to 115 points)
- Increasing development standards (220 points to 513 points)
- Acquisition of Repetitive Loss Homes (39 points to 87 points)
- Providing more flood information on the website (35 points to 77 points) Goal to be a Class 5 by 2025.

<b>Insurance Partnerships</b>	Develop partnerships with insurance companies to promote building codes	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards		Remove
<b>FIRMs/DFIRMs</b>	Work with FEMA to update FIRMs / DFIRMs	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Public Works, City/Town Mayors' Offices	Flooding (Flash and Riverine)		Completed and Ongoing
<b>Comment on Status:</b> In November 2018, after nearly a 10 year process, LCG adopted the Current Effective FIRM. In 2018, LCG signed a contract with Engineering Firm CH Fenstermaker & Associates to restudy North University Avenue Coulee. The study includes the development of representative hydrologic and hydraulic models that account for major channel improvements as well as land use changes that have occurred since the publication of prior models. Submitted in October 2020, Awaiting FEMA approval							
<b>Update Mitigation Requirements</b>	Continue to include and update mitigation requirements in floodplain development regulations.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	Flooding (Flash and Riverine)	1,2,3,4, 5	In Progress and Ongoing
<b>Comment on Status:</b> New drainage regulations put into place in October 2017 that require that any development causing post-development runoff that exceeds the development area's pre-development runoff rate must mitigate the increase through drainage improvements such that the post-development runoff shall be 15% less than the predevelopment runoff (85% of the pre-development runoff) for developments greater than two and half (2.5) acres. Additionally, developments up to and including two and a half (2.5) acres in area are required to retain the applicable design storm event. In 2017, LCG also adopted "Zero Net Fill", which requires developers to provide compensatory storage for any fill placed within the floodplain to offset any storage loss.							
<b>Auxiliary Power Sources</b>	Identify and prioritize auxiliary power sources for critical infrastructure.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Utilities Service, Private Energy Providers	All Hazards	5	In Progress and Ongoing
<b>Hazardous Materials Training</b>	Train First Responders (EMS Personnel) in hazardous materials incidents.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Fire and Volunteer Departments, City/Town Mayor's Offices	Hazardous Materials Incidents	5	In Progress and Ongoing
<b>Terrorism Review</b>	Conduct parish-wide terrorism critical infrastructure review.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Terrorism	5	In Progress and Ongoing
<b>Preparedness Coordination</b>	Coordination of all preparedness and mitigation efforts; hosting disaster response drills; regular attendance at networking and coordination meetings.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	5	In Progress and Ongoing

[illegible]

<b>Larger Volume Pumps and Pipes</b>	Along Beau Basin Coulee, Coulee Acadiana Lat. 8A, Coulee Mine, LaFamme Road Coulee and Ille de Cannes Coulee increase the drainage capacity of the drainage laterals by installing larger volume pumps and larger pipes.	LWI, FEMA, State, Local, HUD	1-5 Years	Department of Public Works	Flooding (Flash and Riverine)/ Hurricanes and Tropical Systems	4, 5	In Progress and Ongoing
<b>Repetitive Loss Area Drainage</b>	Determine the most feasible drainage projects for each repetitive loss area, as seen on Map 3, to reduce its flood potential (e.g., Beau Basin Coulee and Ille de Cannes Coulee, which are located in the unincorporated areas of the Parish) and implement the identified interior localized drainage project.	LWI, FEMA, State, Local, HUD	1-5 Years	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager / Community Development and Capital Projects	Flooding (Flash and Riverine)/ Hurricanes and Tropical Systems	2,3,4,5	In Progress and Ongoing
<p><b>Comment on Status:</b> As a part of the scoring system for the 2018 drainage initiative, repetitive loss is taken into consideration and scored higher than areas that were not a repetitive loss area. These projects have been rated by the number of addresses affected and cost per address, percentage area in a flood zone, number of FEMA and repetitive loss claims, complexity of each project, and any foreseen permitting issues. See Appendix H for original projects and Appendix I 2018-2019 Progress Report for each project.</p> <p>≥ 11 repetitive losses in a given drainage basin was given 10 points as part of the cumulative rating            9 - 10 repetitive losses in a given drainage basin was given 8 points as part of the cumulative rating            6 -8 repetitive losses in a given drainage basin was given 6 points as part of the cumulative rating            3-5 repetitive losses in a given drainage basin was given 4 points as part of the cumulative rating            1-2 repetitive losses in a given drainage basin was given 2 points as part of the cumulative rating            0 repetitive losses in a given drainage basin was given 0 points as part of the cumulative rating</p>							
<b>Repetitive Loss Structure Improvements</b>	Pursue elevation, acquisition, and flood proofing projects and structural solutions to flooding for repetitive loss structures and severe repetitive loss structures.	LWI, FEMA, State, Local, HUD	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure) / Hurricanes and Tropical Systems	1,2,3,4	In Progress and Ongoing
<p><b>Comment on Status:</b> In FY18, LCG started to utilize Hazard Mitigation Assistance-FMA funds to address repetitively flooded properties through residential elevations and acquisitions. The elevation and acquisition grant application that LCG submitted under the FY18 FMA Notice of Funding Opportunity has been approved and homeowner Kickoff Meetings took place in February 2021 &amp; Construction activities for the 13 properties included in the grant are expected to begin in 2021. LCG submitted two applications under FY 19 FMA NOFO to elevate or acquire 24 structures and submitted three grant applications under FY 20 FMA NOFO to elevate or acquire 50 structures. Since 2016, a total of 8 structures have been mitigated, via elevation or acquisition through the Hazard Mitigation Assistance-HMGP and approximately 6 others have been mitigated by utilizing Increased Cost of Compliance.</p>							
<b>Update Comprehensive Drainage Plan</b>	Update the comprehensive drainage plan ensuring future protection for areas in the Parish that	LWI, FEMA, State, Local, HUD	1 Year	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager	Flooding (Flash and Riverine)	2,3,4,5	In Progress and Ongoing



	experience flooding and drainage problems.						
<b>Retention and Detention Ponds</b>	Pursue the development of retention and detention ponds to reduce flooding impacts.	LWI, FEMA, State, Local, HUD	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure) / Hurricanes and Tropical Systems	3, 4, 5	In Progress and Ongoing
<b>Comment on Status:</b> In January 2020, LCG submitted 9 applications for various drainage projects throughout the parish, as well as detention projects to the Louisiana Watershed Initiative. All but 1 was approved to move on to the Full Application. One of the projects, we have decided to use local funding as it was decided this is in immediate need. In October 2020, LCG submitted an application for funding through the Louisiana DOTD Statewide Flood Control to construct a 40 acre detention pond along Coulee Mine East with a control structure to limit the discharge to Coulee Mine and hold storm water in the pond for storm events.							
<b>Safe Rooms</b>	Pursue opportunities to mitigate structures to use as safe rooms or construct safe rooms throughout the parish.	LWI, FEMA, State, Local, HUD	1-5 years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Hurricanes and Tropical Systems / Tornados / High Wind	3, 4, 5	Not Started
<b>Public Building Wind Hardening</b>	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage and helps assure that the public buildings can be used, occupied and operable during or after storms.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/ Lafayette Parish Government	High Wind, Hail, Tropical Cyclone, Tornado	3,4,5	Not Started
<b>Drainage Projects</b>	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.	LWI, FEMA, State, Local, HUD	Ongoing	City of Lafayette/ Lafayette Parish Government	Flooding, High Wind, Tropical Cyclone	3,4	In Progress and Ongoing

**Comment on Status:** Day to Day Maintenance 2020: 227,557 Linear Feet of Roadside Ditch Excavation, 7,150 Linear feet of Off-Road Channel Excavation, 616 Cubic yards of silt and debris removed from roadside ditches, 121,764 linear feet of flushing, 2,108 feet of damaged culverts replaced.

2019: Administered federal grants for drainage improvements to Coulee Ile des Cannes, Derby Heights, L8C Bayou Carencro and Ile des Cannes and in the City of Carencro; working toward the enhancement of flood protection in the parish by administering FEMA and HUD-funded drainage improvement projects. While these projects are ongoing, Public Works continues to manage our day-to-day drainage maintenance needs, including roadside ditch and coulee excavation projects, cleaning litter traps and storm drains, repairing sinkholes, and flushing out culvert. See Appendix F

<b>Residential Elevations and Acquisitions for Repetitive Loss and Severe Repetitive Loss Properties</b>	Elevation or acquisition-demolition of properties. Benefits: Relieves property owners of the continual flooding problems. Saves flood relief and damage repayment for each property.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/ Lafayette Parish Government	Flooding, Tropical Cyclone	1,3,4	In Progress and Ongoing
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**Comment on Status:** In FY18, LCG started to utilize Hazard Mitigation Assistance-FMA funds to address repetitively flooded properties through residential elevations and acquisitions. The elevation and acquisition grant application that LCG submitted under the FY18 FMA Notice of Funding Opportunity has been approved and homeowner Kickoff Meetings took place in February 2021 & Construction activities for the 13 properties included in the grant are expected to begin in 2021. LCG submitted two applications under FY 19 FMA NOFO to elevate or acquire 24 structures and submitted three grant applications under FY 20 FMA NOFO to elevate or acquire 50 structures. Since 2016, a total of 8 structures have been mitigated, via elevation or acquisition through the Hazard Mitigation Assistance-HMGP and approximately 6 others have been mitigated by utilizing Increased Cost of Compliance.

<b>Safe Room Projects</b>	Construction of a safe room for first responders located in Lafayette. Other locations will be identified based on funding availability.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/ Lafayette Parish Government	Tornado, high wind, hail, tropical cyclone, flooding	3,4,5	Not Started
<b>Public Outreach</b>	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, and Sinkhole hazards, as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/ Lafayette Parish Government	Drought, Flooding, Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, Sinkhole	1,2,4	In Progress and Ongoing

**Comment on Status:** To help everyone in Lafayette Parish be better prepared for hurricanes and tropical storms, Lafayette Utilities System has published the 2020 edition of the Hurricane Handbook. This 40-page handbook features a variety of in-depth information including a directory of important phone numbers, evacuation routes, a hurricane tracking map, emergency planning information and checklist for

individuals and businesses, generator and chainsaw safety, and much more. The LUS Hurricane Handbook is available at approximately 15 locations throughout the parish.

<b>Generators for Continuity of Operations and Government</b>	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/ Lafayette Parish Government	Tornados, Winter Weather, tropical cyclone, thunderstorms (lightning, high wind, hail), Sinkhole	3,4,5	In Progress and Ongoing
<b>Comment on Status:</b> The HMGP grant for Lafayette Parish's Hurricane Barry allocation is to purchase 14 generators. 6 for Duson, 2 for Lafayette, 1 for Carencro, 1 for Scott, 2 for Broussard, 2 for Youngsville. The total amount of the grant application is \$700,214, which is 75% reimbursable with a 25% match							
<b>Installation of Lightning Rods and Surge Protectors at Critical Facilities</b>	install lightning rods and/or surge protectors; Benefits: will help to ensure minimal down time or equipment failures at Critical Facilities	LWI, FEMA, State, Local, HUD	1-5 years	City of Lafayette/ Lafayette Parish Government	Lightning, Thunderstorms	3,4,5	Not Started – Carried Over
<b>Potable Water</b>	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, Local	1-5 years	City of Lafayette/ Lafayette Parish Government	Tropical Cyclones, Thunderstorms (lightning, high wind, hail), Tornadoes, Drought	3,4,5	Not Started

*New Mitigation Actions*

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Lafayette Fire Department Equipment, Training, & Outreach
LEAD AGENCY	Lafayette Fire Department- Fire Chief
SUPPORTING AGENCIES	Lafayette Consolidated Government
TIMELINE	Unknown
COST ESTIMATE	\$1,610,000 approximately
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
ASSOCIATED GOALS	1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact 3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities 5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium-High
Action Description	Purchase New Equipment, implement education and outreach programs, training for first responders.
Type of Mitigation Action	Education and Outreach Programs Preparedness and Response Actions
How Action Aligns with Risk Reduction	These programs, equipment, activities, and devices would be beneficial for emergency response during rapid flooding and hurricanes or major storms for first responders. Training and exercises help ensure responders are prepared and can take action to reduce loss of life and injury during a disaster.
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

**Additional Supporting Information:****Included Action Items:**

- The purchase of 30 Motorola APX6000 XE radios built to withstand 24 hours of being submerge in water with Bluetooth and Wi-Fi technology. Cost \$154,830.
- SCBA facepiece, C5 RDI, with Bluetooth to integrate with the Motorola APX6000. Cost of 30 facepieces \$52,650.
- Mobile command unit outfitted with communications equipment to utilize during hazardous material incidents or major weather events impacting our area. Cost of \$42,300.
- Multi-hazard outreach program through our Fire Prevention Bureau for Lafayette parish residents before, during, and after major weather events. Cost of \$13,000.
- The purchase of Swiftwater/Flood equipment and training. Cost of \$42,660.
- The acquisition of new Hazmat Response Unit. Cost \$1,300,000.

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Draft a Standalone Floodplain Management Plan
LEAD AGENCY	Lafayette Consolidated Government Development & Planning-Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	2-3 years
COST ESTIMATE	\$100,000
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	<p>1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact</p> <p>2) Improve data collection, use, and sharing to reduce the impact of hazards</p> <p>3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities</p> <p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.</p> <p>5) Maintain continuity of operations during and after natural hazards events.</p>
Priority	High
Action Description	<p>A Floodplain Management Plan is an overall strategy of programs, projects, and measures aimed at reducing the adverse impacts of flood hazards on the community. The FMP identifies and addresses the impacts caused by flood hazards and provides specific mitigation measures to help protect the properties and their occupants. The floodplain management plan is an important component of the City-Parish's participation in the National Flood Insurance Program (NFIP) and the Community Rating System (CRS). Developing a floodplain management plan is among the activities that earn CRS credit toward reduced flood insurance rates. The CRS program sets forth requirements that floodplain management plans be updated on a five-year cycle and that progress on meeting plan objectives be reviewed annually.</p>
Type of Mitigation Action	<p>Local Plans and Regulations</p> <p>Education and Awareness Programs</p>

How Action Aligns with Risk Reduction	The FMP would describe the flood hazard in Lafayette Parish and present measures to mitigate those hazards. The purpose of these measures is to reduce or alleviate the loss of life, personal injury, and property damage that can result from flooding. They involve long- and short-term strategies such as planning, policy changes, programs, projects, and other activities to mitigate the impacts of flood
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Grant Funding Assistance Programs
LEAD AGENCY	Lafayette Consolidated Government Development & Planning-Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	5-10 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	Development of local programs that will provide non-federal match to projects for FEMA Hazard Mitigation Assistance and other federal funding sources.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	By removing structures from the floodplain and raising structures above the BFE, homeowners suffer less mental and physical stress, displacement days, and flood damage. Also, the drain on the NFIP is reduced by a decrease in floodclaims.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Repetitive Loss Area Analysis (RLAA)
LEAD AGENCY	Lafayette Consolidated Government Development & Planning-Director
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	1-2 years
COST ESTIMATE	\$50,000
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local
GOAL ALIGNMENT	1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact 2) Improve data collection, use, and sharing to reduce the impact of hazards 3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities 4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.
PRIORITY	High
Action Description	Examine the FEMA SRL and RL data sets and NFIP Claims data to determine and prioritize the most cost effective, feasible mitigation projects for each specific area, based on flood depth, type of construction, and other data. (RLAA)
Type of Mitigation Action	Structure and Infrastructure Projects Local Plans and Regulations Education and Awareness Programs
How Action Aligns with Risk Reduction	RLAAs generate specific guidance on mitigation solutions for individual buildings or areas and help property owners reduce their risk of future flooding by providing an understanding of flood risk, flooding sources, and resources for mitigation.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Incentivize Hazard Mitigation
LEAD AGENCY	Lafayette Office of Homeland Security and Emergency Preparedness
SUPPORTING AGENCIES	Lafayette Consolidated Government Public Works-Director
TIMELINE	1-5 years
COST ESTIMATE	unknown
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	<p>1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact</p> <p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure.</p> <p>5) Maintain continuity of operations during and after natural hazard events</p>
PRIORITY	Medium
Action Description	<p>Incentives and disincentives can be used to promote hazard mitigation through the following measures:</p> <ul style="list-style-type: none"> <li>▪ Using special tax assessments to discourage builders from constructing in hazardous areas.</li> <li>▪ Using insurance incentives and disincentives (i.e., incentives for best practices).</li> <li>▪ Providing tax incentives for development of low-risk hazard profiles</li> <li>▪ Waiving permitting fees for home construction projects related to mitigation.</li> <li>▪ Using tax abatements, public subsidies, and other incentives to encourage private mitigation practices.</li> <li>▪ Reducing or deferring the tax burden for undeveloped hazard areas facing development pressure.</li> <li>▪ Encouraging infill development through tax incentives, streamlined approval processes, etc.</li> </ul>
Type of Mitigation Action	Local Plans and Regulations

How Action Aligns with Risk Reduction	Promotion of resilience by communities to attract and retain quality developers and businesses. Reductions in the amount of damaged and contaminated materials and contents following a disaster event, which initially may pose health hazards and then will require disposal of at existing landfills or by incineration
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Protect Power Lines
LEAD AGENCY	Lafayette Utilities Systems- Director
SUPPORTING AGENCIES	Lafayette Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	LWI, FEMA, State, HUD, Local, Other
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	<p>Power lines can be protected from the impacts of hazards with the following techniques:</p> <ul style="list-style-type: none"> <li>▪ Establishing standards for all utilities regarding tree pruning around lines.</li> <li>▪ Burying overhead power lines.</li> <li>▪ Using designed-failure mode for power line design to allow lines to fall or fail in small sections rather than as a complete system to enable faster restoration.</li> <li>▪ Installing redundancies and loopfeeds</li> </ul>
Type of Mitigation Action	<p>Preparedness and Response Actions</p> <p>Local Plans and Regulations</p> <p>Structure and Infrastructure</p>
How Action Aligns with Risk Reduction	Protection of power lines can increase the resilience of the power grid and reduce impacts to people and property in the event of a disaster
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones, Thunderstorms, Tornadoes, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Enhance Emergency Response Systems
LEAD AGENCY	Lafayette Parish Office of Homeland Security and Emergency Preparedness Director
SUPPORTING AGENCIES	Lafayette Consolidated Government- Public Works Director
TIMELINE	3-5 years
COST ESTIMATE	50,000; staff hours
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 3: Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
PRIORITY	Medium
Action Description	Continually update and improve hazard warning systems, evacuation plans, and hazard response operations. Take special care to improve systems and incorporate new tools and technologies as they become available. Support professional development of emergency service workers by providing new training opportunities.
Type of Mitigation Action	Emergency Services Activities
How Action Aligns with Risk Reduction	Continually maintaining and improving emergency service systems ensures that these services are as efficient and convenient as possible for residents in the event of an emergency.
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Thunderstorms, Tornados, Tropical Storms, Wildfires, Winter Weather

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Environmental Public Outreach
LEAD AGENCY	Lafayette Consolidated Government-Public Works Director
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$40,000, staff hours
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 1: Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact.
PRIORITY	Medium
Action Description	Environmental public outreach to inform on the benefits of preserving our wetlands for stormwater management and natural ecosystems services. Additionally, this educational activity should inform the public of the benefit of preserving trees to increase stormwater retention and reduce the urban heat island effect. Public outreach may include, but is not limited to, school education programs, library outreach, and public postings.
Type of Mitigation Action	Public Information Activities Natural Resource Protection
How Action Aligns with Risk Reduction	Environmental public outreach allows residents to have a more comprehensive understanding of our wetland systems and the natural and man-made causes of flooding. Furthermore, it allows residents an understanding of how preserving greenery can reduce urban heat. When residents understand the ecosystem benefits of green space, they may be more likely to support initiatives to preserve it.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Preventative Land Use Planning and Regulations
LEAD AGENCY	Lafayette Consolidated Government Development & Planning Director
SUPPORTING AGENCIES	Acadiana Planning Commission
TIMELINE	3-5 years
COST ESTIMATE	\$200,000; staff hours
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Parish Funds, FEMA, State Mitigation Grants
GOAL ALIGNMENT	Goal 3: Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities Goal 4: Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Integrate hazard mitigation, especially flood mitigation, into land use planning systems and regulatory tools. Planning systems and documents include, but are not limited to, comprehensive city plans, small area site plans, watershed plans, and climate adaptation plans.  Regulatory tools may include, but are not limited to, zoning, stormwater management regulations, building codes, and ordinances
Type of Mitigation Action	Preventative Activities

How Action Aligns with Risk Reduction	<p>Integrating hazard mitigation into land use planning keeps people and property out of harm's way in the future. For example, overlaying vulnerability maps, floodplain maps, and comprehensive plans allows for more thorough analysis of which land is suitable for future development. This process folds land suitability analysis into comprehensive planning. Planning that involves analysis of potential future climatic conditions, like watershed planning and climate change adaptation planning, allows for more informed decision making about development. Specifically, it informs decision makers on which areas will be most flood-prone in the future, so development can be directed away from these areas.</p> <p>Regulatory tools are useful in enforcing flood-smart development. Zoning can be used to ensure flood-prone areas are not densely developed. It can also help preserve natural spaces that provide stormwater storage. Building codes and ordinances can mandate that buildings are elevated above Base Flood Elevation. Regulations can dictate permeable surface requirements. Codes and regulations can also be used to preserve trees, which both provide cooling benefits during heat events and help absorb stormwater.</p>
Current Status of Action	New
Hazard Addressed	Drought, Extreme Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

**Additional Supporting Information:**



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Capacity Building in Management of Disaster Risk Reduction Projects
LEAD AGENCY	Lafayette Consolidated Government- Public Works Director
SUPPORTING AGENCIES	NA
TIMELINE	1-5 years
COST ESTIMATE	\$2,400,000
POSSIBLE FUNDING SOURCE(S)	Parish Funds, Municipal Funds
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	Expand capacity to effectively manage mitigation projects and grants.
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	Dedicated preparation for management costs ensures that the funding and manpower is continually available to oversee hazard mitigation projects.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF LAFAYETTE	
	DESCRIPTION
MITIGATION ACTION	Green Infrastructure focused Climate Resilient Mitigation Activities
LEAD AGENCY	Lafayette Consolidated Government- Public Works Director
SUPPORTING AGENCIES	Lafayette Consolidated Government- Planning Manager
TIMELINE	3-5 years
COST ESTIMATE	NA
POSSIBLE FUNDING SOURCE(S)	Federal Infrastructure Grants, FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Identify, design, and implement climate resilient mitigation activities, especially those that involve green infrastructure.
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Green Infrastructure involves the design and installation of nature-based solutions. Generally, it provides cost-effective, low-impact solutions to natural hazards, especially flooding. Green infrastructure can also help reduce the Urban Heat Island effect. Oftentimes, the installation and implementation of these solutions work in concert with and are complementary to existing gray water systems and canopies available to stakeholder municipalities.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones

## City of Scott Mitigation Actions

## Previous Action Update

City of Scott							
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Goals	Status
Public Education	Continue and expand efforts to educate the public regarding all hazards, including direct mail, technical assistance, and development / implementation of general advertising campaign. Distribute public awareness information regarding flood hazards, SFHA's and potential mitigation measures using the local newspaper, utility bill inserts, inserts in the phone book, a parish hazard awareness website, and an educational program for school age children or "how to" classes in retrofitting by local merchants. Integrate "Disaster Resistance Education" into the public school curriculum. Provide public education on the importance of maintaining the ditches. Benefits: An informed public is better able to respond and protect themselves in times of hazards.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices, Parish School Board	All Hazards	1,2	In Progress and Ongoing
<b>Comment on Status:</b> In September & October 2018, the Development and Planning Department conducted outreach efforts to inform Lafayette citizens of the upcoming FEMA flood maps, as well as provide them with valuable flood insurance information, mitigation information and property protection brochures. The Department coordinated with the City of Scott, City of Broussard and City of Carencro to hold three well attended public meetings in September 2018 where FEMA representatives, LADOTD, and National Flood Insurance Representatives attended to answer questions from the public about flood insurance, flood mapping and general flood concerns. The new FEMA Flood Maps were successfully adopted on November 5, 2018 and took effect on December 21, 2018 after over 10 years in process, due to appeals and protests.							
Business Hazards	Work with local businesses to identify hazards to their business and mitigation actions that can be taken to protect Parish's economy.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	2,3	In Progress and Ongoing

[illegible]

<b>Update Mitigation Requirements</b>	Continue to include and update mitigation requirements in floodplain development regulations.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	Flooding (Flash and Riverine)	1,3,4	In Progress and Ongoing
<b>Auxiliary Power Sources</b>	Identify and prioritize auxiliary power sources for critical infrastructure.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Utilities Service, Private Energy Providers	All Hazards	4,5	In Progress and Ongoing
<b>Hazardous Materials Training</b>	Train First Responders (EMS Personnel) in hazardous materials incidents.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Fire and Volunteer Departments, City/Town Mayor's Offices	Hazardous Materials Incidents	1,3	In Progress and Ongoing
<b>Terrorism Review</b>	Conduct parish-wide terrorism critical infrastructure review.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Terrorism	3,4	In Progress and Ongoing
<b>Preparedness Coordination</b>	Coordination of all preparedness and mitigation efforts; hosting disaster response drills; regular attendance at networking and coordination meetings.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	3,4	In Progress and Ongoing
<b>NIMS and ICS Training</b>	Work to provide training to emergency personnel Parish-wide in NIMS and ICS.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	1	In Progress and Ongoing
<b>Monitoring and Communications Enhancement</b>	Work to enhance monitoring and communications systems to improve ability to predict and prepare for flood events, including connection with Lafayette Parish Flood Warning System.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure)	1,2,3	In Progress and Ongoing

**Comment on Status:** Lafayette Parish Office of Homeland Security & Emergency Preparedness has created an online self reporting application for post disaster damage assessment at <http://www.lafayetteohsep.org> LCG created a GIS Dashboard for closed roads and sand bag locations during flood events.

<b>International Building Codes</b>	Implement and enforce International Building Codes.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards	4	Completed
<b>Insurance Partnerships</b>	Develop partnerships with insurance companies to promote building codes.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards	1	In Progress and Ongoing
<b>Lafayette Emergency Operation Center Hardening</b>	Wind harden and upgrade the Lafayette Emergency Operation Center at 800 South Buchanan Street, by expanding the site to accommodate increasing demand, adding new monitoring equipment and to become more disaster resistant.	FEMA, State, Local, HUD, Other	LCG	Lafayette Parish President, Office of Homeland Security and Emergency Preparedness	Floods; Hurricanes and Tropical Systems; Thunderstorms (Lightning, High Winds, Hail); Tornadoes	4,5	Completed
<b>Comment on Status:</b> New EOC center completed in 2021.							
<b>Larger Volume Pumps and Pipes</b>	Along Beau Basin Coulee, Coulee Acadiana Lat. 8A, Coulee Mine, LaFamme Road Coulee and Ille de Cannes Coulee increase the drainage capacity of the drainage laterals by installing larger volume pumps and larger pipes.	FEMA, State, Local, HUD, Other	LCG	Department of Public Works	Flooding (Flash and Riverine); Hurricanes and Tropical Systems	4,5	In Progress and Ongoing
<b>Repetitive Loss Area Drainage</b>	Determine the most feasible drainage projects for each repetitive loss area, as seen on Map 3, to reduce its flood potential (e.g. Beau Basin Coulee and Ille de Cannes Coulee, which are located in the unincorporated areas of the Parish) and implement the identified interior localized drainage project.	FEMA, State, Local, HUD, Other	Ongoing	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager / Community Development and Capital Projects	Flooding (Flash and Riverine); Hurricanes and Tropical Systems	3	In Progress and Ongoing

<b>Repetitive Loss Structure Improvements</b>	Pursue elevation, acquisition, and flood proofing projects and structural solutions to flooding for repetitive loss structures and severe repetitive loss structures.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine); Flooding (Dam and Levee Failure); Hurricanes and Tropical Systems	3,4	In Progress and Ongoing
<b>Update Comprehensive Drainage Plan</b>	Update the comprehensive drainage plan ensuring future protection for areas in the Parish that experience flooding and drainage problems.	FEMA, State, Local, HUD, Other	LCG	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager	Flooding (Flash and Riverine)	3,4	In Progress and Ongoing
<b>Retention and Detention Ponds</b>	Pursue the development of retention and detention ponds to reduce flooding impacts.	FEMA, State, Local, HUD, Other	Ongoing	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine); Flooding (Dam and Levee Failure); Hurricanes and Tropical Systems	4,5	In Progress and Ongoing
<b>Safe Rooms</b>	Pursue opportunities to mitigate structures to use as safe rooms or construct safe rooms throughout the parish.	FEMA, State, Local, HUD, Other	1-5 years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Hurricanes and Tropical Systems; Tornadoes; High Wind	3,4,5	In Progress and Ongoing
<b>Public Building Wind Hardening</b>	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage and helps assure that the public buildings can be used, occupied and operable during or after storms.	FEMA, State, Local, HUD, Other	1-5 years	City of Scott/Lafayette Parish Government	High Wind; Hail; Tropical Cyclones; Tornadoes	4, 5	Not Started – Carried Over

<b>Drainage Projects</b>	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, State, Local, HUD, Other	1-5 years	City of Scott/Lafayette Parish Government	Flooding; High Wind; Tropical Cyclones	4	In Progress
<b>Residential elevations and acquisitions for repetitive loss and severe repetitive loss properties</b>	Elevation or acquisition-demolition of properties. Benefits: Relieves property owners of the continual flooding problems. Saves flood relief and damage repayment for each property.	FEMA, State, Local, HUD, Other	1-5 years	City of Scott/Lafayette Parish Government	Flooding; Tropical Cyclones	4	In Progress
<b>Safe Room Projects</b>	Construction of a safe room for first responders located in Scott. Other locations will be identified based on funding availability.	FEMA, State, Local, HUD, Other	1-5 years	City of Scott/Lafayette Parish Government	Tornadoes, High Wind; Hail, Tropical Cyclones; Flooding	5	Not Started – Carried Over
<b>Mitigation Public Outreach</b>	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Drought, Flooding, Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, and Sinkhole hazards, as well as providing information on high risk areas. Informing communities, business and citizens on proper mitigation efforts and activities will create resiliency within the parish and its communities.	FEMA, State, Local, HUD, Other	1-5 years	City of Scott/Lafayette Parish Government	Drought; Flooding; Thunderstorms; Lightning; Hail; High Wind; Tropical Cyclones; Tornadoes; Wildfire; Winter Weather	1, 2	In Progress



**Comment on Status:** To help everyone in Lafayette Parish be better prepared for hurricanes and tropical storms, Lafayette Utilities System has published the 2020 edition of the Hurricane Handbook. This 40-page handbook features a variety of in-depth information including a directory of important phone numbers, evacuation routes, a hurricane tracking map, emergency planning information and checklist for individuals and businesses, generator and chainsaw safety, and much more. The LUS Hurricane Handbook is available at approximately 15 locations throughout the parish.

<b>Generators for continuity of operations and government</b>	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA, State, Local, HUD, Other	1-5 years	City of Scott/Lafayette Parish Government	Tornados; Winter Weather; Tropical Cyclones; Thunderstorms (lightning, high wind, hail)	4, 5	In Progress
<b>Comment on Status:</b> The HMGP grant for Lafayette Parish's Hurricane Barry allocation is to purchase 14 generators. 6 for Duson, 2 for Lafayette, 1 for Carencro, 1 for Scott, 2 for Broussard, 2 for Youngsville. The total amount of the grant application is \$700,214, which is 75% reimbursable with a 25% match.							
<b>Installation of lightning rods and surge protectors at Critical Facilities</b>	install lightning rods and/or surge protectors; Benefits: will help to ensure minimal down time or equipment failures at Critical Facilities	FEMA, State, Local, HUD, Other	1-5 years	City of Scott/Lafayette Parish Government	Lightning	4, 5	Not Started – Carried Over
<b>Potable Water</b>	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, State, Local, HUD, Other	1-5 years	City of Scott/Lafayette Parish Government	Tropical Cyclones; Thunderstorms (lightning, high wind, hail); Tornadoes; Drought	4, 5	Not Started – Carried Over

*New Mitigation Actions*

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Capacity Building in Management of Disaster Risk Reduction Projects
LEAD AGENCY	Mayor - City of Scott
SUPPORTING AGENCIES	NA
TIMELINE	1-5 years
COST ESTIMATE	\$2,400,000
POSSIBLE FUNDING SOURCE(S)	Parish Funds, Municipal Funds
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	Medium
Action Description	Expand capacity to effectively manage mitigation projects and grants.
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	Dedicated preparation for management costs ensures that the funding and manpower is continually available to oversee hazard mitigation projects
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Storms

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Regional Detention Ponds
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Parish Floodplain Managers
TIMELINE	2-4 years
COST ESTIMATE	\$18,799,057
POSSIBLE FUNDING SOURCE(S)	Municipal funds, FEMA grants, Louisiana Watershed initiative Funding
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Pursue the development and/or expansion of detention ponds, especially, but not limited to, these locations: Apollo Pond, Delhomme Pond, Marais des Cannes.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	Detention basins or ponds are excavated areas that are designed to fill with stormwater during or immediately following rain events. The outfall from the pond acts to limit the flow of water, enabling the pond to fill and detain the stormwater as it slowly discharges into a channel. This slowing down of stormwater reduces the likelihood that channels within the drainage system become filled beyond capacity and overtop their banks.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

### Additional Supporting Information:

Approximate cost estimates are as follow:

Apollo Pond: \$1,396,061 Delhomme Pond: \$2,557,163

Marais des Cannes Pond 1: \$9,426,466

Marais des Cannes Pond 2: \$5,419,367

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Diversion Channel - Coulee Ile des Cannes and Coulee Mine
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Parish Floodplain Managers
TIMELINE	3-5 years
COST ESTIMATE	\$7,500,000
POSSIBLE FUNDING SOURCE(S)	NA
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	A diversion channel connecting Coulee Ile des Cannes Lateral 18 and Coulee Mine West Lateral 5 would serve this purpose. The proposed channel would include an extension and substantial improvements of Coulee Ile des Cannes Lateral 18C. The proposed diversion channel is north of the City limits so collaboration with LCG is required.
Type of Mitigation Action	Natural System Protection
How Action Aligns with Risk Reduction	The positioning of the City of Scott across two watersheds provides an opportunity for an additional large-scale project to combat flooding. When high-intensity, localized storms rain over only one of the two watersheds, the channel network within can exceed its capacity while the other channel maintains available capacity. A diversion channel connecting the two watersheds could help to alleviate this pressure when storms fall on one or the other.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Flood Mitigation for Lift Stations
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	NA
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	<p>4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure</p> <p>5) Maintain continuity of operations during and after natural hazard events</p>
PRIORITY	High
Action Description	Mitigation Lift Stations so that in a flood event, the station is still capable of operation. Mitigation actions may include elevation of the existing station above the established BFE or Flood of Record, improving capacity via replacement with more resilient and/or larger stations, constructing ring barriers around the stations themselves, diverting floodwater from the lift station prior to inundation, etc. A networked, real-time data system will link lift stations and other critical infrastructure to aid government/first responder stakeholders in real-time disaster-based decision making for public safety and public-health strategies.
Type of Mitigation Action	Structure and Infrastructure Projects Preparedness and Response Actions
How Action Aligns with Risk Reduction	Lift stations pump wastewater or sewage from a lower to higher elevation and maintaining continuity of these functions is important for public health and safety during a flood event. By mitigating these stations for flood damage, a scenario in which these pumps fail is avoided.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Green Infrastructure focused Climate Resilient Mitigation Activities
LEAD AGENCY	City of Scott Mayor's Office
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	3-5 years
COST ESTIMATE	NA
POSSIBLE FUNDING SOURCE(S)	Federal Infrastructure Grants, FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Identify, design, and implement climate resilient mitigation activities, especially those that involve green infrastructure.
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Green Infrastructure involves the design and installation of nature-based solutions. Generally, it provides cost-effective, low-impact solutions to natural hazards, especially flooding. Green infrastructure can also help reduce the Urban Heat Island effect. Oftentimes, the installation and implementation of these solutions work in concert with and are complementary to existing graywater systems and canopies available to stakeholder municipalities.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Heating and Cooling Stations
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$75,000
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Various FEMA grant funding
GOAL ALIGNMENT	3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
PRIORITY	Medium
Action Description	Designate climate-controlled centers to shelter residents in the event of utilities failures due to extreme weather, especially extreme cold or heat.
Type of Mitigation Action	Preparedness and Response Actions
How Action Aligns with Risk Reduction	This project would ensure that in times of extreme weather, residents could take shelter in climate-controlled environments, thus reducing the risk of heat or cold induced health problems. Shelters can be multi-purpose, so they can be utilized during other hazard events
Current Status of Action	New
Hazard Addressed	Excessive Heat, Winter Storms, Thunderstorms, Tornadoes, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Plan and Implement Mitigation of Historic Sites
LEAD AGENCY	Mayor - City of Scott
SUPPORTING AGENCIES	Lafayette Parish Government
TIMELINE	3-5 years
COST ESTIMATE	\$1,000,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds, HUD CDBG, National and State Historic Preservation Funding
GOAL ALIGNMENT	<p>1) Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact</p> <p>3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities</p>
PRIORITY	Medium
Action Description	Pursue hazard mitigation for historical sites. Historical preservation hazard mitigation may include the following actions: conduct public meetings to understand what sites are of historical importance to residents, taking inventory of historical sites within the municipality, writing and enforcing ordinances that help mitigate historic sites, pursuing funding for mitigation of historic sites, implementing mitigation. Mitigation of historical structures may include wet and dry floodproofing, fortifying structures against strong wind, and updating insulation against extreme cold or heat.
Type of Mitigation Action	Local Plans and Regulations Structure and Infrastructure Projects Education and Awareness Programs
How Action Aligns with Risk Reduction	This action protects the municipality's important historic sites from harm. By mitigating historic sites, the municipality can better protect the region's rich history for future generations. History-based tourism is a significant contributor to the local economy. By protecting historic sites, municipalities can help make the local economy more resilient.
Current Status of Action	New
Hazard Addressed	Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Storms

### Additional Supporting Information:



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Infrastructure Retrofits
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-5 years
COST ESTIMATE	\$11,000,000
POSSIBLE FUNDING SOURCE(S)	Federal Infrastructure Grants, FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	<p>4) Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure</p> <p>5) Maintain continuity of operations during and after natural hazard events</p>
PRIORITY	Medium
Action Description	Infrastructure retrofits entail the improvement of existing infrastructure to better prepare it to withstand natural hazards.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Retrofitting Infrastructure ensures that critical systems like electricity, transportation, water resources (drinking, wastewater & drainage) networks are more likely to remain functional and/or return to normal operation more quickly at reduced costs in a post-disaster scenario.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Storms

### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$1,100,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Localized Flood Risk Reduction Projects include any projects that reduce flooding and decrease flood damage within an isolated and confined drainage or catchment area. Such project may involve pursuing neighborhood level green infrastructure instillations.
Type of Mitigation Action	Structure and Infrastructure Projects Natural Systems Protection
How Action Aligns with Risk Reduction	Localized Flood Risk Reduction projects, such as localized green infrastructure, decreases risk of localized flooding and flood loss.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Micro Grids
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$8,500,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	5) Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	<p>The proposed System would provide continuity of operations to the following FEMA-identified Community Lifelines using Community-identified risks to:</p> <ul style="list-style-type: none"> <li>• Safety &amp; Security (LEO, Fire, SAR, Governments, Community Safety)Food, Water &amp; Shelter – Food, Water, Shelter &amp; Agriculture</li> <li>• Health &amp; Medical – Medical Care, Public Health, Patient Movement,Medical Supply Chain, Fatality Management</li> <li>• Energy – Power Grid, Fuel (Government &amp; Community)</li> <li>• Communications – Infrastructure, Responder Comms, Alerts,Warnings and Messages, Finance, 911 &amp; Dispatch</li> <li>• Transportation – Highway/Roadway/Motor Vehicle, Mass Transit, Railway, Aviation, Maritime</li> <li>• Hazardous Materials – Facilities, HAZMAT, Pollutants &amp; Contaminants</li> </ul>
Type of Mitigation Action	Structure and Infrastructure Actions
How Action Aligns with Risk Reduction	This action ensures more continuity of critical systems during a hazard event.
Current Status of Action	New
Hazard Addressed	Flooding, Thunderstorms Tornadoes, Tropical Cyclones, Wildfires

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Mitigating for Extreme Heat
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$1,000,000
POSSIBLE FUNDING SOURCE(S)	Municipal funds, National and State hazard mitigation funds, CDBGblock grants
GOAL ALIGNMENT	3) Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities;
PRIORITY	Medium
Action Description	Conceptualize, plan, and implement both structural and non- structural mitigation measures to address and mitigate extremeheat hazards.
Type of Mitigation Action	Local Plans and Regulations Natural System Protection Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Mitigating for extreme heat through a combination of green and blue infrastructure and home retrofits makes households and communities more prepared to withstand heat waves.
Current Status of Action	New - Conceptual
Hazard Addressed	Drought, Excessive Heat

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Non - Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$7,700,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Non-localized Flood Risk Reduction Projects aim to reduce flooding and flood damage specifically in areas that are hydraulically linked to regional drainage basins.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	This project would focus on enhancing hydraulic capacity regionally. Various flood reduction methods and a combination of projects could be used.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Property Acquisition and Structure Demolition
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Comprehensive Plan Facilitator
TIMELINE	1-5 years
COST ESTIMATE	\$4,000,000
POSSIBLE FUNDING SOURCE(S)	NA
GOAL ALIGNMENT	4) Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, futurestructures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Property acquisition entails the procurement of high-risk structuresby a local government so that they can be better managed and mitigated for the threat of hazards.
Type of Mitigation Action	Structure and Infrastructure Projects Natural System Protection
How Action Aligns with Risk Reduction	FEMA has confirmed that Property Acquisition & Structural Demolition as a part of Residential Mitigation Projects is the single most effective means of Residential Mitigation itself. By purchasingand demolishing high-risk homes and structures, this project ensures that emergency personnel and neighboring structures will not be in an unnecessarily dangerous situation if a disaster strikethe high-risk structure.
Current Status of Action	New
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Rain Gauges
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$250,000
POSSIBLE FUNDING SOURCE(S)	Parish Funds, Municipal Funds
GOAL ALIGNMENT	2) Improve data collection, use, and sharing to reduce the impact of hazards
PRIORITY	High
Action Description	Place rain gauges in strategic locations in the city to assure more accurate measurements on the level or rainfall. Creation of a linked/networked system or grid of rain-gauge data that can work in concert to provide government/first-responders real-time information to aid in effective disaster-related decision-making for resource deployment and/or public safety and health strategies
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	When rain gauge data is available, the city and its residents have access to more accurate data and can make more informed decisions during both disaster response and long-term planning.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Tropical Cyclones, Winter Storms

