

2023 LINCOLN PARISH MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN

CHODRANT, DUBACH GRAMBLING,
RUSTON, SIMSBORO, VIENNA,
UNINCORPORATED LINCOLN PARISH



LINCOLN PARISH MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE

Prepared for:

Lincoln Parish



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Unincorporated Lincoln Parish

Village of Choudrant

Town of Dubach

City of Grambling

City of Ruston

Village of Simsboro

Town of Vienna

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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 Lincoln 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 Lincoln Parish and its jurisdictions less vulnerable and more disaster resilient. It also includes mitigation project scoping to further identify scopes of work, funding sources, and implementation timing requirements of proposed selected mitigation projects. Information in the plan will be used to help guide and coordinate mitigation and local policy decisions affecting future land use.

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

- Unincorporated Lincoln Parish
- Village of Choudrant
- Town of Dubach
- City of Grambling
- City of Ruston
- Village of Simsboro
- Town of Vienna

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

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

efficient solutions. It can also ensure that activities are coordinated with each other and with other goals and programs, preventing conflicts and reducing the costs of implementing each individual activity.

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

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

Geography, Population and Economy

Geography

Lincoln Parish is located in north central Louisiana along Interstate 20. It is strategically situated to serve the tristate market region which includes Louisiana, Mississippi, and Arkansas. Bienville and Claiborne Parishes are to the west; Union Parish is to the northeast; Ouachita Parish is to the east; and Jackson Parish is to the south of Lincoln Parish. Lincoln Parish consists of an area of 471.4 square miles, or 301,695 acres.