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Enhance Emergency Response Systems
LEAD AGENCY	Mayor - City of Scott
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	3-5 years
COST ESTIMATE	\$50,000; staff hours
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 3: Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities
PRIORITY	Medium
Action Description	Continually update and improve hazard warning systems, evacuation plans, and hazard response operations. Take special care to improve systems and incorporate new tools and technologies as they become available. Support professional development of emergency service workers by providing new training opportunities.
Type of Mitigation Action	Emergency Services Activities
How Action Aligns with Risk Reduction	Continually maintaining and improving emergency service systems ensures that these services are as efficient and convenient as possible for residents in the event of an emergency.
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Thunderstorms, Tornados, Tropical Storms, Wildfire, Winter Weather

#### Additional Supporting Information:



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Environmental Public Outreach
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$40,000, staff hours
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 1: Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact.
PRIORITY	Medium
Action Description	Environmental public outreach to inform on the benefits of preserving our wetlands for stormwater management and natural ecosystems services. Additionally, this educational activity should inform the public of the benefit of preserving trees to increase stormwater retention and reduce the urban heat island effect. Public outreach may include, but is not limited to, school education programs, library outreach, and public postings.
Type of Mitigation Action	Public Information Activities
How Action Aligns with Risk Reduction	Environmental public outreach allows residents to have a more comprehensive understanding of our wetland systems and the natural and man-made causes of flooding. Furthermore, it allows residents an understanding of how preserving greenery can reduce urban heat. When residents understand the ecosystem benefits of green space, they may be more likely to support initiatives to preserve it.
Current Status of Action	New
Hazard Addressed	Extreme Heat, Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Maintain Flood Maps and Watershed Models
LEAD AGENCY	Parish Floodplain Managers
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	3-5 years
COST ESTIMATE	\$200,000
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Parish Funds, FEMA, State Mitigation Grants
GOAL ALIGNMENT	Goal 2: Improve data collection, use, and sharing to reduce the impact of hazards
PRIORITY	High
Action Description	Update floodplain maps regularly, as well as watershed maps and models, and models to predict future flooding conditions.
Type of Mitigation Action	Preventative Activities
How Action Aligns with Risk Reduction	Having up-to-date maps and models allows for more informed decision making and planning. Localized floodplain maps that are updated more often than the national standard allow more accurate data. Regularly updated watershed maps and models allow for a more comprehensive understanding of which areas are likely to flood in the present and future. This information can be used to make more informed decisions about land use and building regulations.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Preserve and Restore Wetland Areas
LEAD AGENCY	Comprehensive Plan Facilitator, City of Scott
SUPPORTING AGENCIES	Lafayette Consolidated Government Parks and Recreation, Floodplain Managers
TIMELINE	3-5 years
COST ESTIMATE	\$2,000,000
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 4: Pursue opportunities to mitigate repetitive and sever repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Low
Action Description	Protect natural systems that provide flood mitigation benefits like stormwater storage. Activities may include protecting and restoring wetland areas and incorporating environmental corridors into urban planning.
Type of Mitigation Action	Natural and Beneficial Functions Activities; Local Plans and Regulations
How Action Aligns with Risk Reduction	Preserving wetlands from development keeps property out of flood-prone areas. Furthermore, it allows those wetland areas to continue providing floodwater storage, drainage, and water filtration services.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Preventative Land Use Planning and Regulations
LEAD AGENCY	Comprehensive Plan Facilitator, City of Scott
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Parish Floodplain Managers, Lafayette Consolidated Government Department of Parks and Recreation
TIMELINE	3-5 years
COST ESTIMATE	\$200,000; staff hours
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Parish Funds, FEMA, State Mitigation Grants
GOAL ALIGNMENT	Goal 3: Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities; Goal 4: Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	High
Action Description	Integrate hazard mitigation, especially flood mitigation, into land use planning systems and regulatory tools. Planning systems and documents include, but are not limited to, comprehensive city plans, small area site plans, watershed plans, and climate adaptation plans.  Regulatory tools may include, but are not limited to, zoning, stormwater management regulations, building codes, and ordinances
Type of Mitigation Action	Preventative Activities

How Action Aligns with Risk Reduction	<p>Integrating hazard mitigation into land use planning keeps people and property out of harm's way in the future. For example, overlaying vulnerability maps, floodplain maps, and comprehensive plans allows for more thorough analysis of which land is suitable for future development. This process folds land suitability analysis into comprehensive planning. Planning that involves analysis of potential future climatic conditions, like watershed planning and climate change adaptation planning, allows for more informed decision making about development. Specifically, it informs decision makers on which areas will be most flood-prone in the future, so development can be directed away from these areas.</p> <p>Regulatory tools are useful in enforcing flood-smart development. Zoning can be used to ensure flood-prone areas are not densely developed. It can also help preserve natural spaces. Building codes and ordinances can mandate that buildings are elevated about Base Flood Elevation. Regulations can dictate permeable surface requirements.</p>
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Thunderstorms, Tornados, Tropical Cyclones, Wildfires, Winter Weather

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Pursue Protect Property Activities
LEAD AGENCY	Parish Floodplain Managers
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	3-5 years
COST ESTIMATE	Staff hours
POSSIBLE FUNDING SOURCE(S)	Municipal Funds, Parish Funds, FEMA, State Mitigation Grants
GOAL ALIGNMENT	Goal 4: Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Pursue property protection and mitigation activities on a case-by-case basis at the building or neighborhood level. Property protection measures may include building acquisition, dry and wet floodproofing, home elevation programs, and promoting flood insurance.
Type of Mitigation Action	Property Protection
How Action Aligns with Risk Reduction	Property protection and property mitigation activities either fortify property or move it out of harm's way. Building acquisitions and buy-out programs move repetitive loss properties out high-risk areas. Dry and wet floodproofing fortify buildings against floodwater. Home elevation programs elevate buildings above Base Flood Elevation. Promoting flood insurance allows home and business owners to insure their property in the event of a flood.
Current Status of Action	New
Hazard Addressed	Flooding, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF SCOTT	
	DESCRIPTION
MITIGATION ACTION	Targeted Outreach to Small and Local Businesses
LEAD AGENCY	Mayor - City of Scott / Lafayette Parish Government
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	2-3 years
COST ESTIMATE	\$100,000; staff time
POSSIBLE FUNDING SOURCE(S)	FEMA, State Mitigation Grants, Parish Funds, Municipal Funds
GOAL ALIGNMENT	Goal 1: Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact. Goal 5: Maintain continuity of operations during and after natural hazard events
PRIORITY	High
Action Description	Targeted outreach to small and local businesses to encourage and support hazard mitigation, especially flood mitigation. Educate and encourage business owners on how to on their mitigation options. Encourage business continuity planning.
Type of Mitigation Action	Public Information Activities
How Action Aligns with Risk Reduction	Healthy, hazard-ready local businesses help make economies more resilient and recovery more rapid. When local businesses can stay open immediately after a hazard event, it allows residents to return to their community and start the process of hazard recovery more easily.
Current Status of Action	New
Hazard Addressed	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather, Wildfires

#### Additional Supporting Information:

## City of Youngsville Mitigation Actions

*Previous Action Update*

City of Youngsville							
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Goals	Status
<b>Public Education</b>	Continue and expand efforts to educate the public regarding all hazards, including direct mail, technical assistance, and development / implementation of general advertising campaign. Distribute public awareness information regarding flood hazards, SFHA's and potential mitigation measures using the local newspaper, utility bill inserts, inserts in the phone book, a parish hazard awareness website, and an educational program for school age children or "how to" classes in retrofitting by local merchants. Integrate "Disaster Resistance Education" into the public school curriculum. Provide public education on the importance of maintaining the ditches. Benefits: An informed public is better able to respond and protect themselves in times of hazards.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices, Parish Schoolboard	All Hazards	1,2,3,4,5	In Progress and Ongoing
<b>Business Hazards</b>	Work with local businesses to identify hazards to their business and mitigation actions that can be taken to protect Parish's economy.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	1,3,5	in progress and on going



<b>Employee Hazards</b>	Work with parish and municipal employees to identify potential ways to mitigate the impact of hazards upon employees, assets and infrastructure.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayor's Offices	All Hazards	1,2,3,4,5	in progress and on going
<b>Flood Insurance</b>	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	FEMA, State, Local	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Floodplain Managers or Designee	All Hazards	1	in progress and on going
<b>Community Rating System</b>	Work to improve Community Rating System (CRS) rating.	FEMA, State, Local	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Floodplain Managers or Designee	Floods	1,2,3,4,5	In progress and on going
<b>Insurance Partnerships</b>	Develop partnerships with insurance companies to promote building codes	FEMA, State, Local	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards		In progress and on going
<b>FIRMS/DFIRMS</b>	Work with FEMA to update FIRMS / DFIRMS	FEMA, State, Local	1-5 Years	Lafayette City-Parish Public Works, City/Town Mayors' Offices	Flooding (Flash and Riverine)		in progress and on going
<b>Update Mitigation Requirements</b>	Continue to include and update mitigation requirements in floodplain development regulations.	FEMA, State, Local	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	Flooding (Flash and Riverine)	1,2,3,4,5	In progress
<b>Auxiliary Power Sources</b>	Identify and prioritize auxiliary power sources for critical infrastructure.	FEMA, State, Local	1-5 Years	Lafayette Utilities Service, Private Energy Providers	All Hazards	5	in progress and on going
<b>Hazardous Materials Training</b>	Train First Responders (EMS Personnel) in hazardous materials incidents.	FEMA, State, Local	1-5 Years	Lafayette Fire and Volunteer Departments, City/Town Mayor's Offices	Hazardous Materials Incidents	5	Completed and on going

<b>Terrorism Review</b>	Conduct parish-wide terrorism critical infrastructure review.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Terrorism	5	in progress and on going
<b>Preparedness Coordination</b>	Coordination of all preparedness and mitigation efforts; hosting disaster response drills; regular attendance at networking and coordination meetings.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	5	in progress and on going
<b>NIMS and ICS Training</b>	Work to provide training to emergency personnel Parish-wide in NIMS and ICS.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	All Hazards	5	In progress
<b>Monitoring and Communications Enhancement</b>	Work to enhance monitoring and communications systems to improve ability to predict and prepare for flood events, including connection with Lafayette Parish Flood Warning System.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, City/Town Mayors' Offices	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure)	1,2,3,4,5	In progress
<b>International Building Codes</b>	Implement and enforce International Building Codes.	FEMA, State, Local	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards		Completed and on going
<b>Insurance Partnerships</b>	Develop partnerships with insurance companies to promote building codes.	FEMA, State, Local	1-5 Years	Lafayette City-Parish Consolidated Government Planning, Zoning and Codes, City/Town Mayors' Offices	All Hazards		In progress and on going

<b>Lafayette Emergency Operation Center Hardening</b>	Wind harden and upgrade the Lafayette Emergency Operation Center at 800 South Buchanan Street, by expanding the site to accommodate increasing demand, adding new monitoring equipment and to become more disaster resistant.	FEMA, State, Local	1-5 Years	Lafayette Parish President, Office of Homeland Security and Emergency Preparedness	Floods/ Hurricanes and Tropical Systems/ Thunderstorms, Lightning, High Winds / Hail/ Tornadoes		In progress
<b>Larger Volume Pumps and Pipes</b>	Along Beau Basin Coulee, Coulee Acadiana Lat. 8A, Coulee Mine, LaFamme Road Coulee and Ille de Cannes Coulee increase the drainage capacity of the drainage laterals by installing larger volume pumps and larger pipes.	FEMA, State, Local	1-5 Years	Department of Public Works	Flooding (Flash and Riverine)/ Hurricanes and Tropical Systems	4, 5	In progress and on going
<b>Repetitive Loss Area Drainage</b>	Determine the most feasible drainage projects for each repetitive loss area, as seen on Map 3, to reduce its flood potential (e.g. Beau Basin Coulee and Ille de Cannes Coulee, which are located in the unincorporated areas of the Parish) and implement the identified interior localized drainage project.	FEMA, State, Local	1-5 Years	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager / Community Development and Capital Projects	Flooding (Flash and Riverine)/ Hurricanes and Tropical Systems	2,3,4,5	In progress and on going
<b>Repetitive Loss Structure Improvements</b>	Pursue elevation, acquisition, and flood proofing projects and structural solutions to flooding for repetitive loss structures and severe repetitive loss structures.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine) /Flooding (Dam and Levee Failure) / Hurricanes and Tropical Systems	1,2,3,4	In progress and on going
<b>Update Comprehensive Drainage Plan</b>	Update the comprehensive drainage plan ensuring future protection for areas in the Parish that experience flooding and drainage problems.	FEMA, State, Local	1-5 Years	Parish Engineer / Parish Department of Public Works / Parish Floodplain Manager	Flooding (Flash and Riverine)	2,3,4,5	in progress and on going

<b>Retention and Detention Ponds</b>	Pursue the development of retention and detention ponds to reduce flooding impacts.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Flooding (Flash and Riverine) / Flooding (Dam and Levee Failure) / Hurricanes and Tropical Systems	3,4,5	In progress and on going
<b>Safe Rooms</b>	Pursue opportunities to mitigate structures to use as safe rooms or construct safe rooms throughout the parish.	FEMA, State, Local	1-5 Years	Lafayette Parish Office of Homeland Security and Emergency Preparedness, Mayor of City and City or Parish Floodplain Managers	Hurricanes and Tropical Systems / Tornados / High Wind	3,4,5	Carry Over
<b>Y1 Public Building Wind Hardening</b>	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP and Parish	1-5 years	City of Youngsville/ Lafayette Parish Government	High Wind, Hail, Tropical Cyclone, Tornado	3,4,5	Carried Over/Not Started
<b>Y2 Drainage Projects</b>	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.	HMGP and Parish	1-5 years	City of Youngsville/ Lafayette Parish Government	Flooding, High Wind, Tropical Cyclone	3,4	In Progress

<b>Y3 Residential elevations and acquisitions for repetitive loss and severe repetitive loss properties</b>	Elevation or acquisition-demolition of properties. Benefits: Relieves property owners of the continual flooding problems. Saves flood relief and damage repayment for each property.	HMGP and Parish	1-5 years	City of Youngsville/ Lafayette Parish Government	Flooding, Tropical Cyclone	1,3,4	In Progress
<b>Y4 Safe Room Projects</b>	Construction of a safe room for first responders located in Youngsville. Other locations will be identified based on funding availability.	HMGP and Parish	1-5 years	City of Youngsville/ Lafayette Parish Government	Tornado, high wind, hail, tropical cyclone, flooding	3,4,5	In Progress
<b>Y5 Mitigation Public Outreach</b>	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Drought, Flooding, Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather, Sinkhole, 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.	HMPG and Parish	1-5 years	City of Youngsville/ Lafayette Parish Government	Drought, Flooding, Thunderstorms, Lightning, Hail, High Wind, Tropical Cyclones, Tornado, Wildfire, Winter Weather	1,2,4	Carried Over/Not Started
<b>Y6: Generators for continuity of operations and government</b>	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	FEMA, Local	1-5 years	City of Youngsville/ Lafayette Parish Government	Tornados, Winter Weather, Tropical Cyclones, thunderstorms (lightning, high wind, hail)	3,4,5	In Progress
<b>Y7: Installation of lightning rods and surge protectors at Critical Facilities</b>	install lightning rods and/or surge protectors; Benefits: will help to ensure minimal down time or equipment failures at Critical Facilities	HMPG and Parish	1-5 years	City of Youngsville/ Lafayette Parish Government	Lightning, Thunderstorms	3,4,5	In Progress

<b>Y8: Potable Water</b>	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, Local	1-5 years	City of Youngsville/ Lafayette Parish Government	Tropical Cyclone, Thunderstorms (lightning, high wind, hail), Tornadoes, Drought	3,4,5	In Progress
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*New Mitigation Actions*

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITGATION ACTION	Municipal Complex Building
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	City of Youngsville Police Department
TIMELINE	1-5 years
COST ESTIMATE	\$7,000,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds
GOALS ALIGNMENT	Goal 5 - This action will maintain continuity of operations during and after natural hazard events. Building of a critical facility building for City of Youngsville Administrative, Public Works and Police Department staff with that provides for redundancy of power and the safe and centralized operation of the City during high winds, hail, tropical cyclone, tornado, flooding, lightning, winter and extreme weather.
PRIORITY	High
Action Description	Construct new building for the City Administration, City Police Department and City Public Works Department with new building and plumbing codes, redundancy in power as well as a safe room for emergency operations of Key City Staff and First Responders. Benefits: Reduces down time due to power outages, creates efficiency with centralized city operations on a daily basis and helps assure that the public buildings can be used, occupied and operable during or after storms and other weather-related hazards.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Critical City facilities will be built under the updated building codes and will be equipped with redundancy power and a safe room to protect critical staff to minimize downtime and continue essential operations.
Current Status of Action	New
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclone, Winter Storm, Wildfires

**Additional Supporting Information:**

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Localized Flood Risk Reduction Projects
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	Lafayette Parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-5 years
COST ESTIMATE	\$2,000,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, Lafayette Parish, State Mitigation Grants, FEMA HMGP
GOALS ALIGNMENT	Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Localized retention/detention pond construction, subsurface drainage repair and/or replacement, retention/detention pond outfall and permanent pool elevation modifications
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional conveyance and storage capacity of the stormwater management system.
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding

#### Additional Supporting Information:



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Regional Detention Ponds
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	Lafayette Parish Government, St. Martin Parish Government, Vermilion Parish Government, City of Broussard
TIMELINE	1-5 years
COST ESTIMATE	\$5,000,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, Lafayette Parish, State Mitigation Grants, FEMA HMGP, Louisiana Watershed Initiative
GOALS ALIGNMENT	Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Pursue the identification and development of additional regional detention pond projects that will benefit the City of Youngsville, Lafayette, Vermilion and St. Martin Parishes
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional storage capacity within the watershed's stormwater management system and thereby reducing the amount of runoff threatening to flood road, critical facilities, homes and businesses within the watershed.
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Regional Detention Ponds
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	Lafayette Parish Government, St. Martin Parish Government, Vermilion Parish Government, City of Broussard
TIMELINE	1-5 years
COST ESTIMATE	\$5,000,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, Lafayette Parish, State Mitigation Grants, FEMA HMGP, Louisiana Watershed Initiative
GOALS ALIGNMENT	Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Pursue the identification and development of additional regional detention pond projects that will benefit the City of Youngsville, Lafayette, Vermilion and St. Martin Parishes
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional storage capacity within the watershed's stormwater management system and thereby reducing the amount of runoff threatening to flood road, critical facilities, homes and businesses within the watershed.
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Regional Detention Ponds
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	Lafayette Parish Government, St. Martin Parish Government, Vermilion Parish Government, City of Broussard
TIMELINE	1-5 years
COST ESTIMATE	\$5,000,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, Lafayette Parish, State Mitigation Grants, FEMA HMGP, Louisiana Watershed Initiative
GOALS ALIGNMENT	Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Pursue the identification and development of additional regional detention pond projects that will benefit the City of Youngsville, Lafayette, Vermilion and St. Martin Parishes
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional storage capacity within the watershed's stormwater management system and thereby reducing the amount of runoff threatening to flood road, critical facilities, homes and businesses within the watershed.
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Anslem Regional Detention Pond
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	GOSHEP, Lafayette parish
TIMELINE	1-5 years
COST ESTIMATE	\$3,500,000
POSSIBLE FUNDING SOURCE(S)	FEMA HMGP, Louisiana Watershed Initiative
GOALS ALIGNMENT	Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Design and construction of a 20-acre regional detention pond adjacent to Anslem Coulee within the City limits of Youngsville or Unincorporated Lafayette Parish.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional storage capacity within the Anslem Coulee watershed reducing the amount flood impacts to road, critical facilities, homes and businesses within the watershed as well as reducing the flows downstream of the detention pond.
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Public/Private Partnership Detention Facilities
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	none
TIMELINE	1-5 years
COST ESTIMATE	\$100,000-\$600,000 per site
POSSIBLE FUNDING SOURCE(S)	FEMA HMGP, Louisiana Watershed Initiative, Local Municipal Funds, State
GOALS ALIGNMENT	Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Design, construction and/or modification of privately owned detention facilities to increase storage capacity and reduce flood risk.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional storage capacity within the various local watersheds reducing the amount flood impacts to road, critical facilities, homes and businesses within the watershed as well as reducing the flows downstream of the detention pond.
Current Status of Action	New
Hazard Addressed	Flooding, Thunderstorms, Tropical Cyclones

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Bridge Replacements and Roadway Crossings
LEAD AGENCY	Mayor - City of Youngsville/Public Works Director
SUPPORTING AGENCIES	LA DOTD
TIMELINE	1-5 years
COST ESTIMATE	\$3,000,000
POSSIBLE FUNDING SOURCE(S)	FEMA HMGP, Louisiana Watershed Initiative, Local Municipal Funds, State
GOALS ALIGNMENT	Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure
PRIORITY	Medium
Action Description	Replace failing and undersized bridges and roadway crossings to increase conveyance capacity to channels and detention facilities.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional conveyance capacity of the existing collection and conveyance systems reducing the amount flood impacts to road, critical facilities, homes and businesses within the watershed.
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding

#### Additional Supporting Information:

Critical locations:

South Larriviere Road, Griffin Road, Bonin Road (2 locations), Fortune Road, Détente Road, Hwy 92, Savoy Road, Hwy 89 (4 locations)

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Rain and Flow Gauges
LEAD AGENCY	Mayor - City of Youngsville/Public Works Director
SUPPORTING AGENCIES	GOHSEP, Lafayette Parish, State OCD
TIMELINE	1-5 years
COST ESTIMATE	\$350,000
POSSIBLE FUNDING SOURCE(S)	FEMA HMGP, Louisiana Watershed Initiative, Local Municipal Funds, State
GOALS ALIGNMENT	<p>Goal 1 – Improve education and outreach regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact;</p> <p>Goal 2 – Improve data collection, use, and sharing to reduce the impact of hazards;</p> <p>Goal 3 – Improve capabilities, coordination and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs and activities;</p> <p>Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure;</p> <p>Goal 5 – Maintain continuity of operations during and after natural and hazard events</p>
PRIORITY	Medium
Action Description	Expand and improve hydrologic and hydraulic data for flood and drought predictions, advanced warning, scour at bridges, debris locations, road closures, planning and design of future drainage and infrastructure projects
Type of Mitigation Action	Education and Awareness Programs, Preparedness and Response Actions
How Action Contributes to Risk Reduction	Provides critical information that can protect property and life as well as be used for future planning and design purposes and sharing with adjacent municipal government and agencies.
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding, Drought

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS	
	DESCRIPTION
MITIGATION ACTION	Retrofit/Upgrade Water Supply System
LEAD AGENCY	Mayor - City of Youngsville/Public Works Director
SUPPORTING AGENCIES	Lafayette Utilities System
TIMELINE	1-5 years
COST ESTIMATE	\$5,000,000
POSSIBLE FUNDING SOURCE(S)	FEMA HMGP, Local Municipal Funds, State
GOALS ALIGNMENT	5 – Maintain continuity of operations during and after natural and hazard events
PRIORITY	Medium
Action Description	Repair, update, expand and improve water supply infrastructure
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Provides for continued and additional capacity for higher usage hazards of winter storms, wildfires and droughts
Current Status of Action	New
Hazard Addressed	Winter Storms, Drought, Wildfires

#### Additional Supporting Information:

- Repair wells and plant infrastructure
- Construct additional supply lines and eliminate dead end lines
- Construct additional water storage facility for additional capacity
- Install additional valves within the system to better isolate the system from leaks and to facilitate the use of other systems



IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Establish a Hazard Mitigation and Preparedness Page on City's Website
LEAD AGENCY	Mayor - City of Youngsville/City Engineer
SUPPORTING AGENCIES	City of Youngsville Police Department/City of Youngsville Fire Department
TIMELINE	1-5 years
COST ESTIMATE	\$25,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, State
GOALS ALIGNMENT	<p>Goal 1 – Improve education and outreach regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact;</p> <p>Goal 2 – Improve data collection, use, and sharing to reduce the impact of hazards;</p> <p>Goal 3 – Improve capabilities, coordination and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs and activities;</p> <p>Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure;</p> <p>5 – Maintain continuity of operations during and after natural and hazard events</p>
PRIORITY	High
Action Description	Establish a page on the City's website dedicated to hazard mitigation and preparedness that consists of programs, fact sheets, resources and to educate the public on hazard mitigation and preparedness measures
Type of Mitigation Action	Education and Awareness Programs, Preparedness and Response Actions
How Action Contributes to Risk Reduction	Provides critical information that can protect property and life as well as be used for future planning and design purposes and sharing with adjacent municipal government and agencies.
Current Status of Action	New
Hazard Addressed	Winter Storms, Drought, Wildfires, Thunderstorms, Tornadoes, Tropical Cyclones, Flooding,

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Road Improvements of Roads Subject to Repetitive Flooding and Closure
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	LADOTD, GOHSEP, Lafayette Parish Government
TIMELINE	1-5 years
COST ESTIMATE	\$15,000,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, Lafayette Parish, State Mitigation Grants, FEMA HMGP, State Funding, Federal Highway Funding
GOALS ALIGNMENT	Goal 3 – Improve capabilities, coordination and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs and activities; Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure; 5 – Maintain continuity of operations during and after natural and hazard events
PRIORITY	Medium
Action Description	Improve the drainage, traction, driving conditions or elevate the roadway to preserve the integrity of the roadway for emergency vehicles during an event and to facilitate the continued use of the roadway for residents to evacuate and/or access emergency services, goods and products
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional conveyance as well as providing evacuation and transportation access to goods and services and utilities.
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding, Winter Storms

#### Additional Supporting Information:

Larriviere Road, Bonin Road, Savoy Road, Détente Road, Hwy 89, Fortune Road, Chemin Metairie Parkway North, Hwy 92

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITGATION ACTION	Restrict Floodway and Flood Prone Areas from Development and Use for Drainage
LEAD AGENCY	Mayor - City of Youngsville/City Engineer
SUPPORTING AGENCIES	LADOTD, GOHSEP, Lafayette Parish Government
TIMELINE	1-5 years
COST ESTIMATE	\$250,000 per site
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, Lafayette Parish, State Mitigation Grants, FEMA HMGP, State Funding, LWI
GOALS ALIGNMENT	Goal 3 – Improve capabilities, coordination and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs and activities; Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure;
PRIORITY	Medium
Action Description	Preserve naturally function retention areas and floodway areas with homes or vacant lots that developers may wish to mitigate and purchase the land, enhance the areas and create detention ponds and community park areas
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Contributes to Risk Reduction	Reduces the flood risk by providing additional storage capacity within the watershed's stormwater management system and thereby reducing the amount of runoff threatening to flood road, critical facilities, homes and businesses within the watershed. Open spaces and parks assist in providing additional pervious surface areas to allow for infiltration and reduce flooding
Current Status of Action	New
Hazard Addressed	Thunderstorms, Tropical Cyclone, Flooding

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Update to City of Youngsville's 10 Year Master Plan
LEAD AGENCY	Mayor - City of Youngsville/City Engineer/City Public Works Director
SUPPORTING AGENCIES	City of Youngsville Police Department/City of Youngsville Fire Department
TIMELINE	1-5 years
COST ESTIMATE	\$150,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, State, Federal, FEMA, USACE
GOALS ALIGNMENT	<p>Goal 1 – Improve education and outreach regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact;</p> <p>Goal 2 – Improve data collection, use, and sharing to reduce the impact of hazards;</p> <p>Goal 3 – Improve capabilities, coordination and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs and activities;</p> <p>Goal 4 – Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure;</p> <p>5 – Maintain continuity of operations during and after natural and hazard events</p>
PRIORITY	Medium
Action Description	Update the City's 10 Year masterplan to include additional projects and activities to address repairs and improvements to the City's water, sewer, roadway and drainage infrastructure and to identify and plan for additional projects and activities to address hazards of wildfires, drought, thunderstorms, flooding, tornadoes, tropical cyclones and winter storms
Type of Mitigation Action	Education and Awareness Programs, Preparedness and Response Actions, local planning and regulations
How Action Contributes to Risk Reduction	Provides critical information as well as serves for an important informational tool to address the management of the City's infrastructure to protect property and life as well as be used for future planning and design purposes and sharing with adjacent municipal government and agencies.
Current Status of Action	New
Hazard Addressed	Winter Storms, Drought, Wildfires, Thunderstorms, Tornadoes, Tropical Cyclones, Flooding,

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Heating and Cooling Stations
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	Lafayette parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$75,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, State, FEMA
GOALS ALIGNMENT	Goal 3 – Improve capabilities, coordination and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs and activities;
PRIORITY	Medium
Action Description	Identify and designate climate-controlled centers to shelter residents in the event of utility failure during extreme heat or extreme cold.
Type of Mitigation Action	Preparedness and Response Actions
How Action Contributes to Risk Reduction	During extreme weather events, residents would have access to shelter in climate-controlled environments, reducing risk of health problems due to heat or cold.
Current Status of Action	New
Hazard Addressed	Winter Storms, Drought, Thunderstorms, Tornadoes, Tropical Cyclones, Excessive Heat

#### Additional Supporting Information:

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF YOUNGSVILLE	
	DESCRIPTION
MITIGATION ACTION	Public Education and Outreach on Extreme Temperature Risk and Safety
LEAD AGENCY	Mayor - City of Youngsville
SUPPORTING AGENCIES	Lafayette parish Office of Homeland Security and Emergency Preparedness
TIMELINE	1-3 years
COST ESTIMATE	\$20,000
POSSIBLE FUNDING SOURCE(S)	Local Municipal Funds, State, FEMA
GOALS ALIGNMENT	Goal 1 – Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact
PRIORITY	Medium
Action Description	Development and distribution of Public Information Documents regarding Extreme Temperature Risk and Safety to City residents via mail, social media and the City's website.
Type of Mitigation Action	Preparedness and Response Actions; Education and Awareness Programs
How Action Contributes to Risk Reduction	Residents would have access to information on safety and preparedness for extreme weather events; especially heat and cold which would make residents more prepared to endure heat and cold weather events.
Current Status of Action	New
Hazard Addressed	Winter Storms, Drought, Excessive Heat

#### Additional Supporting Information:

### Action Prioritization

During the prioritization process, 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. Therefore, many projects were prioritized with these factors in mind. In addition, prioritization of the mitigation actions was performed based on the following economic criteria: i) whether the action can be performed with the existing parish resources; ii) whether the action requires additional funding from external sources; and iii) relative costs of the mitigation actions.

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

The steering committee prioritized the possible activities that could be pursued. Steering committee members consulted appropriate agencies in order to assist with the prioritizations. The results were items that address the major hazards, are appropriate for those hazards, are cost-effective, and are affordable. The steering committee met internally for mitigation action meetings to review and approve mitigation actions for Lafayette City-Parish Consolidated Government and the incorporated jurisdictions. On-going actions, as well as actions which will provide maximum benefit that can be undertaken by existing parish staff with or without additional external funding were given high priority. The actions with medium benefit and relatively 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 and would result in limited benefit to the community were given low priority.

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

## Appendix A: Planning Process

### Purpose

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

### The Lafayette Parish Hazard Mitigation Plan Update

The Lafayette Parish Hazard Mitigation Plan Update process began in September 2020 with a series of emails, phone calls, meetings, and collaborations between the contractor (SDMI) and a diverse group of participating agencies and stakeholders. Update activities were intended to give each participating agency and stakeholder the opportunity to shape the plan to best fit their community's mitigation goals. Community stakeholders and the general public were invited to attend and contribute information to the planning process during specific time periods or meetings.

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

Date	Meeting or Outreach	Location	Public Invited	Purpose
10/5/2020	Kick Off Email	Email	No	Schedule kick off call with Parish OHSEP and SDMI Staff.
10/5/2020	Kick Off Meeting	Phone Conference	No	Discuss with the Parish OHSEP Director and Engineer expectations and requirements of the project. Discuss meeting schedules, committee make up, and next steps.
10/29/2020	Parish Requested Meeting	Lafayette, LA	No	Discuss plan update requirements with Parish OHSEP Director, Parish Administrator, Engineer, and SDMI Staff.
11/11/2020	Lafayette C-PCG Drainage Committee Meeting	Lafayette, LA	No	Presentation of Hazard Mitigation Plan Update Process to Lafayette City-Parish Consolidated Government Drainage Committee by Lafayette OHSEP and SDMI Staff.
12/15/2020	Steering Committee Meeting (Planning Process)	Lafayette, LA	No	Discussion with Lafayette Parish Hazard Mitigation Steering Committee the process and expectations of plan participants. Discuss timeline and action items of each jurisdiction and parish.
3/10/2021	Steering Committee Meeting (Mitigation Actions)	Lafayette, LA	No	Discussion with Lafayette Parish Hazard Mitigation Steering Committee of the outstanding data required for plan update, as well as discussion of mitigation actions (old and new) for plan update. Continued timeline discussions.
4/14/2021	Risk Assessment Review with Steering Committee	Lafayette, LA	Yes	Presentation of Risk Assessment Hazards and maps to Steering Committee.



Date	Meeting or Outreach	Location	Public Invited	Purpose
4/14/2021	Public Meeting	Lafayette, LA	Yes	Presentation of Risk Assessment Hazards and maps to Public. Presentation also includes current mitigation project highlights within communities and public survey discussion.
12/15/2020 – 4/16/2021	Public Opinion Survey	Online	Yes	This survey asked participants about public perceptions and opinions regarding natural hazards in Lafayette Parish. In addition, questions covered the methods and techniques preferred for reducing the risks and losses associated with these hazards. Survey Results: <a href="https://www.surveymonkey.com/results/SM-LVLW9V9L9/">https://www.surveymonkey.com/results/SM-LVLW9V9L9/</a>

## Planning

The plan update process consisted of several phases:

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

## Coordination

The Lafayette Parish Office of Homeland Security and Emergency Preparedness (OHSEP) and Lafayette City-Parish Consolidated Government oversaw the coordination of the 2021 Hazard Mitigation Plan Update Steering Committee during the update process. The parish OHSEP was responsible for identifying members for the committee.

The Parish Assistant Director was responsible for inviting the steering committee and key stakeholders to planned meetings and activities via email and phone calls. SDMI assisted the Parish Assistant Director with press releases and social media statements for notification to the media and general public for public meetings and public outreach activities.

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

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

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

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

- Participation in Hazard Mitigation planning meetings at the local and parish level
- Coordination with Lafayette Drainage Committee
- Community Rating System Meetings and coordination
- Sharing local data and information with jurisdictions
- Incorporation of other planning documents, studies and efforts
- Action item development and action progress from 2016 update
- Risk Assessment review
- Plan document draft review
- Formal adoption of the Hazard Mitigation Plan

SDMI assisted Lafayette City-Parish Consolidated Government with encouraging the collaboration with neighboring communities by recommending the involvement of the neighboring parishes of Vermilion, Iberia, St Martin and Acadia in the planning process. These neighboring parishes had open invitations to attend any of the planning meetings. Each of these parishes, among others, are currently actively involved as a region in the Louisiana Watershed Initiative (LWI Region 5). Lafayette City-Parish Consolidated Government is also pursuing multi parish mitigation activities and undergoing active recovery efforts from Hurricanes Laura, Delta, and the Winter Storm of 2021. Lafayette City-Parish Consolidated government is aligned with each of these neighboring parishes on future mitigation strategies as a region. The participation of the GOHSEP Region 4 Coordinator during the process also contributed to neighboring community representation.

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

The 2021 Hazard Mitigation Plan Update Steering Committee consisted of representatives from the following parish, municipal or community stakeholders. Below is a detailed list of the 2021 HMPU Steering Committee:

Lafayette Parish Hazard Mitigation Steering Committee			
Name	Title	Agency	Email
Josh Guillory	Mayor/President	Lafayette City-Parish Consolidated Government	<a href="mailto:mayorpresidentsoffice@lafayettela.gov">mayorpresidentsoffice@lafayettela.gov</a>
Craig Stansbury	Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>

Linda Lavergne	Assistant Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Melanie Jumonville	Budget Analyst	Lafayette City-Parish Consolidated Government	<a href="mailto:mjumonville@lafayettela.gov">mjumonville@lafayettela.gov</a>
Stephanie Weeks	Flood Plain Administrator	Lafayette City-Parish Consolidated Government	<a href="mailto:sweeks@lafayettela.gov">sweeks@lafayettela.gov</a>
Mary Sliman	Development and Planning Director	Lafayette City-Parish Consolidated Government	<a href="mailto:msliman@lafayettela.gov">msliman@lafayettela.gov</a>
Melinda Felps	Accounting Manager	Lafayette City-Parish Consolidated Government	<a href="mailto:mfelps@lafayettela.gov">mfelps@lafayettela.gov</a>
Don Chauvin	City Manager	City of Carencro	<a href="mailto:dchauvin@carencro.org">dchauvin@carencro.org</a>
Lowell Duhon	Utilities Director	Lafayette Utilities Systems	<a href="mailto:lduhon@lafayettela.gov">lduhon@lafayettela.gov</a>
Chad Nepveaux	Public Works Director	Lafayette City-Parish Consolidated Government	<a href="mailto:cnepveaux@lafayettela.gov">cnepveaux@lafayettela.gov</a>
Mayor Ray Bourque	Mayor	City of Broussard	<a href="mailto:mayorbourque@broussardla.com">mayorbourque@broussardla.com</a>
Mayor Glenn	Mayor	City of Carencro	<a href="mailto:mayor@carencro.org">mayor@carencro.org</a>
Mayor Johnny Paul Thibodeaux	Mayor	Town of Duson	<a href="mailto:dusonla@cox-internet.com">dusonla@cox-internet.com</a>
Mayor Jan-Scott	Mayor	City of Scott	<a href="mailto:jrichard@cityofscott.org">jrichard@cityofscott.org</a>
Mayor Ken Ritter	Mayor	City of Youngsville	<a href="mailto:kenritter@youngsvillela.gov">kenritter@youngsvillela.gov</a>
Joey Pons	Director of Risk Management	The University of Louisiana at Lafayette	<a href="mailto:safetyman@louisiana.edu">safetyman@louisiana.edu</a>
Steven Picou	Executive Director	Lafayette Regional Airport	<a href="mailto:stevenp@lftairport.com">stevenp@lftairport.com</a>
Desiree Early	Director of Risk Management	Lafayette School Board	<a href="mailto:ddearly@lpssonline.com">ddearly@lpssonline.com</a>
Chief Thomas Glover	Police Chief	Lafayette Police Department	<a href="mailto:tglover@lafayettela.gov">tglover@lafayettela.gov</a>
Sheriff Mark Garber	Sheriff	Lafayette Sheriff's Office	<a href="mailto:mark.garber@lafayettesheriff.com">mark.garber@lafayettesheriff.com</a>
Chief Robert Benoit	Fire Chief	Lafayette Fire Department	<a href="mailto:rpbenoit@lafayettela.gov">rpbenoit@lafayettela.gov</a>
Donnie Simon	Region 4 Hospital Emergency Preparedness Coordinator	Louisiana Department of Health	<a href="mailto:donald.simon@lourdesrmc.com">donald.simon@lourdesrmc.com</a>
Troy Guidry	Sr. Director of Operations	Acadian Ambulance Service, Inc.	<a href="mailto:tguidry@acadian.com">tguidry@acadian.com</a>
Warren Abadie	Director of Traffic and Transportation	Lafayette City-Parish Consolidated Government	<a href="mailto:wabadie@lafayettela.gov">wabadie@lafayettela.gov</a>
Pam Deville	Director	Cajundome	<a href="mailto:pdeville@cajundome.com">pdeville@cajundome.com</a>
Pamela Granger	President/Owner	McBade Engineers & Consultants, LLC	<a href="mailto:pamelag@mcbadeengineers.com">pamelag@mcbadeengineers.com</a>
Tammy Vincent	Administrative Assistant / Floodplain Administrator	City of Scott	<a href="mailto:tvincent@cityofscott.org">tvincent@cityofscott.org</a>
Jeffrey Giering	SHMO	GOHSEP	<a href="mailto:jeffrey.giering@la.gov">jeffrey.giering@la.gov</a>
Lauren Morgan	Associate Director	SDMI	<a href="mailto:lstevens@lsu.edu">lstevens@lsu.edu</a>
Chris Rippetoe	Hazard Mitigation Program Manager	SDMI	<a href="mailto:crippe2@lsu.edu">crippe2@lsu.edu</a>
Chris Andrus	Fire Communications Chief	Lafayette Fire Department	<a href="mailto:candrus@lafayettela.gov">candrus@lafayettela.gov</a>
Mel Bertrand	City Manager/ Director	City of Broussard	<a href="mailto:mel@broussardla.com">mel@broussardla.com</a>
Missy Lacassin	Executive Assistant	City of Broussard	<a href="mailto:mlacassin@broussardla.com">mlacassin@broussardla.com</a>

Sally Angers	City Clerk	City of Youngsville	<a href="mailto:sallyangers@youngsvillela.gov">sallyangers@youngsvillela.gov</a>
Anna Doucet	City Engineer	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Anna@fenstermaker.com">Anna@fenstermaker.com</a>
Gary O'Neal	Grants Manger	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Goneal@fenstermaker.com">Goneal@fenstermaker.com</a>
Kim Alleman	Superintendent	Town of Duson	<a href="mailto:kim.alleman@townofduson.com">kim.alleman@townofduson.com</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 Lafayette City-Parish Consolidated Government programs and planning.

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

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

The members of the Lafayette Parish Hazard Mitigation Steering Committee will remain charged with ensuring that the goals and strategies of new and updated local planning documents for their communities or agencies are consistent with the goals and actions of the Hazard Mitigation Plan and will not contribute to increased hazard vulnerability in the parish. Existing plans, studies, and technical information were incorporated in the planning process. Examples include flood data from FEMA and the U. S. Geological Survey. Much of this data was incorporated into the Risk Assessment component of the plan relative to plotting historical events and the magnitude of damages that occurred. The parish's 2016 Hazard Mitigation Plan was also used in the planning process. Other existing data and plans used in the planning process include those listed below.

- Parish Emergency Operations Plan
- Stormwater Management Plan
- Flood Insurance Rate Maps
- Flood Insurance Study for Lafayette Parish
- CRS Coordinators Manual
- Floodplain Management Activity 510
- State of Louisiana Hazard Mitigation Plan

Further information on the plans can be found in the *Capability Assessment*.

## Meeting Documentation and Public Outreach Activities

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

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

**Date:** October 5, 2020

**Location:** Conference Call

**Purpose:** Discuss with the Parish OHSEP Director and Engineer expectations and requirements of the project. Discuss meeting schedules, committee make up, and next steps.

**Public Invitation:** No

**Meeting Invitees:**

Lafayette Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Linda Lavergne	Assistant Director	Lafayette OHSEP
Pamela Granger	President/Owner	McBade Engineers & Consultants, LLC
Chris Rippetoe	Program Manager	LSU-SDMI

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

**Date:** October 29, 2020

**Location:** Lafayette, LA

**Purpose:** Discuss with the Public Works Director, Parish OHSEP Director and Engineer expectations and requirements of the project. Discuss meeting schedules, committee make up, and next steps.

**Public Invitation:** No

**Meeting Invitees:**

Lafayette Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Linda Lavergne	Assistant Director	Lafayette OHSEP
Pamela Granger	President/Owner	McBade Engineers & Consultants, LLC
Lauren Morgan	Associate Director	LSU-SDMI
Chris Rippetoe	Program Manager	LSU-SDMI
Chad Nepveux	Public Works Director	Lafayette City-Parish Consolidated Government

**Meeting #3: Lafayette Drainage District Committee Meeting****Date:** October 14, 2020**Location:** Rosa Parks Transportation Center – Lafayette, LA**Purpose:** Presentation of Hazard Mitigation Plan Update Process to Lafayette Parish Drainage Committee by Lafayette OHSEP and SDMI Staff.**Public Invitation:** No**Meeting Invitees:**

Lafayette Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Lauren Morgan	Associate Director	LSU-SDMI
Chris Rippetoe	Program Manager	LSU-SDMI

\*\*All other meeting invitees were managed and handled by the Lafayette Drainage District Committee. Lafayette OHSEP and the Hazard Mitigation Steering Committee requested a presentation to the committee of the Hazard Mitigation Plan Update process and planning project in order to collaborate and consolidate efforts and floodplain management initiatives.

**Meeting #4: Hazard Mitigation Plan Steering Committee Meeting – Planning Process****Date:** December 15, 2020**Location:** Rosa Parks Transportation Center – Lafayette, LA

**Purpose:** Discuss the expectations and requirements of the hazard mitigation plan update process and establish an initial project timeline with the Parish's Hazard Mitigation Plan Steering Committee. Assign each individual the parish data collection for the plan update.

**Public Invitation:** Yes**Meeting Invitees:**

Lafayette Parish Hazard Mitigation Steering Committee			
Name	Title	Agency	Email
Josh Guillory	Mayor/President	Lafayette City-Parish Consolidated Government	<a href="mailto:mayorpresidentsoffice@lafayettela.gov">mayorpresidentsoffice@lafayettela.gov</a>
Craig Stansbury	Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Linda Lavergne	Assistant Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Melanie Jumonville	Budget Analyst	Lafayette City-Parish Consolidated Government	<a href="mailto:mjumonville@lafayettela.gov">mjumonville@lafayettela.gov</a>
Stephanie Weeks	Flood Plain Administrator	Lafayette City-Parish Consolidated Government	<a href="mailto:sweeks@lafayettela.gov">sweeks@lafayettela.gov</a>
Mary Sliman	Development and Planning Director	Lafayette City-Parish Consolidated Government	<a href="mailto:msliman@lafayettela.gov">msliman@lafayettela.gov</a>
Melinda Felps	Accounting Manager	Lafayette City-Parish Consolidated Government	<a href="mailto:mfelps@lafayettela.gov">mfelps@lafayettela.gov</a>
Don Chauvin	City Manager	City of Carencro	<a href="mailto:dchauvin@carencro.org">dchauvin@carencro.org</a>
Lowell Duhon	Utilities Director	Lafayette Utilities Systems	<a href="mailto:lduhon@lafayettela.gov">lduhon@lafayettela.gov</a>
Chad Nepveux	Public Works Director	Lafayette City-Parish Consolidated Government	<a href="mailto:cnepveux@lafayettela.gov">cnepveux@lafayettela.gov</a>
Mayor Ray Bourque	Mayor	City of Broussard	<a href="mailto:mayorbourque@broussardla.com">mayorbourque@broussardla.com</a>
Mayor Glenn Brasseaux	Mayor	City of Carencro	<a href="mailto:mayor@carencro.org">mayor@carencro.org</a>

Mayor Johnny Paul Thibodeaux	Mayor	Town of Duson	<a href="mailto:dusonla@cox-internet.com">dusonla@cox-internet.com</a>
Mayor Jan-Scott Richard	Mayor	City of Scott	<a href="mailto:jrichard@cityofscott.org">jrichard@cityofscott.org</a>
Mayor Ken Ritter	Mayor	City of Youngsville	<a href="mailto:kenritter@youngsvillela.gov">kenritter@youngsvillela.gov</a>
Joey Pons	Director of Risk Management	The University of Louisiana at Lafayette	<a href="mailto:safetyman@louisiana.edu">safetyman@louisiana.edu</a>
Steven Picou	Executive Director	Lafayette Regional Airport	<a href="mailto:stevenp@lftairport.com">stevenp@lftairport.com</a>
Desiree Early	Director of Risk Management	Lafayette School Board	<a href="mailto:ddearly@lpssonline.com">ddearly@lpssonline.com</a>
Chief Thomas Glover	Police Chief	Lafayette Police Department	<a href="mailto:tglover@lafayettela.gov">tglover@lafayettela.gov</a>
Sheriff Mark Garber	Sheriff	Lafayette Sheriff's Office	<a href="mailto:mark.garber@lafayettesheriff.com">mark.garber@lafayettesheriff.com</a>
Chief Robert Benoit	Fire Chief	Lafayette Fire Department	<a href="mailto:rpbenoit@lafayettela.gov">rpbenoit@lafayettela.gov</a>
Donnie Simon	Region 4 Hospital Emergency Preparedness Coordinator	Louisiana Department of Health	<a href="mailto:donald.simon@lourdesrhc.com">donald.simon@lourdesrhc.com</a>
Troy Guidry	Sr. Director of Operations	Acadian Ambulance Service, Inc.	<a href="mailto:tguidry@acadian.com">tguidry@acadian.com</a>
Warren Abadie	Director of Traffic and Transportation	Lafayette City-Parish Consolidated Government	<a href="mailto:wabadie@lafayettela.gov">wabadie@lafayettela.gov</a>
Pam Deville	Director	Cajundome	<a href="mailto:pdeville@cajundome.com">pdeville@cajundome.com</a>
Pamela Granger	President/Owner	McBade Engineers & Consultants, LLC	<a href="mailto:pamelag@mcbadeengineers.com">pamelag@mcbadeengineers.com</a>
Tammy Vincent	Administrative Assistant / Floodplain Administrator	City of Scott	<a href="mailto:tvincen@cityofscott.org">tvincen@cityofscott.org</a>
Jeffrey Giering	SHMO	GOHSEP	<a href="mailto:jeffrey.giering@la.gov">jeffrey.giering@la.gov</a>
Lauren Morgan	Associate Director	SDMI	<a href="mailto:lsteven@lsu.edu">lsteven@lsu.edu</a>
Chris Rippetoe	Hazard Mitigation Program Manager	SDMI	<a href="mailto:crippe2@lsu.edu">crippe2@lsu.edu</a>
Chris Andrus	Fire Communications Chief	Lafayette Fire Department	<a href="mailto:candrus@lafayettela.gov">candrus@lafayettela.gov</a>
Mel Bertrand	City Manager/ Director	City of Broussard	<a href="mailto:mel@broussardla.com">mel@broussardla.com</a>
Missy Lacassin	Executive Assistant	City of Broussard	<a href="mailto:mlacassin@broussardla.com">mlacassin@broussardla.com</a>
Sally Angers	City Clerk	City of Youngsville	<a href="mailto:sallyangers@youngsvillela.gov">sallyangers@youngsvillela.gov</a>
Anna Doucet	City Engineer	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Anna@fenstermaker.com">Anna@fenstermaker.com</a>
Gary O'Neal	Grants Manager	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Goneal@fenstermaker.com">Goneal@fenstermaker.com</a>
Kim Alleman	Superintendent	Town of Duson	<a href="mailto:kim.alleman@townofduson.com">kim.alleman@townofduson.com</a>
Jessica Cornay	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Design & Development	<a href="mailto:jcornay@lafayettela.gov">jcornay@lafayettela.gov</a>
Fred Trahan	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Project Control	<a href="mailto:ftrahan@lafayettela.gov">ftrahan@lafayettela.gov</a>
Brian Smith	Director of Drainage	City of Lafayette & Lafayette C-PCG Drainage	<a href="mailto:bsmith@lafayettela.gov">bsmith@lafayettela.gov</a>



Jeanne Hornsby	Engineer	City of Carencro/ C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:jeanne@fenstermaker.com">jeanne@fenstermaker.com</a>
Walter Comeaux	Engineer	City of Broussard/Comeaux Engineering	<a href="mailto:walter4@comeauxengineering.com">walter4@comeauxengineering.com</a>

**LAFAYETTE PARISH HAZARD MITIGATION PLAN UPDATE PLANNING COMMITTEE MEETING**  
**December 15, 2020**

Name	Organization	Email
Melanie Jumanville	LCG	<a href="mailto:mjumanville@lafayettela.gov">mjumanville@lafayettela.gov</a>
Rickey Boudreaux	Youngsville P.D.	<a href="mailto:rickyboudreaux@youngsvillepd.org">rickyboudreaux@youngsvillepd.org</a>
Toby Landry	LPSO	<a href="mailto:tobywl@lftpsd.com">tobywl@lftpsd.com</a>
Timmy Vincent	City of Scott	<a href="mailto:tvincen@cityofscott.org">tvincen@cityofscott.org</a>
Don Chauvin	CARENCRO	<a href="mailto:CITYMANAGER@CARENCRO.ORG">CITYMANAGER@CARENCRO.ORG</a>
Jeanne Hornsby	Fenstermaker	<a href="mailto:jeanne@fenstermaker.com">jeanne@fenstermaker.com</a>
Anna Doucet	Fenstermaker	<a href="mailto:anna@fenstermaker.com">anna@fenstermaker.com</a>
Adam Olivier	Acadian Ambulance	<a href="mailto:Stephen.Olivier@Acadian.com">Stephen.Olivier@Acadian.com</a>
JOSH GUILLORY	LAFAYETTE PARISH	
Fred Trahan	LCG - Public Works	<a href="mailto:fttrahan@lafayettela.gov">fttrahan@lafayettela.gov</a>
Brian Smith	LCG - Drainage	<a href="mailto:bsmith@lafayettela.gov">bsmith@lafayettela.gov</a>
Clint Simoneaux	City of Youngsville	<a href="mailto:clintsimoneaux@youngsvillela.gov">clintsimoneaux@youngsvillela.gov</a>
Chris Andrus	LFD	<a href="mailto:candrus@lafayettela.gov">candrus@lafayettela.gov</a>
DALE LEBLANC	McBade Engineers	<a href="mailto:dale@mcbadengineers.com">dale@mcbadengineers.com</a>
Jennifer Comeaux	Lafayette Airport Comm	<a href="mailto:Jennifer.c@lftairport.com">Jennifer.c@lftairport.com</a>
Maurice Boulet	APC	<a href="mailto:mboulet@planacadiane.org">mboulet@planacadiane.org</a>
Jessica Cornaty	LCG - PW	<a href="mailto:jcomaty@lafayettela.gov">jcomaty@lafayettela.gov</a>
Troy Guidry	Acadian Ambulance	<a href="mailto:troy.guidry@acadian.com">troy.guidry@acadian.com</a>
Laurie Rice	LSU   Stephenson Disaster Management Institute	<a href="mailto:lrice@lafayettela.gov">lrice@lafayettela.gov</a>
Chad Algreant	LCG - PW	<a href="mailto:calgreant@lafayettela.gov">calgreant@lafayettela.gov</a>
Shawn Dixon	CCG - LUS	<a href="mailto:SDixon@LACRIFIELD.GOV">SDixon@LACRIFIELD.GOV</a>

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## LAFAYETTE PARISH HAZARD MITIGATION PLAN UPDATE PLANNING COMMITTEE MEETING

December 15, 2020

Melinda Felps	LCG	mfelps@lafayettela.gov
Desree Easley	LPSS	deasleye@lpssonline.com
Jan-Scott Richard	COS	jrichard@cityofscott.org
Mary Simon	LCG	msliman@lafayettela.gov
Stephanie Wells	LCG	sweels@lafayettela.gov
Linda Laverne	Lafayette DHSEP	llaverne@lafayettela.gov

## Meeting #5: Hazard Mitigation Plan Steering Committee Meeting – Mitigation Actions

**Date:** March 10, 2021**Location:** Lafayette Parish Emergency Operations Center – Lafayette, LA**Purpose:** Discussion with Lafayette Parish Hazard Mitigation Steering Committee of the outstanding data required for plan update, as well as discussion of mitigation actions (old and new) for plan update. Continued timeline discussions.**Public Invitation:** Yes**Meeting Invitees:**

Lafayette Parish Hazard Mitigation Steering Committee			
Name	Title	Agency	Email
Josh Guillory	Mayor/President	Lafayette City-Parish Consolidated Government	<a href="mailto:mayorpresidentsoffice@lafayettela.gov">mayorpresidentsoffice@lafayettela.gov</a>
Craig Stansbury	Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Linda Lavergne	Assistant Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Melanie Jumonville	Budget Analyst	Lafayette City-Parish Consolidated Government	<a href="mailto:mjumonville@lafayettela.gov">mjumonville@lafayettela.gov</a>
Stephanie Weeks	Flood Plain Administrator	Lafayette City-Parish Consolidated Government	<a href="mailto:sweeks@lafayettela.gov">sweeks@lafayettela.gov</a>
Mary Sliman	Development and Planning Director	Lafayette City-Parish Consolidated Government	<a href="mailto:msliman@lafayettela.gov">msliman@lafayettela.gov</a>
Melinda Felps	Accounting Manager	Lafayette City-Parish Consolidated Government	<a href="mailto:mfelps@lafayettela.gov">mfelps@lafayettela.gov</a>
Don Chauvin	City Manager	City of Carencro	<a href="mailto:dchauvin@carencro.org">dchauvin@carencro.org</a>
Lowell Duhon	Utilities Director	Lafayette Utilities Systems	<a href="mailto:lduhon@lafayettela.gov">lduhon@lafayettela.gov</a>
Chad Nepveux	Public Works Director	Lafayette City-Parish Consolidated Government	<a href="mailto:cnepveux@lafayettela.gov">cnepveux@lafayettela.gov</a>
Mayor Ray Bourque	Mayor	City of Broussard	<a href="mailto:mayorbourque@broussardla.com">mayorbourque@broussardla.com</a>
Mayor Glenn Brasseaux	Mayor	City of Carencro	<a href="mailto:mayor@carencro.org">mayor@carencro.org</a>
Mayor Johnny Paul Thibodeaux	Mayor	Town of Duson	<a href="mailto:dusonla@cox-internet.com">dusonla@cox-internet.com</a>
Mayor Jan-Scott Richard	Mayor	City of Scott	<a href="mailto:jrichard@cityofscott.org">jrichard@cityofscott.org</a>
Mayor Ken Ritter	Mayor	City of Youngsville	<a href="mailto:kenritter@youngsvillela.gov">kenritter@youngsvillela.gov</a>
Joey Pons	Director of Risk Management	The University of Louisiana at Lafayette	<a href="mailto:safetyman@louisiana.edu">safetyman@louisiana.edu</a>
Steven Picou	Executive Director	Lafayette Regional Airport	<a href="mailto:stevenp@lftairport.com">stevenp@lftairport.com</a>
Desiree Early	Director of Risk Management	Lafayette School Board	<a href="mailto:ddearly@lpssonline.com">ddearly@lpssonline.com</a>
Chief Thomas Glover	Police Chief	Lafayette Police Department	<a href="mailto:tglover@lafayettela.gov">tglover@lafayettela.gov</a>
Sheriff Mark Garber	Sheriff	Lafayette Sheriff's Office	<a href="mailto:mark.garber@lafayettesheriff.com">mark.garber@lafayettesheriff.com</a>
Chief Robert Benoit	Fire Chief	Lafayette Fire Department	<a href="mailto:rpbenoit@lafayettela.gov">rpbenoit@lafayettela.gov</a>
Donnie Simon	Region 4 Hospital Emergency Preparedness Coordinator	Louisiana Department of Health	<a href="mailto:donald.simon@lourdesrhc.com">donald.simon@lourdesrhc.com</a>
Troy Guidry	Sr. Director of Operations	Acadian Ambulance Service, Inc.	<a href="mailto:tguidry@acadian.com">tguidry@acadian.com</a>

Warren Abadie	Director of Traffic and Transportation	Lafayette City-Parish Consolidated Government	<a href="mailto:wabadie@lafayettela.gov">wabadie@lafayettela.gov</a>
Pam Deville	Director	Cajundome	<a href="mailto:pdeville@cajundome.com">pdeville@cajundome.com</a>
Pamela Granger	President/Owner	McBade Engineers & Consultants, LLC	<a href="mailto:pamelag@mcbadeengineers.com">pamelag@mcbadeengineers.com</a>
Tammy Vincent	Administrative Assistant / Floodplain Administrator	City of Scott	<a href="mailto:tvincent@cityofscott.org">tvincent@cityofscott.org</a>
Jeffrey Giering	SHMO	GOHSEP	<a href="mailto:jeffrey.giering@la.gov">jeffrey.giering@la.gov</a>
Lauren Morgan	Associate Director	SDMI	<a href="mailto:lsteven@lsu.edu">lsteven@lsu.edu</a>
Chris Rippetoe	Hazard Mitigation Program Manager	SDMI	<a href="mailto:crippe2@lsu.edu">crippe2@lsu.edu</a>
Chris Andrus	Fire Communications Chief	Lafayette Fire Department	<a href="mailto:candrus@lafayettela.gov">candrus@lafayettela.gov</a>
Mel Bertrand	City Manager/ Director	City of Broussard	<a href="mailto:mel@broussardla.com">mel@broussardla.com</a>
Missy Lacassin	Executive Assistant	City of Broussard	<a href="mailto:mlacassin@broussardla.com">mlacassin@broussardla.com</a>
Sally Angers	City Clerk	City of Youngsville	<a href="mailto:sallyangers@youngsvillela.gov">sallyangers@youngsvillela.gov</a>
Anna Doucet	City Engineer	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Anna@fenstermaker.com">Anna@fenstermaker.com</a>
Gary O'Neal	Grants Manger	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Goneal@fenstermaker.com">Goneal@fenstermaker.com</a>
Kim Alleman	Superintendent	Town of Duson	<a href="mailto:kim.alleman@townofduson.com">kim.alleman@townofduson.com</a>
Jessica Cornay	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Design & Development	<a href="mailto:jcornay@lafayettela.gov">jcornay@lafayettela.gov</a>
Fred Trahan	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Project Control	<a href="mailto:ftrahan@lafayettela.gov">ftrahan@lafayettela.gov</a>
Brian Smith	Director of Drainage	City of Lafayette & Lafayette C-PCG Drainage	<a href="mailto:bsmith@lafayettela.gov">bsmith@lafayettela.gov</a>
Jeanne Hornsby	Engineer	City of Carencro/ C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:jeanne@fenstermaker.com">jeanne@fenstermaker.com</a>
Walter Comeaux	Engineer	City of Broussard/Comeaux Engineering	<a href="mailto:walter4@comeauxengineering.com">walter4@comeauxengineering.com</a>

## LAFAYETTE PARISH HAZARD MITIGATION WORKSHOP

March 10, 2021

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Name	Organization	Email
Lauren Moran	LSU	Lsterens@LSU.edu
Anna Dalgie	LSU	addig35@LSU.edu
Jessica Cornay	LCG	jcornay@lafayettela.gov
Linda Laversne	Lafayette DHEP	llaversne@lafayettela.gov
Don Chauvin	CARENCRO	CITY MANAGER@CARENCRO.ORG
Johnny Thibodeaux	Town of Dusan	Johnny.Thibodeaux@townofdusan.com
Kim D. Allen	Town of Dusan	kim.allen@townofdusan.com
Mel Bertrand	City of Broussard	mel@broussardla.com
Walter Pomeau	City of Proussard	Walter.Pomeau@engineering.com
Brian Smith	LCG - Orange	bsmith@lafayettela.gov
Callie Benton	City of Scott	callie@fenstermaker.com
Abrina Williams	City of Scott	abrina@fenstermaker.com
Melanie Jaramonville	LCG	mjamonville@lafayettela.gov
Garry M. O'Neal, Sr.	Fenstermaker (Scott, Carencro)	spneal@fenstermaker.com



Stephenson Disaster  
Management Institute

## Meeting #6: Risk Assessment Presentation to Steering Committee

**Date:** April 14, 2021**Location:** Robicheaux Center – Lafayette, LA**Purpose:** Presentation of Risk Assessment Hazards and maps to Steering Committee.**Public Invitation:** No**Meeting Invitees:**

Lafayette Parish Hazard Mitigation Steering Committee			
Name	Title	Agency	Email
Josh Guillory	Mayor/President	Lafayette City-Parish Consolidated Government	<a href="mailto:mayorpresidentsoffice@lafayettela.gov">mayorpresidentsoffice@lafayettela.gov</a>
Craig Stansbury	Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Linda Lavergne	Assistant Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Melanie Jumonville	Budget Analyst	Lafayette City-Parish Consolidated Government	<a href="mailto:mjumonville@lafayettela.gov">mjumonville@lafayettela.gov</a>
Stephanie Weeks	Flood Plain Administrator	Lafayette City-Parish Consolidated Government	<a href="mailto:sweeks@lafayettela.gov">sweeks@lafayettela.gov</a>
Mary Sliman	Development and Planning Director	Lafayette City-Parish Consolidated Government	<a href="mailto:msliman@lafayettela.gov">msliman@lafayettela.gov</a>
Melinda Felps	Accounting Manager	Lafayette City-Parish Consolidated Government	<a href="mailto:mfelps@lafayettela.gov">mfelps@lafayettela.gov</a>
Don Chauvin	City Manager	City of Carencro	<a href="mailto:dchauvin@carencro.org">dchauvin@carencro.org</a>
Lowell Duhon	Utilities Director	Lafayette Utilities Systems	<a href="mailto:lduhon@lafayettela.gov">lduhon@lafayettela.gov</a>
Chad Nepveux	Public Works Director	Lafayette City-Parish Consolidated Government	<a href="mailto:cnepveux@lafayettela.gov">cnepveux@lafayettela.gov</a>
Mayor Ray Bourque	Mayor	City of Broussard	<a href="mailto:mayorbourque@broussardla.com">mayorbourque@broussardla.com</a>
Mayor Glenn Brasseaux	Mayor	City of Carencro	<a href="mailto:mayor@carencro.org">mayor@carencro.org</a>
Mayor Johnny Paul Thibodeaux	Mayor	Town of Duson	<a href="mailto:dusonla@cox-internet.com">dusonla@cox-internet.com</a>
Mayor Jan-Scott Richard	Mayor	City of Scott	<a href="mailto:jrichard@cityofscott.org">jrichard@cityofscott.org</a>
Mayor Ken Ritter	Mayor	City of Youngsville	<a href="mailto:kenritter@youngsvillela.gov">kenritter@youngsvillela.gov</a>
Joey Pons	Director of Risk Management	The University of Louisiana at Lafayette	<a href="mailto:safetyman@louisiana.edu">safetyman@louisiana.edu</a>
Steven Picou	Executive Director	Lafayette Regional Airport	<a href="mailto:stevenp@lftairport.com">stevenp@lftairport.com</a>
Desiree Early	Director of Risk Management	Lafayette School Board	<a href="mailto:ddearly@lpssonline.com">ddearly@lpssonline.com</a>
Chief Thomas Glover	Police Chief	Lafayette Police Department	<a href="mailto:tglover@lafayettela.gov">tglover@lafayettela.gov</a>
Sheriff Mark Garber	Sheriff	Lafayette Sheriff's Office	<a href="mailto:mark.garber@lafayettesheriff.com">mark.garber@lafayettesheriff.com</a>
Chief Robert Benoit	Fire Chief	Lafayette Fire Department	<a href="mailto:rpbenoit@lafayettela.gov">rpbenoit@lafayettela.gov</a>
Donnie Simon	Region 4 Hospital Emergency Preparedness Coordinator	Louisiana Department of Health	<a href="mailto:donald.simon@lourdesrhc.com">donald.simon@lourdesrhc.com</a>
Troy Guidry	Sr. Director of Operations	Acadian Ambulance Service, Inc.	<a href="mailto:tguidry@acadian.com">tguidry@acadian.com</a>

Warren Abadie	Director of Traffic and Transportation	Lafayette City-Parish Consolidated Government	<a href="mailto:wabadie@lafayettela.gov">wabadie@lafayettela.gov</a>
Pam Deville	Director	Cajundome	<a href="mailto:pdeville@cajundome.com">pdeville@cajundome.com</a>
Pamela Granger	President/Owner	McBade Engineers & Consultants, LLC	<a href="mailto:pamelag@mcbadeengineers.com">pamelag@mcbadeengineers.com</a>
Tammy Vincent	Administrative Assistant / Floodplain Administrator	City of Scott	<a href="mailto:tvincent@cityofscott.org">tvincent@cityofscott.org</a>
Jeffrey Giering	SHMO	GOHSEP	<a href="mailto:jeffrey.giering@la.gov">jeffrey.giering@la.gov</a>
Lauren Morgan	Associate Director	SDMI	<a href="mailto:lsteven@lsu.edu">lsteven@lsu.edu</a>
Chris Rippetoe	Hazard Mitigation Program Manager	SDMI	<a href="mailto:crippe2@lsu.edu">crippe2@lsu.edu</a>
Chris Andrus	Fire Communications Chief	Lafayette Fire Department	<a href="mailto:candrus@lafayettela.gov">candrus@lafayettela.gov</a>
Mel Bertrand	City Manager/ Director	City of Broussard	<a href="mailto:mel@broussardla.com">mel@broussardla.com</a>
Missy Lacassin	Executive Assistant	City of Broussard	<a href="mailto:mlacassin@broussardla.com">mlacassin@broussardla.com</a>
Sally Angers	City Clerk	City of Youngsville	<a href="mailto:sallyangers@youngsvillela.gov">sallyangers@youngsvillela.gov</a>
Anna Doucet	City Engineer	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Anna@fenstermaker.com">Anna@fenstermaker.com</a>
Gary O'Neal	Grants Manger	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Goneal@fenstermaker.com">Goneal@fenstermaker.com</a>
Kim Alleman	Superintendent	Town of Duson	<a href="mailto:kim.alleman@townofduson.com">kim.alleman@townofduson.com</a>
Jessica Cornay	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Design & Development	<a href="mailto:jcornay@lafayettela.gov">jcornay@lafayettela.gov</a>
Fred Trahan	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Project Control	<a href="mailto:ftrahan@lafayettela.gov">ftrahan@lafayettela.gov</a>
Brian Smith	Director of Drainage	City of Lafayette & Lafayette C-PCG Drainage	<a href="mailto:bsmith@lafayettela.gov">bsmith@lafayettela.gov</a>
Jeanne Hornsby	Engineer	City of Carencro/ C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:jeanne@fenstermaker.com">jeanne@fenstermaker.com</a>
Walter Comeaux	Engineer	City of Broussard/Comeaux Engineering	<a href="mailto:walter4@comeauxengineering.com">walter4@comeauxengineering.com</a>

**Meeting #7: Public Meeting****Date:** April 14, 2021**Location:** Robicheaux Center – Lafayette, 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 Lafayette Parish planning area were provided for the meeting attendees to identify specific areas where localized hazards occur.

**Public Invitation:** Yes**Meeting Invitees:**

Lafayette Parish Hazard Mitigation Steering Committee			
Name	Title	Agency	Email
Josh Guillory	Mayor/President	Lafayette City-Parish Consolidated Government	<a href="mailto:mayorpresidentsoffice@lafayettela.gov">mayorpresidentsoffice@lafayettela.gov</a>
Craig Stansbury	Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Linda Lavergne	Assistant Director	Lafayette Parish OHSEP	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Melanie Jumonville	Budget Analyst	Lafayette City-Parish Consolidated Government	<a href="mailto:mjumonville@lafayettela.gov">mjumonville@lafayettela.gov</a>
Stephanie Weeks	Flood Plain Administrator	Lafayette City-Parish Consolidated Government	<a href="mailto:sweeks@lafayettela.gov">sweeks@lafayettela.gov</a>
Mary Sliman	Development and Planning Director	Lafayette City-Parish Consolidated Government	<a href="mailto:msliman@lafayettela.gov">msliman@lafayettela.gov</a>
Melinda Felps	Accounting Manager	Lafayette City-Parish Consolidated Government	<a href="mailto:mfelps@lafayettela.gov">mfelps@lafayettela.gov</a>
Don Chauvin	City Manager	City of Carencro	<a href="mailto:dchauvin@carencro.org">dchauvin@carencro.org</a>
Lowell Duhon	Utilities Director	Lafayette Utilities Systems	<a href="mailto:lduhon@lafayettela.gov">lduhon@lafayettela.gov</a>
Chad Nepveaux	Public Works Director	Lafayette City-Parish Consolidated Government	<a href="mailto:cnepveaux@lafayettela.gov">cnepveaux@lafayettela.gov</a>
Mayor Ray Bourque	Mayor	City of Broussard	<a href="mailto:mayorbourque@broussardla.com">mayorbourque@broussardla.com</a>
Mayor Glenn Brasseaux	Mayor	City of Carencro	<a href="mailto:mayor@carencro.org">mayor@carencro.org</a>
Mayor Johnny Paul Thibodeaux	Mayor	Town of Duson	<a href="mailto:dusonla@cox-internet.com">dusonla@cox-internet.com</a>
Mayor Jan-Scott Richard	Mayor	City of Scott	<a href="mailto:jrichard@cityofscott.org">jrichard@cityofscott.org</a>
Mayor Ken Ritter	Mayor	City of Youngsville	<a href="mailto:kenritter@youngsvillela.gov">kenritter@youngsvillela.gov</a>
Joey Pons	Director of Risk Management	The University of Louisiana at Lafayette	<a href="mailto:safetyman@louisiana.edu">safetyman@louisiana.edu</a>
Steven Picou	Executive Director	Lafayette Regional Airport	<a href="mailto:stevenp@lftairport.com">stevenp@lftairport.com</a>
Desiree Early	Director of Risk Management	Lafayette School Board	<a href="mailto:ddearly@lpssonline.com">ddearly@lpssonline.com</a>
Chief Thomas Glover	Police Chief	Lafayette Police Department	<a href="mailto:tglover@lafayettela.gov">tglover@lafayettela.gov</a>
Sheriff Mark Garber	Sheriff	Lafayette Sheriff's Office	<a href="mailto:mark.garber@lafayettesheriff.com">mark.garber@lafayettesheriff.com</a>
Chief Robert Benoit	Fire Chief	Lafayette Fire Department	<a href="mailto:rpbenoit@lafayettela.gov">rpbenoit@lafayettela.gov</a>
Donnie Simon	Region 4 Hospital Emergency Preparedness Coordinator	Louisiana Department of Health	<a href="mailto:donald.simon@lourdesrhc.com">donald.simon@lourdesrhc.com</a>



Troy Guidry	Sr. Director of Operations	Acadian Ambulance Service, Inc.	<a href="mailto:tguidry@acadian.com">tguidry@acadian.com</a>
Warren Abadie	Director of Traffic and Transportation	Lafayette City-Parish Consolidated Government	<a href="mailto:wabadie@lafayettela.gov">wabadie@lafayettela.gov</a>
Pam Deville	Director	Cajundome	<a href="mailto:pdeville@cajundome.com">pdeville@cajundome.com</a>
Pamela Granger	President/Owner	McBade Engineers & Consultants, LLC	<a href="mailto:pamelag@mcbadeengineers.com">pamelag@mcbadeengineers.com</a>
Tammy Vincent	Administrative Assistant / Floodplain Administrator	City of Scott	<a href="mailto:tvincent@cityofscott.org">tvincent@cityofscott.org</a>
Jeffrey Giering	SHMO	GOHSEP	<a href="mailto:jeffrey.giering@la.gov">jeffrey.giering@la.gov</a>
Lauren Morgan	Associate Director	SDMI	<a href="mailto:lsteven@lsu.edu">lsteven@lsu.edu</a>
Chris Rippetoe	Hazard Mitigation Program Manager	SDMI	<a href="mailto:crippe2@lsu.edu">crippe2@lsu.edu</a>
Chris Andrus	Fire Communications Chief	Lafayette Fire Department	<a href="mailto:candrus@lafayettela.gov">candrus@lafayettela.gov</a>
Mel Bertrand	City Manager/ Director	City of Broussard	<a href="mailto:mel@broussardla.com">mel@broussardla.com</a>
Missy Lacassin	Executive Assistant	City of Broussard	<a href="mailto:mlacassin@broussardla.com">mlacassin@broussardla.com</a>
Sally Angers	City Clerk	City of Youngsville	<a href="mailto:sallyangers@youngsvillela.gov">sallyangers@youngsvillela.gov</a>
Anna Doucet	City Engineer	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Anna@fenstermaker.com">Anna@fenstermaker.com</a>
Gary O'Neal	Grants Manger	C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:Goneal@fenstermaker.com">Goneal@fenstermaker.com</a>
Kim Alleman	Superintendent	Town of Duson	<a href="mailto:kim.alleman@townofduson.com">kim.alleman@townofduson.com</a>
Jessica Cornay	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Design & Development	<a href="mailto:jcornay@lafayettela.gov">jcornay@lafayettela.gov</a>
Fred Trahan	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Project Control	<a href="mailto:ftrahan@lafayettela.gov">ftrahan@lafayettela.gov</a>
Brian Smith	Director of Drainage	City of Lafayette & Lafayette C-PCG Drainage	<a href="mailto:bsmith@lafayettela.gov">bsmith@lafayettela.gov</a>
Jeanne Hornsby	Engineer	City of Carencro/ C.H. Fenstermaker & Associates, L.L.C.	<a href="mailto:jeanne@fenstermaker.com">jeanne@fenstermaker.com</a>
Walter Comeaux	Engineer	City of Broussard/Comeaux Engineering	<a href="mailto:walter4@comeauxengineering.com">walter4@comeauxengineering.com</a>



**Public Meeting Announcement:****LAFAYETTE PARISH OFFICE OF HOMELAND SECURITY & EMERGENCY PREPAREDNESS****PUBLIC MEETING ANNOUNCEMENT****Lafayette Parish and its partners are seeking community input for the 2021 Lafayette Parish Hazard Mitigation Plan update!**

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

Are you passionate about building a more resilient future for your parish? Do you have questions about the natural hazards your community is at risk to? Please join us on Wednesday April 14th, for a public meeting at 5:30pm to learn more about the plan and share your input on the risks and vulnerabilities that most impact you and your community.

**Meeting Location:**

Robicheaux Center  
1919 Eraste Landry Road  
Lafayette, LA 70506

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

<https://www.surveymonkey.com/r/Lafayettehm2021>

The Parish appreciates your input.

If you have questions, please contact: Linda Lavergne, 337-291-5060

**LAFAYETTE PARISH HAZARD MITIGATION PLAN UPDATE PUBLIC MEETING**  
**April 14, 2021**

Name	Organization	Email	Phone
Linda Lavergne	Lafayette HSEP	coc@lafayettela.gov	337-291-5060
Melanie Sumonville	LCG	mjunonville@lafayettela.gov	337-291-7177
Gray M. O'Neal, Jr.	Fenstermaker City of Scott	goncal@fenstermaker.com	225-788-4434
Abrina Williams	Fenstermaker City of Scott	abrina@fenstermaker.com	979-777-7491
Johnny Thibodeaux	Town of Dumas	Johnnythibodeaux@townofdumas.com	337-501-9598
Larry Anderson	Public	N/A	N/A
Jessica Cornay	DW	jcornay@lafayettela.gov	291-8553
Jeffery Svendsen	DTV Dredge the Vermilion	jsvendsen@dl-llc.com	337-654-7532
Harold Fothergill	Sierra Club		337-417-1550
ROGER PEAK	" "	repeakjr@yahoo.com	337-349-1622
Chris Rippke	LSU-SDMI	crippke2@lsu.edu	
Anna Dargle	LSU-SDMI	addargle@lsu.edu	
BOB HAMMACK	DTV	bobh2@bobbhennacplaw.com	337-280-4346



**LAFAYETTE PARISH HAZARD MITIGATION PLAN UPDATE PUBLIC MEETING**  
**April 14, 2021**

Name	Organization	Email
Joshua Broussard	Fenstermaker, L.L.C.	j.broussard@fenstermaker.com
Andy Sellers	Fenstermaker	andys@fenstermaker.com
Jeremiah Supple	Dredge the Vermilion	js@jeremiahsupple.com
Josh Schreffler	Sierra Club	cadistyle@aol.com
RB Logan	Dredge the Vermilion	loganrb@yahoo.com
Pamela Granger	McBade for Youngsville	pamelag@mcbadengineers.com



### Outreach Activity #1: Public Opinion Survey

**Date:** Ongoing throughout planning process

**Location:** Web survey

**Public Invitation:** Yes

As referenced in the **Error! Reference source not found.** section of this document, an online public opinion survey of Lafayette Parish residents was conducted between December 2020 and April 2021. Full survey results can be found here: <https://www.surveymonkey.com/results/SM-LVLW9V9L9/>

### Outreach Activity #2: Incident Questionnaire

**Date:** April 14, 2021; Public Meeting Activity

**Location:** Public Meeting

**Public Invitation:** Yes

LAFAYETTE PARISH PUBLIC MEETING	
<b>PUBLIC ACTIVITY: INCIDENT/ISSUE QUESTIONNAIRE</b>	<b>4. INTENSITY:</b>
<b>1. HAZARD TYPE(S):</b>	A. DEPTH (FLOODING) OR SIZE (HAIL, ETC.): 
A. FLOODING I. RIVERINE II. STORM SURGE III. STREET IV. OTHER (DESCRIBE): B. HIGH WINDS (NOT TROPICAL) C. COASTAL I. SALTWATER INTRUSION II. EROSION III. OTHER (DESCRIBE): D. TROPICAL SYSTEMS E. WINTER WEATHER	B. WIND STRENGTH 
<b>F. OTHER:</b>	<b>5. RE-OCCURRING OR ONE-TIME</b>
	A. IF RE-OCCURRING, HOW OFTEN? 
<b>2. DESCRIBE INCIDENT OR ISSUE:</b>	<b>6. WHAT TYPE OF INTERRUPTIONS DOES/DID THE INCIDENT OR ISSUE CAUSE? (BUSINESS CLOSURE, DAMAGE, EVACUATION, ETC.)</b>
<b>3. LOCATION:</b>	<b>7. HOW LONG WAS THE INTERRUPTION (HOURS, DAYS, WEEKS, ETC.)?</b>
A. CITY: 	
B. ADDRESS OR AREA: 	<b>8. HOW COULD THIS PROBLEM OR IMPACT BE PREVENTED, FIXED OR ALLEVIATED?</b>
C. LOCALIZED OR DISPERSED: 	

## 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 Lafayette Parish Hazard Mitigation Steering 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 other applicable 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 buildings 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

Lafayette City-Parish Consolidated Government 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

Lafayette City-Parish Consolidated Government has developed a method to ensure monitoring, evaluating, and updating of the HMP occurs during the five-year cycle of the plan. The steering committee will become a permanent body and will be responsible for monitoring, evaluating, and updating of the plan. The steering committee meeting will be held annually in order to monitor, evaluate, and update the plan. The Lafayette Parish OHSEP Assistant Director will be responsible for conducting the annual Steering Committee meetings.

The lead person of the agency responsible for the implementation of a specific mitigation action will submit a progress report to the Assistant 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 fully updated every five years. The annual maintenance, monitoring and evaluation of the plan will be conducted in the annual Steering Committee meeting. The Steering Committee will review each goal to determine their relevance to changing situations in the parish, as well as changes to state or federal policy, and to ensure that they are addressing current and expected conditions. The Steering Committee will evaluate if any change in hazard profile and risk in the parish occurred during the past year. In addition, the evaluation will include the following criteria in respect of plan implementation:

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

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

Additionally, the public will be canvassed to solicit public input to continue Lafayette City-Parish Consolidated Government'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 Lafayette City-Parish Consolidated Government Website.

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 Assistant Director for contacting committee members, organizing the meeting and providing public noticing for the meeting to solicit public input.

### 2021 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 2021 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 Lafayette Parish Hazard Mitigation Plan Steering Committee and participating jurisdictions to determine additional implementation procedures when appropriate. This may include integrating the requirements of the Lafayette Parish Hazard Mitigation Plan into each jurisdiction's planning documents, processes, or mechanisms as follows:

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

Opportunities to integrate the requirements of this plan into other local planning mechanisms will continue to be identified through future meetings of the Lafayette 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.).



While there have been no instances of the mitigation strategy being incorporated into other planning documents since the adoption of the 2016 Lafayette Hazard Mitigation Plan, the committee members recognize the importance of a holistic approach across all planning efforts and will use their standing to integrate the mitigation strategy outlined in the 2021 Livingston Hazard Mitigation Plan into other planning documents when appropriate. The members of the 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 Lafayette Parish Hazard Mitigation Plan, and will not contribute to increased hazard vulnerability within the parish. Most notably, Lafayette City-Parish Government Parish intends to create a standalone Floodplain Management Plan and will incorporate the mitigation strategy from this FEMA approved hazard mitigation plan into the Floodplain Management Plan process and document.