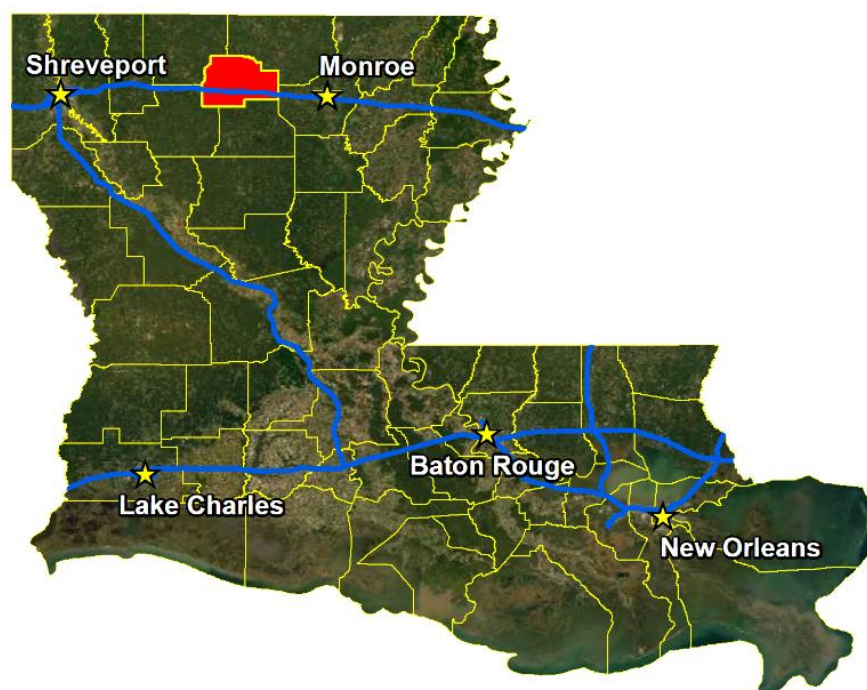


Figure 1-1: Location of Lincoln Parish in the State of Louisiana

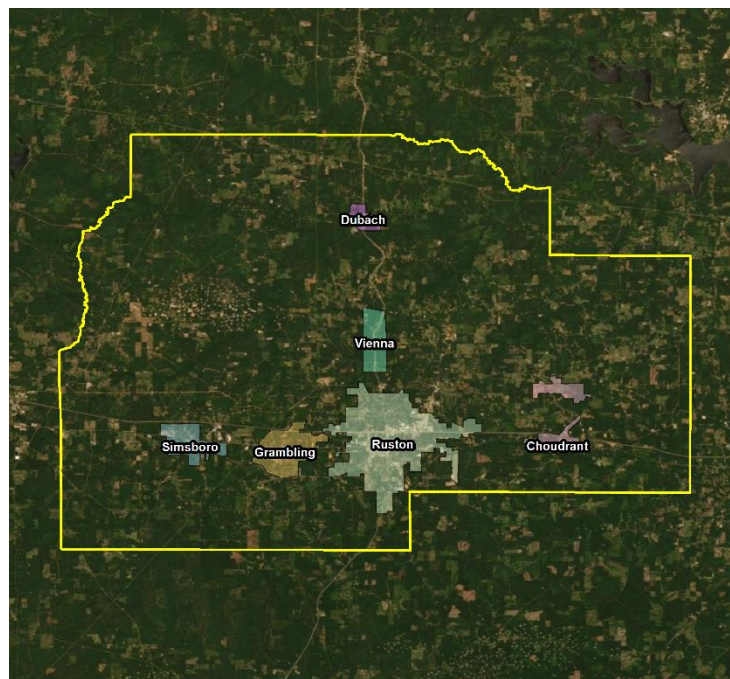


Figure 1-2: Incorporated Jurisdictions within Lincoln Parish

Lincoln Parish has a humid subtropical climate. 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 Lincoln 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 56 inches. Lincoln Parish is susceptible to the normal weather dangers, such as thunderstorms and flooding. Even though Lincoln is about 200 miles North of the Gulf of Mexico, the states' proximity to the gulf makes the parish susceptible to tropical cyclones. Hurricane season lasts from June 1st to November 30th, with most hurricanes forming in August, September, and October.

Lincoln Parish is located in Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) Region 8 (Figure 1-3).

As noted above, Lincoln Parish is located in the north-central region of Louisiana.



Figure 1-3: Louisiana Homeland Security Regions

Population

The population of Lincoln Parish is estimated at 48,396 (2020 census) with a population percent change from April 1, 2010 – April 1, 2020 of 3.42%.

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

	2010 Census	2014 Estimate	2020 Census	Percent Change 2010 - 2020
Total Population	46,740	47,617	48,396	3.42%
Population Density (Pop/Sq. Mi.)	99.1		102.6	3.41%
Total Households	19,479	19,732	17,712	-9.98%
Persons Per Household			2.49	-----

*Table 1-2: University's Influence on Population in Lincoln Parish
(Source: US Census)*

College	Jurisdiction	Enrollment	2020 Census (Per Jurisdiction)	(% Change Enrollment +Census)
Grambling State University	Grambling	4,658	5,095	47.76%
Louisiana Tech University	Ruston	8,321	22,277	27.19%

Economy

Originally, the local economy relied solely on abundant natural resources and a railroad line that ambles through the heart of downtown. Today, the economy of Ruston and Lincoln Parish is firmly rooted in education by Louisiana Tech, the Lincoln Parish School Board and Grambling State University, the three largest employers in the area. Providing balance and diversity are the many other major employers which include: Washington-based Weyerhaeuser Company (with numerous manufacturing facilities in Lincoln Parish and the surrounding area); and House of Raeford.

In addition to the universities, manufacturing, and business services, other niche employers play a major role on the local scene. These include healthcare, with Northern Louisiana Medical Center, Ruston Regional Specialty Hospital, Green Clinic, and Ruston Surgical Center being the most significant. Two social service agencies: Louisiana Methodist Children's Home and the Louisiana Center for the Blind are also counted among Lincoln Parish's top job providers. Finally, the banking and trust services sector plays a major role in the local economy. Industry data for business patterns in Lincoln Parish can be found in the table on the following page.