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 City of Broussard, City of Carencro, Town of Duson, City of Lafayette, City of Scott, City of Youngsville, Lafayette City-Parish Consolidated Government 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:

Lafayette City-Parish Consolidated Government			
<i>Comprehensible Master Plan</i>	Updated as needed	Lafayette Consolidated Government	✓
<i>Capital Improvements Plan</i>	Updated as needed	Lafayette Consolidated Government	✓
<i>Continuity of Operations Plan</i>	Updated as needed	Lafayette Parish OHSEP	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	Lafayette Parish OHSEP	✓
<i>Transportation Plan</i>	Updated as needed	Lafayette Consolidated Government	✓
<i>Economic Development Plan</i>	Updated as needed	Lafayette Economic Development Authority	✓
<i>Stormwater Management Plan</i>	Updated as needed	Department of Public Works	✓

## City of Broussard

<i>Comprehensible Master Plan</i>	Updated as needed	City of Broussard Mayor's Office	✓
<i>Economic Development Plan</i>	Updated as needed	City of Broussard Mayor's Office	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	City of Broussard Mayor's Office	✓
<i>Stormwater Management Plan</i>	Updated as needed	City of Broussard Mayor's Office	✓

## City of Carencro

<i>Local Emergency Operations Plan</i>	Updated annually	City of Carencro Mayor's Office	✓
<i>Capital Improvement Plan</i>	Updated as needed	City of Carencro Mayor's Office	✓
<i>Stormwater Management Plan</i>	Updated as needed	City of Carencro Mayor's Office	✓

## Town of Duson

<i>Stormwater Management Plan</i>	Updated as needed	Town of Duson Mayor's Office	✓
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## City of Lafayette

<i>Comprehensible Master Plan</i>	Updated as needed	Lafayette Consolidated Government	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	Lafayette Parish OHSEP	✓
<i>Transportation Plan</i>	Updated as needed	Lafayette Consolidated Government	✓
<i>Economic Development Plan</i>	Updated as needed	Lafayette Economic Development Authority	✓
<i>Stormwater Management Plan</i>	Updated as needed	Department of Public Works	✓

## City of Scott

<i>Comprehensible Master Plan</i>	Updated as needed	City of Scott Mayor's Office	✓
<i>Capital Improvement Plan</i>	Updated as needed	City of Scott Mayor's Office	✓
<i>Economic Development Plan</i>	Updated as needed	City of Scott Mayor's Office	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	City of Scott Mayor's Office	✓
<i>Stormwater Management Plan</i>	Updated as needed	City of Scott Mayor's Office	✓
<i>Transportation Plan</i>	Update as needed	City of Scott Mayor's Office	✓

## City of Youngsville

<i>Comprehensible Master Plan</i>	Updated as needed	City of Youngsville Mayor's Office	✓
<i>Capital Improvement Plan</i>	Updated as needed	City of Youngsville Mayor's Office	✓
<i>Economic Development Plan</i>	Updated as needed	City of Youngsville Mayor's Office	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	City of Youngsville Mayor's Office	✓
<i>Stormwater Management Plan</i>	Updated as needed	City of Youngsville Mayor's Office	✓



### Continued Public Participation

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

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

## Appendix C: Critical Facilities

### Critical Facilities within the Lafayette Parish Planning Area

Lafayette Parish Planning Area Critical Facilities												
Type	Name	Drought	Excessive Heat	Flooding	Sinkholes	Hail	Lightning	High Wind	Tornadoes	Tropical Cyclones	Wildfires	Winter Weather
Government	Lafayette City-Parish Consolidated Government					X	X	X	X	X		X
	Lafayette Parish Courthouse					X	X	X	X	X		X
	Lafayette Parish Communication District & Office of Homeland Security & Emergency Preparedness					X	X	X	X	X		X
	Lafayette Parish Coroner's Office					X	X	X	X	X		X
	Broussard City Hall					X	X	X	X	X		X
	Carencro City Hall					X	X	X	X	X		X
	Duson City Hall					X	X	X	X	X		X
	Scott City Hall					X	X	X	X	X		X
	Youngsville City Hall					X	X	X	X	X		X
	Rosa Parks Transportation Center					X	X	X	X	X		X

Type	Name	Drought	Excessive Heat	Flooding	Sinkholes	Hail	Lightning	High Wind	Tornadoes	Tropical Cyclones	Wildfires	Winter Weather
Fire & SAR	Lafayette Parish Fire Department Station #1					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #2					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #3					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #4					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #5					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #6					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #7					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #8					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #9					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #10					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #11					X	X	X	X	X		X
	Lafayette Fire Department Station #12					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #13					X	X	X	X	X		X
	Lafayette Parish Fire Department Station #14					X	X	X	X	X		X
	Milton Volunteer Fire Department			X		X	X	X	X	X		X
	Broussard Volunteer Fire Department Station #1					X	X	X	X	X		X

	Name	Drought	Excessive Heat	Flooding	Sinkholes	Hail	Lightning	High Wind	Tornadoes	Tropical Cyclones	Wildfires	Winter Weather
	Broussard Volunteer Fire Department Station #2					X	X	X	X	X		X
	Broussard Volunteer Fire Department Station #3					X	X	X	X	X		X
	Carencro Volunteer Fire Department Station #1					X	X	X	X	X		X
	Carencro Volunteer Fire Department Station #2					X	X	X	X	X		X
	Duson Volunteer Fire Department Station #1					X	X	X	X	X		X
	Duson Volunteer Fire Department Station #2					X	X	X	X	X		X
	Judice Volunteer Fire Department					X	X	X	X	X		X
	Scott Volunteer Fire Department Station #1					X	X	X	X	X		X
	Scott Volunteer Fire Department Station #2					X	X	X	X	X		X
	Youngsville Fire Department					X	X	X	X	X		X

Type	Name	Drought	Excessive Heat	Flooding	Sinkholes	Hail	Lightning	High Wind	Tornadoes	Tropical Cyclones	Wildfires	Winter Weather
Law Enforcement	Lafayette Parish Sheriff's Office					X	X	X	X	X		X
	Lafayette Parish Correctional Center					X	X	X	X	X		X
	Broussard City Police Department					X	X	X	X	X		X
	Carencro Police Department					X	X	X	X	X		X
	Duson Police Department					X	X	X	X	X		X
	Lafayette Police Department					X	X	X	X	X		X
	Lafayette City Marshall					X	X	X	X	X		X
	Scott Police Department					X	X	X	X	X		X
	Youngsville Police Department					X	X	X	X	X		X

Type	Name	Drought	Excessive Heat	Flooding	Sinkholes	Hail	Lightning	High Wind	Tornadoes	Tropical Cyclones	Wildfires	Winter Weather
Public Health	Acadian Ambulance Service					X	X	X	X	X		X
	Lafayette Parish Health Unit					X	X	X	X	X		X
	Ochsner Lafayette General Medical Center					X	X	X	X	X		X
	Our Lady of Lourdes Regional Medical Center					X	X	X	X	X		X
	Our Lady of Lourdes Women's and Children's Hospital					X	X	X	X	X		X
	University Hospitals & Clinics: Emergency Room					X	X	X	X	X		X
	Our Lady Of Lourdes Emergency Center					X	X	X	X	X		X

Type	Name	Drought	Excessive Heat	Flooding	Sinkholes	Hail	Lightning	High Wind	Tornadoes	Tropical Cyclones	Wildfires	Winter Weather
Schools	Lafayette Parish School System					X	X	X	X	X		X
	Alice N Boucher School					X	X	X	X	X		X
	Dr. Raphael A. Baranco Elementary School					X	X	X	X	X		X
	Broadmoor Elementary School					X	X	X	X	X		X
	Carencro Heights Elementary School					X	X	X	X	X		X
	Charles M Burke Elementary School					X	X	X	X	X		X
	Duson Elementary			X		X	X	X	X	X		X
	Ernest Gallet Elementary School					X	X	X	X	X		X
	Evangeline Elementary School					X	X	X	X	X		X
	Green T. Lindon Elementary School					X	X	X	X	X		X
	J.W. Faulk Elementary School					X	X	X	X	X		X
	J.W. James Elementary School					X	X	X	X	X		X
	Katherine Drexel Elementary School					X	X	X	X	X		X
	L. Leo Judice Elementary School					X	X	X	X	X		X
	Live Oak Elementary School					X	X	X	X	X		X
	Martial F. Billeaud Elementary School					X	X	X	X	X		X
	Milton Elementary School					X	X	X	X	X		X
	Myrtle Place Elementary School					X	X	X	X	X		X
	Ossun Elementary			X		X	X	X	X	X		X
	Corporal Michael Middlebrook Elementary School					X	X	X	X	X		X

Prairie Elementary			X		X	X	X	X	X		X
Ridge Elementary					X	X	X	X	X		X
S.J. Montgomery Elementary School					X	X	X	X	X		X
Truman Elementary School			X		X	X	X	X	X		X
Westside Elementary School			X		X	X	X	X	X	X	X
Woodvale Elementary School					X	X	X	X	X		X
Evangeline Elementary School					X	X	X	X	X		X
Acadian Middle School					X	X	X	X	X		X
Broussard Middle					X	X	X	X	X		X
Carencro Middle School					X	X	X	X	X		X
E.A. Martin Middle School					X	X	X	X	X		X
Judice Middle School					X	X	X	X	X		X
Lafayette Middle School					X	X	X	X	X		X
L.J. Alleman Middle School					X	X	X	X	X		X
Paul Breaux Middle School					X	X	X	X	X	X	X
David Thibodaux STEM Magnet Academy					X	X	X	X	X		X
Scott Middle School					X	X	X	X	X		X
Youngsville Middle School					X	X	X	X	X		X
Acadiana High School					X	X	X	X	X		X
Carencro High School					X	X	X	X	X		X
Comeaux High School			X		X	X	X	X	X		X
Early College Academy					X	X	X	X	X		X
Lafayette High School					X	X	X	X	X		X
Northside High School					X	X	X	X	X		X
Southside High School					X	X	X	X	X		X

## Appendix D: Plan Adoption

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



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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. The worksheets were presented at the Initial Planning Meeting by SDMI as tools for assisting in the update of the Hazard Mitigation Plan, but also as a State Requirement (Element E) for the update. 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 state required worksheets.

### Mitigation Planning Team

Lafayette Parish Hazard Mitigation Steering Committee				
Name	Title	Department	Representation	Email
Josh Guillory	Mayor/President	City of Lafayette & Lafayette C-PCG Executive	Public Information	<a href="mailto:mayorpresidentsoffice@lafayettela.gov">mayorpresidentsoffice@lafayettela.gov</a>
Craig Stansbury	Director	Lafayette Parish OHSEP	Emergency Services	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Linda Lavergne	Assistant Director	Lafayette Parish OHSEP	Public Information	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Melanie Jumonville	Budget Analyst	City of Lafayette & Lafayette C-PCG Codes	Property Protection	<a href="mailto:mjumonville@lafayettela.gov">mjumonville@lafayettela.gov</a>
Stephanie Weeks	Flood Plain Administrator	City of Lafayette & Lafayette C-PCG Development	Preventative Measures	<a href="mailto:sweeks@lafayettela.gov">sweeks@lafayettela.gov</a>
Mary Sliman	Development and Planning Director	City of Lafayette & Lafayette C-PCG Development	Public Information	<a href="mailto:msliman@lafayettela.gov">msliman@lafayettela.gov</a>
Melinda Felps	Accounting Manager	City of Lafayette & Lafayette C-PCG	Property Protection	<a href="mailto:mfelps@lafayettela.gov">mfelps@lafayettela.gov</a>
Don Chauvin	City Manager	City of Carencro	Public Information	<a href="mailto:dchauvin@carencro.org">dchauvin@carencro.org</a>
Lowell Duhon	Utilities Director	City of Lafayette	Emergency Services	<a href="mailto:lduhon@lafayettela.gov">lduhon@lafayettela.gov</a>
Chad Nepveux	Public Works Director	City of Lafayette & Lafayette C-PCG Finance	Emergency Services	<a href="mailto:cnepveux@lafayettela.gov">cnepveux@lafayettela.gov</a>
Mayor Ray Bourque	Mayor	City of Broussard	Public Information	<a href="mailto:mayorbourque@broussardla.com">mayorbourque@broussardla.com</a>
Mayor Glenn Brasseaux	Mayor	City of Carencro	Public Information	<a href="mailto:mayor@carencro.org">mayor@carencro.org</a>
Mayor Johnny Paul Thibodeaux	Mayor	Town of Duson	Public Information	<a href="mailto:dusonla@cox-internet.com">dusonla@cox-internet.com</a>
Mayor Jan-Scott Richard	Mayor	City of Scott	Public Information	<a href="mailto:jrichard@cityofscott.org">jrichard@cityofscott.org</a>
Mayor Ken Ritter	Mayor	City of Youngsville	Public Information	<a href="mailto:kenritter@youngsvillela.gov">kenritter@youngsvillela.gov</a>

Joey Pons	Director of Risk Management	The University of Louisiana at Lafayette	Public Information	<a href="mailto:safetyman@louisiana.edu">safetyman@louisiana.edu</a>
Steven Picou	Executive Director	Lafayette Regional Airport	Emergency Services	<a href="mailto:stevenp@lftairport.com">stevenp@lftairport.com</a>
Desiree Early	Director of Risk Management	Lafayette School Board	Emergency Services	<a href="mailto:ddearly@lpssonline.com">ddearly@lpssonline.com</a>
Chief Thomas Glover	Police Chief	Lafayette Police Department	Emergency Services	<a href="mailto:tglover@lafayettela.gov">tglover@lafayettela.gov</a>
Sheriff Mark Garber	Sheriff	Lafayette Sheriff's Office	Emergency Services	<a href="mailto:mark.garber@lafayettesheriff.com">mark.garber@lafayettesheriff.com</a>
Chief Robert Benoit	Fire Chief	Lafayette Fire Department	Emergency Services	<a href="mailto:rpbenoit@lafayettela.gov">rpbenoit@lafayettela.gov</a>
Donnie Simon	Region 4 Hospital Emergency Preparedness Coordinator	Louisiana Department of Health	Public Health	<a href="mailto:donald.simon@lourdesrhc.com">donald.simon@lourdesrhc.com</a>
Troy Guidry	Sr. Director of Operations	Acadian Ambulance Service, Inc.	Public health	<a href="mailto:tguidry@acadian.com">tguidry@acadian.com</a>
Warren Abadie	Director of Traffic and Transit	City of Lafayette & Lafayette C-PCG Traffic & Transit	Emergency Services	<a href="mailto:wabadie@lafayettela.gov">wabadie@lafayettela.gov</a>
Pam Deville	Director	Cajundome	Emergency Services	<a href="mailto:pdeville@cajundome.com">pdeville@cajundome.com</a>
Pamela Granger	President/Owner	City of Youngsville/McBade Engineers & Consultants, LLC	Structural Flood Control Projects	<a href="mailto:pamelag@mcbadeengineers.com">pamelag@mcbadeengineers.com</a>
Tammy Vincent	Administrative Assistant / Floodplain Administrator	City of Scott	Preventative Measures	<a href="mailto:tvincent@cityofscott.org">tvincent@cityofscott.org</a>
Jeffrey Giering	SHMO	GOHSEP		<a href="mailto:jeffrey.giering@la.gov">jeffrey.giering@la.gov</a>
Lauren Morgan	Associate Director	SDMI		<a href="mailto:lstevens@lsu.edu">lstevens@lsu.edu</a>
Chris Rippetoe	Hazard Mitigation Program Manager	SDMI		<a href="mailto:crippe2@lsu.edu">crippe2@lsu.edu</a>
Chris Andrus	Chief	Lafayette Fire Department	Emergency Services	<a href="mailto:candrus@lafayettela.gov">candrus@lafayettela.gov</a>
Mel Bertrand	City Manager/ Director	City of Broussard	Emergency Services	<a href="mailto:mel@broussardla.com">mel@broussardla.com</a>
Missy Lacassin	Executive Assistant	City of Broussard	Public Information	<a href="mailto:mlacassin@broussardla.com">mlacassin@broussardla.com</a>
Sally Angers	City Clerk	City of Youngsville	Public Information	<a href="mailto:sallyangers@youngsvillela.gov">sallyangers@youngsvillela.gov</a>
Anna Doucet	City Engineer	C.H. Fenstermaker & Associates, L.L.C.	Structural Flood Control Projects	<a href="mailto:Anna@fenstermaker.com">Anna@fenstermaker.com</a>
Gary O'Neal	Grants Manger	C.H. Fenstermaker & Associates, L.L.C.	Property Protection	<a href="mailto:Goneal@fenstermaker.com">Goneal@fenstermaker.com</a>
Kim Alleman	Superintendent	Town of Duson	Preventative Measures	<a href="mailto:kim.alleman@townofduson.com">kim.alleman@townofduson.com</a>

Jessica Cornay	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Design & Development	Preventative Measures	<a href="mailto:jcornay@lafayettela.gov">jcornay@lafayettela.gov</a>
Fred Trahan	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Project Control	Structural Flood Control Projects	<a href="mailto:ftrahan@lafayettela.gov">ftrahan@lafayettela.gov</a>
Brian Smith	Director of Drainage	City of Lafayette & Lafayette C-PCG Drainage	Preventative Measures	<a href="mailto:bsmith@lafayettela.gov">bsmith@lafayettela.gov</a>
Jeanne Hornsby	Engineer	City of Carencro/ C.H. Fenstermaker & Associates, L.L.C.	Structural Flood Control Projects	<a href="mailto:jeanne@fenstermaker.com">jeanne@fenstermaker.com</a>
Walter Comeaux	Engineer	City of Broussard/Comeaux Engineering	Structural Flood Control Projects	<a href="mailto:walter4@comeauxengineering.com">walter4@comeauxengineering.com</a>

## Capability Assessment

## Lafayette City-Parish Consolidated Government

Capability Assessment Worksheet - Lafayette City-Parish Consolidated Government		
Local mitigation capabilities are existing authorities, policies and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.		
Planning and Regulatory		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
Plans	Yes / No	Comments
Comprehensive / Master Plan	Yes	Plan Lafayette; R-026-2014, 07/1/2014
Capital Improvements Plan	Yes	Updated September 2020
Economic Development Plan	Yes	Part of Plan Lafayette
Local Emergency Operations Plan	Yes	updated June 2020
Continuity of Operations Plan	Yes	Part of EOP
Transportation Plan	Yes	Transportation Improvement Plan-MPO: July 2018 Acadiana Metropolitan Transportation Plan Updated 2040: January 2020
Stormwater Management Plan	Yes	Updated March 2, 2020
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	Yes	
Building Code, Permitting and Inspections	Yes / No	Comments
Building Code	Yes	Ord. No. O-039-2019, 03/12/2019
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	Class 6 with Water Hauling
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes / No	Comments
Zoning Ordinance	Yes	LDC Ord. No. JO-111-2020, 12/16/2020
Subdivision Ordinance	Yes	LDC Ord. No. JO-111-2020, 12/16/2020
Floodplain Ordinance	Yes	FDP Ord No. O-195-2018, 11/5/2018
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	Yes	SWO Ord. No. O-237-2007, 10/16/2007
Flood Insurance Rate Maps	Yes	FDP Ord No. O-195-2018, 11/5/2018
Acquisition of land for open space and public recreation uses	No	
Other	Yes	

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

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	Yes	

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

## City of Broussard

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



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

Financial		
Identify whether your jurisdiction has access to or is eligible to use 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	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)	Yes	
Natural Disaster or safety related school program	Yes	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

## City of Carencro

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

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

Financial		
Identify whether your jurisdiction has access to or is eligible to use 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	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)	Yes	
Natural Disaster or safety related school program	Yes	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

## Town of Duson

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

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

Financial		
Identify whether your jurisdiction has access to or is eligible to use 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	Yes	

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



## City of Lafayette

Capability Assessment Worksheet – City of Lafayette		
Local mitigation capabilities are existing authorities, policies and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.		
Planning and Regulatory		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
Plans	Yes / No	Comments
Comprehensive / Master Plan	Yes	Plan Lafayette; R-026-2014, 07/1/2014
Capital Improvements Plan	Yes	Updated September 2020
Economic Development Plan	Yes	Part of Plan Lafayette
Local Emergency Operations Plan	Yes	updated June 2020
Continuity of Operations Plan	Yes	Part of EOP
Transportation Plan	Yes	Transportation Improvement Plan-MPO: July 2018 Acadiana Metropolitan Transportation Plan Updated 2040: January 2020
Stormwater Management Plan	Yes	Updated March 2, 2020
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	Yes	
Building Code, Permitting and Inspections	Yes / No	Comments
Building Code	Yes	Ord. No. O-039-2019, 03/12/2019
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	Class 6 with Water Hauling
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes / No	Comments
Zoning Ordinance	Yes	LDC Ord. No. JO-111-2020, 12/16/2020
Subdivision Ordinance	Yes	LDC Ord. No. JO-111-2020, 12/16/2020
Floodplain Ordinance	Yes	FDP Ord No. O-195-2018, 11/5/2018
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	Yes	SWO Ord. No. O-237-2007, 10/16/2007
Flood Insurance Rate Maps	Yes	FDP Ord No. O-195-2018, 11/5/2018
Acquisition of land for open space and public recreation uses	No	
Other	Yes	

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

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	Yes	

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

## City of Scott

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

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

Education and Outreach		
Identify education and outreach programs and methods, already in place that could be used to implement mitigation activities and communicate hazard-related information.		
Program / Organization	Yes / No	Comments
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	No	
Ongoing public education or information program (responsible water use, fire safety, household preparedness, environmental education)	Yes	
Natural Disaster or safety related school program	Yes	
Storm Ready certification	Yes	City of Scott works with LCG to provide relevant data that has helped Lafayette Parish receive their Storm Ready certification.
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

## City of Youngsville

Capability Assessment Worksheet - City of Youngsville		
Local mitigation capabilities are existing authorities, policies and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.		
Planning and Regulatory		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
Plans	Yes / No	Comments
Comprehensive / Master Plan	Yes	
Capital Improvements Plan	YES	
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes	
Continuity of Operations Plan	No	
Transportation Plan	No	
Stormwater Management Plan	Yes	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	No	City of Youngsville 10 Year Master Plan; USACE Lafayette Parish Areawide Drainage Plan; City of Youngsville Stormwater Management Plan
Building Code, Permitting and Inspections	Yes / No	Comments
Building Code	Yes	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes / No	Comments
Zoning Ordinance	No	
Subdivision Ordinance	Yes	
Floodplain Ordinance	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	Yes	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	Yes	
Other	YES	Land Use Ordinance, Façade/Building Ordinance, Detention Ordinance

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



Financial		
Identify whether your jurisdiction has access to or is eligible to use 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	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)	Yes	
Natural Disaster or safety related school program	Yes	
Storm Ready certification	No	
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	Yes	
Other	No	

## Building Inventory

Parish and Jurisdiction Owned Building Information in Lafayette Parish Planning Area								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
***Building inventory for Lafayette City-Parish Consolidated Government and Incorporated Jurisdictions are available upon request***								

## Vulnerable Populations

Vulnerable Populations Worksheet					
Lafayette Parish Planning Area					
All Hospitals (Private or Public)	Address	City	Zip Code	Latitude	Longitude
Amelia Manor Nursing Home	903 Center Street	Uninc Lafayette Parish	70501	30.239364	-91.992516
Courtyard Manor Nurse Care Center	306 Sidney Martin	Uninc Lafayette Parish	70507	30.278010	-92.010526
Acadia Vermilion Hospital	2520 North University Avenue	City of Lafayette	70507	30.271300	-92.046054
AMG Specialty Hospital – Lafayette	310 Youngsville Highway	City of Lafayette	70508	30.155873	-91.992003
AMG Specialty Hospital – Regional Campus	2810 Ambassador Caffery Pkwy	City of Lafayette	70506	30.197966	-92.077243
AMG Specialty Hospital - Park Place Campus	811 Ambassador Caffery 4th Floor	City of Lafayette	70508	30.232103	-92.062458
Compass Behavioral - Lafayette Campus	1015 Saint John Street	City of Lafayette	70501	30.222718	-92.022845
Heart Hospital of Lafayette	1105 Kaliste Saloom Road	City of Lafayette	70508	30.173161	-92.026973
Lafayette General Medical Center	1214 Coolidge Avenue	City of Lafayette	70503	30.202780	-92.019565
Lafayette General Surgical Hospital	1000 West Pinhook Road	City of Lafayette	70508	30.204212	-92.014576
Lafayette Physical Rehabilitation Hospital	207 Polly Lane	City of Lafayette	70508	30.176969	-92.027589
Lafayette Surgical Specialty Hospital	1101 Kaliste Saloom Road	City of Lafayette	70508	30.176328	-92.027359
Louisiana Extended Care Hospital of Lafayette	1214 Coolidge Avenue, 8th Floor	City of Lafayette	70503	30.202780	-92.019565
Optima Specialty Hospital	1131 Rue de Belier	City of Lafayette	70501	30.224090	-92.019843
Our Lady of Lourdes Regional Medical Center	4801 Ambassador Caffery Parkway	City of Lafayette	70508	30.150517	-92.036983
Park Place Surgery Center	901 Wilson St.	City of Lafayette	70503	30.207156	-92.017760
Post Acute Medical Specialty Hospital of Lafayette	204 Energy Pkwy	City of Lafayette	70508	30.180227	-92.011628
Regional Medical Center of Acadiana	2810 Ambassador Caffery Parkway	City of Lafayette	70506	30.197966	-92.077243
University Hospital and Clinics	2390 W Congress Street	City of Lafayette	70596	30.217096	-92.046423
Women's & Children's Hospital	4600 Ambassador Caffery Pkwy	City of Lafayette	70508	30.152439	-92.046403
Our Lady of Lourdes Quick Care	3824 NE Evangeline Thruway	Carencro	70520		
Lafayette General Urgent Care	917 W. Gloria Switch Rd.	Carencro	70520		
Oceans Behavioral Hospital	420 Albertson Pkwy	Broussard	70518		

Nursing Homes (Private or Public)	Address	City	Zip Code	Latitude	Longitude
Bethany MHS Health Care Center	406 St. Julien Street	City of Lafayette	70506	30.214815	-92.026471
Cornerstone Village South, Inc.	103 W. Matrial Avenue	City of Lafayette	70508	30.165867	-92.041939
Lady of the Oaks Retirement Manor	1005 Eraste Landry Road	City of Lafayette	70506	30.223168	-92.054792
Lafayette Care Center	325 Baque Crescent Drive	City of Lafayette	70503	30.203710	-92.027043
Magnolia Estates	1511 Dulles Dr	City of Lafayette	70506	30.209646	-92.077500
Maison de Lafayette	2707 Kaliste Saloom Road	City of Lafayette	70508	30.152768	-92.049787
River Oaks Retirement Manor	2500 E Simcoe Street	City of Lafayette	70501	30.223250	-91.992136
Beau Se Jour	125 Ola Street	Carencro	70520		
Belle Rose Gardens	211 Arceneaux Road	Carencro	70520		
Evangeline Oaks	240 Arceneaux Road	Carencro	70520		
Camelot of Broussard	418 Albertson Pkwy	Broussard	70518		
Beehive Homes	500 Copper Meadows Blvd	Youngsville	70592		
Mobile Home Parks	Address	City	Zip Code	Latitude	Longitude
Clifton Mobile Home Park	235 Smalley Road	Lafayette	70507		
Sugar Ridge Mobile Home Park	211 East Gloria Switch Road	Lafayette	70507		
Stacy Acres Mobile Home Park # 1	701 West Gloria Switch Road	Lafayette	70507		
Stacy Acres Mobile Home Park # 2	339 East Gloria Switch Road	Lafayette	70507		
ACADIAN ACRES MOBILE HOME PARK	1410 Westgate Rd	Lafayette	70506		
ASA BROUSSARD TRAILER PARK	120 Desjacque Rd	Lafayette	70506		
AUDBON ACRES MOBILE HOME PARK	1112 Lebesque Rd	Lafayette	70507		
GARY'S TRAILER PARK	721 Lebesque Rd	Lafayette	70507		
Acadiana Country Estates	619 Breaux Road	Uninc Lafayette Parish	70506	92°7'2.957"W	30°8'41.862"N
Angelle MHP	2321 Mills Street	Uninc Lafayette Parish	70507	92°5'36.321"W	30°16'45.69"N
Belle Place MHP	600 Saint Nazaire Road	uninc Lafayette Parish	70518	91°56'10.389"W	30°8'21.489"N
Belle Ville MHP	900 Blk South Fieldspan Road	uninc Lafayette Parish	70529	92°8'22.71"W	30°13'43.148"N
Bridgewood MHP	1912 Carmel Drive	uninc Lafayette Parish	70501		30°14'8.822"N
C & D MHP	417 Louveteau Road	uninc Lafayette Parish	70520	92°3'13.341"W	30°20'30.297"N
Cajun Country MHP	215 Gireer Road	uninc Lafayette Parish	70518		30°5'4.131"N
Cajun Mobile Home Village	314 Malapart Road	uninc Lafayette Parish	70507	92°3'28.047"W	30°17'31.195"N
Chester Mobile Home Estates	110-142 Peltier Road	uninc Lafayette Parish	70520		30°21'1.647"N

Charlie's MHP	109 Tabb Road	uninc Lafayette Parish	70583	92°7'15.957"W	30°12'48.389"N
Conques MHP	3008 North University Avenue	uninc Lafayette Parish	70507	92°2'54.366"W	30°17'1.977"N
Country Aire MHP	100 Blk Lagneaux Road	uninc Lafayette Parish	70529	92°7'21.399"W	30°11'36.424"N
Country Corner MHP	840 Jenkins Road	uninc Lafayette Parish	70529	92°7'28.761"W	30°13'35.683"N
Country Mobile Living	1731 Lagneaux Road	uninc Lafayette Parish	70506	92°7'42.176"W	30°8'28.487"N
Country Run MHP	200-349 Country Run Drive	uninc Lafayette Parish	70518	91°57'29.807"W	30°6'21.602"N
Cozy Acres MHP	304 Rue Septembre	uninc Lafayette Parish	70583	92°7'34.118"W	30°15'0.63"N
Cypress MHP	1312 Roper Drive	uninc Lafayette Parish	70583	92°3'50.523"W	30°16'0.776"N
D & D MHP	2925 Mills Street	uninc Lafayette Parish	70507	92°5'37.175"W	30°17'30.284"N
Deer Park Subdivision	400 Blk Cormier Road	uninc Lafayette Parish	70520	92°3'43.636"W	30°20'0.515"N
G & R MHP	307 Pecan Grove Road	uninc Lafayette Parish	70583	92°4'22.608"W	30°14'10.455"N
Gardemal MHP	143 Albarado Road	uninc Lafayette Parish	70583	92°3'38.419"W	30°15'25.081"N
Glen Oaks MHP	207 Lormand Road	uninc Lafayette Parish	70583	92°8'6.273"W	30°15'8.021"N
Going West MHP	900 Leblanc Road	uninc Lafayette Parish	70529	92°8'49.082"W	30°7'28.807"N
Golden Acres MHP	440 Heide Circle	uninc Lafayette Parish	70583	92°4'37.636"W	30°15'55.956"N
Hillside MHP	205 Mineral Road	uninc Lafayette Parish	70518	91°59'9.221"W	30°9'35.831"N
Holiday Villa MHP	2808 West Pinhook Road	uninc Lafayette Parish	70508	92°0'12.88"W	30°10'28.624"N
Indian Hill MHP	100-121 Apache Circle	uninc Lafayette Parish	70520	92°1'45.042"W	30°20'6.077"N
King's Court MHP	728 West Gloria Switch Road	uninc Lafayette Parish	70507	92°2'32.426"W	30°17'54.289"N
Luxury Living MHP	401 D Arceneaux Road	uninc Lafayette Parish	70583	92°8'2"W	30°14'16.407"N
Marie Jean MHP	1409 East Broussard Road	uninc Lafayette Parish	70508	92°3'17.289"W	30°7'46.463"N
Melanie Rose MHP	630 Brothers Road	uninc Lafayette Parish	70507	92°3'21.445"W	30°16'20.992"N
Mes Amis MHP	400 Louveteau Road	uninc Lafayette Parish	70520	92°3'10.219"W	30°20'40.733"N
Mouton MHP	201 Porter Lane	uninc Lafayette Parish	70501	91°59'6.571"W	30°14'25.183"N
Northgate MHP	210 West Pont des Mouton	uninc Lafayette Parish	70507	92°1'21.962"W	30°16'16.861"N
Oakview MHP	748 Malapart Road	uninc Lafayette Parish	70507	92°4'39.981"W	30°17'30.229"N
Parkland MHP	106 LA 1252	uninc Lafayette Parish	70520	92°2'9.97"W	30°20'13.099"N
Pecan Acres MHP	1130, 1132, 1138 Breaux Road	uninc Lafayette Parish	70506	92°6'43.667"W	30°9'30.396"N
Plauche MHP	100-150 Plauche Drive	uninc Lafayette Parish	70520	92°5'35.969"W	30°19'38.371"N
Potpourri Village	1000 Renaud Drive	uninc Lafayette Parish	70583	92°3'43.722"W	30°15'17.897"N
Queen's Row MHP	342 Queen's Row	uninc Lafayette Parish	70508	92°3'43.722"W	30°10'35.734"N

Quiet Living, LLC	150 Ray Pardue Road	uninc Lafayette Parish	70529	92°8'43.758"W	30°11'28.612"N
River Oaks MHP	241 Beau Bassin Road	uninc Lafayette Parish	70520	91°59'14.793"W	30°17'55.906"N
Royal MHP	7727 Cameron Street	uninc Lafayette Parish	70529	92°8'58.071"W	30°14'0.434"N
Royal Vista MHP	700 Blk Young St.	uninc Lafayette Parish	70592	91°58'47.323"W	30°5'57.339"N
Shiloh MHP	1111 Roper Drive	uninc Lafayette Parish	70583	92°3'49.724"W	30°15'41.815"N
Smiling C MHP	1626 Duhon Road	uninc Lafayette Parish	70529	92°7'57.677"W	30°10'8.445"N
Sunrise MHP	105 Amireau Drive	uninc Lafayette Parish	70592	92°1'30.609"W	30°5'12.441"N
Teco's MHP	230 Jenkins Road	uninc Lafayette Parish	70529	92°7'4.509"W	30°13'45.636"N
Trail's End MHP	409 Petite Road	uninc Lafayette Parish	70555	92°7'47.565"W	30°7'11.626"N
Westgate MHP	3750 Landry Road	uninc Lafayette Parish	70583	92°6'54.265"W	30°12'53.541"N
Avalon Park	125 Avalon Road	City of Lafayette	70508	91°59'51.73"W	30°10'10.341"N
Floyd's Trailer Park	125 Floyd Street	City of Lafayette	70501	92°1'11.077"W	30°14'42.112"N
Mobile Home Acres	200-268 John Wayne Drive	City of Lafayette	70508	92°1'13.612"W	30°10'26.76"N
Mr B's MHP	2520 Ambassador Caffery Pkwy	City of Lafayette	70506	92°4'38.03"W	30°12'13.598"N
Oak Park Estates	1717 Eraste Landry Road	City of Lafayette	70506	92°3'43.882"W	30°13'8.364"N
Presley Benoit MHP	200 blk Conrad St, 100 blk Benoit Falgout	City of Lafayette	70501	92°1'3.67"W	30°15'23.839"N
Smitty's MHP	1301 Verot School Road	City of Lafayette	70508	92°1'7.393"W	30°10'9.108"N
Summerwood MHP	3201 Kalist Saloom Road	City of Lafayette	70508	92°3'14.75"W	30°8'46.846"N
Sunny Acres MHP	2114 Ambassador Caffery Pkwy	City of Lafayette	70506	92°4'38.146"W	30°12'49.362"N
Willow Springs MHP	131 Hebert Road	City of Lafayette	70506	92°3'6.43"W	30°14'15.856"N
Daves Mobile Home Park	5215 North University Avenue	Carencro	70520		
Executive Choice Mobile Home Park	5217 North Univerisity Avenue	Carencro	70520		
North Acadian Mobile Home Park	515 Sonnier Road	Carencro	70520		
Sugar Ridge Mobile Home Park	200 blk E. Gloria Switch Rd.	Carencro	70520		
Stacey Acres II Mobile Home Park	339 E. Gloria Switch Rd.	Carencro	70520		
La Roulette Mobile Home Park	201 Andre Street	Carencro	70520		
Pecan Acres	425 Toby Mouton Rd	Duson	70529	30.24043	-92.18301
Easy Living	9123 Cameron	Duson	70529	30.23465	-92.1865
Anita Park Mobile Home Community	115 St Barnabas St	Broussard	70518		
Belle Place Mobile Home Park	600 St Nezaire Rd	Broussard	70518		
Crepe Myrtle	Langlinais Road	Youngsville	70592		

## National Flood Insurance Program (NFIP)

National Flood Insurance Program (NFIP)							
	Lafayette C-PCG	Broussard	Carencro	Duson	Lafayette	Scott	Youngsville
<b>Insurance Summary</b>							
How many NFIP policies are in the community? What is the total premium and coverage?	9,853 policies; \$5,282,896 premium	1,264/ \$389,047,100	502	153 policies, \$74,003.00 total premium, \$21,585,900 building and \$6,231,300 contents coverage	8425 policies; \$5,320,556 premium	Policies = 1099; Total Premium = \$760,696; Total Coverage = \$249,315,400	1973; \$952,931; \$483
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?	2708 claims paid; 3040 claims made; \$127,837,443 paid	154 / \$3,334,952.59/ 16	281 Claims paid; \$5,403,964.53 Total loss Payments	26 claims for \$878,498	1606 claims paid \$84,488,219 paid 1898 claims made	Number of Claims Paid = 274; Total Paid = \$5,099,0335	190 claims for \$11,633,200.94
How many structures are exposed to flood risk with in the community?	Every structure where rainfall can occur in Lafayette Parish is exposed to flood risk. Some are designated as FEMA Flood zones and some are not.		~395	All of them	Every structure where rainfall can occur in Lafayette Parish is exposed to flood risk. Some are designated as FEMA Flood zones and some are not.	1,890 buildings in SFHA	
Describe any areas of flood risk with limited NFIP policy coverage.	There are many areas in Unincorporated Lafayette Parish where FEMA did not study the flood risk, yet flood events occur often. Without a flood insurance mandate, this leaves many residents that are highly susceptible to flooding with no flood insurance.			Unknown	There are some areas in older Lafayette, where many of the residents own their homes, and do not have a flood insurance mandate leaving them susceptible to flooding and no flood insurance coverage	Gouaux Road	

Staff Resources							
Is the Community FPA or NFIP Coordinator certified?	Yes	Yes	Yes	yes	Yes	Yes	Yes
Is flood plain management an auxiliary function?	No	No	No	no	No	Yes	Yes
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)	Review Permits/plats, GIS, education/outreach, grants, data collection, CRS, compliance inspections and letters, GIS	permit review, outreach and inspection		Permit Review	Review Permits/plats, GIS, education/outreach, grants, data collection, CRS, compliance inspections and letters, GIS	Permit review, education and outreach, and engineering capabilities	Permit review, inspections and engineering capability
What are the barriers to running an effective NFIP program in the community, if any?	None	none	None	Funding	None	None	None
Compliance History							
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)?	No	Yes; A pond was dug in the floodway but no fill was placed in the floodway.	No	no	No	No	No
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact(CAC)?	March 13,2019	Unknown	9/9/2019	Unknown	March 13,2019	January 2017	
Is a CAV or CAC scheduled or needed? If so when?	No		NO	No	No	No	
Regulations							
When did the community enter the NFIP?	9/30/1980	3/16/1988	11/5/1980	9/30/1981	9/30/1980	06/14/76	4/1/1974
Are the FIRMs digital or paper?	Digital	Both	Both	Digital	Digital	Digital	Paper



Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Exceed	Yes; The city has set some higher standards for building 1' above BFE and 1' above adjacent roadway	Yes	Yes; Meet Minimum FEMA requirements (1' free board	Exceed	Yes	Exceed; all developments have to meet a no rise in discharge and all construction must be a minimum of 1' above the BFE
<b>Community Rating System (CRS)</b>							
Does the community participate in CRS?	Yes	No	Yes	No	Yes	Yes	No
What is the community's CRS Class Ranking?	8	n/a	7	n/a	8	9	N/A
Does the plan include CRS planning requirements?	Yes	n/a	Yes	n/a	Yes	Yes	Yes

## Appendix F: Community Rating System

### Introduction To The Community Rating System (CRS)

The CRS is a voluntary program, which provides incentives for communities to implement floodplain management activities that exceed those required by the National Flood Insurance Program (NFIP). The goals of the CRS are to (1) reduce flood damage to insurable property; (2) strengthen and support all insurance aspects of the NFIP; and (3) encourage a comprehensive approach to floodplain management. An incentive for communities to participate in the CRS is discounts on flood insurance premiums for local policyholders. A community earns points for each CRS activity completed; the number of points earned determines the amount of the flood insurance premium discount. Premium discounts for policies on properties located within the Special Flood Hazard Area (SFHA) range from 5% for a Class 9 community, to 45% for a Class 1. See [Table F-93](#) for the number of points needed per class, along with corresponding premium discounts.

*Table F-93: CRS Classes and Corresponding Insurance Premium Reductions*

Credit Points	Class	Premium Reduction (SFHA*)	Premium Reduction (Non-SFHA)
4,500+	1	45%	10%
4,000 – 4,499	2	40%	10%
3,500 – 3,999	3	35%	10%
3,000 – 3,499	4	30%	10%
2,500 – 2,999	5	25%	10%
2,000 – 2,499	6	20%	10%
1,500 – 1,999	7	15%	5%
1,000 – 1,499	8	10%	5%
500 – 999	9	5%	5%
0 – 499	10	0%	0%

\*Special Flood Hazard Area (SFHA) also known as the A and V Zones on a Flood Insurance Rate Map

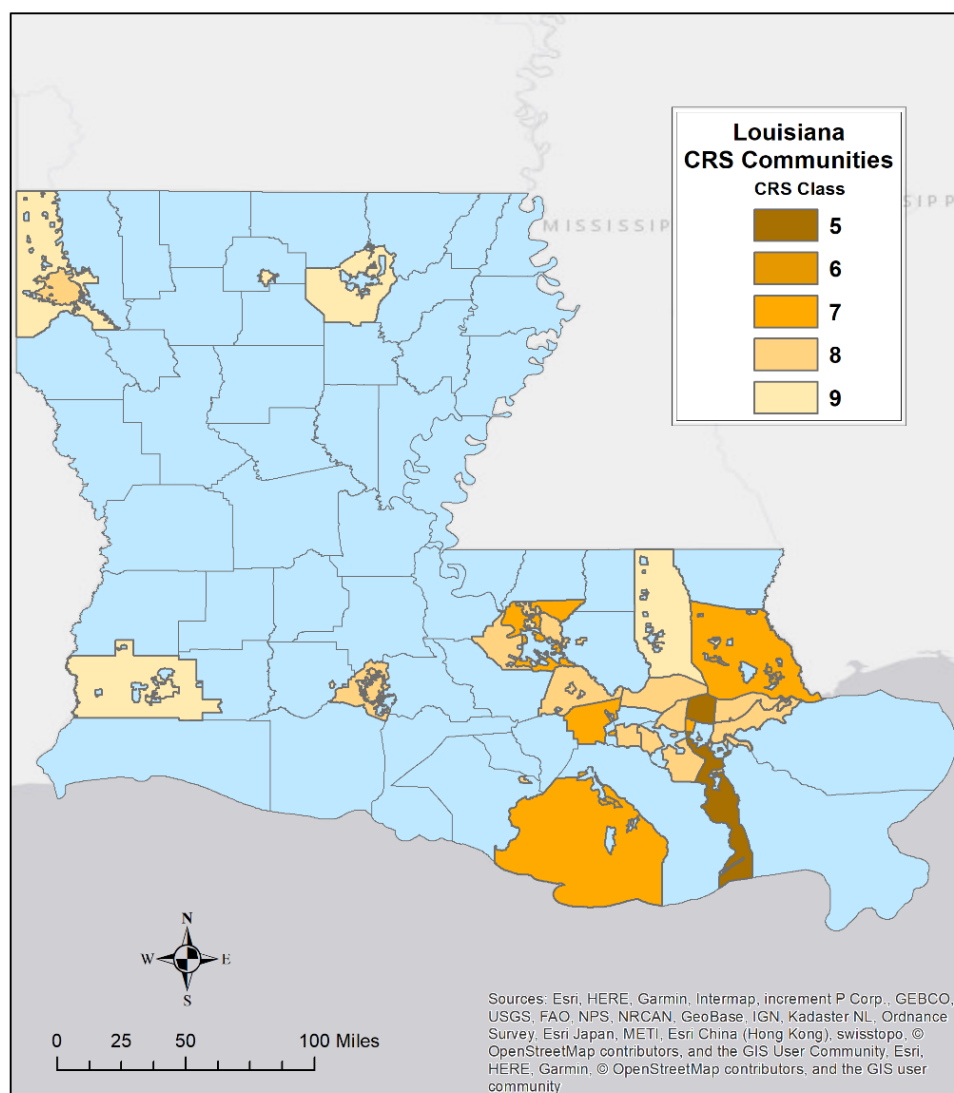
\*\*The Preferred Risk Policy does not receive premium rate credits under the CRS because it already has a lower premium than other policies

The Community Rating System is made up of four series of activities, numbered from 300 to 600. Each series has a number of activities within it, for a total of 19 activities. There are subsequent elements under each activity, totaling 94. Communities earn points for completing the elements under each activity. The 300 series includes public information activities, the 400 series includes activities that encompass mapping and regulations, the 500 series covers flood damage reduction activities, and the 600 series includes activities that cover flood warning and response.

### Louisiana CRS Communities

According to the FEMA NFIP Community Book, there are 317 communities in Louisiana that participate in the NFIP. Of those, 41 also participate in the CRS. These 41 make up approximately 13% of the communities in the NFIP, and 85% of the policies. Participation in the CRS provides these communities with an annual savings of over \$29,000,000. In comparison to the national rate of participation of 5%, Louisiana communities are very active in the CRS.

The map below reveals that most of the CRS communities are in the southeastern portion of the state, with the large majority clustered around urban areas. The CRS communities in the northern part of the state are also clustered around urban areas.



*Figure F-30: CRS Communities and Their Classes*

### CRS Activity Introduction

As an introduction, [Table F-94](#) lists each of the activities available for credit under the Community Rating System. CRS activities are numbered according to series 300 through 600. Each activity in the series lists elements for potential points. For example, 300 is the series for Public Information Activities, and 310 is the Elevation Certificate activity that has three elements: a, b, and c.

Table F-94: CRS Activities and Elements

300 Series: Public Information Activities		400 Series: Mapping and Regulations	
310: Elevation Certificates		403: Impact Adjustment Mapping	
a	Elevation Certificates	410: Floodplain Mapping	
b	Elevation Certificate on post-FIRM bldgs.	a	New Study
c	Elevation Certificate on pre-FIRM bldgs.	b	Leverage
320: Map Information Service		c	State Review
a	Providing insurance information from the FIRM	d	Higher Study Standards
b	LiMWA/floodway info/CBRS area	e	Floodway Standard
c	Other flood problems not shown on FIRM	f	Special Hazards Mapping
d	Flood depth data	420: Open Space Preservation	
e	Special flood-related hazards	a	Preserved Open Space
f	Historical flood information/repetitive flooding	b	Deed Restriction
g	Natural floodplain functions	c	Natural Functions Open Space
330: Outreach Projects		d	Special Hazards Open Space
a	Outreach projects	e	Open Space Incentives
b	Flood response preparations	f	Low Density Zoning
c	Program for Public Information bonus	g	Natural Shoreline Protection
d	Stakeholder bonus	430: Higher Regulatory Standards	
340: Hazard Disclosure		a	Development Limitations
a	Real estate agent disclosure of SFHA	b	Freeboard
b	Other disclosure requirements	c	Foundation Protection
c	Real estate brochure	d	Cumulative Substantial Improvements
d	Disclosure of other hazards	e	Lower Substantial Improvements
350: Flood Protection Information		f	Protection Of Critical Facilities
a	Library	g	Enclosure Limitations
b	Locally pertinent documents in the library	h	Building Code
c	Website	i	Local Drainage Protection
360: Flood Protection Assistance		j	Manufactured Home Park
a	Property protection advice	k	Coastal A Zone Regulations
b	Advice after a site visit	l	Special Hazards Regulations
c	Financial assistance advice	m	Other Higher Standards
d	Training	n	State Mandated Standards
370: Flood Insurance Promotion		o	Regulations Administration
a	Flood insurance assessment	440: Flood Data Maintenance	
b	Coverage plan	a	Additional Map Data
c	Plan implementation	b	FIRM Maintenance
d	Technical assistance	c	Benchmark Maintenance
		d	Erosion Data Maintenance
		450: Flood Protection Information	
		a	Stormwater Management Regulations
		b	Watershed Master Plan
		c	Erosion and Sedimentation Control
		d	Water Quality Regulations

500 Series: Flood Damage Reduction Activities	
510: Floodplain Management Planning	
a	Floodplain Management Planning
b	Repetitive Loss Area Analyses
c	Natural Floodplain Functions Plan
520: Acquisition and Relocation	
a	Acquisition and Relocation of Buildings
530: Flood Protection	
a	Retrofitted Buildings
b	Structural Flood Control & Drainage Projects
540: Drainage System Maintenance	
a	Channel Debris Removal
b	Problem Site Maintenance
c	Capital Improvements Program
d	Stream Dumping Regulations
e	Storage Basin Maintenance

600 Series: Warning and Response	
610: Flood Warning and Response	
a	Flood Threat Recognition System
b	Emergency Warning Dissemination
c	Flood Response Operations Plan
d	Critical Facilities Planning
e	StormReady Community
f	TsunamiReady Community
620: Levees	
a	Levee Maintenance
b	Levee Failure Threat Recognition System
c	Levee Failure Warning
d	Levee Failure Response Operations
e	Levee Failure Critical Facilities
630: Dams	
a	State Dam Safety Program
b	Dam Failure Threat Recognition System
c	Dam Failure Warning
d	Dam Failure Response Operations
e	Dam Failure Critical Facilities

Note that the CRS activities in the previous tables are divided by series. The 300 series, or public information activities, includes activities that involve providing information through brochures, the library, a website, or in other mediums. The 400 series, or mapping and regulations, spans floodplain mapping, open space preservation, higher regulatory standards, flood data maintenance, and stormwater management. The 500 series, or flood damage reduction activities, involves floodplain management planning, acquisition and relocation, flood protection, and drainage system maintenance. The 600 series, or warning and response, includes activities that have to do with flood threats, levees, and dams. Each series has a number of activities and elements within it. The focus of this appendix will be earning critical points through activity 510 – Floodplain Management Planning, and more specifically, element 512.a.

### Activity 510: Floodplain Management Planning

The Floodplain Management Planning activity provides points to communities who create plans to manage their floodplains. Activity 510 provides points to communities that develop and adopt three types of these plans:

- A floodplain management or multi-hazard mitigation plan to provide overall guidance for preventing and reducing flood problems (Activity 512.a);
- Area analyses for repetitive loss areas (Activity 512.b); or
- Plans that protect natural floodplain functions (Activity 512.c).

Within this activity, Element 512.a states that a maximum of 382 points may be awarded to communities that create a community-wide floodplain management plan following a standard planning process. This process consists of ten steps, and the planning process must receive some credit under each of the ten steps in order to be considered. If the plan is approved by FEMA as a multi-hazard mitigation plan such as this document, and one step is missing, the mitigation plan may only receive a maximum of 50 points.

If the plan is missing two or more steps, the community will receive no credit for this element. Because of this, it is imperative that each of the steps is adequately addressed within this appendix, as well as the rest of the planning document.

#### *Step 1: Organize*

The credit for step 1 is based on how the community organizes to prepare its floodplain management plan. Receiving input from various offices, departments, and agencies within the community can produce a more comprehensive planning document. There are three opportunities to earn a total of 15 points through this step. The first opportunity which can earn four points is by having the office responsible for the community's land use and comprehensive planning actively involved in the floodplain planning process. This could be any office provided that it performs regular land use or comprehensive planning duties for the community. However, this office is usually not the floodplain management or mitigation planner or consultant because the intention is to incorporate the floodplain management or mitigation plan into the rest of the community's planning activities.

The second opportunity to earn points under step 1 is if the planning process is conducted through a committee composed of staff from community departments that have expertise in activities/actions that could prevent or reduce the severity of hazards that impact the community. These activities, which will be included in step 7, show an active commitment toward building and strengthening the resiliency of the community. One point is earned for each office represented, up to nine total points. However, no credit is provided for the creation of a planning committee if the committee only meets once or twice. In order to receive the maximum credit, the committee must meet a sufficient number of times to involve the members in the following key steps of the planning process:

- Step 4: Assess the Hazard
- Step 5: Assess the Problem
- Step 6: Set Goals
- Step 7: Review Possible Activities
- Step 8: Draft an Action Plan

If the community wants credit for participating in a multi-jurisdictional hazard mitigation planning committee, the following guidelines must be satisfied:

- The community must send at least two representatives to the planning committee
- At least half of the community's representatives must attend all the meetings of the planning committee
- CRS credit for the multi-jurisdictional planning committee will be based on the representation from offices that implement the activities included in step 7

Lastly, the third opportunity to earn step 1 points is through the formal creation or recognition of the planning process/planning committee by action of the community's governing body. The preferred method is a formal resolution that designates who is responsible for preparing the plan specifies a completion deadline. If a community participates in a multi-jurisdictional committee, its governing body must act in order for the community to receive credit. A city will not receive credit for a parish council resolution.

#### *Qualifying Activities for Step 1*

##### *Opportunity 1.a. – Involvement of Office Responsible for Community Planning*

Monique Boulet, CEO of Acadiana Planning Commission attended kickoff meeting.

## Opportunity 1.b. – Planning Committee of Department Staff

Table F-95: Hazard Mitigation Plan Steering Committee and Other Participants

Lafayette Parish Hazard Mitigation Steering Committee and Other Participants				
Name	Title	Department	Representation	Email
Josh Guillory	Mayor/President	City of Lafayette & Lafayette C-PCG Executive	Public Information	<a href="mailto:mayorpresidentsoffice@lafayettela.gov">mayorpresidentsoffice@lafayettela.gov</a>
Craig Stansbury	Director	Lafayette Parish OHSEP	Emergency Services	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Linda Lavergne	Assistant Director	Lafayette Parish OHSEP	Public Information	<a href="mailto:eoc@lafayettela.gov">eoc@lafayettela.gov</a>
Melanie Jumonville	Budget Analyst	City of Lafayette & Lafayette C-PCG Codes	Property Protection	<a href="mailto:mjumonville@lafayettela.gov">mjumonville@lafayettela.gov</a>
Stephanie Weeks	Floodplain Administrator	City of Lafayette & Lafayette C-PCG Development	Preventative Measures	<a href="mailto:sweeks@lafayettela.gov">sweeks@lafayettela.gov</a>
Mary Sliman	Development and Planning Director	City of Lafayette & Lafayette C-PCG Development	Public Information	<a href="mailto:msliman@lafayettela.gov">msliman@lafayettela.gov</a>
Melinda Felps	Accounting Manager	City of Lafayette & Lafayette C-PCG	Property Protection	<a href="mailto:mfelps@lafayettela.gov">mfelps@lafayettela.gov</a>
Don Chauvin	City Manager	City of Carencro	Public Information	<a href="mailto:dchauvin@carencro.org">dchauvin@carencro.org</a>
Lowell Duhon	Utilities Director	City of Lafayette	Emergency Services	<a href="mailto:lduhon@lafayettela.gov">lduhon@lafayettela.gov</a>
Chad Nepveux	Public Works Director	City of Lafayette & Lafayette C-PCG Finance	Emergency Services	<a href="mailto:cnepveux@lafayettela.gov">cnepveux@lafayettela.gov</a>
Mayor Ray Bourque	Mayor	City of Broussard	Public Information	<a href="mailto:mayorbourque@broussardla.com">mayorbourque@broussardla.com</a>
Mayor Glenn Brasseaux	Mayor	City of Carencro	Public Information	<a href="mailto:mayor@carencro.org">mayor@carencro.org</a>
Mayor Johnny Paul Thibodeaux	Mayor	Town of Duson	Public Information	<a href="mailto:dusonla@cox-internet.com">dusonla@cox-internet.com</a>
Mayor Jan-Scott Richard	Mayor	City of Scott	Public Information	<a href="mailto:jrichard@cityofscott.org">jrichard@cityofscott.org</a>
Mayor Ken Ritter	Mayor	City of Youngsville	Public Information	<a href="mailto:kenritter@youngsvillela.gov">kenritter@youngsvillela.gov</a>
Joey Pons	Director of Risk Management	The University of Louisiana at Lafayette	Public Information	<a href="mailto:safetyman@louisiana.edu">safetyman@louisiana.edu</a>
Steven Picou	Executive Director	Lafayette Regional Airport	Emergency Services	<a href="mailto:stevenp@lftairport.com">stevenp@lftairport.com</a>
Desiree Early	Director of Risk Management	Lafayette School Board	Emergency Services	<a href="mailto:ddearly@lpssonline.com">ddearly@lpssonline.com</a>
Chief Thomas Glover	Police Chief	Lafayette Police Department	Emergency Services	<a href="mailto:tglover@lafayettela.gov">tglover@lafayettela.gov</a>
Sheriff Mark Garber	Sheriff	Lafayette Sheriff's Office	Emergency Services	<a href="mailto:mark.garber@lafayettesheriff.com">mark.garber@lafayettesheriff.com</a>
Chief Robert Benoit	Fire Chief	Lafayette Fire Department	Emergency Services	<a href="mailto:rbenoit@lafayettela.gov">rbenoit@lafayettela.gov</a>
Donnie Simon	Region 4 Hospital Emergency Preparedness Coordinator	Louisiana Department of Health	Public Health	<a href="mailto:donald.simon@lourdesrhc.com">donald.simon@lourdesrhc.com</a>
Troy Guidry	Sr. Director of Operations	Acadian Ambulance Service, Inc.	Public health	<a href="mailto:tguidry@acadian.com">tguidry@acadian.com</a>

Warren Abadie	Director of Traffic and Transit	City of Lafayette & Lafayette C-PCG Traffic & Transit	Emergency Services	<a href="mailto:wabadie@lafayettela.gov">wabadie@lafayettela.gov</a>
Pam Deville	Director	Cajundome	Emergency Services	<a href="mailto:pdeville@cajundome.com">pdeville@cajundome.com</a>
Pamela Granger	President/Owner	City of Youngsville/ McBade Engineers & Consultants, LLC	Structural Flood Control Projects	<a href="mailto:pamelag@mcbadeengineers.com">pamelag@mcbadeengineers.com</a>
Tammy Vincent	Administrative Assistant / Floodplain Administrator	City of Scott	Preventative Measures	<a href="mailto:tvincent@cityofscott.org">tvincent@cityofscott.org</a>
Jeffrey Giering	SHMO	GOHSEP		<a href="mailto:jeffrey.giering@la.gov">jeffrey.giering@la.gov</a>
Lauren Morgan	Associate Director	SDMI		<a href="mailto:lstevens@lsu.edu">lstevens@lsu.edu</a>
Chris Rippetoe	Hazard Mitigation Program Manager	SDMI		<a href="mailto:crippe2@lsu.edu">crippe2@lsu.edu</a>
Chris Andrus	Chief	Lafayette Fire Department	Emergency Services	<a href="mailto:candrus@lafayettela.gov">candrus@lafayettela.gov</a>
Mel Bertrand	City Manager/ Director	City of Broussard	Emergency Services	<a href="mailto:mel@broussardla.com">mel@broussardla.com</a>
Missy Lacassin	City of Broussard	City of Broussard	Public Information	<a href="mailto:mlacassin@broussardla.com">mlacassin@broussardla.com</a>
Sally Angers	City Clerk	City of Youngsville	Public Information	<a href="mailto:sallyangers@youngsvillela.gov">sallyangers@youngsvillela.gov</a>
Anna Doucet	City Engineer	C.H. Fenstermaker & Associates, L.L.C.	Structural Flood Control Projects	<a href="mailto:Anna@fenstermaker.com">Anna@fenstermaker.com</a>
Gary O'Neal	Grants Manger	C.H. Fenstermaker & Associates, L.L.C.	Property Protection	<a href="mailto:Goneal@fenstermaker.com">Goneal@fenstermaker.com</a>
Kim Alleman	Town of Duson	Town of Duson	Preventative Measures	<a href="mailto:kim.alleman@townofduson.com">kim.alleman@townofduson.com</a>
Jessica Cornay	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Design & Development	Preventative Measures	<a href="mailto:jcornay@lafayettela.gov">jcornay@lafayettela.gov</a>
Fred Trahan	Civil Engineering Supervisor	City of Lafayette & Lafayette C-PCG CIP Project Control	Structural Flood Control Projects	<a href="mailto:ftrahan@lafayettela.gov">ftrahan@lafayettela.gov</a>
Brian Smith	Director of Drainage	City of Lafayette & Lafayette C-PCG Drainage	Preventative Measures	<a href="mailto:bsmith@lafayettela.gov">bsmith@lafayettela.gov</a>
Jeanne Hornsby	Engineer	City of Carencro/ C.H. Fenstermaker & Associates, L.L.C.	Structural Flood Control Projects	<a href="mailto:jeanne@fenstermaker.com">jeanne@fenstermaker.com</a>
Walter Comeaux	Engineer	City of Broussard/Comeaux Engineering	Structural Flood Control Projects	<a href="mailto:walter4@comeauxengineering.com">walter4@comeauxengineering.com</a>
Monique Boulet	President	Acadiana Planning Commission		<a href="mailto:moniqueb@planacadiana.org">moniqueb@planacadiana.org</a>

Opportunity 1.c. – Formal Recognition of the Planning Process by Governing Body  
Not Applicable.



*Step 2: Involve The Public*

The involvement of the general public is a major tenant of the hazard mitigation planning process, and the CRS planning process is no exception. The term “public” includes residents, businesses, property owners, and tenants in the floodplain and other hazard areas, as well as stakeholders in the community and other governmental agencies. The CRS planning process must include an opportunity for the public to make comment on the plan during its development and before it’s approval. The best way to accomplish this is through the inclusion of members of the public on the planning committee, although they may also be organized as a separate committee. It is important to note that 50% of the maximum credit for this planning step is a prerequisite for Class 4 or better communities.

There are four opportunities to earn a total of 120 points under this step. The first opportunity can earn a maximum of 60 points if the planning process is conducted through a planning committee that includes members of the public and meets the following criteria:

- One half of the committee members must be representatives of the public or stakeholders for full credit
- The committee must meet a sufficient number of times to involve members in the keys steps of the process identified in Step 1
- All meeting must be open to the public and the meeting schedule must be publicly posted
- The planning process must be conducted through a committee composed of staff from community departments that have expertise in activities/actions that could prevent or reduce the severity of hazards that impact the community.
- The formalities of organizing and naming the committee are not as important as the membership and participation of all members

The second opportunity for earning points under step 2 is if one or more public meetings are held in the affected area(s) within the first two months of the planning process. This gives the committee an opportunity to obtain public input on the natural hazards, problems, and possible solutions. One key note to this is that the meetings must be held separately from the planning committee meetings credited for the aforementioned activity.

The third opportunity to earn points under step 2 is by holding one or more public meetings to obtain input on the recommended plan. The meeting must be at the end of the planning process, at least two weeks before submittal of the recommended plan to the community’s governing body. More specifically, this meeting serves as a chance for the plan and its findings to be explained to the public and people can submit their questions and comments regarding potential augmentation of the plan.

The fourth and last opportunity to earn CRS points under step 2 is through the addition of public information activities implemented to help explain the planning process and encourage input. Five points can be awarded for each activity, with a maximum of 30 points allowed.

*Qualifying Activities for Step 2**Opportunity 2.a. – Planning Process Conducted Through a Planning Committee*

The Planning Process and Committee is outlined in [Appendix A: Planning Process](#).

*Opportunity 2.b. – Public Meeting Within Two Months of Process Initiation in Impacted Area*

Not Applicable

#### Opportunity 2.c. – Public Meeting held for Review of Draft Plan

The Public Meeting was held on April 14, 2021 at the Robicheaux Center in Lafayette, LA. This allowed the public and community stakeholders to participate and provide input into the hazard mitigation planning process and plan draft. Additional information regarding the Lafayette Parish Public Meeting can be found under the [Meeting #7: Public Meeting](#) in [Appendix A: Planning Process](#).

#### Opportunity 2.d. – Additional Public Information Activities to Encourage Input

Several public information activities were created and implemented to help explain the planning process and encourage input from members of the community. An online public opinion survey of Lafayette Parish residents was conducted between December 2020 and March 2021. The survey was designed to capture public perceptions and opinions regarding natural hazards in the Lafayette Parish planning area. In addition, the survey collected information regarding the methods and techniques preferred by the respondents for reducing the risks and losses associated with local hazards. Additional information regarding this survey, as well as a link to the full results, can be found in the [Mitigation Strategy](#) section.

During the Public Meeting, an incident/issue questionnaire was provided in an effort to collect additional information from residents of Lafayette Parish regarding hazard events and their localized impacts. While the information collected via the questionnaire was to be integrated into this planning document, there were no questionnaires returned to the Planning Committee, and subsequently no results could be collected. A copy of the incident questionnaire can be found in the [Outreach Activity #2: Incident Questionnaire](#) portion of [Appendix A: Planning Process](#).

Lastly, SDMI created a Hazard Mitigation Plan Update website that includes information regarding the update process, meeting dates/materials, a status of the update, and a link to the public opinion survey. It also contains a copy of the draft plan was made available for the public to review. This website can be found at <https://hmpplans.sdmi.lsu.edu/Home/Parish/lafayette>

#### Step 3: Coordinate

In many instances, the flood hazards within communities have already been studied. There should be existing plans, studies, and flooding reports that can be reviewed, and there may also be flood protection activities being implemented or considered by other agencies. Step three calls for the coordination with additional agencies and organizations, particularly those not represented in the planning committee, and incorporation of these additional plans and activities into the floodplain management plan. The goals of the community should be identified in this step, reviewed, and considered during the development of the floodplain management plan. They should also be taken into account when the goals for the floodplain management plan are developed in step six.

There are two opportunities to earn points under step three, resulting in a maximum of 35 points possible. The first opportunity to earn points is through the inclusion of a review of existing studies, reports, and technical information, as well as the community's needs, goals, and plans for the area. This is a requirement in order to earn points under step three. This review needs to include a review of community needs and goals, past flood studies, disaster damage reports, natural area plans, and other documents that will provide information for the planning process.

The second opportunity for CRS points is by coordinating with agencies and organizations outside of the community's governmental structure. For these purposes, "coordinate" means to:

- Keeping records of contacts with agencies and organizations
- Data requests related to the hazard
- Ask if the agency or organization is engaged in activities that might affect flooding
- Provide the agency an opportunity to be involved in the planning effort

One point is provided for each agency or organization that is contacted. Two points are provided for meeting or having a phone conversation with the agency or organization. However, coordination with an agency can only be counted once. If the community wants the plan to qualify as a multi-hazard mitigation plan, the plan must identify all stakeholders that are involved or given the opportunity to be involved. At a minimum, stakeholders include local and regional agencies involved in hazard mitigation activities, agencies that have the authority to regulate development, and any neighboring communities.

### [Qualifying Activities for Step 3](#)

#### [Opportunity 3.a. – Review of Existing Studies and Plans](#)

The specific Plans, Studies, and Reports are listed below along with a discussion on how they were incorporated into the Floodplain Management portion of the 2021 HMP Update.

- Floodplain Ordinances – All seven jurisdictions within Lafayette Parish participate in the National Flood Insurance Program (NFIP) and therefore have adopted floodplain ordinances. These ordinances have been continually reviewed to incorporate any new requirements, the adoption of a Freeboard Ordinance in 2009, and the latest ordinance adoption in November 2018 to adopt the 2018 Flood Insurance Rate Maps.
- Lafayette Parish Emergency Operations Plan (EOP) –The EOP was reviewed to determine what action items were needed to improve emergency preparedness. It was also used for warnings and evacuation information to incorporate into the plan. The Lafayette Office of Homeland Security and Emergency Preparedness updated the EOP in June of 2020.
- Comprehensive Plan – The City of Lafayette recently updated its Comprehensive Plan. The updated Plan is entitled Plan Lafayette. The updated plan was used to gather data on the Parish's growth strategies and planning initiatives. Table 1.4 shows the plan's objectives.
- Flood Insurance Rate Maps (FIRMs) Flood Insurance Study – These maps were used to evaluate the risk associated with the Flood Zones A, AE, and X. Data from these maps was also used to summarize the flood hazard
- Capital Improvement Plans (CIP) – were developed to address the inefficiencies in the Parish's drainage system. The plans help to determine, prioritize, and optimize drainage projects to reduce local flooding and propose drainage facilities, construction priorities, as well as funding sources and capital improvements.

Please see the [Program Integration](#) section of Appendix A and the [Incorporation into Existing Planning Programs](#) section of Appendix B for more information regarding the review of existing studies and plans.

Table F-96: Plan Lafayette Elements and Goals

Plan Lafayette Elements and Goals	
Land Use Element	
GOAL 1: Align land use, transportation, and utility planning with the FLUM.	
GOAL 2: Create a clear process for land use and zoning review, land use planning, annexation, and extension of utilities.	
GOAL 3: Strengthen local planning, regional planning and coordination with surrounding municipalities.	
Community Character Element	
GOAL 1: Preserve And Capitalize On Lafayette's Unique Character	
GOAL 2: Project An Attractive Community Image	
GOAL 3: Strengthen the character of downtown and its surrounding areas and neighborhoods.	
GOAL 4: Direct growth toward mixed-use centers and major corridors.	
Housing & Neighborhoods	
GOAL 1: Encourage a diverse range of housing opportunities and choices	
GOAL 2: Promote quality housing and encourage the rehabilitation and/ or reuse of declining housing stocks	
GOAL 3: Develop and facilitate affordable housing opportunities for low income households	
GOAL 4: Protect and revitalize neighborhoods and assets	
Historical & Cultural Resources	
GOAL 1: Promote and highlight key historical and cultural resources	
GOAL 2: Increase community-wide arts and cultural access and education.	
GOAL 3: Value economic impact of arts and culture in the creative economy.	
Economic Development	
GOAL 1: Produce more skilled workers locally for local jobs	
GOAL 2: Broaden employment sectors that drive the parish economy.	
GOAL 3: Continue to strengthen the identity and mix of uses in the downtown core.	
Transportation & Mobility	
GOAL 1: Preserve the existing and planned transportation system.	
GOAL 2: Provide a multimodal transportation system that facilitates the operational efficiency and effective movement of both people and goods	
GOAL 3: Ensure safety for all users of transportation facilities and services.	
GOAL 4: Identify the funding needed for LCG's transportation system and potential sources for that funding.	
Utilities	
GOAL 1: Coordinate with LUS to ensure that utilities incorporate the FLUM in the strategic planning of system expansions to provide adequate service to all customers in the service area	
GOAL 2: Continue to provide reliable service to all customers.	
GOAL 3: Satisfy all environmental compliance regulations established by federal and state environmental agencies	
GOAL 4: Ensure adequate funding for needed existing infrastructure expansions and new facilities.	
Community Facilities & Services	

GOAL 1: Continue to provide reliable service to all customers
GOAL 2: Support efforts to improve LPSS performance.
GOAL 3: Connect UL at Lafayette, Downtown, and surrounding neighborhoods.
GOAL 4: Encourage a range of technical training, adult education, and higher education opportunities in Lafayette.
GOAL 5: Enhance the role of community centers, libraries, and public buildings as centers of activity and neighborhood resources
<b>Recreation &amp; Open Space</b>
GOAL 1: Operate and maintain Lafayette parks to provide opportunities for all residents to experience and enjoy the parish's open space and recreation.
GOAL 2: Expand role of parks and recreation in promoting healthy communities and opportunities for recreation
GOAL 3: Utilize parks, recreation, open space, and waterways to expand the green infrastructure network
<b>Resource Conservation &amp; Hazard Mitigation</b>
GOAL 1: Conserve and protect natural resources.
GOAL 2: Protect people and property from hazards.

Opportunity 3.b. – Coordinating with Communities and Agencies Outside of Government Structure

*Table F-97: Summary of Coordination between Planners, Jurisdictions, and Other Agencies.*

Agency/Organization	Invited to Participate in the FMP Process	Phone or In-person Meeting	Other Information/ Data Provided
Lafayette Office of Homeland Security and Emergency Preparedness	Yes	In-person E-mail	Organized previous Hazard Mitigation Plan
Louisiana Watershed Initiative	No	E-mail	Received Stakeholder Input Form
FEMA	No	Phone	NFIP Claims Data / Misc. Guidance
ISO	No	Phone E-mail	Advice regarding the FMP process
C.H. Fenstermaker and Associates	Yes	E-mail Phone In-person	Discussed FMP process, gained feedback, and tools. Project Assistance
Stephenson Disaster Management Institute	Yes	In person E-mail	Contracted to Develop Parish Hazard Mitigation Plan
Acadiana Planning Commission	No	Phone In-person	Possibilities discussed for future collaboration. Monique Boulet attended Kickoff Meeting
Governor's Office of Homeland Security and Emergency Preparedness	Yes	E-mail Phone	Advice regarding the FMP process
Lafayette Economic Development Authority	No	E-mail	Received economic data

During the beginning phases of the 2021 Lafayette Parish Multi-Jurisdictional Hazard Mitigation Plan Update process, Parish officials contacted several stakeholder groups in an effort to involve them in the update process. Below is a copy of the correspondence requesting participation, a copy of the form sent with the correspondence collecting input from the stakeholders, and a list of stakeholders to which the correspondence and input form were sent.

*Table F-98: Stakeholder Groups Contacted for Participation in Hazard Mitigation Plan Update*

Name	Organization	Email
Krista Jankowski	CPRA	<a href="mailto:Krista.Jankowski@la.gov">Krista.Jankowski@la.gov</a>
Evelyn Campo	OCD- DRU	<a href="mailto:evelyn.campo@la.gov">evelyn.campo@la.gov</a>
Dwayne Leblanc	Wright National Flood	<a href="mailto:dwayne.leblanc@weareflood.c">dwayne.leblanc@weareflood.c</a>
Cindy O'Neal	LA-DOTD	<a href="mailto:Cindy.ONeal@LA.gov">Cindy.ONeal@LA.gov</a>
Darrin Dutton	FEMA Region 6	<a href="mailto:DarrinD.Dutton@fema.dhs.gov">DarrinD.Dutton@fema.dhs.gov</a>
Dave Heigel	FEMA Region 6	<a href="mailto:David.Hiegel@fema.dhs.gov">David.Hiegel@fema.dhs.gov</a>
Donald Sagrera	Teche Vermilion	<a href="mailto:sagreral@aol.com">sagreral@aol.com</a>
Emad Habib	UL Lafayette	<a href="mailto:emad.habib@louisiana.edu">emad.habib@louisiana.edu</a>
Pamela Granger	McBade Engineers	<a href="mailto:pamelag@mcbadeengineers.co">pamelag@mcbadeengineers.co</a>
Ralph Libersat	Vermilion Parish	<a href="mailto:libersatcoastalservices@gmail.c">libersatcoastalservices@gmail.c</a>
Larry Richard	Iberia Parish	<a href="mailto:mlarryrichard@iberiagov.net">mlarryrichard@iberiagov.net</a>
Matt Johns	Rapides Parish	<a href="mailto:matt@rapc.info">matt@rapc.info</a>
Chester Cedars	St Martin Parish	<a href="mailto:ccedars@stmartinparish.net">ccedars@stmartinparish.net</a>
Alex Guillory	Bluewing Civil Consulting	<a href="mailto:alex@bluewingcivil.com">alex@bluewingcivil.com</a>
David Cheramie	Bayou Vermillion	<a href="mailto:ceo@bayouvermiliondistrict.org">ceo@bayouvermiliondistrict.org</a>
Noclette Jones	OCD- DRU	<a href="mailto:Nicolette.Jones2@la.gov">Nicolette.Jones2@la.gov</a>
Garland Pennison	HDR Engineering	<a href="mailto:garland.pennison@hdrinc.com">garland.pennison@hdrinc.com</a>
Mark Wingate	ARMY CORPS	
Bradley Spiegel	OCD- DRU	<a href="mailto:Bradley.Spiegel@la.gov">Bradley.Spiegel@la.gov</a>
Kelia Bingham	APC	<a href="mailto:kbingham@planacadiana.org">kbingham@planacadiana.org</a>
Jeffery Giering	GOHSEP	<a href="mailto:jeffrey.giering@la.gov">jeffrey.giering@la.gov</a>
Anne Famoso	LEDA	<a href="mailto:Afamoso@Lafayettela.gov">Afamoso@Lafayettela.gov</a>

**From:** Stephanie Weeks  
**Sent:** Wednesday, December 16, 2020 10:24 AM  
**To:** Stephanie Weeks <sweeks@LafayetteLA.gov>  
**Subject:** LAFAYETTE PARISH HAZARD MITIGATION PLAN STAKEHOLDER INPUT

Good Afternoon,

You are receiving this email because you have been identified as a possible stakeholder, that could provide valuable input for our upcoming Parish wide All-Hazard Mitigation Plan Update for Lafayette Parish.

This update includes a review of our existing risk to flooding and other natural hazards. We are trying to collect information from many different stakeholder groups and wanted to reach out to your organization to see if you would like to provide input on the plan update.

We would appreciate it if you could review the questions in the attached input form and let us know if you have any comments. I have included a fillable document, as well as a word document, in the event there is not enough space on the fillable form.

Thank you in advance for your time and we look forward to getting your response.

Have a wonderful day and Happy Holidays!

Sincerely,

*Figure F-31: Stakeholder Outreach Email*

<b><u>Stakeholder Outreach Form</u></b>	
Staff Member:	<u>Stephanie Weeks</u>
Date:	
Time:	
Organization Contacted:	
Name of Contact:	
Title of Contact:	
Phone Number:	
Email Address:	
<p><b>Introduction:</b> We are currently working to update our local hazard mitigation plan which includes a review of our existing risk to flooding and other natural hazards. We are trying to collect information from many different stakeholder groups and wanted to reach out to your organization to see if you would like to provide input on the plan update. We have a few questions we are asking if you have some time to answer them.</p>	
<p>Question #1: Do you have any data or information related to flooding or other hazards that may be useful as we assess risk to hazards through this planning process?</p>	
<div></div> <div></div> <div></div>	
<p>Question #2: Is there anything that your organization is doing that might affect flooding (increase/decrease) or properties in flood prone areas within the community?</p>	
<div></div> <div></div> <div></div>	
<p>Question #3: Would you be interested in being more involved in the planning effort? For example, being sent the draft plan for review when ready?</p>	
<div></div> <div></div> <div></div>	
<p>Other information you would like to provide:</p>	
<div></div> <div></div> <div></div> <div></div>	

Figure F-32: Stakeholder Outreach Input Form



*Step 4: Assess The Hazard*

For this step, the committee reviews, analyzes, and summarizes the data collected regarding the natural hazards faced by the community. The focus is on the sources, frequency, extent, and causes of flooding. The planning committee should consult existing flood studies, including the Flood Insurance Study, drainage problem studies, historical records, and the knowledge and experiences of the planning committee members to get a robust understanding of the flood hazard. New studies developing new flood data do not need to be conducted in order to receive credit, although that can occur if it determined through the progression of the planning process.

Rather than being a broad or generic discussion, the hazard assessment needs to describe the flood hazard specific to the community. It needs to discuss how often it floods, the locations of flooding, the depth of flooding, and the source or cause of the flooding.

Credit for step four is broken down into four opportunities. The first opportunity for credit is through the inclusion of an assessment of the flood hazard in the plan. This flood hazard assessment is required in order to obtain points within step four. Flood hazard areas that require assessment include:

- The Special Flood Hazard Area (SFHA) shown on the Flood Insurance Rate Map (FIRM)
- Repetitive loss areas
- Areas not mapped on the FIRM that have flooded in the past
- Other surface flooding identified in other studies

A total of 15 points is available for this flood hazard assessment if it meets the following criteria:

- Five points for a map of the flood hazard areas
- Five points for a description of the known flood hazards, including source of water, depth of flooding, velocities, and warning time
- Five points for a discussion of past floods

The next opportunity worth 10 points is through the inclusion of an assessment of less-frequent flood hazards in the plan. For this credit, the community must identify the hazard, including:

- An inventory of levees that would result in a flood of developed areas if they failed or were overtopped
- An inventory of dams that would result in a flood of developed areas if they failed or were overtopped
- Any of the seven flood-related special hazards listed in Section 401 of the CRS Coordinator's Manual
- The coastal A zone

To receive full credit under this opportunity, the community must also map the area(s) affected. Area maps are acceptable and no new studies are needed. Lastly, the community must summarize the hazard(s) in lay terms. Because the most important readers are elected officials and community residents, the descriptions must be as approachable and accessible as possible.

The third opportunity, worth five points, is through the identification of areas likely to be flooded and flood problems that are likely to get worse as a result of changes in floodplain development and demographics, development in the watershed, and climate change and sea level rise.

The fourth and final opportunity for points under step four, also worth five points, is by including a description of the magnitude or severity, history, and probability of future events for other natural hazards.

This section goes into depth assessing the hazards that face Lafayette Parish, and identifying the potential challenges that may occur because of those hazards.

#### Qualifying Activities for Step 4

##### Opportunity 4.a. – Inclusion of Flood Hazard Assessment

See the *Flooding* portion of the Risk Assessment for additional details concerning flooding in the Lafayette Parish Planning Area.

### *Known Flooding Hazards*

*(Step 4)*

Flooding refers to a general and temporary condition of partial or complete inundation of normally dry land. Three types of flooding occur in the planning area: 1) Flash Flooding; 2) Localized Drainage Flooding; 3) Backwater Flooding and; 4) Riverine Flooding.

A description of each type of flooding is provided, along with information on historical events, and the likelihood of future effects. The end of this section will detail the vulnerability of the parish to flooding, and the types of impacts that can be expected from future flooding.



*Figure F-37: Flash Flooding in June 2019: University Underpass*

#### Special Flood Hazard Areas (100-year floodplain) (Step 4.a.1)

A SFHA is defined by FEMA as: “the area where the National Flood Insurance Program's (NFIP's) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies” (FEMA, 2016). The SFHA is the same as the 100-year floodplain, which is known to have a 1% annual chance of flooding. This can also be interpreted that over the span of an average 30-year mortgage, the property will have a 26% chance of flooding. The Maps on pages 41-44 in the Hazard Mitigation Plan show the SFHA for Lafayette Parish. Approximately, 70,284 acres of Lafayette Parish lie within the 100-year Floodplain or the 1% annual chance floodplain. This accounts for 41% of the parish.

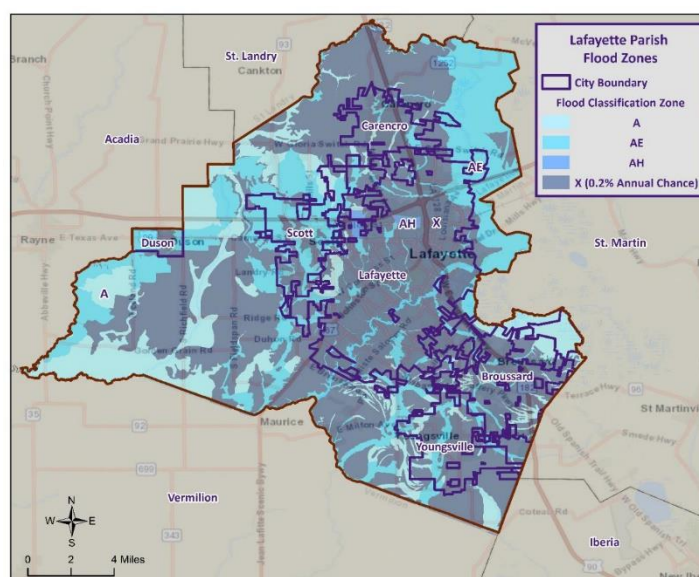


Figure F-34: Lafayette Parish Planning Area within the Flood Zones.

Also see [Location of Principle Flood Areas](#) in the Risk Assessment for SHFA maps for individual jurisdictions.

#### Other Potential Flooding Hazards

##### *500-year Floodplains (Step 4.b)*

The 500-year floodplains are moderate flood hazard areas known to have a .2% annual chance of flooding. These areas are known to flood, only at a much less frequent rate of the 100-year floodplains (the SFHA). Approximately 6,280 acres within Lafayette Parish lies in the 500-year Floodplain.

##### *Coastal Flood Zones (Step 4.b)*

Coastal flooding is caused by irregular tidal water and wave action that temporarily inundates areas near land- ocean boundaries. Lafayette Parish has no Coastal Flood Zones.

##### *Localized Flooding (Step 4.c)*

Both [Figure F-35](#) and [Figure F-36](#) identify areas in Lafayette Parish that are specifically prone to flooding. These areas were identified by parish employees and local residents. Some of these areas are not located in the SFHA.

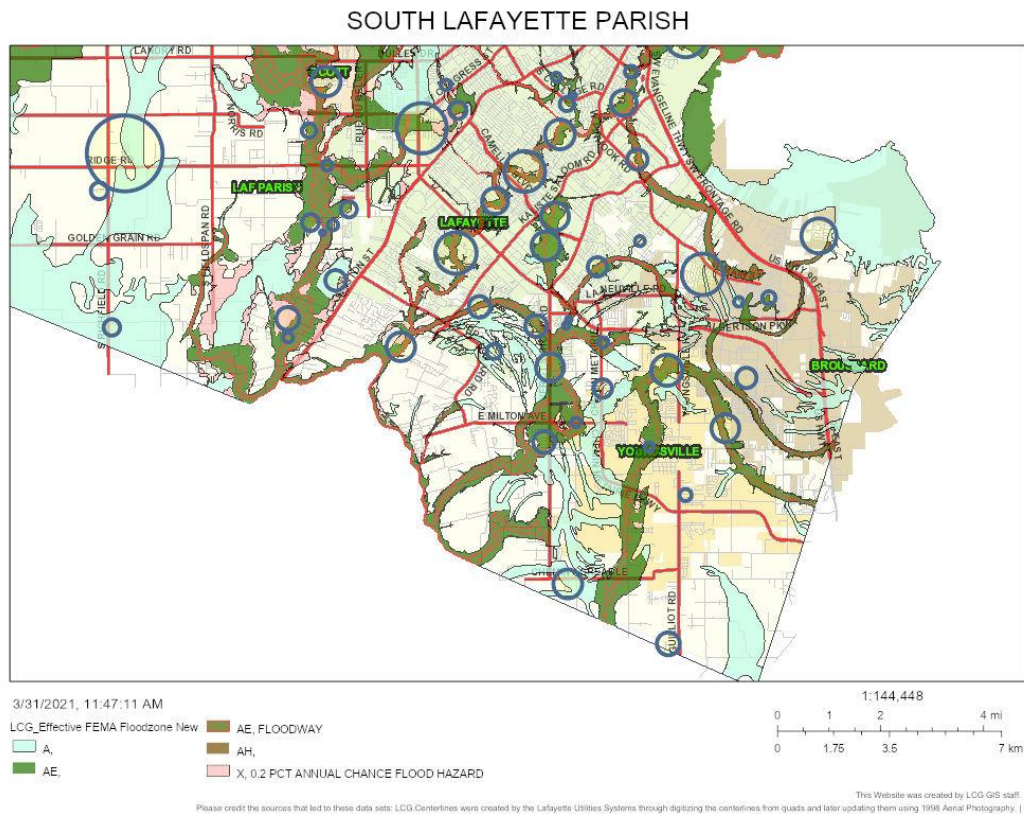


Figure F-35: Areas of South Lafayette Parish Likely to Flood (Step 4.c.)