Table 1-3: Lincoln Parish Business Patterns
(Source: US Census, CBP)

Business Description	Number of Establishments	Number of Employees	Annual Payroll (\$1,000)
Retail Trade	171	66,577	2,509
Manufacturing	39	56,577	1,071
Health Care and Social Assistance	141	111,271	3,186
Transportation and Warehousing	25	21,766	320
Construction	94	44,670	854
Administration/Support and Waste Management/Remediation Services	56	23,219	588
Real Estate and Rental and Leasing	68	16,676	419
Wholesale Trade	36	18,835	408
Other Services (except Public Administration)	93	15,022	742
Accommodation and Food Services	100	30,316	2,363
Financial and Insurance	85	43,611	611
Professional, Scientific, and Technical Services	99	53,679	839
Agriculture, Forestry, Fishing and Hunting	18	5,767	98
Mining, quarrying, and oil and gas extraction	17	10,318	179
Utilities	8	2,113	38
Arts, entertainment, and recreation	15	3,981	178
Educational services	10	9,401	345
Information	16	8,350	243
Management of companies and enterprises	6	18,498	376

Hazard Mitigation

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

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

enforcement of building codes, and construction projects (e.g., flood proofing homes through elevation, or acquisition or relocation away from floodplains).

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

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

As *Figure 1-4* demonstrates, mitigation relies on updating in the wake of disaster. This can give the appearance that mitigation is only reactive rather than proactive. In reality, post-disaster revision is a vital component of improving mitigation. Each hazardous event affords an opportunity to reduce the consequences of future occurrences. Unfortunately, this cycle can be painful for a community. For instance, the risks of disasters that could create catastrophic incidents in Louisiana were thought to be relatively well-understood prior to 2005. However, the impact of the

2005 hurricane season on the Gulf Coast region of the United States prompted a new level of planning and engagement related to disaster response, recovery, and hazard mitigation. Hurricanes Katrina and Rita hit three weeks apart and together caused astonishing damage to human life and to property. The two storms highlighted a hurricane season that spawned 28 storms—unparalleled in American history. The 2005 hurricane season confirmed Louisiana’s extreme exposure to natural disasters and both the positive effects and the concerns resulting from engineered flood-protection solutions. More recently, the historically impactful 2020 hurricane season reinforced the need for proper planning and mitigation strategies.

The catastrophic tropical events of 2005 and 2020, coupled with the unprecedented flooding events of 2016 have had profound impacts on emergency management and hazard mitigation throughout Louisiana. As detailed later in this document, significant funding has been made available to the State of Louisiana and its parishes for the purpose of hazard mitigation planning. The storms also raised awareness of the importance of hazard mitigation among decision-makers and the general population, which has



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

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 2023 Lincoln 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 Lincoln Parish HMP were as follows:

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

This plan update also coheres with the Plain Writing Act of 2010, which requires federal agencies to use clear communication that is accessible, consistent, understandable, and useful to the public. While the State of Louisiana and its political subdivisions are not required to meet such standards, the Act aligns with best practices in hazard mitigation. Since successful hazard mitigation relies on full implementation and cooperation at all levels of government and community, a successful hazard mitigation plan must also be easily used at all of these levels. Nevertheless, the Lincoln Parish Hazard Mitigation Planning Committee recognized the benefits from the successful analysis and mitigation planning executed in previous plan updates, as well as improvements to be made in the 2023 update. This plan update remains coherent with those documents, retaining language and content when needed, deleting it when appropriate, and augmenting it when constructive.

2023 Plan Update

This 2023 plan update proceeds with the previous goals of the Lincoln Parish Hazard Mitigation Plan. The current goals are as follows:

1. Identifying and pursuing preventive measures that will reduce future damages from hazards
2. Enhancing public awareness and understanding of disaster preparedness
3. Reducing repetitive flood losses in the parish
4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards

This plan update makes a number of textual changes throughout, but the most obvious changes are data related and structural edits. First, the National Oceanic and Atmospheric Administration's (NOAA) National Centers for Environmental Information's (NCEI) Storm Events Database was used in the analysis, which provides historical hazard data from 1950 to 2023. The planning committee was also instrumental in providing detailed data where appropriate to more accurately reflect hazard impacts on the parish and jurisdictions. Furthermore, all of the sections were updated to reflect the most current information and the most current vision of the plan update. The most significant changes are the newly developed hazard profiles and risk assessments, as well as the removal of much repetition between sections from the previous plan updates.