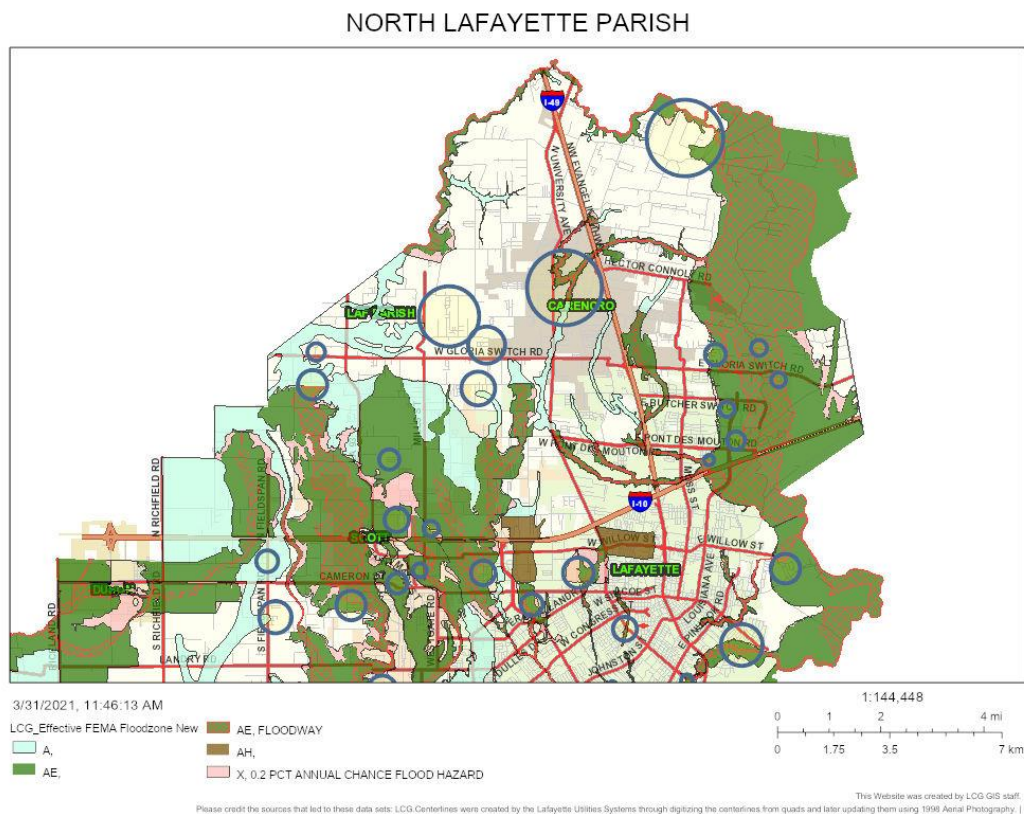


Figure F-36: Areas of North Lafayette Parish Likely to Flood (Step 4.c.)



*Table F-99* shows the % of land that is located inside of the 100 and 500 Year Floodplain. The percentage was calculated on a City/Parish basis. I.E.: Within the City limits of Broussard, the amount of 100-Year floodplain is 31.85%; Within the Parish of Lafayette, the amount of 100-Year Floodplain located within the city limits of Broussard is 1.85%

*Table F-99: Percentage of land located within 100-year (1% annual chance) and 500-Year Floodplain (0.2% annual Chance)*

Jurisdiction	% of Land IN 100-Year Floodplain (City/Parish)	% of land IN 500-Year Floodplain (City/Parish)	% of land OUT of 500-Year Floodplain (City/Parish)	Repetitive Loss Structures	NFIP policies in Force
City of Broussard	31.63%/1.85%	.94%/.05%	67.44%/3.95%	9	1,333
City of Carencro	16.14%/.47%	1.22%/.04%	82.64%/2.40%	36	601
Town of Duson	64.20%/.54%	15.65%/.13%	20.15%/.17%	1	71
Lafayette Parish (Unincorporated)	48.77%/29.67%	3.66%/2.23%	47.57%/28.94%	211	9,853
City of Lafayette	20.50%/4.25%	3.52%/.73%	75.97%/15.76%	137	8,425
City of Scott	65.31%/2.31%	8.81%/.38%	25.88%/1.12%	26	1,119
City of Youngsville	28.92%/1.30%	2.12%/.10%	68.95%/3.10%	26	2,139

*Table F-100: Acreage located within the 100-year (1% annual chance) and 500-Year Floodplain (0.2% annual chance)*

Jurisdiction	Acreage in 100-Year Floodplain (1% annual chance)	Acreage IN 500-year Floodplain (.2% annual chance)	Acreage OUT 500-Year Floodplain (.2% annual chance)	Total Acreage
City of Broussard	3179	94	6779	10052
City of Carencro	805	61	4122	4988
Town of Duson	927	226	291	1444
Lafayette Parish (Unincorporated)	50,977	3824	49715	104516
City of Lafayette	7,308	1256	27080	35644
City of Scott	4,855	655	1924	7434
City of Youngsville	2,233	164	5323	7720
<b>Total</b>	<b>70,284</b>	<b>6,280</b>	<b>95,234</b>	<b>171,798</b>

## Repetitive Loss Areas

(Step 4.a)

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 the entire Lafayette Parish planning area are provided in the table below:

*Table F-101: Repetitive Loss Structures for Lafayette Parish.*

Jurisdiction	Number of Structures	Residential	Commercial	Government	Total Claims	Total Claims Paid	Average Claim Paid
Lafayette C-PCG	211	206	5	0	683	\$19,069,105	\$27,919
Broussard	9	8	1	0	25	\$431,326	\$17,253
Carencro	36	35	1	0	122	\$1,678,108	\$13,755
Duson	1	1	0	0	2	\$27,925	\$13,963
Lafayette	137	126	11	0	447	\$14,077,731	\$31,493
Scott	26	17	9	0	86	\$653,499	\$7,599
Youngsville	26	26	0	0	69	\$1,135,849	\$16,462
<b>Total</b>	<b>444</b>	<b>417</b>	<b>23</b>	<b>0</b>	<b>1,434</b>	<b>\$37,073,543</b>	<b>\$18,349</b>

The repetitive loss structures were geocoded in order to provide an overview of where the repetitive loss structures are located throughout the parish. [Figure F-37](#) shows the approximate location of the structures, while [Figure F-38](#) shows where the highest concentration of repetitive loss structures is located. Through the repetitive loss map, it is clear the primary concentrated area of repetitive loss structures is focused in and around the City of Lafayette.

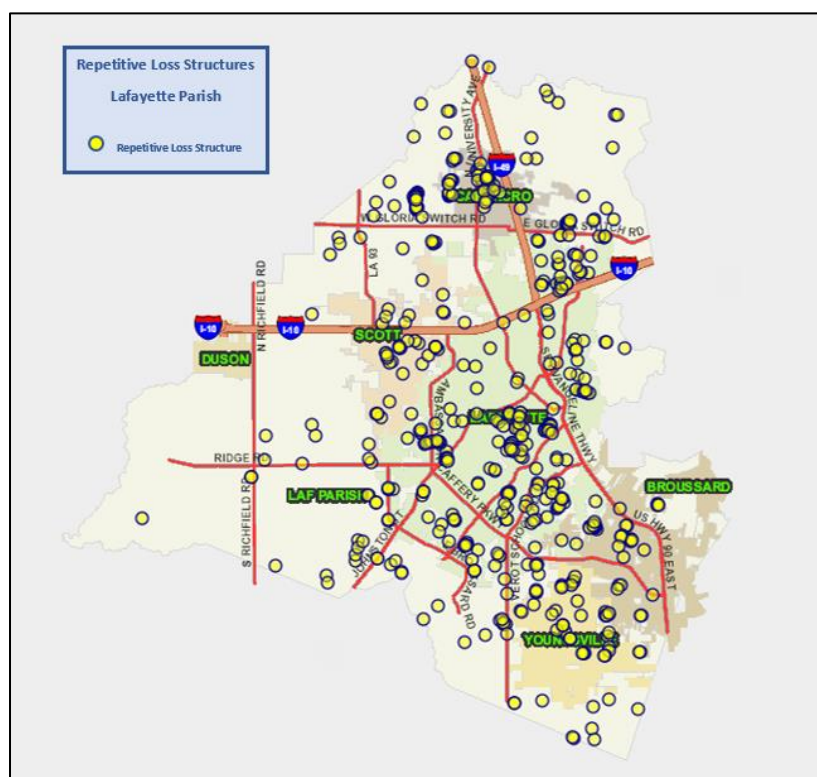


Figure F-37: Repetitive Loss Properties in the Lafayette Parish Planning Area.

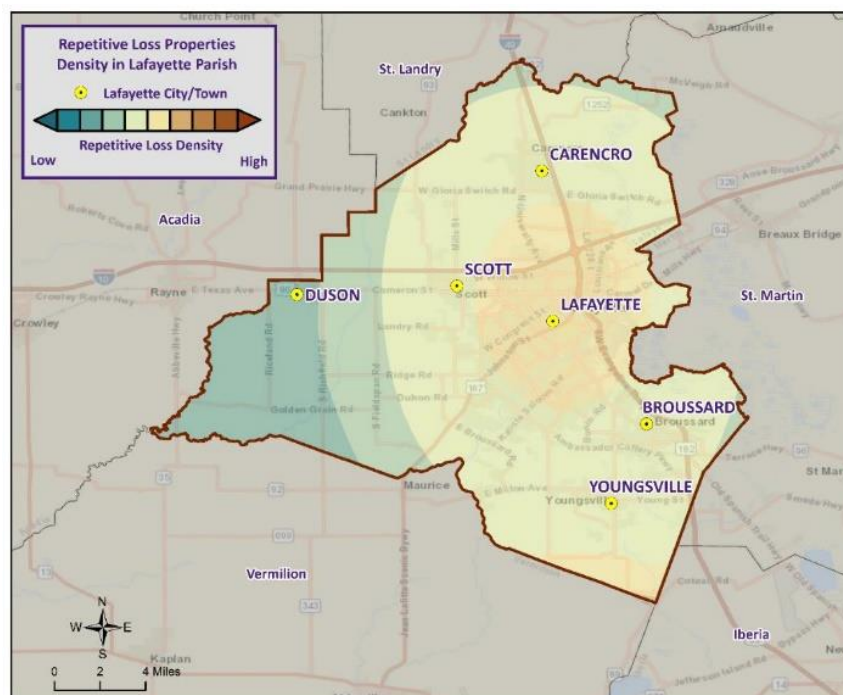
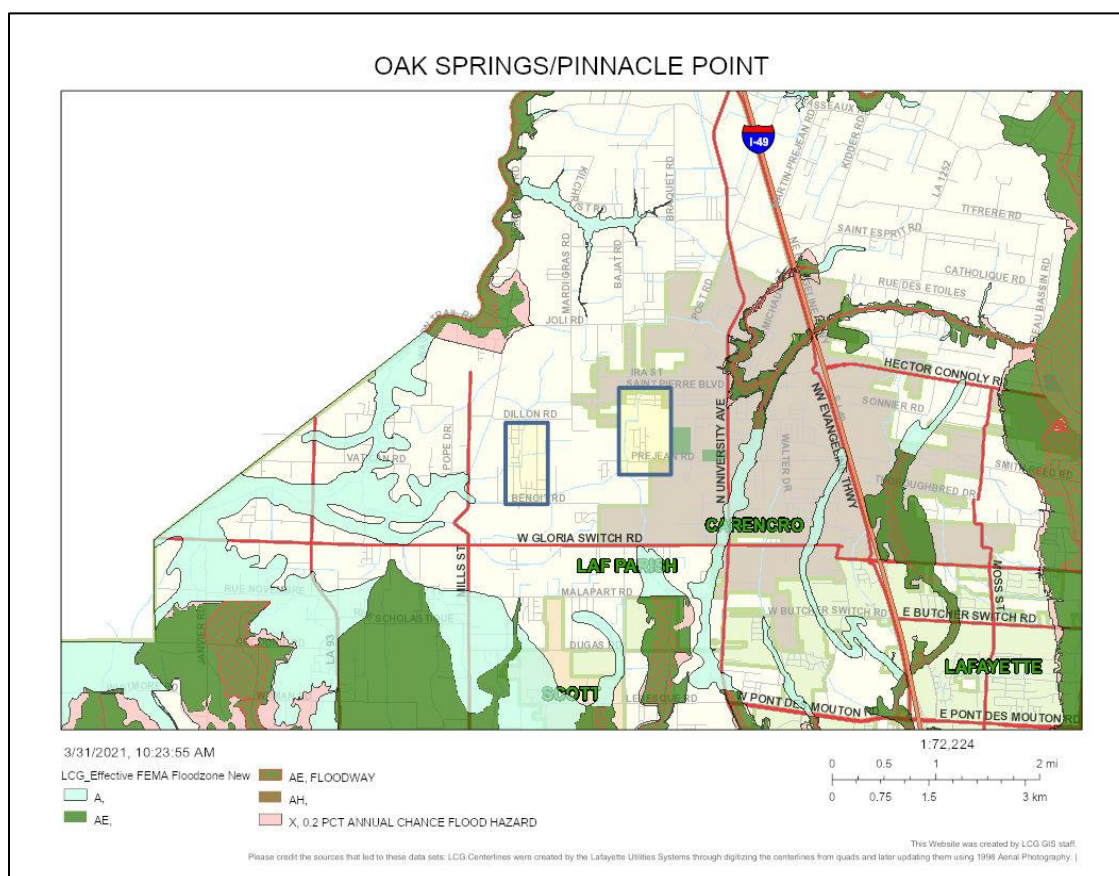


Figure F-38: Repetitive Loss Property Densities in the Lafayette Parish Planning Area.



*Figure F-39: SFHAs Around Oak Springs Subdivision*

**Flood Zone: X**

**Elevation Range:**

**Oak Springs 39.0 - 41.0**

**Slab on Grade**

Oak Springs Subdivision is a 95-lot subdivision located within an unincorporated area of Lafayette Parish. The development of the subdivision began in 2007, with 82 of the 95 lots built out between 2009 and present. An element of the development was the relocation of Lateral 9 of Bayou Carencre. Since construction, the subdivision has experienced multiple flood events: in March 2012, May 2014, May 2016, August 2016, June 2017, and June 2019; with NFIP claims totaling roughly \$1.5 million. This area is located within Flood Zone X, and mandatory flood insurance coverage is not required; therefore, many residents chose not to carry flood insurance. Based on FEMA Individual Assistance data from the August 2016 event, it is estimated the amount of damages, including claims and uninsured damage, equals approximately \$6 million. The adjacent development, Frenchman's Trail, is also heavily impacted by the relocated channel and has experienced numerous flood events, with flood insurance claims totaling \$2.1 million. As a result of the flooding, many of the residents can no longer afford their Standard NFIP Flood Insurance Policies (do not qualify for Preferred Risk Policy) or cannot afford to rebuild, resulting in many homes to be abandoned and/or foreclosed upon. According to the Acadiana Realtor Association Multiple Listing Service (MLS), since August 2016 a total of 36 properties in Oak Springs have been sold, with seven of those properties being sold as Bank Owned Properties. If drastic action is not taken to mitigate the flooding in this area, Oak Springs and the surrounding areas will continue to deteriorate, which will lead to higher foreclosure rates, lower property values, and increased crime.

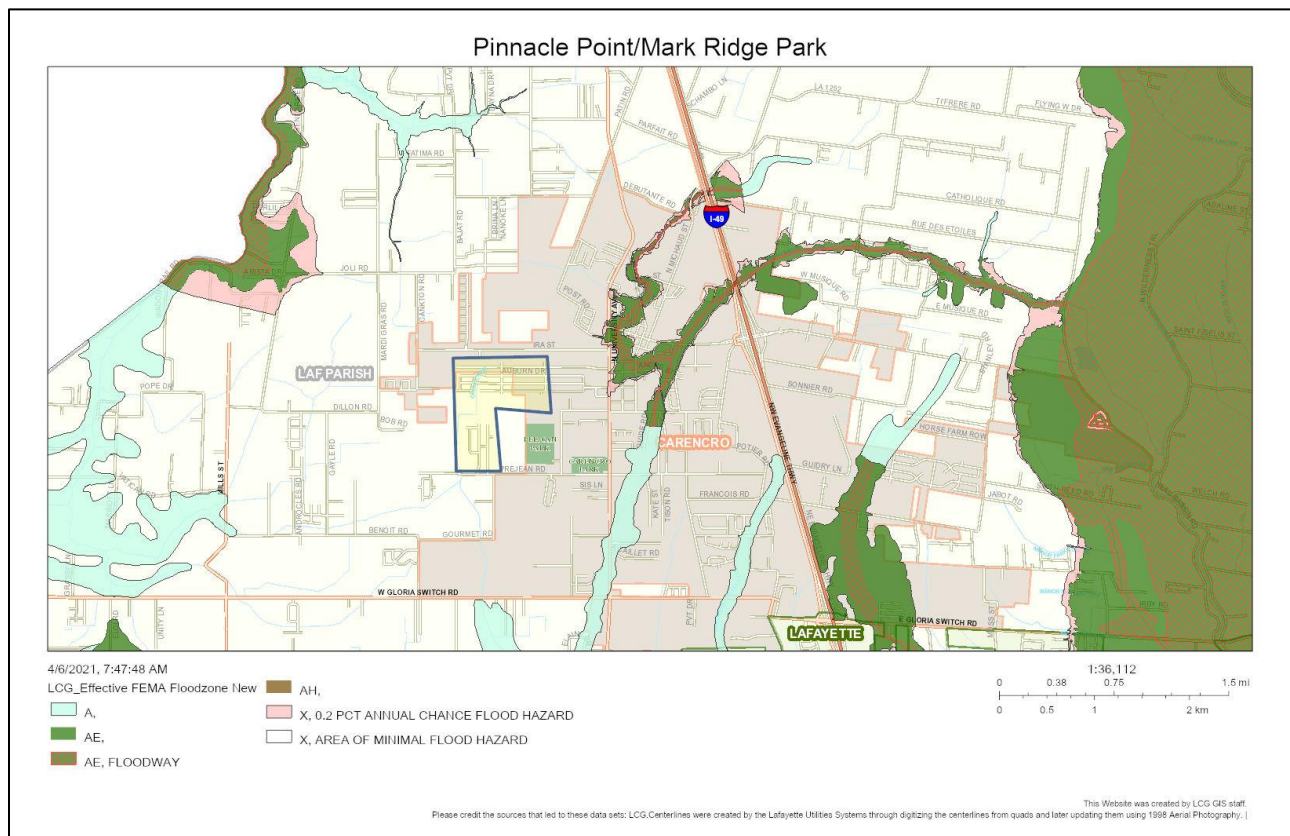




Figure F-40: Aerial Illustration of Oak Springs Subdivision from Recent Project Submittal

Table F-102: Number of Repetitive Loss Properties in Frenchman's Trail and Oak Springs Areas

Repetitive Loss Area	# of FEMA Repetitive Loss Properties	# of Additional Properties
<b>Frenchman's Trail</b>	15	14
<b>Oak Springs</b>	10	18



*Figure F-12: Aerial Illustration of Oak Springs from recent project submittal*

**Flood Zone: X**  
**Elevation Range:**  
**Pinnacle Point: 42.0 - 44.0**  
**Slab on Grade**

Pinnacle Point/Mark Ridge Park encompasses an area that is mainly residential homes that are built lower than the top bank of channel and lower than the road, the channel has a limited capacity and does not drain quickly. Flat area that does not drain. In the process of submitting multiple detention projects to alleviate the flooding in this area.

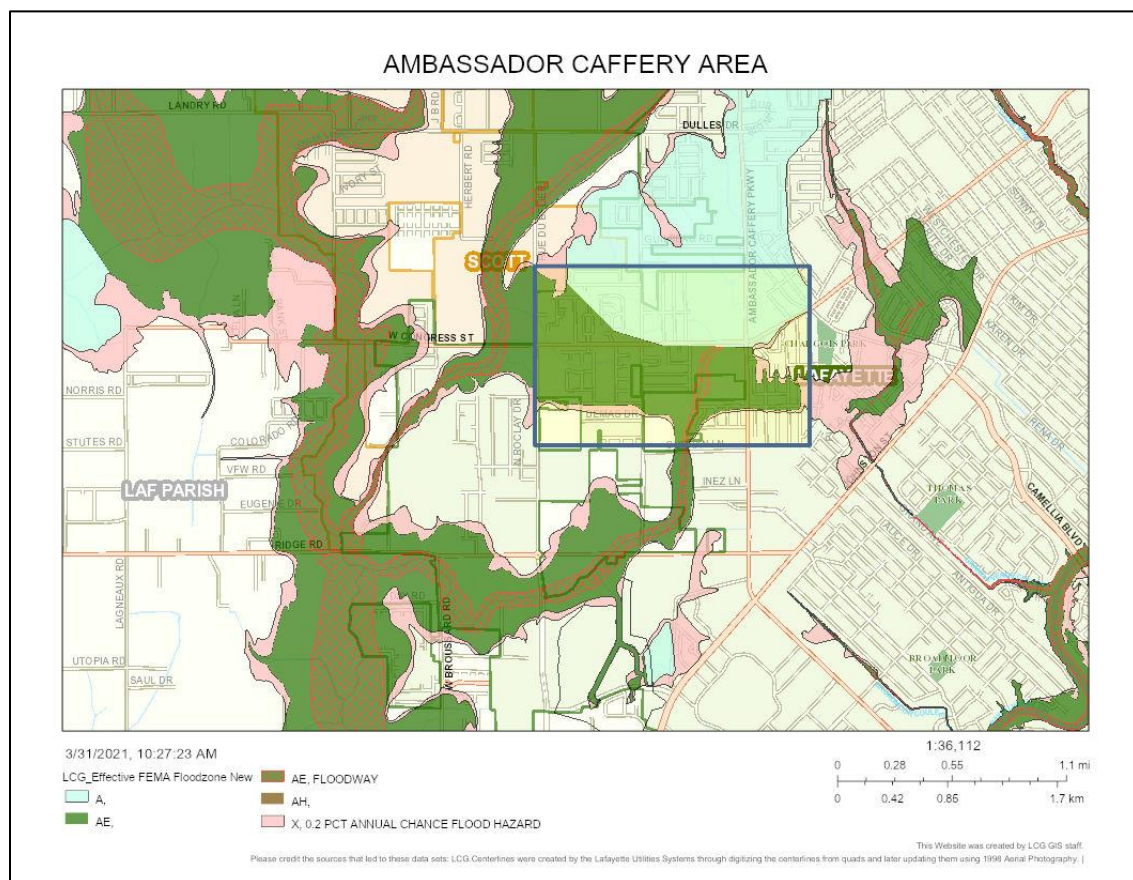


Figure F-41: Aerial Illustration of Pinnacle Point/Mark Ridge Park from Recent Project Submittal

Table F-103: Number of Repetitive Loss Properties in Mark Ridge Park and Pinnacle Point Areas

Repetitive Loss Area	# of FEMA Repetitive Loss Properties	# of Additional Properties
Mark Ridge Park	12	8
Pinnacle Point	9	8

Flooding in this area can be attributed to limited channel capacity and a flat terrain that does not drain. Floodwaters can quickly cover main roads and highways during storm events, often preventing evacuations and rescues. Heavy rains within a short period of time have caused the drainage system to be inundated and unable to keep up, resulting in ponding water in streets and homes.



*Figure F-42: Area near the intersection of W Congress & Ambassador*

**Flood Zone: AE, A, & X**

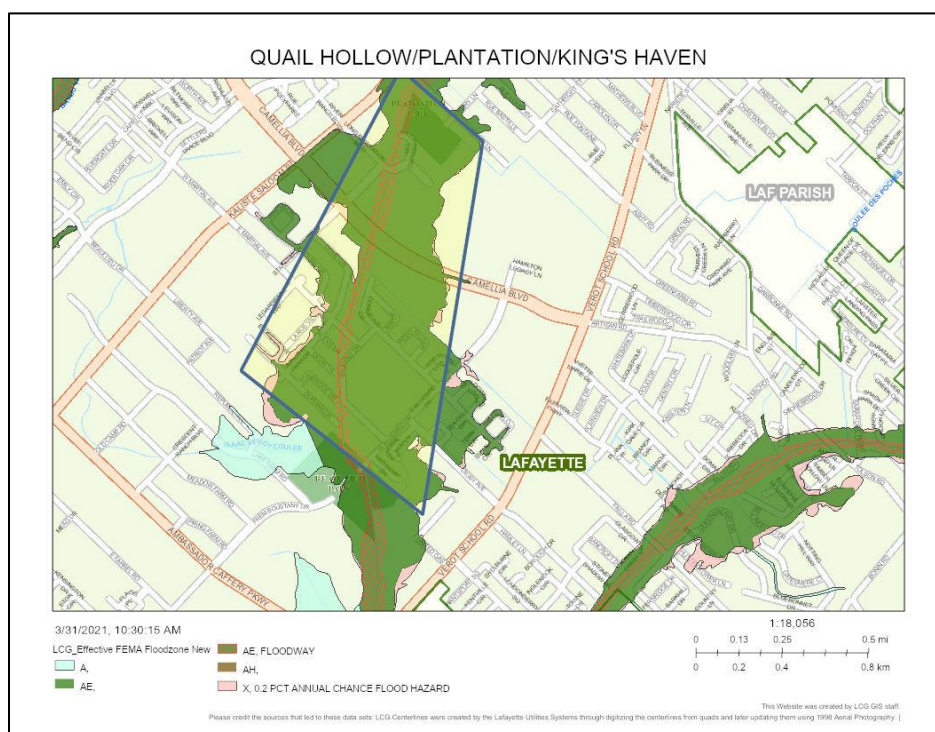
**BFE: 27.5-29.0**

**Elevation Range: 26.0-30.0**

**Slab on Grade**

Ambassador's drainage system was built on the assumption that a downstream drainage project would occur. That project still has not been built. This area does not have the outfall it needs, therefore water backs up. This was a state project. We are trying to fund a portion of the outfall project this year.





*Figure F-43: Quail Hollow/Plantation/King's Haven Areas*

**Current Flood Zone: AE, A, & X**

**Historic Flood Zone: X**

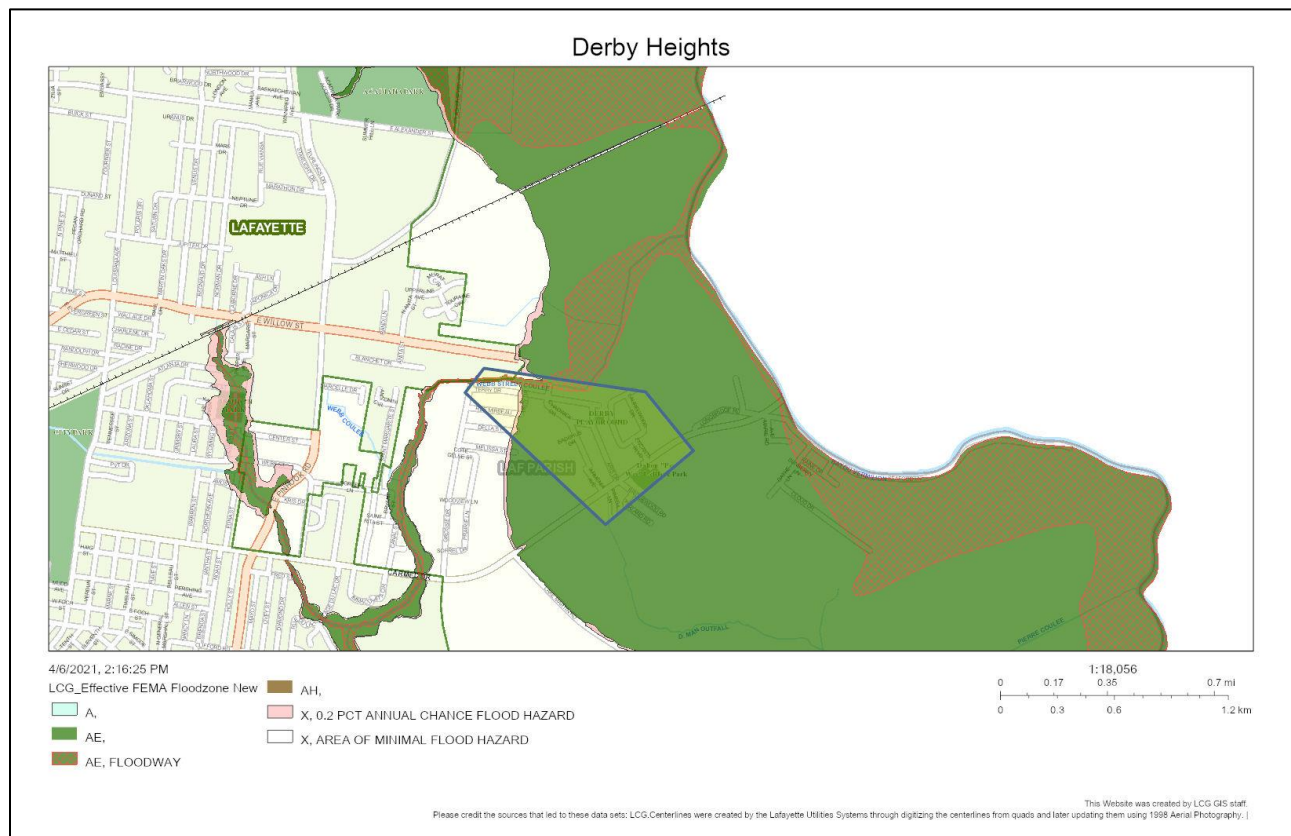
**BFE: 29.5-30.6**

**Elevation Range: 25.0-30.0**

**Slab on Grade**

**Single Family Homes and Townhomes**

Long Plantation should never been built – they excavated 2' below natural ground. The developer built a hole and then put homes there. Quail Hollow has always been a natural low detention area. When the homes were built they were not raised nor was the channel improved to handle the increase runoff – so it is still a low detention area. Unfortunately, now there are homes there instead of just birds. King's Haven was built just prior to the issuing of new flood maps and the homes were not built a BFE. The same channel was not improved to handle the increased runoff. None of these developments were built when detention was required.



*Figure F-44: Derby Heights Area*

**Current Flood Zone: AE & X**

**Historic Flood Zone: AE**

**BFE: 15.0-16.0**

**Elevation Range: 12.0-15.0**

**Slab on Grade**

**Single Family Homes**

Derby Heights is a Residential Neighborhood in the Eastern section of Lafayette Parish north of Carmel Drive, also known as Breaux Bridge Highway, approximately a half mile west of the Vermilion River. The subdivision is bounded by the Webb Coulee to the north (lateral W-11) and the D-Man Outfall (lateral W-29) to the south. During relatively minor rain events, the interior drainage within the subdivision, consisting of roadside ditches and culverts, conveys runoff southward where it crosses Carmel Drive through three (3) 4' by 4' box culverts before entering the D-Man Outfall. The D-Man Outfall continues traveling south where it confluent with the Vermilion River just upstream of Lake Martin Road.

During more extreme rainfall events (e.g., August 2016), additional flow enters the subdivision when the Webb Coulee overtops its banks. Flow begins to enter Derby Heights from the Webb Coulee when the water surface elevation reaches approximately 13.3 feet NAVD88.

This flow must exit the subdivision by flowing back into the Webb Coulee or travel southward toward the Vermilion River via the D-Man Outfall.

There is a ridge that borders the western edge of Derby Heights with higher elevations (i.e., up to 44 feet NAVD88); however, the majority of the subdivision is situated at elevations ranging from 12 to 15 feet NAVD88.

In addition to these two flooding sources (Webb Coulee and D-Man Outfall), the Derby Heights Subdivision is also located within the floodplain associated with the Vermilion River. According to the FEMA Flood Insurance Rate Map Number 22055C0200J (December 21, 2018), the Base Flood Elevation (BFE) within the Derby Heights Subdivision ranges from elevation 16 feet NAVD88 upstream of the subdivision to elevation 15 feet NAVD88 downstream of the subdivision.

#### ***Current Mitigation Actions for Derby Heights***

Duplantis Design Group conducted a H&H study of the Webb Coulee and D-Man Outfall in support of drainage improvements in the Derby Heights and Carmel Village Subdivisions located along Carmel Drive. DDG utilized HEC-HMS to simulate rainfall-runoff processes and HEC-RAS to simulate channel / structure hydraulics. These models were used to determine flowrates and water surface elevations associated with these two flooding sources. It was determined that there is a significant amount of overflow from the Webb Coulee into the Derby Heights Subdivision. As a result, increasing the outflow capacity into the D-Man Outfall is not a comprehensive solution.

To reduce the impacts of flooding in Derby Heights and Carmel Village, the overflow from the Webb Coulee must be addressed; additional outflow capacity can then be achieved by adding additional culverts under Carmel Drive.

Four (4) alternatives were identified and evaluated.

The following alternatives were evaluated

1. Alternative 1 includes the installation of an earthen berm and/or floodwall at the north of Carmel Village in an existing low area. The berm will extend approximately 450 feet and be set at approximately elevation 15 feet NAVD88. The minimum topography in this area is at approximately elevation 13.3 feet NAVD88.
2. Alternative 2 is inclusive of the earthen berm /floodwall as well as an additional 4'x 4' culvert at Carmel Drive.
3. Alternative 3 includes the earthen berm / floodwall as well as flap gates on existing culverts that drain into the Webb Coulee from Derby Heights and Carmel Village. These same storm drains backflow into the subdivision during heavy rains.
4. Alternative 4 includes the earthen berm/floodwall, additional culvert at Carmel Drive, and the flap gates.

Based on the report findings, DDS recommended Alternative 3 given the reduction in peak water surface elevation, the reduced duration of flooding, and the lower cost. Additional capacity out of Derby Heights can be added in the future if desired

## Types of Flooding Hazards

(Step 4.a.2)

**Flash Flooding:** Flash floods are characterized by a rapid rise in water level, high velocity, and large amounts of debris. They are 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. Flooding from excessive rainfall in Lafayette Parish usually occurs between July and October.

### Historical Events (Step 4.a.3)

*Table F-104* uses data mined from NOAA's National Centers for Environmental Information (NCEI) to identify the historic flash flooding events between January 1996 and November 2020 for the planning area. There were some that were included but the flash flood event was a part of a Hurricane or Tropical System.



*Figure F-49: Image of Flash Flooding in the Lafayette Parish Planning Area*

### Frequency (Step 4.a.3)

With 36 "Flash Flood" events reported by the NCEI over the past 25 years, the area can expect approximately 1.44 flash flood events per year. These are only "flash flood" reports. See *Table 2-21* on *Page 51* to see the annual probability by jurisdiction.

*Table F-104: Historical Flash Flood Events in Lafayette Parish between 1996-2020*

Date	Extents	Type of Flooding	Estimated Damages	Location
October 25, 1996	Between five and seven inches fell across Lafayette Parish in less than 24 hours. The hardest hit area was Carencro, and southern sections of Lafayette along the Vermilion River.	Flash Flood	\$10,000	CARENCRO
January 5, 1998	Around eight inches of rain fell across Lafayette Parish, resulting in serious flooding in Carencro. 41 homes received flood damages, of which 14 had major damage. Several businesses also were damaged by the floods. Several roads in the city of Lafayette were also flooded.	Flash Flood	\$200,000	CARENCRO
January 6-7, 1998	Another two to three inches fell across Lafayette, adding up to a two-day total of nearly ten inches. Many roads were closed in the city of Lafayette, and Carencro also reported many roads closed.	Flash Flood	\$40,000	LAFAYETTE
January 7, 1999	Over 5 inches of rain fell over Carencro, resulting in significant flooding in downtown and rural areas northwest of town. At least eight homes received water damage, and fire trucks had to come in to evacuate the residents. Twelve streets had high water on them.	Flash Flood	\$50,000	CARENCRO



March 11, 1999	Low area flooding reported across much of northern Lafayette, with minor flooding of a home in Carencro.	Flash Flood	\$10,000	LAFAYETTE
May 31, 1999	As much as five inches of rain fell in 40 minutes, resulting in 20 to 30 homes flooding on the southwest side of Lafayette.	Flash Flood	\$50,000	LAFAYETTE
May 31, 1999	Several roads were closed due to high water. Doppler radar estimated as much as five inches of rain had fallen over Carencro.	Flash Flood	\$25,000	CARENCRO
June 16, 1999	Around four inches of rain fell in an hour, resulting in flooding in Lafayette. One foot of water covered several roads, and some water was entering homes in southern sections of Lafayette.	Flash Flood	\$10,000	LAFAYETTE
June 6, 2001	Over ten inches of rain fell in the Youngsville area, resulting in nearly 400 homes and businesses with flood water damages. With US 90 closed between Lafayette and New Iberia, many people risked their life by driving around road barricades into deep, moving water. Fire and police rescue personnel used water ski-doo's to retrieve dozens of people from roofs of vehicles, and even trees. (Tropical Storm Allison)	Flash Flood	\$5,000,000	YOUNGSVILLE
April 8, 2002	Three inches of rain fell in one hour, resulting in significant street flooding across Iberia, Lafayette, and Vermilion parishes. Several homes had water enter them.	Flash Flood	\$25,000	PARISHWIDE
September 13, 2003	Around three inches of rain fell in less than an hour, resulting in street flooding across the city of Lafayette.	Flash Flood	\$25,000	LAFAYETTE
April 30, 2004	Over 3 inches of rain fell in less than 2 hours, resulting in serious street flooding. Some places had over 2 feet of water covering the roads.	Flash Flood	\$5,000	LAFAYETTE
May 12, 2004	After recording as much as 10 to 15 inches of rain in some locations, over 400 homes were damaged or destroyed.	Flash Flood	\$4,000,000	CARENCRO
May 22, 2008	After receiving four to six inches of rain, some homes had water enter them in the Oakbourne subdivision, and along Pinhook Road, Evangeline Thruway, and 10th Street.	Flash Flood	\$250,000	LAFAYETTE
September 01, 2008	Between 4 and 5 inches of rain fell in less than 3 hours, resulting in street flooding of sections of Lafayette. (Hurricane Gustav)	Flash Flood	\$10,000	PARISHWIDE
July 17, 2009	Three inches of rainfall per hour was reported west of Youngsville that resulted in flash flooding. Several roads were completely underwater.	Flash Flood	\$0	UNINCORPORATED AREA
October 22, 2009	Severe thunderstorms caused flash floods in Scott and Lafayette. Widespread street flooding was reported. Verot School Road was completely underwater with water approaching the undercarriages of cars.	Flash Flood	\$10,000	SCOTT AND LAFAYETTE

October 11, 2010	Widespread street flooding was reported near Ossun Elementary School when 3 to 5 inches of rain fell in a 3 hour period. Widespread street flooding occurred along Interstate 10 near the Ambassador Caffery Road exit.	Flood	\$2,000	UNINCORPORATED AREA
March 12, 2012	A weak frontal boundary caused widespread flooding in the Carencro area. 690 homes were flooded, and 77 rescues were necessary to evacuate residents.	Flash Flood	\$164,000,000	CARENCRO
March 12, 2012	Localized street flooding occurred in unincorporated areas of the parish when a weak frontal boundary passed through the area.	Flood	\$0	UNINCORPORATED AREA
August 11, 2012	A report was received of a bridge washed out due to heavy rain in the area.	Flash Flood	\$5,000	YOUNGSVILLE
January 9-10, 2013	A stalled frontal boundary along with multiple impulses aloft lead to an extended duration of rain, thunderstorms, and even a couple tornadoes. Massive flooding occurred along the Mermentau River where rainfall totals exceeded one foot at some locations during the event. Flood waters slowly drained over a couple of weeks. Heavy rain fell on saturated ground during the 9th and 10th causing road closures in portions of Lafayette Parish. Over 60 homes had flood waters enter them.	Flash Flood	\$22,500,000	RIDGE
May 28, 2014	Heavy rain in slow moving thunderstorms produced near a foot of rainfall just west of Lafayette during the morning of the 28th. Numerous roads were flooded and closed for a time and some schools sent children home for the day. Several houses were also reported flooded around Carencro along with 2 Lafayette area elementary schools. A few high-water rescues also took place during the event around the Scott area where the heaviest rainfall occurred.	Flash Flood	\$100,000	CARENCRO
July 18, 2014	Rain began to fall across Lafayette during the 17th and into the early morning of the 18th with 1 to 3 inches across the parish as a cold front moved closer. Heavy rain producing 2 to 4 additional inches occurred during the morning to early afternoon of the 18th as the front slowly moved through. This caused numerous roadways to be flooded from Carencro to the City of Lafayette while the rain was ongoing.	Flash Flood	\$0	CARENCRO
April 20, 2016	Flooding was reported along Ambassador Parkway at multiple intersections. Flood waters was also reported entering a high school auditorium at the peak of the event.	Flash Flood	\$1,000 (NCEI)	LAFAYETTE
May 1, 2016	Media reported many streets across Lafayette during the event flooded including Ambassador Caffery and Dulles. Several homes in Carencro also flooded. Rainfall amounts ranged from around 4 inches up to 6 in the north side of Lafayette to Carencro and the parish line.	Flash Flood	\$2,360,789	BILLEAUD
June 4, 2016	Heavy rain over the Lafayette area produced street flooding including along Ambassador Caffery Parkway and Dulles Drive. The flooding made the street impassable for a time.	Flash Flood	\$0 (NCEI)	LAFAYETTE

August 12, 2016	Street flooding along Ambassador Caffery and a few other poorly drained streets were first reported during the early morning of the 12th. High rainfall rates continued through the day with many streets being flooded and some structures by mid-morning. Widespread flooding of vehicles, structures, and high-water rescues began during the late morning across Lafayette Parish. The Vermilion River reached major flood stage by sunrise on the 13th and remained above major flood stage for 5 and a half days. Rainfall totals surpassed 20 inches in the southern section of the parish over the 12th and 13th. An estimated 9,376 structures flooded during the event.	Flash Flood	\$61,873,501	CARENCRO
August 13 & 14, 2016	Stream gages along the Vermilion River in Lafayette Parish crested during the 15th at the end of the flash flood event. Major flooding along the Vermilion continued through the 24th-25th and kept some neighborhoods flooded for a couple of weeks. At the Surrey Street Gage 10 feet is flood stage and the Vermilion crested at 17.6 feet which is the 2nd highest recorded Crest.	Flood	\$129,860,301	MOUTON
May 3, 2017	Heavy rain flooded many streets around Lafayette Parish. Some cars became flooded as water reached depths that was to the headlights. An elementary school also flooded in Scott. Rainfall totals ranged from 4 to 6 inches with Acadiana Regional Airport reporting 5.09 inches and 6.11 inches falling on Surrey Street at the Vermilion River.	Flash Flood	\$171,837	DUSON
June 29, 2017	Heavy rain in thunderstorms moved across the portions of Acadiana and flooding streets around Carencro. Water closed many streets and approached neared homes. Swanky's Restaurant in Carencro reported 3 inches of water in the structure.	Flash Flood	\$1,477,955	VATICAN
November 1, 2017	Multiple reports and photographs were received indicating flooding around the city of Lafayette. Multiple cars were stalled/flooded around the city with some structures almost taking water. Some roads were closed for multiple hours until flood waters receded.	Flash Flood	\$2,153,184	SCOTT
December 27, 2018	Numerous roadways became flooded or impassable in Lafayette and Scott after several inches of heavy rain. Flood waters also approached some businesses and homes.	Flash Flood	\$0	TORIAN
April 18, 2019	Flooding closed several roads in Scott and Lafayette.	Flash Flood	\$0 (NCEI)	SCOTT & LAFAYETTE
May 10, 2019	Several roads flooded and barricaded in Scott.	Flash Flood	\$0 (NCEI)	SCOTT
June 6, 2019	Significant street flooding was reported across Lafayette. Several cars were reported flooded or stalled on University Ave and around 20 roads were temporarily closed. Several businesses flooded in southern Lafayette Parish along Highway 90.	Flash Flood	\$4,988,438	OSSUN
July 14, 2019	Heavy rain from Barry resulted in flooding in Youngsville. One home had 4 inches of water inside the structure.	Flash Flood	\$281,495	YOUNGSVILLE

Based on previous flood events, the worst-case scenarios are comprised of 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 five feet can be expected in the unincorporated areas of the parish. The incorporated areas of Lafayette, Carencro, and Scott can expect flood depths from three to five feet, while the incorporated areas of Broussard, Youngsville, and Duson can expect flooding levels of approximately one to three feet.

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

The principal factors affecting flood damage along a river or stream are flood depth and velocity. The deeper and faster flood flows become, the more damage they can cause. Shallow flooding with high velocities can cause as much damage as deep flooding with slow velocity. This is especially true when a channel migrates over a broad floodplain, redirecting high velocity flows and transporting debris and sediment. Flood severity is often evaluated by examining peak discharges.

On the following pages, [Table F-105](#) lists peak flows used by FEMA to map the floodplains of Lafayette Parish, as noted in the effective Lafayette Parish Flood Insurance Study.

Table F-105: Summary of Discharges

Peak Discharge (cfs)					
<u>Flooding Source and Location</u>	Drainage Area (sq. mi.)	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Acadiana Coulee (Vermilion Lateral 2)–(U)					
At confluence with Vermilion River	1.16	911	1,215	1,417	1,823
At Bruce Street	1.01	815	1,034	1,304	1,699
At Canberra Road	0.94	606	823	1,025	1,331
At Bellevue Plantation Road	0.81	667	898	1,110	1,438
At Crestlawn Drive	0.75	576	780	956	1,272
At Guidry Road	0.45	442	543	685	938
App 1,100 ft upstream of Guidry Road	0.31	442	520	669	902
Anselm Coulee–(U)					
At confluence with Darby Coulee	1.16	1,195	1,929	2,163	2,931
At Savoy Road	1.01	1,141	1,871	2,078	2,813
At Gallet Road	0.94	1,076	1,815	1,984	2,676
At Mermentau Road	0.81	997	1,960	1,863	2,519
At Verot School Road	0.75	339	394	422	496
At Fortune Road	0.45	473	845	974	1,330
Bayou Carencro					
At confluence with Vermilion River	50.08	5,570	7,862	9,054	12,112
At Meche Road	47.81	5,400	7,600	8,800	11,700
At LA 182	39.88	4,900	7,000	8,100	10,700
At I-49	36.46	4,700	6,700	7,700	10,200
At Waters Drive	31.45	4,350	6,200	7,100	9,550
At Billeaux Road	22.2	3,550	5,160	5,930	7,940
Bayou Parc Perdue–(U)					
At Parish Boundary	9.16	1,651	2,363	2,721	3,881
At Chemin Agreeable	6.86	1,614	2,319	2,668	3,790
At Savoy Road	6	508	829	1,074	1,667
At Iberia Street	2.23	440	818	1,025	1,543
At Hawk Drive	1.77	361	724	918	1,397
At Copperfield Way	1.75	310	642	822	1,243
At Fortune Road	1.25	207	418	538	822

Table F-13: Summary of Discharges (cont.)

Peak Discharge (cfs)					
Flooding Source and Location	Drainage Area (sq. mi.)	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Bayou Queue de Tortue					
At Parish Boundary	39.4	3,049	4,344	5,045	7,020
At LA 342	36.69	2,964	4,818	5,588	7,717
At 6,800 ft. downstream from W. Congress Street	27.96	2,901	4,193	4,880	6,779
At W. Congress Street	21.87	2,429	3,603	4,204	5,737
At LA 720 Landry Road	18.13	1,816	2,734	3,194	4,404
At 5,000-ft downstream from LA 719	15.37	1,470	2,233	2,612	3,695
At LA 719	8.46	1,256	1,934	2,282	3,110
At A Street (Splits to Southern Branch)	8.46	347	564	670	1,018
At LA 343	6.73	409	750	890	1,245
At Southern Pacific Railroad	5.92	415	753	887	1,222
At Anderson Rd (Splits to Indian Bayou)	4.61	344	577	667	900
At I-10	4.61	844	1,147	1,317	1,750
At Gazette Road	3	600	800	900	1,200
At Whitmore Road	1.87	369	513	593	808
Beau Basin Coulee					
At confluence with Vermilion River	6.76	1,614	2,527	3,201	4,550
At Beau Basin Road	6	1,530	2,379	3,018	4,243
At approximately 0.9 miles downstream from St. Esprit Road	5.79	1,362	2,116	2,673	3,764
At St. Esprit Road	4.8	1,095	1,679	2,108	2,957
At I-49	3.77	906	1,388	1,721	2,435
At Bernard Street / LA-726	2.87	878	1,349	1,667	2,368
At approximately 200 feet upstream of Bernard Street / LA-726	1.55	672	1,020	1,269	1,791
At North Church Street	1.2	589	894	1,115	1,580
At E Armand Street	0.98	526	796	996	1,413
At approximately 200 feet downstream of Railroad Street	0.42	321	503	634	923
At approximately 50 feet downstream of Debutante Road	0.3	255	396	512	723
Broadmoor Coulee–(U)					
At confluence with Vermilion River	0.71	772	1,000	1,091	1,299
At Ambassador Caffery Pkwy	0.65	607	775	844	976
At Dover Boulevard	0.6	609	778	846	982
At 1,400 ft upstream from Dover Boulevard	0.54	433	541	584	649
At Robley Drive	0.37	343	420	460	497

Table F-13: Summary of Discharges (cont.)

Flooding Source and Location	Peak Discharge (cfs)				
	Drainage Area (sq. mi.)	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
<b>Coulee Bend</b>					
At confluence with Dan Dabaillion Coulee (Francois Coulee)	5.3	1,800	2,400	2,800	3,800
<b>Coulee Des Poches / Grenovillieres Swamp</b>					
At confluence with Vermilion River	4.48	4,070	6,188	6,824	8,450
At Market Place	4	3,750	5,800	6,500	8,000
At Verot School Road	3.25	3,200	5,100	5,900	7,000
At 700 ft. upstream of Verot School Road	2.53	2,700	4,350	5,000	5,800
At Beau Pre Road	1.95	2,200	3,600	4,200	4,600
At South Park Road	1.4	1,600	2,700	3,100	3,400
At 1500 ft upstream of Consolidated Road	0.96	1,100	1,800	2,000	2,300
At S. Bernard Road	0.53	642	1,052	1,160	1,445
At Railroad	0.18	200	400	500	600
<b>Coulee Fortune North (Cypress Bayou) –(U)</b>					
At mouth	2.99	994	1,293	1,458	1,966
At Bayou Tortue Road	2.88	1,028	1,302	1,467	2,045
At N. Girouard Road	2.43	881	1,100	1,225	1,731
At US 90	1.96	769	986	1,094	1,602
At LA 182	1.41	243	307	345	502
At Albertson Parkway	1.24	133	205	228	314
At Southern Pacific Railroad	1	112	147	164	252
At St. DePorres Street	0.82	-27	-38	38	37
At Morgan Street	0.6	93	146	182	348
<b>Coulee Fortune South–(U)</b>					
At US 90	3.06	805	1,152	1,355	2,300
At Young Street	2.47	636	915	1,079	1,981
At 1,800 ft downstream from Fairfield Drive	2.16	567	818	971	1,843
At Fairfield Drive	1.42	202	391	493	1,225
At N. Larriviere Road	1.32	168	325	410	1,088
At Heart D. Farm Road	0.82	78	149	191	778

(U) Indicates the peak discharge determined utilizing HEC-RAS unsteady modeling when maximum stages occur

Table F-13: Summary of Discharges (cont.)

Peak Discharge (cfs)					
<u>Flooding Source and Location</u>	Drainage Area (sq. mi.)	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Coulee Ile Des Cannes–(U)					
At confluence with Vermilion River	52.56	361	361	361	361
At US Hwy 167	49.61	7,817	10,462	11,510	13,853
At Bourque Road	35.35	5,450	7,166	7,838	9,251
At Ellias G Road	33.83	5,318	7,030	7,712	9,176
At Below confluence with Lateral 2	28.43	4,080	5,396	5,897	7,072
At LA 342	23.89	3,119	4,074	4,418	5,177
At W. Congress Street	17.08	2,040	2,765	3,081	4,270
At Le Violon Road	10.17	2,082	2,946	3,240	3,983
At I-10	7	1,090	1,506	1,617	2,146
At Below confluence with Lateral 5	6.34	445	608	672	1,108
At Rue Des Babineaux	4	365	490	532	473
At Cocodril Road	2	316	481	515	787
Coulee Ile Des Cannes – Lateral 1–(U)					
At confluence with Ile Des Cannes	12.94	661	908	1,088	1,451
At Petite Road	12.8	662	930	1,115	1,490
At Leblanc Road	3	538	836	1,004	1,370
At Sellers Road	2.8	275	428	499	655
At S. Fieldspan Road	1	168	262	306	399
Coulee Ile Des Cannes – Lateral 2–(U)					
At confluence with Ile Des Cannes	4.54	978	1,324	1,480	1,895
At Broussard Road	4	1,089	1,488	1,595	1,995
At WTP Entrance Road	3	1,130	1,560	1,712	2,042
At Ridge Road	2	975	1,323	1,455	1,774
Coulee Ile Des Cannes–Lateral F (L3)–(U)					
At confluence with Ile Des Cannes	6.8	1,041	1,476	1,649	2,066
At W. Congress St.	6	1,008	1,397	1,595	2,056
At LA 93 Ru Belier Rd	5	917	1,275	1,426	1,813
At Ole Colony Road	3	387	471	534	626
At US 90	1.5	245	308	325	374
At Southern Pacific Railroad	1.4	236	294	307	345
At Mills Street	0.7	179	216	216	222
Coulee Ile Des Cannes – Lateral F2					
At confluence with Lateral F	1.57	229	328	340	446

(U) Indicates the peak discharge determined utilizing HEC-RAS unsteady modeling when maximum stages occur.



Table F-13: Summary of Discharges (cont.)

<u>Flooding Source and Location</u>	Peak Discharge (cfs)				
	Drainage Area (sq. mi.)	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
<b>Coulee Ile Des Cannes – Lateral 4–(U)</b>					
At confluence with Ile Des Cannes	6.9	603	912	990	1,290
At Landry Road	2.49	392	472	497	591
At Jenkins Road	2	280	396	414	444
At SP Railroad	1.6	194	246	248	263
At Below I-10	1.2	108	168	193	207
<b>Coulee Ile Des Cannes – Lateral 5</b>					
At confluence with Ile Des Cannes	1.5	404	573	632	*
<b>Coulee Lantier</b>					
At confluence with Vermilion	2.5	2,505	4,001	4,423	5,514
At 4,300 ft downstream of LA 726	1.39	1,850	2,600	2,900	3,700
At LA 726	0.62	1,000	1,300	1,600	2,000
At Arnaudville Rd	0.13	220	400	440	570
<b>Coulee LaSalle–(U)</b>					
At Le Triomphe Parkway	3.5	1,055	1,299	1,407	1,703
At Marteau Road	3.06	508	615	670	875
At S. Larriviere Road	2.35	247	332	397	562
At Young St (LA 92)	1.33	252	340	411	578
At Griffen Road	0.93	125	182	220	312
At Cane Brake Road	0.51	72	105	120	174
<b>Coulee Mine–(U)</b>					
At confluence with Vermilion	16.71	5,414	6,699	7,209	8,635
At US 167	16	4,587	5,633	6,061	7,321
At W. Congress Street	15.46	3,508	4,224	4,520	5,521
At Dulles Drive	11.66	1,953	1,533	1,563	1,756
At Eraste Landry Drive	11.2	1,989	2,346	2,551	3,640
At Ambassador Caffery Parkway	10.8	2,080	2,416	2,606	3,649
At Southern Pacific Railroad	10.4	2,086	2,425	2,618	3,523
At I-10	4.2	1,381	1,417	1,399	1,642
At LA 725 (Renaud Drive)	3.8	1,821	2,386	2,702	3,272
At LA 723 (Roper Drive)	3.32	1,637	2,066	2,355	2,942
At Lebesque Road	1.8	646	826	1,017	1,138
At N. Dugas Road	1.7	717	917	1,135	1,252
At Malapart Road	1.63	444	560	782	708
<b>Coulee Mine – Lateral 1 (West Channel)</b>					
At confluence with Coulee Mine	3.4	1,100	1,500	1,600	1,900

\* Data not computed

(U) Indicates the peak discharge determined utilizing HEC-RAS unsteady modeling when maximum stages occur

Table F-13: Summary of Discharges (cont.)

Peak Discharge (cfs)

<u>Flooding Source and Location</u>	<u>Drainage Area (sq. mi.)</u>	<u>10-Percent Annual Chance</u>	<u>2-Percent Annual Chance</u>	<u>1-Percent Annual Chance</u>	<u>0.2-Percent Annual Chance</u>
<b>Coulee Mine Branch</b>					
At confluence with Old Coulee Mine	5	1,800	2,900	3,300	3,900
<b>Cypress Bayou Ditch</b>					
At St. De Porres Street	0.24	*	*	143	*
<b>Dan Dabaillion Coulee (Francois Coulee)</b>					
At confluence with Vermilion River	10.45	3,845	5,670	6,529	8,597
At Louisiana Avenue	10	4,038	5,722	6,425	8,625
At I-10	9.2	4,382	6,073	6,781	8,315
At Moss Street	6	2,908	3,859	4,272	5,554
At I-49	5.3	2,253	3,167	3,505	4,522
At W. Pont Des Mouton Road	5	2,134	3,020	3,357	4,307
At I-49	3.5	1,432	2,062	2,300	2,970
At E. Butcher Switch Road	2.8	803	1,142	1,302	2,022
At Amesbury Drive	2.5	518	718	822	1,626
At E. Gloria Switch Road	2.1	314	402	509	1,182
At Thoroughbred Drive	0.9	135	149	166	273
At Guidry Lane	0.7	100	100	100	100
<b>Darby Coulee</b>					
At confluence with Vermilion River	6.89	4,280	5,895	6,605	8,430
At 3,300 ft downstream of Gallett Road	6.23	4,000	5,600	6,250	8,000
At Gallett Road	5.41	3,750	5,300	5,900	7,600
At 3,000 ft upstream of Gallett Road	4.54	3,400	5,000	5,550	7,050
At LA 339	3.17	2,750	4,340	4,790	5,960
<b>Duson Branch</b>					
At Town of Duson corporate limit	*	819	1,017	1,182	1,421
At Cross Section C	*	*	*	1,780	*
At Cross Section K	*	*	*	1,400	*
At confluence of Bayou Queue de Tortue	1.72	445	611	703	953
<b>Edith Coulee</b>					
At Zothique Road	2.04	873	1,221	1,381	1,810
At Espasie Lane	1.25	567	793	898	1,177
At LA 92 (E. Milton Ave)	1.2	540	770	870	1,120
At E. Edith Road	1.03	500	700	780	1,000
At LA 733	0.83	429	598	670	862

\* Data not computed

Table F-13: Summary of Discharges (cont.)

Peak Discharge (cfs)					
<u>Flooding Source and Location</u>	Drainage Area (sq. mi.)	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Gaston Coulee (North)					
At confluence with Beau Basin Coulee	0.9	415	615	667	790
Gaston Coulee (South)					
At confluence with Coulee Bend	2.1	900	1,200	1,400	2,000
Grand Avenue Coulee					
At confluence with Vermilion River	2.1	1,569	2,166	2,406	3,057
At 2,000 ft downstream from US 167	1.75	1,459	2,005	2,216	2,805
At US 167 Johnson Street	1.54	1,356	1,851	2,045	2,612
At 600 ft downstream from Maple Drive	1.39	1,263	1,716	1,987	2,440
At Guilbeau Drive	1	935	1,271	1,400	1,797
At Crawford Street	0.58	648	867	956	1,248
Isaac Verot Coulee/Lateral 2-(U)					
At confluence with Vermilion River	12.21	3,211	4,014	4,415	5,302
At East Peck Boulevard	9.23	2,238	2,850	3,025	3,766
At Verot School Road	7.83	1,919	2,440	2,566	3,105
At La Neuville Road	3.91	1,620	2,147	2,398	2,972
At Failla Road	1.9	739	987	1,113	1,456
At Tolson Road	1.5	600	823	924	1,167
At Bonin Road	0.92	360	477	545	715
At Hwy 89	0.15	60	81	91	120
Isaac Verot Coulee – Lateral 3-(U)					
At confluence with Isaac Verot Coulee	3.23	1,042	1,557	1,859	2,573
At 2800 ft upstream from confluence with Isaac Verot Coulee	2.6	898	1,342	1,563	2,102
Isaac Verot Coulee					
At Chemin Metairie Road	2.28	881	1,288	1,470	1,933
At Serenity Road	1.6	985	1,393	1,559	1,981
At Bonin Road	1.28	822	1,163	1,304	1,684
At E. Pinhook Road	1.97	1,772	2,321	2,450	2,785
At Webb Street	1.64	517	669	705	780
At Amilcar Road	1.61	519	698	771	853
At Southern Pacific Railroad	0.96	522	710	787	1,000

(U) Indicates the peak discharge determined utilizing HEC-RAS unsteady modeling when maximum stages occur

Table F-13: Summary of Discharges (cont.)

Peak Discharge (cfs)					
Flooding Source and Location	Drainage Area (sq. mi.)	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Manor Park Coulee-(U)					
At confluence with Vermilion River	4.57	1,779	2,292	2,518	3,230
At Maryview Farm Road	2.53	854	1,105	1,250	1,769
At Butcher Switch Road	2.3	747	1,054	1,217	1,697
At Irby Road	2	537	827	990	1,412
At Parklane Road	1.14	259	549	721	1,296
At 1,000 ft upstream from Parklane Road	0.81	171	367	480	861
At Upstream study limit	0.6	95	201	264	476
North Branch					
At confluence with Bayou Queue de Tortue	4.9	702	990	1,150	1,585
Point Brule Coulee					
At East Parish Boundary	1.04	2,610	3,648	4,213	5,630
At Hwy 726 (Old LA 1252)	0.53	1,159	1,614	1,861	2,481
At North Parish Boundary	0.48	1,142	1,590	1,833	2,443
South Branch					
At confluence with Bayou Queue de Tortue	7.9	195	439	583	929
At W. Milton Avenue	*	9,077	13,326	15,686	21,474
At LA 733 (E. Broussard Road)	*	2,970	4,538	5,298	7,383
At LA 3073 Ambassador Caffery Pkwy	*	340	714	864	1,411
At Camellia Boulevard	*	-1,435	-1,828	-2,020	-2,492
At W. Pinhook Road	*	-5,300	-7,445	-8,421	-11,045
At General Mouton Road	*	-5,660	-7,913	-8,958	-11,668
At Railroad	*	-5,655	-7,913	-8,949	-11,655
At E. University Avenue	*	-5,655	-7,904	-8,949	-11,643
At US 90 (SW. Evangeline Thruway)	*	-5,650	-7,896	-8,939	-11,630
At Surry Street	*	-5,639	-7,873	-8,923	-11,602
At LA 353	*	3,315	3,156	2,745	541
At LA 94 (Carmel Drive)	*	6,325	8,075	9,371	13,147
At Union Pacific Railroad	*	6,364	8,130	9,567	13,443
At Lajaunie Road	*	6,387	8,180	9,609	14,040
At I-10	*	6,468	8,340	9,698	14,024
At E. Pont Des Mouton Road	*	6,476	8,353	9,689	13,620
At Maryview Farm Road	*	4,017	4,772	5,322	6,925
At E. Gloria Switch Road	*	4,040	4,764	5,311	6,894
At Beau Basin Road	*	4,291	4,817	5,356	6,892
At Private Bridge	*	5,701	5,059	5,470	6,896
At LA 1252	*	7,154	10,463	13,575	8,149
At Arnaudville Road	*	7,823	11,114	13,842	18,967

(U) Indicates the peak discharge determined utilizing HEC-RAS unsteady modeling when maximum stages occur

Table F-13: Summary of Discharges (cont.)

Peak Discharge (cfs)					
<u>Flooding Source and Location</u>	Drainage Area (sq. mi.)	10-Percent Annual Chance	2-Percent Annual Chance	1-Percent Annual Chance	0.2-Percent Annual Chance
Webb Coulee (Lower) – (U)					
At confluence with Vermilion River	5.11	2,449	3,245	3,593	4,443
LA 94 (Carmel Drive)	4.11	1,976	2,558	2,757	3,070
West Coulee Mine					
At confluence with Coulee Mine	3.7	666	803	1,001	1,316
At W. Willow Street	3.3	724	850	1,059	1,374
At I-10	3.22	1,037	1,117	1,281	1,640
At 6,800 ft upstream from I-10	2.13	179	175	184	232

### Historical Events (Step 4.a.3)

As noted in the Flood Insurance Study conducted for the Lafayette Parish planning area, significant floods are reported to have occurred as early as 1907. In researching rainfall records, using high-water stages on the Vermilion River and interviewing local citizens, it was determined that other significant floods occurred in 1927, 1940, 1946, 1947, 1953, 1955, 1959, 1961, 1964, 1966, 1969, 1971, 1977, 1980, 1982, 1989, 1993, 1995, 2001, and 2004.

The most severe flood in the study area occurred in August 1940 and approximated the Standard Project Flood (SPF). Studies of this flood showed extremely heavy 10 rainfall at Lafayette FAA Airport daily rainfall station. For the four-day period of August 6-9, a rainfall of 27.33 inches was recorded; for the 10-day period of August 1-10, a rainfall of 37.36 inches was recorded. As this immense quantity of water began to run off, the slope of the ground and flat terrain, together with obstructed embankments, caused the flood to spread overland. The waters generally began throughout most of the flooded areas. In certain areas, most notably those lying to the north and west of St. Martinville, water continued to rise for several days. This area between the Teche and Vermilion ridges is normally drained by the Vermilion River. On this occasion, however, the Vermilion River, unable to carry the flow pouring in from the north and west, reversed its flow and begin to flow into the low marsh areas and to pour in excess water through the Evangeline Canal into Bayou Teche.

A significant flood also occurred in the parish in December 1971. Significant amounts of rainfall started falling on December 1 and continued through December 6. The rainfall accumulation recorded for this period was 10.07 inches. The heaviest concentration was the rainfall of 5.09 inches that occurred on December 5. Observed amounts of rainfall at the recording gage were 5.80 and 8 inches for 24- hour and 48-hour durations, respectively. This prolonged rainfall caused higher stages than previous rainfalls of higher intensity and shorter duration.

The most recent flood to occur in the area was in April 1977. Rainfall for this flood was similar to the 1971 flood. Inspections on the ground and aerial over flights indicated that the 1977 flood inundated approximately the same areas as the December 1971 flood. (Note: These statements were made per the 1985, 1988, 1996 FIS and have been updated over the years. Therefore, the FIS does not provide a comprehensive listing of recent flooding occurrences. A list of more recent flooding events, specifically those having occurred since the last HMP update, can be found in [Table 2-20](#))

*Table F-106: Flood Categories for Vermilion River at Surrey St  
(Source: NWS, Advanced Hydrologic Prediction Service, 2021)*

Major Flood Stage	16 feet
Moderate Flood Stage	14 feet
Flood Stage	10 feet
Action Stage	10 feet

*Table F-107: Historic Crests of Vermilion River at Surrey St  
(Source: NWS, Advanced Hydrologic Prediction Service, 2021)*

Crest Rank	Feet	Date
1	24.87	08/09/1940
2	17.62	05/15/2016
3	16.80	03/13/1947
4	16.37	04/08/1942
5	15.81	01/20/1993
6	15.56	05/17/1980
7	15.35	06/10/2001
8	15.00	01/21/1993
9	14.84	04/22/1977
10	14.56	12/06/1971
11	14.26	02/16/1966
12	14.23	10/04/1964
13	14.22	07/14/1989

#### Flood Impacts For Vermilion River at Surrey Street Gauge

24.9: The river is at its flood of record. Water several feet deep in portions of Crowley, Lafayette, Kaplan and other nearby communities. Portions of Hwy 167 between Lafayette and Abbeville under 5 feet of water.

16.0: Widespread major flooding will occur with numerous homes and roads flooded throughout Lafayette down stream to Abbeville and Perry. Large areas of inundation as result of backwater flooding of the coulees that drain in the river.

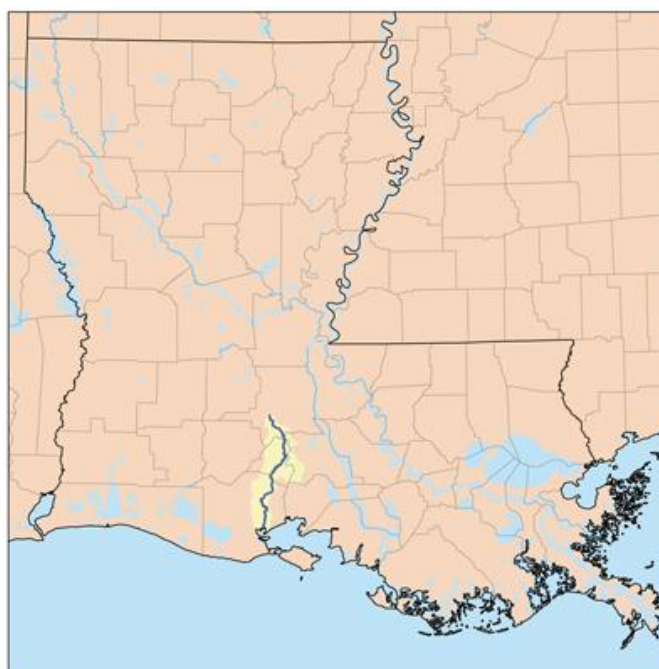
14.6: Widespread moderate flooding will occur with a few homes flooded near the river or from backwater flooding of the coulees and bayou that intersect the river.

14: Moderate flooding in Lafayette, with significant flooding near where coulees and bayous intersect the Vermilion River.

13.5: Flooding of some yards near the river will occur. Significant flooding of Beaver Park and Vermilionville will occur.

11.5: Minor flooding of Beaver Park and Vermilionville near the river will occur.

10: Minor flooding of Heymann Park off of Highway 90 will occur



*Figure F-46: Vermilion River Watershed*



*Figure F-47: Vermilion River in August 2016  
(Photo: Acadiana Advocate)*

**Frequency (Step 4.a.3):** For Vermilion River at Surrey Street, NWS reported 66 flood stage events or higher over a 81-year period. This indicates an 81.4 % chance that a flood stage event will occur any given year at this location.

**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.



Backwater flooding along Beau Basin and Gaston Coulee occasionally causes flood problems in the City of Carencro. A survey of area residents revealed occasional serious flood problems, including water damage in homes. Although flooding of homes and businesses is relatively infrequent in most areas, floodwaters in yards, fields, and streets are not uncommon. The history of flooding within the City of Scott indicates that flooding can occur during any season of the year. Floods occur due to limited stream capacities and because the nature of the terrain offers little relief. The existing channel capacities are exceeded by floods of low frequency that spread rapidly over the floodplains. Due to the flatness of the floodplains, they are entirely covered by floodwaters during the less frequent floods. After this condition occurs, increases in the discharges produce only minor increases in water-surface elevations. The principal sources of flooding in the City of Scott are from rainfall runoff and backwater from Lateral F, Lateral F2, and West Coulee Mine. According to local officials, the main flooding problem the City of Broussard has is caused by Coulee Des Poches and Grenovillieres Swamp. In this FIS, Grenovillieres Swamp is considered to be the headwaters of Coulee Des Poches

#### Opportunity 4.b. – Assessment of Less Frequent Flood Hazards

##### Special Hazards Associated with Less Frequent Flooding (Step 4.b)

There are special hazards that can be related to local flooding that provide greater risks. [Table F-108](#) lists those special hazards, and identifies whether they are relevant in this Lafayette Parish.

*Table F-108: Special Hazards Associated with Less Frequent Flooding.*

Flood-related Special Hazards	Relevant to Planning Area
Uncertain flow paths	No
Closed basin	No
Ice jams	No
Land subsidence	Yes
Mudflow hazards	No
Coastal erosion	No
Tsunamis	No

##### Inventory of Levees (Step 4.b.1a)

No Levees in Lafayette Parish

##### Inventory of Dams (Step 4.b.1b)

No Dams in Lafayette Parish

##### Coastal A Zones (Step 4.b.1d)

No Coastal A Zones in Lafayette Parish

#### Opportunity 4.c. – Assessment of Areas Likely to Flood Due to Development and Sea Level Rise

Also see [Location of Principle Flood Areas](#) in the Risk Assessment for additional details of areas likely to flood.

##### **Anselm Coulee/Isaac Verot watershed –**

(1) this area is experiencing development and the growth of neighborhoods. This area has historically been in Flood Zones X or A, however the recent Flood Insurance Study has identified many of these areas as Flood Zone AE and AE Floodway. This designation will give the community more authority in regulating development and its impacts. This watershed is affected by unique factors since it flows both upstream and downstream depending on the water surface level within the channel.



(2) Development will increase the runoff, which has difficulty vacating the areas since it is dependent of the water surface elevation of the channel.

(3) Climate change or more specifically sea level rise could impact this area since it is along the southern reaches of the larger Vermilion River watershed which is a direct conduit to the Gulf of Mexico and only has 4 feet of fall in the 40 miles it traverses to the Gulf. This area is also seeing a drastic increase in the intensity of rainfall

#### **Bayou Carencro watershed –**

(1) this channel has a very long time of concentration, therefore any increase in runoff from development and

(2) reduction of agricultural lands will likely affect the frequency of flooding in the area.

(3) Since this channel is 40 miles north of the Gulf of Mexico it is unlikely that climate change or sea level rise will affect this watershed, but at some point all of Louisiana may be impacted by sea level rise.

#### **Bayou Queue de Tortue and Indian Bayou watersheds –**

These channels are located primarily within agricultural areas and have very little natural elevation changes. These are areas that developers are moving to because older farming generations are passing on and leaving land to their children who do not wish to farm it. They are selling to developers who are building subdivisions. Due to its rural nature, many of these areas are unmapped on the FEMA FIRM, leaving these homes exposed to significant flood risk. If these areas were to:

(1) develop even further and land would be converted from permeable to non-permeable surfaces, even with detention/retention requirements, it is possible for the areas to experience additional flooding.

(2) Development within the watershed could impact water surface levels, however the development would have to be on a large scale since the watersheds themselves are quite extensive.

(3) Currently, it is unlikely climate change or sea level rise would affect the problems in this area, however all of Louisiana will soon be impacted by sea level rise.

#### **Opportunity 4.d. – Assessment of Other Natural Hazards**

##### **Excessive Heat (Step 4.d)**

See [Excessive Heat](#) hazard profile and vulnerability assessment on [Page 30](#).

##### **Hailstorms (Step 4.d)**

See [Hailstorms](#) hazard profile and vulnerability assessment on [Page 66](#)

##### **Hurricanes and Tropical Storms (Step 4.d)**

See [Tropical Cyclones](#) hazard profile and vulnerability assessment on [Page 77](#)

##### **Severe Winter Storms (Step 4.d)**

See [Winter Weather](#) hazard profile and vulnerability assessment on [Page 99](#)

**Tornadoes** (Step 4.d)

See [Tornadoes](#) hazard profile and vulnerability assessment on [Page 72](#)

**Wildfires** (Step 4.d)

See [Wildfires](#) hazard profile and vulnerability assessment on [Page 91](#)

**Windstorms** (Step 4.d)

See [High Winds](#) hazard profile and vulnerability assessment on [Page 69](#)

*Step 5: Assess The Problem*

The previous step assessed the hazards facing the community. The goal of step five is to have the planning committee assess the impact of the hazards on the community and collect and summarize data on what is at risk. For a multi-jurisdictional plan, each item needs to be described for each community. Tables are acceptable to show the data by community, but a narrative description and summary of the problem should still be included to receive maximum credit.

There are six opportunities under step 5 to earn CRS points. First, the plan must include an overall summary of the jurisdiction's vulnerability to each hazard identified in the risk assessment and the impact on the community. This is a minimum requirement for earning points under step five.

The second opportunity, worth a total of 25 points, is through the inclusion of an inventory of all buildings owned by the community that are located in flood prone areas and identification of those buildings which are insured for flood damage. It also must include a description of the impact that the identified hazards have on the following features:

- Five points for life safety and the need for warning and evacuating residents and visitors
- Five points for public health, including health hazards to individuals from flood waters and mold
- Five points for critical facilities and infrastructure
- Five points for the community's economy and major employers
- Five points for the number and types of affected buildings

Worth five points, the third opportunity is if the assessment includes a review of historical damage to buildings, including all repetitive loss properties and all properties that have received flood insurance claims payments. Vulnerable structures must include all buildings within the community's defined repetitive loss area(s). In order to receive the full credit under this opportunity, the community reviews all the addresses of properties that have received flood insurance claims, not just the repetitive loss properties.

The fourth opportunity is also worth five points and can be earned through the description of areas within the floodplain that provide natural functions, such as wetlands, riparian areas, sensitive areas, and habitat for rare and endangered species.

If a description of development, redevelopment, and population trends is included in the assessment, along with a discussion of future development and redevelopment trends within the community, that will earn the community seven points.

Finally, eight points will be credited if the assessment includes a description of the impact of future flooding conditions on people, property, and natural floodplain functions.

### Qualifying Activities for Step 5

#### Opportunity 5.a. – Summary of Vulnerability and Impacts From Other Natural Hazards

See *Hazard Identification and Parish-Wide Risk Assessment* for descriptions of vulnerabilities and impacts from other natural hazards within the Lafayette Parish planning area.

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

#### Opportunity 5.b. –Vulnerability and Impacts From Other Natural Hazards on Features of the Community **Life Safety & the Need for Warning & Evacuation (Step 5.b.1)**

In a major storm event, flooding can greatly impact evacuation routes exiting the Lafayette Parish area (See Evacuation Route Map below). Of particular concern is Ambassador Caffery Pkwy—a major evacuation route—which is a main route to I-10. This road at various intersections becomes inundated where vehicles cannot drive through.

Other transportation corridors that could be affected are:

- Louisiana Avenue
- LA 339 Verot School Rd
- US90 where it crosses the Vermilion River
- Pinhook Rd where it crosses the Vermilion River



Lafayette Parish Hurricane Evacuation Routes

Figure F-48: Lafayette Parish Hurricane Evacuation Routes

Warnings for flooding are often made available to the public well in advance, as the development of storm systems are tracked for days before land fall. Flash flooding, caused predominantly by heavy rainfall, is also closely monitored by the NWS. Watches are issued by the NWS to officials and the public in a diligent manner, with projections coming, usually, more than a day before an event is expected to occur. These notices, when correctly used by the public, can reduce some of the risks associated with this type of flooding. As the advancing weather patterns get closer—usually within a 24-hour period—warnings are issued in those areas where there is a high confidence that a significant weather event will occur. These warnings allow people to further protect themselves, and to take action before the weather event occurs.

According to the Lafayette Parish Emergency Operations Plan, the following methods are used:

1. National Weather Service (NWS)

Current weather information warnings are received over the GOHSEP network, DTN weather system, EAS ENDEC, and dual NOAA weather alert radio systems (both single tone signaling and specific area message encoding). In addition, the NWS will issue severe weather warnings over the NAWAS line.

2. School Warning System

Schools are notified by the Superintendent of schools office or by means of their warning system in place in the case of disseminations by the National Weather Service.

3. Emergency Alert System (EAS)

The EAS provides a means for supplying emergency information to the public. It uses commercial radio, TV broadcast, and cable TV services which are provided on a voluntary and organized basis. KTDY (99.9 FM) has been designated as the local primary EAS station for Lafayette.

4. Neighborhood Warning Procedures

In some instances, additional warning must be provided to certain areas. Methods used include Connect Lafayette (LCG's Emergency Warning System) and/or vehicle mounted public address and door-to-door warning.

Just as with property damage, depth and velocity are major factors in determining the threat posed to people by flooding. It takes very little depth or velocity for flood waters to become dangerous. A car will float in less than two feet of moving water, and can be swept downstream into deeper waters, trapping passengers within the vehicle.

Victims of floods have often put themselves in perilous situations by entering flood waters that they believe to be safe, or by ignoring travel advisories. Debris also poses a risk both during and after a flood. During a flood, debris carried by floodwaters can cause physical injury from impact. During the recovery process, people may often need to clear debris out of their properties but may encounter dangers such as sharp materials or rusty nails that pose a risk of tetanus. People must be aware of these dangers prior to a flood so that they understand the risks and take necessary precautions before, during, and after a flood.

***Public Health (including mold) (Step 5.b.2)***

While flooding can have severe impacts to life and safety during a severe weather event, the aftermath—once the waters recede—can be just as damaging. Flood waters pose a serious hazard to public health, and this can manifest in the following ways.

- Flood waters entering residences and businesses can cause costly damages such as ruining possessions and merchandise. Furthermore, the residual water in these places can cause the growth of mold and mildew.
- Flood waters can result in pools of standing water. These pools can become havens for mosquito larvae and other toxic parasites that can harm animals and humans.
- Powerful flood waters can cause downed power lines, and generally increase the chance of electrocution in flooded areas.
- Dead animal carcasses and general trash can accumulate, creating hazardous waste areas.
- Tanks holding oil and chemical contaminants can be damaged—resulting in oil spills, displaced tanks, and other increased chances of chemical pollution.
- Septic systems can be seriously impacted by the flooding of their drain fields. This can result in reduced efficiency of the septic system, as well as potential groundwater contamination.
- Shallow wells can be infiltrated by rising flood waters, impacting anyone who uses these wells as their primary, or only, source of drinking water.
- Waters can infiltrate large jurisdictional wastewater systems. The increase in water intake through wastewater lines can overwhelm wastewater treatment plants, resulting in potential sewage spillage.

***Critical Facilities and Infrastructure (Step 5.b.3)***

See [Appendix C: Critical Facilities](#) for parish and municipality buildings that are susceptible to flooding due to proximity within the 100-year floodplain.

***Economy and Major Employers/Tax Base (Step 5.b.4)***

According to a report completed by Louisiana Economic Development on the Economic Impact of the August 2016 Floods, approximately 3100 businesses were disrupted in Lafayette Parish and 40,000 employees. Lost labor productivity during this period is estimated to be \$8.6 million and lost value added is estimated to be \$31.1 million.

The table below identifies the top 10 major employers in Lafayette Parish. Many of these employers are governmental entities; therefore, their normal operations may not stop because of flooding. One of the identified “top 10 employers,” Wal-Mart., is a major retailer that would provide assistance during an emergency event. Two employers—Oschner Lafayette General & Our Lady of Lourdes Regional Medical Center—are in the health service industry, and will likely be evacuated in a severe flooding or storm event.

Although none of these health services companies are located in the Federal Emergency Management Agency (FEMA) designated floodplain, all areas are susceptible to localized flooding.

*Table F-109: Major Employers in Lafayette Parish  
(Source: Lafayette Parish Economic Profile Feb 2021, LEDA)*

Organization	Industry	# Employed
Lafayette Parish School System	Education	4,322
Oschner Lafayette General	Health Care	4,078
Our Lady of Lourdes Regional Medical	Health Care	2,800
Lafayette Consolidated Government	Public Administration	2,500
University of Louisiana at Lafayette	Education	2,426
WHC Energy Svc	Oil & Gas Construction	1,505
Wal-Mart Companies	Retail Trade	1,165
Stuller Inc.	Manufacturing	1,061
Lafayette Parish Government	Public Administration	1,031
Superior Energy Srv	Oil & Gas	834

There are a variety of other businesses in the parish that would be impacted by flooding.

**Construction:** Last fiscal year, construction activity reached more than \$246 million in Lafayette Parish. This industry would surely be impacted by a flood. Home improvement stores, such as Lowe's, may see increased revenues after a flooding event due to the need for supplies to repair structures

**Finance:** There are 36 locally-owned and nationally-operated banking institutions, with an estimated \$12 billion in deposits as of December 2019. Sixteen credit unions have also been established within the Parish. A flood event could hinder these businesses from opening.

**Oil & Gas:** With hundreds oil-and-gas-related businesses in Lafayette, the region is the hub for energy production and services in the southeastern U.S. and the Gulf of Mexico.

**Transportation/Distribution:** Located at the crossroads of Interstates 10 and 49, Lafayette's strategic location has contributed to the viability of the transportation/distribution industry. Cargo can be delivered via the Intracoastal Waterway; and the proximity of Lafayette to the Gulf of Mexico makes deliveries and exports by sea feasible. A major flood event could potentially paralyze this industry.

**Auto Dealerships:** There are many large automobile dealerships in Lafayette Parish, such as Courtesy, Community Honda, Giles Nissan, Giles Volvo, Hampton Toyota, Acura of Lafayette, and multiple others that could be severely impacted by damaged inventory and general loss of revenue.

According to the U.S. Census Bureau, the top two industries in Lafayette Parish are "retail trades" with 1,063 establishments and 17,505 employees, and "Manufacturing" with 287 establishments and 6,548 employees (United States Census Bureau, CBP).

#### [Opportunity 5.c. – Review of Damaged Buildings and Flood Insurance Claims](#)

Flood insurance statistics indicate that the entire Lafayette Parish planning area has 23,541 flood insurance policies with the NFIP, with total annual premiums of \$13,656,098. Lafayette City-Parish Consolidated Government and the jurisdictions of Broussard, Carencro, Duson, Lafayette, Scott, and Youngsville are all participants in the NFIP. Lafayette City-Parish Consolidated Government and all 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 the entire Lafayette Parish planning area are provided in the tables to follow.

*Table F-110: Summary of NFIP Policies for the Lafayette Parish Planning Area.*

Location	No. of Insured Structures	Total Insurance Coverage Value	Annual Premiums Paid
<b>Lafayette C-PCG</b>	9,853	\$2,636,663,900	\$5,282,896
<b>Broussard</b>	1,333	\$408,062,700	\$712,095
<b>Carencro</b>	601	\$157,759,400	\$323,234
<b>Duson</b>	71	\$13,636,100	\$74,895
<b>Lafayette</b>	8,425	\$2,429,411,600	\$5,320,556
<b>Scott</b>	1,119	\$249,315,400	\$848,714
<b>Youngsville</b>	2,139	\$658,826,400	\$1,093,708
<b>Total</b>	<b>23,541</b>	<b>\$6,553,675,500</b>	<b>\$13,656,098</b>

*Table F-111: Flood Insurance Policies in Lafayette City-Parish Consolidated Government (Unincorporated)  
(Source: LADOTD, official communication, July 2020)*

Location of Policies	Policies in Force	Premium
<b>Special Flood Hazard Area (100-year Floodplain)</b>	2,402	\$1,864,912
<b>Within or Above the 500-year Floodplain – Standard X Rates</b>	2,437	\$1,058,062
<b>Preferred Risk Policies Within or Above the 500-Year Floodplain</b>	5,014	\$2,022,416

*Table F-112: Flood Insurance Policies in City of Lafayette  
(Source: LADOTD, official communication, July 2020).*

Location of Policies	Policies in Force	Premium
<b>Special Flood Hazard Area (100-year Floodplain)</b>	2,199	\$2,177,550
<b>Within or Above the 500-year Floodplain – Standard X Rates</b>	863	\$429,302
<b>Preferred Risk Policies Within or Above the 500-Year Floodplain</b>	5,363	\$2,190,014

Flood Insurance Rate Maps are an “Official map of a community on which FEMA has delineated the SFHAs, the Base Flood Elevations (BFEs) and the risk premium zones applicable to the community” (FEMA, 2018). These maps are what determine NFIP premiums.