The 2023 plan update is organized in the same format as the 2016 update, with one minor change to this 2023 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

Table 1-3: 2023 Plan Update Crosswalk

Plan Update Crosswalk	
2016 Update	2023 Update
Section 1: Introduction	Section 1: Introduction
Section 2: Hazard Identification and Parish-Wide Risk Assessment	Section 2: Hazard Identification and Parish-Wide Risk Assessment
Section 3: Capability Assessment	Section 3: Capability Assessment
Section 4: Mitigation Strategy	Section 4: Mitigation Strategy
Appendix A: Planning Process	Appendix A: Planning Process
Appendix B: Plan Maintenance	Appendix B: Plan Maintenance
Appendix C: Essential Facilities	Appendix C: Critical Facilities
Appendix D: Plan Adoptions	Appendix D: Plan Adoptions
Appendix E: State Required Worksheets	Appendix E: State Required Worksheets

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

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

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2. Hazard Identification and Parish-Wide Risk Assessment

This section assesses the various hazard risks that Lincoln 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 Lincoln 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 Last Plan	Considered Medium or High Risk in the State's HM Plan	Profiled in the 2023 Update
Dam Failure	X		+
Drought	X		X
Earthquakes	*		
Excessive Heat	X		X
Flooding	X	X	X
Thunderstorms (Hail, Lightning, & Wind)	X	X	X
Tornadoes	X	X	X
Tropical Cyclones	X	X	X
Wildfires	X		X
Winter Weather	X		X

* Profiled in last HMP update, but discounted

+ Hazard profiled, but discounted

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) Thunderstorms (Hail, Lightning, Wind)
- e) Tornadoes
- f) Tropical Cyclones
- g) Wildfires
- h) 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. Eighteen of the twenty-eight disaster declarations Lincoln Parish have received resulted from tropical cyclones (12) or flooding (6), which validates these as the most significant hazards. Therefore, the issue of hurricanes will serve as the main focus during the mitigation planning process. Hurricanes present risks from the potential for flooding, primarily resulting from storm surge, and high wind speeds. While storm surge is considered the hazard with the most destructive potential, the risk assessment will also assess non-storm surge flooding as well. Flooding can also occur from non-hurricane events, as flash floods are a common occurrence due to heavy rainfall.

Hurricanes, tropical storms, and heavy storms are 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 Lincoln Parish is included in the hurricane risk assessment.

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

Table 2-2: Lincoln Parish Major Disaster Declarations.

Disaster Number	Year	Declaration
3031	2/22/1977	Drought and Freezing
675	1/11/1983	Severe Storms and Flooding
829	5/20/1989	Severe Storms and Flooding
904	5/3/1991	Severe Storms, Tornadoes, and Flooding
1012	2/28/1994	Severe Winter Ice Storm
1264	1/21/1999	Severe Ice Storm
1314	2/15/2000	Severe Winter Storm
1357	1/12/2001	Severe Winter Ice Storm
3172	2/1/2003	Loss of Space Shuttle Columbia
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
4263	3/13/2016	Severe Storms and Flooding
4277	8/14/2016	Severe Storms and Flooding
4439	6/3/2019	Severe Storms and Tornadoes
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
3543	9/14/2020	Tropical Cyclone – Hurricane Sally
4570	10/16/2020	Tropical Cyclone – Hurricane Delta
3549	10/27/2020	Tropical Cyclone – Tropical Storm Zeta
3556	2/18/2021	Severe Winter Storm
4590	3/9/2021	Severe Winter Storms
3568	8/27/2021	Tropical Cyclone – Hurricane Ida
3574	9/13/2021	Tropical Cyclone – Tropical Storm Nicholas