*Table F-113: Summary of Community Flood Maps for the Lafayette Parish Planning Area.*

CID	Community Name	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date	Date Joined the NFIP	Tribal
<b>220101#</b>	Lafayette C-PCG	11/15/1977	8/1/1980	12/21/2018	8/1/2008	No
<b>220102#</b>	Broussard	4/12/1974	3/16/1988	12/21/2018	3/16/1988	No
<b>220103#</b>	Carencro	3/26/1976	11/5/1980	12/21/2018	11/5/1980	No
<b>220104#</b>	Duson	4/5/1974	9/30/1981	12/21/2018	9/30/1981	No
<b>220105#</b>	Lafayette	3/1/1974	9/30/1980	12/21/2018	9/30/1980	No
<b>220106#</b>	Scott	6/14/1974	4/4/1983	12/21/2018	4/4/1983	No
<b>220358#</b>	Youngsville	4/5/1974	3/30/1982	12/21/2018	3/30/1982	No

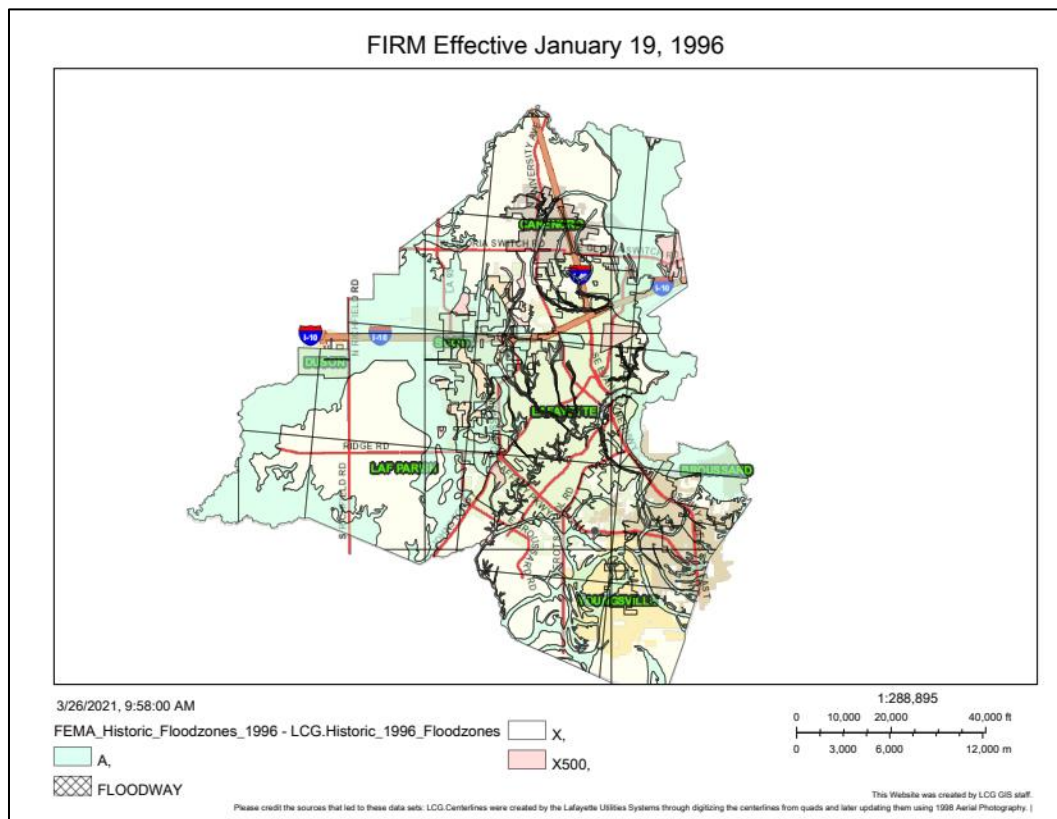
### Future Hazard Impacts

Hazard impacts were estimated for five years and ten years in the future (2025 and 2030). 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 within Lafayette Parish from the present until 2030. A summary of estimated future impacts is shown in the table below. Dollar values are expressed in future costs and assume an annual rate of inflation of 1.02%.

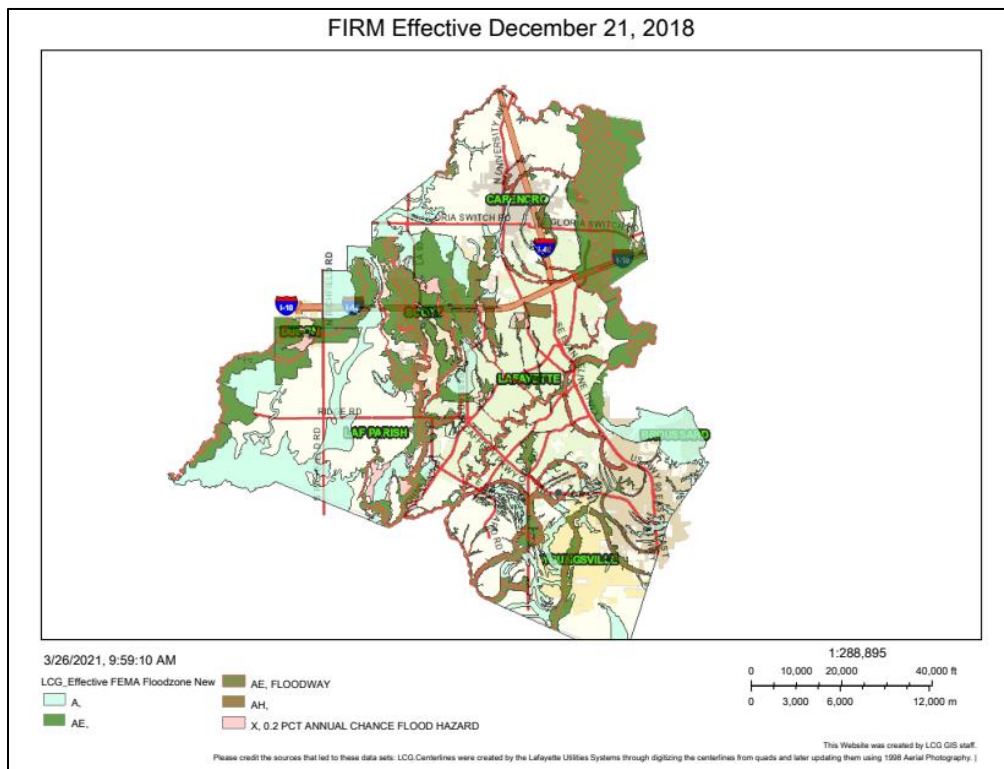
*Table F-114: Estimated Future Impacts, 2018-2030.**(Source: Hazus, US Census Bureau)*

Hazard / Impact	Total in Parish (2018)	Hazard Area (2018)	Hazard Area (2025)	Hazard Area (2030)
<b>Flood Damage</b>				
<b>Structures</b>	105,058	38,353	38,623	38,816
<b>Value of Structures</b>	\$23,686,714,000	\$8,647,257,318.75	\$9,349,071,348.79	\$9,884,977,439
<b># of People</b>	244,634	89,219	89,845	90,295





*Figure F-49: FIRM for Lafayette Parish Effective January 19, 1996*



*Figure F-50: FIRM for Lafayette Parish Effective December 21, 2018*

Table F-115: Flood Insurance Statistics for Lafayette Parish as of October 2020

Year	# of Flood Insurance Claims	Value of Flood Insurance Claims
1977	3	\$2,432
1978	47	\$105,004
1979	114	\$251,737
1980	402	\$2,739,659
1981	21	\$18,253
1982	63	\$78,197
1983	10	\$30,161
1984	55	\$489,054
1985	35	\$27,694
1986	7	\$2,554
1987	8	\$30,393
1988	15	\$44,951
1989	115	\$780,279
1990	5	\$14,531
1991	93	\$545,580
1992	22	\$83,777
1993	462	\$5,125,189
1994	9	\$24,484
1995	259	\$2,645,227
1996	10	\$66,973
1997	8	\$24,548
1998	130	\$899,889
1999	34	\$206,402
2000	7	\$3,620
2001	238	\$4,918,016
2002	103	\$224,593
2003	7	\$58,287
2004	145	\$1,906,103
2005	72	\$651,505
2006	57	\$863,729
2007	5	\$22,189
2008	82	\$798,360
2009	9	\$10,186
2010	11	\$97,550
2011	2	\$-
2012	291	\$10,111,669
2013	28	\$229,140
2014	53	\$924,311
2015	15	\$58,981
2016	2579	\$194,429,105
2017	151	\$4,018,958
2018	2	\$6,972
2019	170	\$5,371,907
<b>Total</b>	<b>5954</b>	<b>\$238,942,149</b>

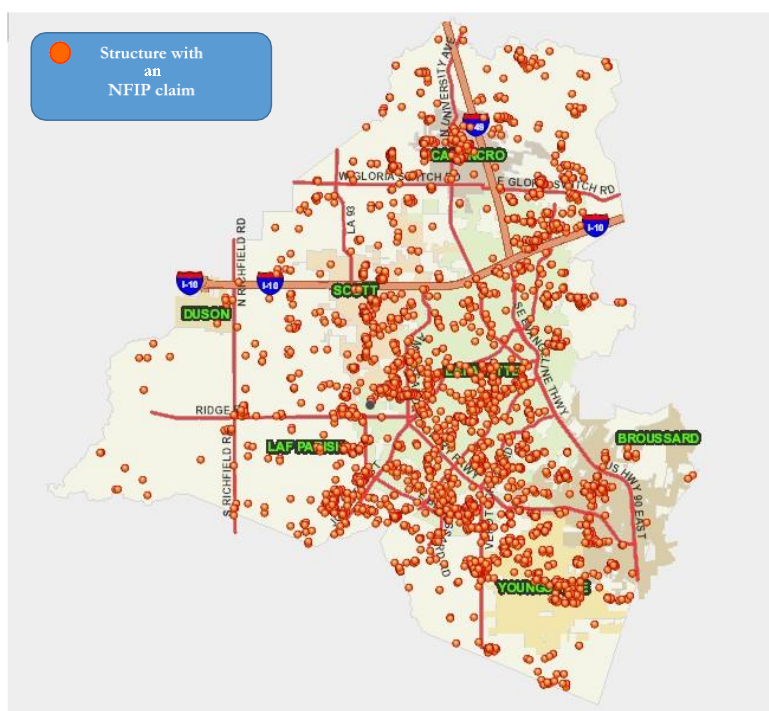


Figure F-51: Structures in Lafayette Parish with an NFIP Claim

#### Opportunity 5.d. – Assessment of Floodplain Areas Providing Natural Functions

The lands within Lafayette Parish are flat, and elevations range from near sea level to 55 feet. The highest elevations in the parish are approximately 55 feet, located in the northern unincorporated areas of the parish and the incorporated area of Carencro. These higher elevations are sporadic throughout the parish and are not common for the majority of the area. The other incorporated areas range in elevation from 26 to 36 feet, with the incorporated areas of Scott, Duson, and Lafayette averaging 36 feet, the city of Broussard averaging 33 feet, and the city of Youngsville averaging 26 feet. The lowest elevations of the parish are located in the unincorporated areas of southern and eastern Lafayette Parish. Soils in Lafayette Parish are part of the Alluvial Plain Complex with a high organic content, which is easily lost especially due to human activities. Underneath the high organic content, the soil is mainly clay. The organic content drains well, but the clay will retain water.

As per [Table 2-12](#), residential, commercial, and industrial areas account for 32% of the parish's land use. At 97,823 acres, agricultural land is the largest category, accounting for 57% of the land in the parish. The parish also consists of wetlands (8%), forest land (2%), and water areas (1%).

Wetlands naturally mitigate flooding by absorbing stormwater and reducing its rate of flow. The soil and vegetation in wetlands give stormwater a place to infiltrate and be stored before it is released back into the channels. This slow, gradual process regulates the velocity of stormwater and flooding, and lessens the destructive force that would be discharged into developed communities.

Forests provide a canopy of vegetation that intercepts and catches rainfall before it hits the ground. Trees also establish a dense root system that provides permeability to soil. The permeability allows more water to infiltrate the ground. This allows more water to enter, and be stored, in the soil, thus reducing runoff and flooding.

While Lafayette Parish does not have any rare or endangered species, the Acadiana Nature Station has close to 100 acres of property located within a flood zone that is for natural research and study.

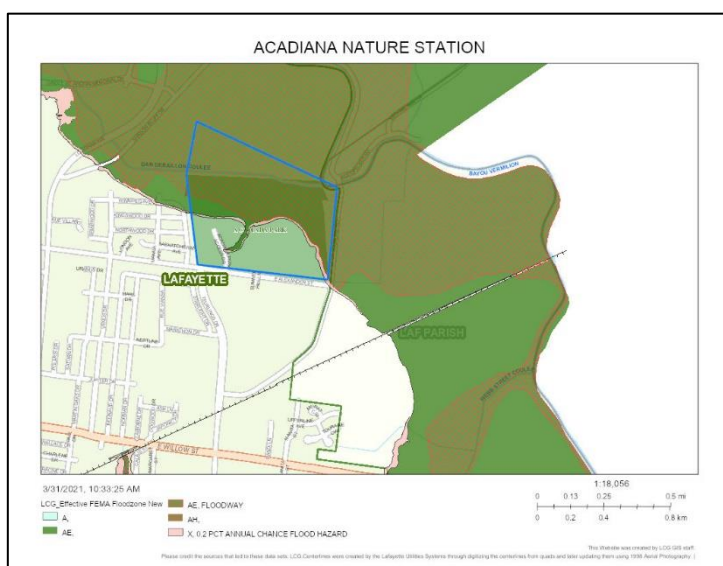


Figure F-56: Aerial Depiction of Acadiana Nature Station

#### Opportunity 5.e. – Current & Future Development, Redevelopment, and Population Trends

See the [Future Development Trends](#) section of the Risk Assessment for additional information regarding current and future development trends.

Population growth is one indication of development trends - building permits are another. Building permits issued can give insight on the amount of new construction and development in the parish. Commercial development in the Parish has been declining over the last four years. See the table below for the annual building permits issued for commercial and residential development from 2016 to 2020 for City of Scott, City of Lafayette, & Unincorporated Lafayette Parish. This slight decline in commercial growth has been relatively small and shows that commercial growth has been taking place at a relatively steady pace. At the same time, residential development in the Parish has been increasing fairly significantly over the last four years. See Table 1 for the annual building permits issued for residential development in the Parish from 2016 to 2020 as reported by LCG Development & Planning. These growth numbers show that residential development is on the rise in the parish and that, as with the population numbers, more and more people and structures are coming into the parish. These represent potentially increased risk.

Table F-116: Total Building Permits Issued in Lafayette Parish

Lafayette Consolidated Government Total Building Permits Issued					
Type	2016 Permits	2017 Permits	2018 Permits	2019 Permits	2020 Permits
New Residential*	632	627	576	511	734 (est.)
New Commercial	52	44	41	47	33 (est.)

\*Not including Mobile Home Placement

Table F-117: Building Permits Issued in the SFHA in Lafayette Parish

(Source: Lafayette Consolidated Government Development & Planning Department)

Lafayette Consolidated Government Building Permits Issued in the SFHA					
Type	2016 Permits	2017 Permits	2018 Permits	2019 Permits	2020 Permits
New Residential*	66	86	62	61	74 (est.)
New Commercial	5	6	9	6	5 (est.)

\*Not including Mobile Home Placement

*Table F-118: Total Building Permits Issued in the City of Scott  
(Source: City of Scott)*

City of Scott Building Permits Issued					
Type	2016 Permits	2017 Permits	2018 Permits	2019 Permits	2020 Permits
New Residential	4	6	17	5	39 (est.)
New Commercial	4	4	7	7	9 (est.)

Most development within the community is expanding into areas that were once agricultural. While this is increasing runoff with non-permeable surfaces, development regulations are limiting the discharge to the channels and monitoring impacts. Agricultural endeavors are exempt from regulations, so in some ways, development limits the impact to the area. A developer must design new infrastructure such that it not only does not impact the surrounding property, but it must reduce the runoff by 15%, whereas a farmer changing the direction of the rows can drastically impact the surrounding properties if the outfall changes. LCG has a strict policy of making sure developments do not impact their neighbors. The City of Lafayette is currently undergoing a mixed approach to development with an infill of smaller developments in areas that were previously vacant with a resurgence of planned unit developments.

Redevelopment is considered new development, so the detention/retention requirements are the same unless the developer chooses to prove the existing drainage system has the capacity to handle increased runoff without detention. This is usually not the case.

#### Opportunity 5.f. – Impacts of Future Flooding Conditions on People, Property, and Natural Floodplain Functions

Lafayette Parish and all of its municipalities are working collaboratively to evaluate future flood management improvements, responsiveness, and efforts for enhanced public safety.

Some of the activities that are currently taking place are:

- The Acadiana Planning Commission (APC) has partnered with UL's Louisiana Watershed Flood Center and the Teche Vermilion Fresh Water District to design and deploy a regional gauge network for the eight parish service-area (Evangeline, St. Landry, Acadia, Lafayette, St. Martin, Vermilion, Iberia, and St. Mary) that will monitor flooding and rainfall; and develop a web-based public visualization interface for communicating real-time alerts. The deployment of a regional gauge network will ultimately enhance emergency-response alerting and be used to develop a predictive hydrological model by which elected officials can make science-based drainage decisions.

#### Step 6: Set Goals

Goals are an important part of any planning process. Goals should set the context for the subsequent review of floodplain management activities and drafting of the action plan. A multi-hazard mitigation plan should have goals that address all the major hazards that face the community. In order to earn a maximum of two points under step six, the goals of the floodplain management of mitigation program must be included. The goals must address all flood-related problems identified in step five.

### Qualifying Activity for Step 6

#### Opportunity 6.a. – Statement of Goals for Community’s Floodplain Management or Hazard Mitigation Program

*The goals for Lafayette Parish and its incorporated jurisdictions are discussed in the [Goals](#) section of the Mitigation Strategy.*

This 2021 plan update proceeds with the previous goals of the Lafayette Parish Hazard Mitigation Plan. The current goals are as follows:

1. Improve education and outreach efforts regarding potential impacts of hazards and the identification of specific measures that can be taken to reduce their impact;
2. Improve data collection, use, and sharing to reduce the impact of hazards;
3. Improve capabilities, coordination, and opportunities at the municipal and parish level to plan and implement hazard mitigation projects, programs, and activities;
4. Pursue opportunities to mitigate repetitive and severe repetitive loss properties and other appropriate hazard mitigation projects, programs, and activities, with a focus on existing structures, future structures, protection of existing infrastructure, and protection of future infrastructure;
5. Maintain continuity of operations during and after natural hazard events.

### Step 7: Review Possible Activities

For this step, the plan reviews different activities that could prevent or reduce the severity of problems assessed previously. This should be a review of a wide range of activities, not just the traditional approaches of flood control, acquisition, and regulation of land use. Activities should also be evaluated for each affected area. The review must be included in the plan and must also include a discussion of why the activity is or is not appropriate for the community.

There are seven opportunities for points under step 7, each one worth five points. The first opportunity is a requirement. The plan must review preventative activities and discuss the community’s comprehensive or land use plan, building codes, zoning ordinances, floodplain management regulations, subdivision ordinance, and stormwater management regulations. The discussion must review how these tools can reduce future flood losses, the current standards in the community’s plans and regulations, and whether the community should adopt or revise such plans and regulations in light of the problem assessment and goals set.

The second opportunity to earn five points under step seven is through the review of the community’s floodplain management regulatory standards. A determination must be made as to whether these standards are sufficient for current and future conditions.

To earn another five points, the plan must review property protection activities such as acquisition, retrofitting, and flood insurance.

In order to satisfy the fourth opportunity for points, the plan must review activities to protect the natural and beneficial functions of the floodplain, such as wetlands protection.



The fifth opportunity for points is through the review of emergency services activities, such as warning and sandbagging.

The sixth opportunity for points is if the plan reviews structural projects, such as levees, reservoirs, and channel modifications.

The seventh and last opportunity for points under step seven is if the plan reviews public information activities, such as outreach projects and environmental education programs.

#### [Qualifying Activities for Step 7](#)

On March 16th, 17th, and 18th, 2021, stakeholders from local governments reviewed and discussed the attached spreadsheet to identify which mitigation activities were most suitable to their communities. The purpose of this exercise was to comprehensively consider all mitigation options. Suitable activities were assigned a priority of high, medium, and low. Action-items to be included in the Hazard Mitigation Plan were reviewed and high or medium priority activities were added to the list of action items.

### **Opportunity 7.a. – 7. g. Review Possible Activities**

#### [Opportunity 7.a. – Review of Preventative Activities](#)

Government, administrative or regulatory actions that influence the way land and buildings are developed to reduce hazard losses. Includes planning and zoning, capital improvement programs, drainage system maintenance, open space preservation, and stormwater management regulations.

New drainage regulations put into place in October 2017 that require that any development causing post-development runoff that exceeds the development area's pre-development runoff rate must mitigate the increase through drainage improvements such that the post-development runoff shall be 15% less than the predevelopment runoff (85% of the pre-development runoff) for developments greater than two and half (2.5) acres. Additionally, developments up to and including two and a half (2.5) acres in area are required to retain the applicable design storm event. LCG contracted with CSRS in April 2021 to draft a Comprehensive Parish wide Stormwater Management Plan.

On March 12, 2019, Lafayette City Parish council adopted an ordinance (Ordinance No. O-039-2019), to adopt the following codes 1) International Building Code 2015 2) International Residential Code 2015 3) International existing Building Code 2015 4) national Electrical Code 2014 5) International Mechanical Code 2015 6) International Plumbing Code 2015 7) International Fuel/Gas Code 2015. The ordinance also included an automatic adoption clause for future code updates.

While Capital Projects are ongoing, Public Works continues to manage our day-to-day drainage maintenance needs, including roadside ditch and coulee excavation projects, cleaning litter traps and storm drains, repairing sinkholes, and flushing out culvert. In 2020 they were responsible for: 227,557 Linear Feet of Roadside Ditch Excavation, 7,150 Linear feet of Off-Road Channel Excavation, 616 Cubic yards of silt and debris removed from roadside ditches, 121,764 linear feet of flushing, 2,108 feet of damaged culverts replaced.

#### [Opportunity 7.b. – Review of Floodplain Management Regulatory Standards](#)

Related to preventative activities, although while FEMA has minimum floodplain management standards for communities participating in the National Flood Insurance Program (NFIP), adopting higher standards

will lead to safer, stronger, more resilient communities. This includes Floodplain Mapping, future conditions mapping, freeboard, prohibition of fill & compensatory storage.

In 2017, LCG adopted "Zero Net Fill", which requires developers to provide compensatory storage for any fill placed within the floodplain to offset any storage loss. Lafayette Consolidated Government, City of Scott, City of Broussard, City of Youngsville, City of Carencro all require the finished floor of all new construction and substantial improvements and all machinery to be elevated at least 1' foot above the Base Flood Elevation.

#### Opportunity 7.c. – Review of Property Protection Activities

Modification of buildings or structures to protect them from a hazard or removal of structures from a hazard area. Includes acquisition, elevation, relocation, structural retrofit, storm shutters, and shatter-resistant glass

In FY18, LCG started to utilize Hazard Mitigation Assistance-FMA funds to address repetitively flooded properties through residential elevations and acquisitions. The elevation and acquisition grant application that LCG submitted under the FY18 FMA Notice of Funding Opportunity has been approved and homeowner Kickoff Meetings took place in February 2021 & Construction activities for the 13 properties included in the grant are expected to begin in 2021. LCG submitted two applications under FY 19 FMA NOFO to elevate or acquire 24 structures and submitted three grant applications under FY 20 FMA NOFO to elevate or acquire 50 structures. Since 2016, a total of 8 structures have been mitigated, via elevation or acquisition through the Hazard Mitigation Assistance-HMGP and approximately 6 others have been mitigated by utilizing Increased Cost of Compliance.

#### Opportunity 7.d. – Review of Natural Resource Protection Activities

Actions that minimize hazard loss and preserve or restore the functions of natural systems. Includes sediment and erosion control, stream corridor restoration, watershed management, forest and vegetation management, and wetland restoration and preservation.

Lafayette Parish and all the municipalities proactively seek to maintain open spaces for flood conveyance in the natural form. It is the City-Parish's plan to continue acquiring open space in support of natural floodplain functions, which aid in conveyance and risk reduction.

#### Opportunity 7.e. – Review of Emergency Services Activities

Actions that protect people and property during and immediately after a hazard event. Includes warning systems, emergency response services, and the protection of essential facilities.

Lafayette Parish Office of Homeland Security & Emergency Preparedness has created an online self-reporting application for post disaster damage assessment at <http://www.lafayetteohsep.org>

LCG created a GIS Dashboard for closed roads and sand bag locations during flood events.

#### Opportunity 7.f. – Review of Structural Projects

Actions that involve the construction of structures to reduce the impact of a hazard. Includes Channel modifications, detention/retention basins, levees/floodwalls, channel diversions, and other storm drain improvements.



Lafayette Parish and its municipalities continue to design and construct projects that protect structures from flood damage by structural flood control projects. These projects provide benefits for existing developments through mitigation of existing flooding challenges and prevention by design of structural features in newly developed areas. It is the City-Parish plan to continue to seek opportunities to lead and partner on structural projects that benefit both individual lots and the entire region.

In January 2020, LCG submitted 9 applications for various drainage projects throughout the parish, as well as detention projects to the Louisiana Watershed Initiative. All but 1 was approved to move on to the Full Application. One of the projects, we have decided to use local funding as it was decided this is in immediate need. In October 2020, LCG submitted an application for funding through the Louisiana DOTD Statewide Flood Control to construct a 40 acre detention pond along Coulee Mine East with a control structure to limit the discharge to Coulee Mine and hold storm water in the pond for storm events.

Administered federal grants for drainage improvements to Coulee Ile des Cannes, Derby Heights, L8C Bayou Carencro and Ile des Cannes and in the City of Carencro; working toward the enhancement of flood protection in the parish by administering FEMA and HUD- funded drainage improvement projects.

#### [Opportunity 7.g. – Review of Public Information Activities](#)

Actions to inform citizens and elected officials about flood hazards and ways to mitigate them. Includes outreach projects, real estate disclosure, hazard information centers, and school-age and adult education.

In September & October 2018, the LCG Development and Planning Department conducted outreach efforts to inform Lafayette citizens of the upcoming FEMA flood maps, as well as provide them with valuable flood insurance information, mitigation information and property protection brochures. The Department coordinated with the City of Scott, City of Broussard and City of Carencro to hold three well attended public meetings in September 2018 where FEMA representatives, LADOTD , and National Flood Insurance Representatives attended to answer questions from the public about flood insurance, flood mapping and general flood concerns. The new FEMA Flood Maps were successfully adopted on November 5, 2018 and took effect on December 21, 2018 after over 10 years in process, due to appeals and protests. To help everyone in Lafayette Parish be better prepared for hurricanes and tropical storms, Lafayette Utilities System has published the 2020 edition of the Hurricane Handbook. This 40-page handbook features a variety of in-depth information including a directory of important phone numbers, evacuation routes, a hurricane tracking map, emergency planning information and checklist for individuals and businesses, generator and chainsaw safety, and much more.

The LUS Hurricane Handbook is available at approximately 15 locations throughout the parish. LCG Environmental Quality has presented the Enviroscape presentation to 9 schools in 2020 alone, and has been doing this for several years. The Enviroscape Presentation is a 3-D Model of watershed components and functions. 456 rain barrels have been distributed in 2020 through the Annual Rain Barrel Program. Since 2018, LCG EQ department recruits artists to submit designs that depict the importance of protecting our waterways, and allow a panel to choose which designs will be painted onto pre-selected storm drains in at least two high-pedestrian areas. LCG will use various marketing materials and media outlets to promote stormwater pollution prevention and the importance of the Vermilion River. Litter Poster Contest. Continue to have flood insurance flyers in the main lobby and at city hall. Also, bring flyers to real estate offices to set out in lobby. Continue to provide FIRM and preliminary FIRM information to citizens at the Development & Planning office, local libraries and LCG website. Using GIS, LCG is working on targeted outreach to promote flood insurance by Identifying areas of Special Flood Hazard Area and all

NFIP policies and locating the areas that have low participation. Created LCG Specific flood handout and it is kept in the lobby and also put on the website. 2018-2019: Have started using social media to promote the purchase of flood insurance.

LCG maintains a web page to educate the community regarding basic floodplain terms, including illustrations showing the encroachment of a 100-year floodplain and provides links to sites like NFIP and FEMA. LCG continues to make use of the Acadiana Realtors Association to inform lenders, insurance agents and real estate offices about the availability of flood zone information and elevation certificates. LCG Floodplain Management section continues to make use of an on hold telephone messaging, which is played for the public.

#### *Step 8: Draft An Action Plan*

After the review of alternatives during step seven, an action plan is drafted that selects and specifies those activities appropriate to the community's resources, hazards, and vulnerable properties. The community should implement preventative activities to keep its flood problems from getting worse and also to protect new construction from the effects of natural hazards. The plan must include activities that the community can be assured will be implemented using its own resources. If outside funding support is needed, the funding sources should be identified and researched to ensure that the projects are eligible.

The CRS credit is based on the range of actions that are recommended in the plan, subject to the following criteria:

- For each recommendation, the action plan must identify:
  - Who is responsible for implementing the action
  - When it will be done
  - How it will be funded
- The actions must be prioritized
- There must be an action item for each goal included in step 6.
- Credit is provided for recommendations on floodplain regulations, provided it recommends adopting or continuing a regulatory standard that exceeds the minimum requirements of the NFIP
- If the plan calls for acquiring properties, there must be a discussion of how the project will be managed and how the land will be used after it's acquired
- When a multi-jurisdictional plan is prepared, it must have action items from at least two of the six categories that directly benefit each community seeking CRS credit
- To qualify as a multi-hazard mitigation plan, the plan must include a "process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate". The action items that relate to preventative activities should clarify how this is done.

The first opportunity for points under step either is set up in a tiered system with the following criteria:

- 10 points are awarded if the action plan includes flood-related recommendations for activities from two of the six categories credited in step 7
- 20 points are awarded if the action plan includes flood-related recommendations for activities from three of the six categories credited in step 7
- 30 points are awarded if the action plan includes flood-related recommendations for activities from four of the six categories credited in step 7
- 45 points are awarded if the action plan includes flood-related recommendations for activities from five of the six categories credited in step 7

The second opportunity for points is obtained through the establishment or revision of post-disaster redevelopment and mitigation policies and procedures. These policies and procedures should account for the expected damage from a base flood or other disaster.

Lastly, the third set of points will be earned if the plan includes action items to mitigate the effect of the other natural hazards identified in the hazard assessment.

#### Qualifying Activity for Step 8

##### Opportunity 8.a. – Categories Covered by Mitigation Action Items

*The action plan is discussed in depth in the [Mitigation Strategy](#) section of this planning document.*

##### Opportunity 8.b. – Establishment or Revision of Post-Disaster Redevelopment and Mitigation Policies and Procedures

Lafayette Office of Homeland Security and Emergency Preparedness has Post-Disaster Policies, Procedures and Action items related to natural hazards. Lafayette OHSEP updated their Emergency Operations Plan in June 2020. Additional documents related to hazard activities are called the Evacuation Operations Plan, Continuity of Operations Plan & Lafayette Utilities System Major Storm Emergency Procedures Manual.

##### Opportunity 8.c. – Inclusion of Action Items to Mitigate Effects of other Natural Hazards Identified in the Risk Assessment

*The action plan is discussed in depth in the [Mitigation Strategy](#) section of this planning document. This includes mitigation action items addressing the additional natural hazards identified in the Risk Assessment.*

#### Step 9: Adopt The Plan

The points for this step are provided if the plan and later amendments are officially adopted by the community's governing body. The plan must be an official plan of the community, not an internal staff's proposal. "adopted" means that there is a resolution or other formal document that is voted on by the community's governing body. A note in the minutes is not credited.

#### Qualifying Activity for Step 9

##### Opportunity 9.a. – Plan Adoptions by Jurisdictions

See [Appendix D: Plan Adoption](#) for copies of formal adoptions of the 2021 Lafayette Parish Multi-Jurisdictional Hazard Mitigation Plan by all involved jurisdictions.

#### Step 10: Implement, Evaluate, and Revise

The process does not end once the plan is written and adopted. Planning must be continual and plans must be dynamic. The community must have a review evaluation, and update process. As plan implementation progresses, it is inevitable that flaws will be discovered and changes will be necessary. The impetus for these changes can vary great, from changes in hazard conditions to changes in goals and objectives.

Changes should be made in an action plan when opportunities arise to add new activities or complete some head of schedule. The plan should also be revised if it is found that some activities cannot be completed as originally scheduled. At a minimum, these types of changes must be a de at the required 5

year update. The key to this step is the annual evaluation report on progress in implementing the plan. Not only are annual evaluations required with the community's annual recertification, but also the process of conducting an annual evaluation gives the community a framework for monitoring the plan's effectiveness and the community's progress in implementing it.

Credit for step 10 is determined by how the community monitors and evaluates its plan:

- The plan must describe how, when, and by whom the plan will be monitored, evaluated, and revised.
- An annual evaluation progress report regarding plan implementation must be prepared at least once each year and submitted with the community's annual CRS recertification.
- If a community receives credit as a result of participation in a multi-jurisdictional plan, that includes action items for each community, the annual evaluation report must cover those action items. This can be done either by a multi-jurisdictional planning committee or through separate submittals by each community. The submittal needs to show who participated in the preparation of the report.
- The community must update the plan at least every five years. The update is due by October 1, five years after the plan was adopted

There are two opportunities to earn points under step ten, resulting in a total of 26 points possible. The first opportunity is if the community has procedures for monitoring implementation, reviewing progress, and recommending revisions to the plan in an annual evaluation report. It is required that the report be submitted to the governing body, released to the media, and made available to the public.

The second of the opportunities can earn the bulk of the points under step ten, and can be satisfied if the annual evaluation report is prepared by the same planning committee that prepared the plan or by a successor committee with a similar membership. The points are based on the frequency of committee meetings:

- 6 points if the committee meets only once a year
- 12 points if the committee meets twice a year
- 24 points if the committee meets at least quarterly

#### [Qualifying Activity for Step 10](#)

##### **Opportunity 10.a. & 10.b.**

See [Appendix B: Plan Maintenance](#) for information related to the evaluation and revision of the 2021 Lafayette Parish Multi-Jurisdictional Hazard Mitigation Plan.

## Resources

### Federal Agencies

The table below lists resources available from federal agencies.

*Table F-119: Resources From Federal Agencies*

Agency	Website	Resources Available
Community Rating System	<a href="http://crsresources.org">crsresources.org</a>	<ul style="list-style-type: none"> <li>• Best practices</li> <li>• Community Rating System manual</li> <li>• Informational webinar</li> <li>• Activity checklists</li> </ul>
Emergency Management Institute (EMI)	<a href="http://training.fema.gov/emi">training.fema.gov/emi</a>	<ul style="list-style-type: none"> <li>• In person CRS training in Emmitsburg, MD</li> <li>• Online CRS courses</li> </ul>
Federal Emergency Management Agency (FEMA)	<a href="http://FEMA.gov">FEMA.gov</a>	<ul style="list-style-type: none"> <li>• Mitigation guidance</li> <li>• Outreach project templates</li> <li>• Preparedness and recovery materials</li> <li>• Risk MAP</li> <li>• Social media templates</li> <li>• NFIP/CRS Update Newsletter</li> </ul>
National Flood Insurance Program (NFIP)	<a href="http://www.floodsmart.gov">www.floodsmart.gov</a>	<ul style="list-style-type: none"> <li>• Information for homeowners and businesses on flood insurance claims and policies</li> </ul>
NOAA Digital Coast	<a href="http://coast.noaa.gov/digitalcoast">coast.noaa.gov/digitalcoast</a>	<ul style="list-style-type: none"> <li>• Flood exposure mapper</li> <li>• Historical hurricane tracks</li> <li>• Land cover data</li> <li>• Risk communication basics</li> <li>• Sea level rise viewer</li> </ul>

### Professional Associations

Floodplain managers and local officials can choose to join professional associations, which are available at the state- wide and national level. These associations host conferences, offer trainings, and provide an avenue for officials to network and share resources.

*Table F-120: Resources from Professional Associations*

Association	Website	Resources
Association of State Floodplain Managers (ASFPM)	<a href="https://www.floods.org/">https://www.floods.org/</a>	<ul style="list-style-type: none"> <li>• Annual conference</li> <li>• Webinars</li> <li>• Website</li> </ul>
Louisiana Floodplain Management Association (LFMA)	<a href="https://lfma.org/">https://lfma.org/</a>	<ul style="list-style-type: none"> <li>• Annual conference</li> <li>• Monthly newsletter</li> <li>• Workshops</li> <li>• Website</li> </ul>
Louisiana Emergency Preparedness Association (LEPA)	<a href="https://lepa.org">https://lepa.org</a>	<ul style="list-style-type: none"> <li>• Annual conference</li> <li>• Education and outreach</li> <li>• Can provide CRS related education and outreach opportunities for emergency managers</li> </ul>

Louisiana Municipal Association (LMA)	<a href="https://www.lma.org/">https://www.lma.org/</a>	<ul style="list-style-type: none"> <li>• Annual conference</li> <li>• Monthly newsletter</li> <li>• Website</li> <li>• Can provide CRS related education and outreach opportunities for local officials</li> </ul>
Louisiana Society for Professional Surveyors	<a href="https://lsps.net/">https://lsps.net/</a>	<ul style="list-style-type: none"> <li>• Education and outreach</li> <li>• Newsletter</li> <li>• Website</li> <li>• Can provide CRS related education and outreach opportunities for surveyors</li> </ul>

### Other Institutions

There are other nonprofits and educational institutions that provide resources to CRS communities. The table below lists these organizations and the resources available.

*Table F-121: Resources from Other Institutions*

Organization	Website	Resources Available
Climate Central	<a href="http://sealevel.climatecentral.org/crs">sealevel.climatecentral.org/crs</a>	<ul style="list-style-type: none"> <li>• Risk Finder</li> <li>• Risk Zone Map</li> <li>• Surging Seas CRS Guide</li> </ul>
Louisiana Sea Grant	<a href="https://www.laseagrant.org/">https://www.laseagrant.org/</a>	<ul style="list-style-type: none"> <li>• Training courses and workshops</li> <li>• Education and outreach</li> <li>• Local partner for grant opportunities</li> </ul>
Louisiana State University AgCenter's Louisiana Flood Maps	<a href="http://maps.lsuagcenter.com/floodmaps">maps.lsuagcenter.com/floodmaps</a>	<ul style="list-style-type: none"> <li>• Louisiana flood maps</li> <li>• FIRMs and DFIRMS</li> <li>• Information for homeowners</li> </ul>
The Nature Conservancy's Coastal Resilience Community Rating System Explorer	<a href="http://coastalresilience.org/project/community-rating-system-explorer">coastalresilience.org/project/community-rating-system-explorer</a>	<ul style="list-style-type: none"> <li>• Open space preservation credit information</li> <li>• Training materials</li> </ul>
RainReady	<a href="http://rainready.org">rainready.org</a>	<ul style="list-style-type: none"> <li>• Outreach and education</li> <li>• Training courses and workshops</li> </ul>
SBP	<a href="http://sbpusa.org">sbpusa.org</a>	<ul style="list-style-type: none"> <li>• Disaster recovery</li> <li>• Outreach materials</li> </ul>
University of New Orleans Center for Hazards Assessment, Response & Technology (UNO-CHART)	<a href="http://floodhelp.uno.edu">floodhelp.uno.edu</a>	<ul style="list-style-type: none"> <li>• CRS users group facilitation/information</li> <li>• CRS resources</li> <li>• Floodplain management resources</li> <li>• Planning for repetitive flood loss</li> </ul>
The Water Institute of the Gulf	<a href="https://thewaterinstitute.org/">https://thewaterinstitute.org/</a>	<ul style="list-style-type: none"> <li>• Natural system modeling</li> <li>• Real time data collection and monitoring</li> <li>• Outreach</li> </ul>

## Element 512.a Checklist

	Community:		
<b>510 FLOODPLAIN MANAGEMENT PLANNING</b>			
<b>512.a Floodplain Management Planning (FMP)</b>			
<b>Credit Points:</b> Enter the section or page number in the plan where each credited item can be found. Add notes on AW-510-4.			
CRS Step	Section/Page	Item Score	Step Total
1. Organize to prepare the plan. (15 Max)			
a. Involvement of Office Responsible for Community Planning (4)			
b. Planning committee of department staff (9)			
c. Process formally created by the community's governing board (2)			
2. Involve the public. (120 Max)			
a. Planning process conducted through a planning committee (60)			
b. Public meetings held at the beginning of the planning process (15)			
c. Public meeting held on draft plan (15)			
d. Other public information activities to encourage input (Up to 30)			
3. Coordinate with other agencies. (35 Max)			
a. Review of existing studies and plans (required) (5)			
b. Coordinating with communities and other agencies (Up to 30)			
4. Assess the hazard. (Max 35)			
a. Plan includes an assessment of the flood hazard (REQUIRED) with:			
(1) A map of known flood hazards (5)			
(2) A description of known flood hazard (5)			
(3) A discussion of past floods (5)			
b. Plan includes assessment of less frequent floods (10)			
c. Plan includes assessment of areas likely to flood (5)			
d. The plan describes other natural hazards (REQUIRED FOR DMA) (5)			

CRS Step	Section/Page	Item Score	Step Total
5. Assess the problem. (Max 52)			
a. Summary of each hazard identified in the hazard assessment and their community impact (REQUIRED) (2)			
b. Description of the impact of the hazards on: (Max 25)			
(1) Life, safety, health, procedures for warning and evacuation (5)			
(2) Public health including health hazards to floodwaters/mold (5)			
(3) Critical facilities and infrastructure (5)			
(4) The community's economy and tax base (5)			
(5) Number and type of affected buildings (5)			
c. Review of all damaged buildings/flood insurance claims (5)			
d. Areas the provide natural floodplain functions (5)			
e. Development/redevelopment/Population Trends (7)			
f. Impact of future flooding conditions outline in Step 4, item c (5)			
6. Set goals. (required) (2)			
7. Review possible activities. (Max 35)			
a. Preventive activities (5)			
b. Floodplain Management Regulatory/current & future conditions (5)			
c. Property protection activities (5)			
d. Natural resource protection activities (5)			
e. Emergency services activities (5)			
f. Structural projects (5)			
g. Public information activities (5)			
8. Draft an action plan. (Max 60)			
a. Actions must be prioritized (required)			
1. Recommendations for activities from two of the six categories (10)			
2. Recommendations for activities from three of the six categories (20)			
3. Recommendations for activities from four of the six categories (30)			
4. Recommendations for activities from five of the six categories (45)			
b. Post-disaster mitigation policies and procedures (10)			
c. Action items for mitigation of other hazards (5)			
CRS Step	Section/Page	Item Score	Step Total



9. Adopt the plan. (2)			
10. Implement, evaluate and revise. (Max 26)			
a. Procedures to monitor and recommend revisions (required) (2)			
b. Same planning committee or successor committee that qualifies under Section 511.a.2 (a) does the evaluation (24)			
			FMP=