Probability of Future Hazard Events

The probability of a hazard event occurring in Lincoln Parish is estimated in the table on the following page. The percent chance of an event happening during any given year was calculated by posting past events and dividing by the time period. Unless otherwise indicated, the time period used to access 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 2021. In staying consistent with the state plan, the Storm Events Database was evaluated for the last thirty years (1990 – 2021) to determine future probability of a hazard occurring. While the 31-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 71-year record was used when Hazus was not available to determine losses. This full

record was used to provide a more extensive record to determine losses. All assessed damages were adjusted for inflation in order to reflect the equivalent amount of damages with the value of the U.S. dollar today. The following table shows the annual probability for each hazard occurring across the parish:

Table 2-3: Probability of Future Hazard Reoccurrence.

Hazard	Probability						
	Unincorporated Lincoln Parish	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
Drought	19%	19%	19%	19%	19%	19%	19%
Excessive Heat	26%	26%	26%	26%	26%	26%	26%
Flooding	32%	6%	6%	10%	26%	6%	13%
Thunderstorms - Hail	100%	100%	100%	100%	100%	100%	100%
Thunderstorms - Lightning	35%	35%	35%	35%	35%	35%	35%
Thunderstorms - Winds	100%	100%	100%	100%	100%	100%	100%
Tornadoes	48%	48%	48%	48%	48%	48%	48%
Tropical Cyclones	26%	26%	26%	26%	26%	26%	26%
Wildfires	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%	< 1%
Winter Weather	48%	48%	48%	48%	48%	48%	48%

As shown in the table above, high winds and hailstorms have the highest chance of occurrence in the parish (100%). This is followed by winter storms and tornadoes (48%); hailstorms (94%), tropical cyclones (54%); flooding for the incorporated area of New Roads (45%); lightning (35%); flooding for the unincorporated area of the parish (32%); flooding for the incorporated area of Ruston, extreme heat, and tropical cyclones (26%); drought (19%), and flooding for the incorporated areas of Vienna (13%), Grambling (10%), Choudrant, Dubach, and Simsboro (6%). Wildfires have an annual chance of occurrence of less than 1%. The hazard of dam failure was discounted.

Inventory of Assets for the Entire Parish

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

Within the entire planning area, there is an estimated value of \$6,524,727,000 in structures throughout the parish. The tables on the following page provide the total estimated value for each type of structure by occupancy.

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

Occupancy	Lincoln Parish	Unincorporated Area	Choudrant	Dubach
Agricultural	\$19,904,000	\$9,928,000	\$1,504,000	\$420,000
Commercial	\$1,075,971,000	\$158,304,000	\$15,920,000	\$8,004,000
Government	\$37,334,000	\$5,926,000	\$750,000	\$4,802,000
Industrial	\$332,919,000	\$135,604,000	\$1,438,000	\$6,386,000
Religion	\$178,964,000	\$39,506,000	\$2,098,000	\$10,112,000
Residential	\$4,714,742,000	\$1,768,359,000	\$72,613,000	\$76,190,000
Education	\$164,893,000	\$7,658,000	\$1,000,000	\$2,910,000
Total	\$6,524,727,000	\$2,125,285,000	\$95,323,000	\$108,824,000

Table 2-5: Estimated Total of Potential Losses throughout Lincoln Parish.

Occupancy	Grambling	Ruston	Simsboro	Vienna
Agricultural	\$0	\$7,126,000	\$522,000	\$404,000
Commercial	\$38,001,000	\$842,226,000	\$11,238,000	\$2,278,000
Government	\$1,602,000	\$23,126,000	\$1,128,000	\$0
Industrial	\$3,151,000	\$158,525,000	\$27,815,000	\$0
Religion	\$21,448,000	\$104,496,000	\$0	\$1,304,000
Residential	\$448,087,000	\$2,204,821,000	\$81,462,000	\$63,210,000
Education	\$62,883,000	\$90,442,000	\$0	\$0
Total	\$575,172,000	\$3,430,762,000	\$122,165,000	\$67,196,000

Critical Facilities of the Parish

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

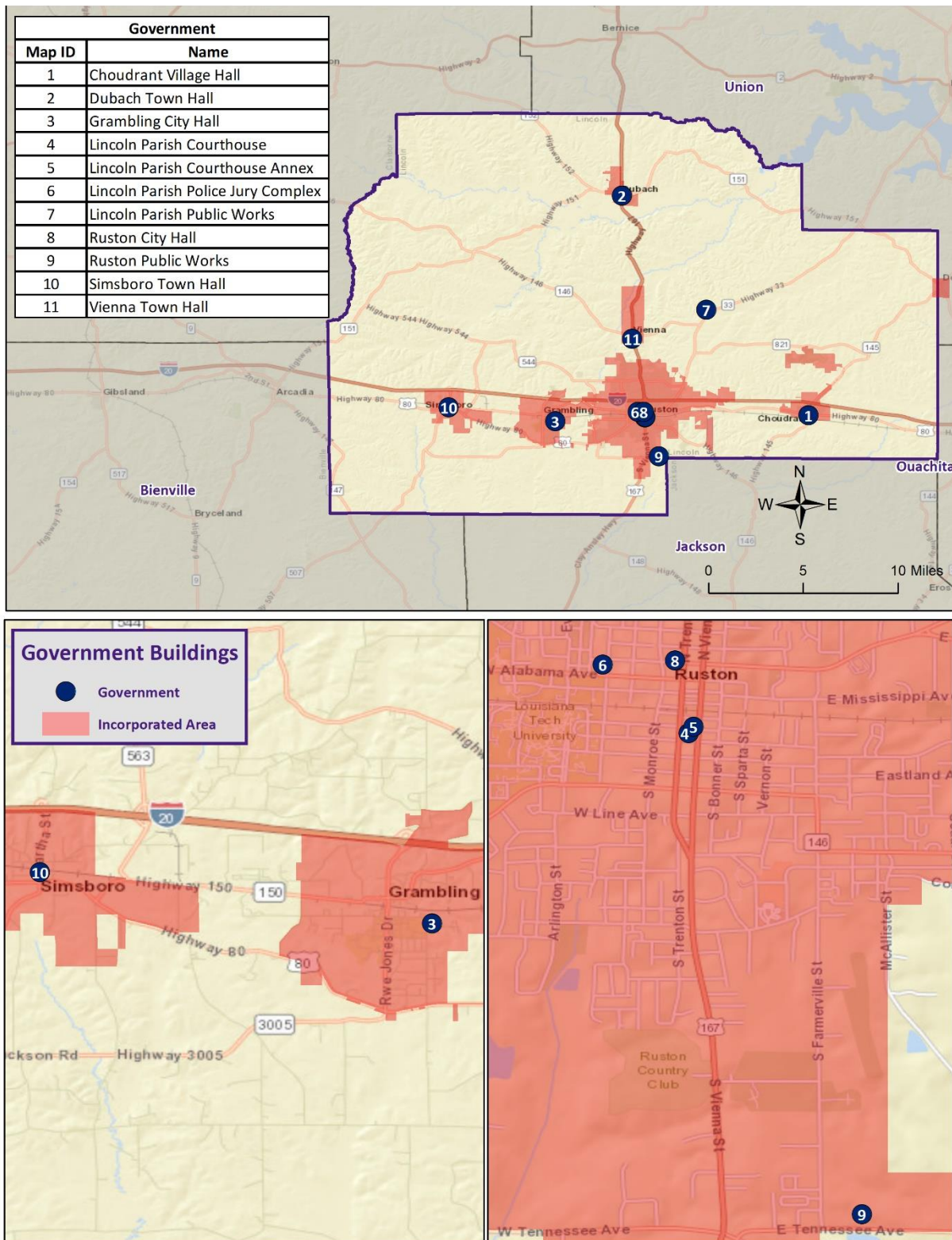


Figure 2-1: Government Buildings in Lincoln Parish.

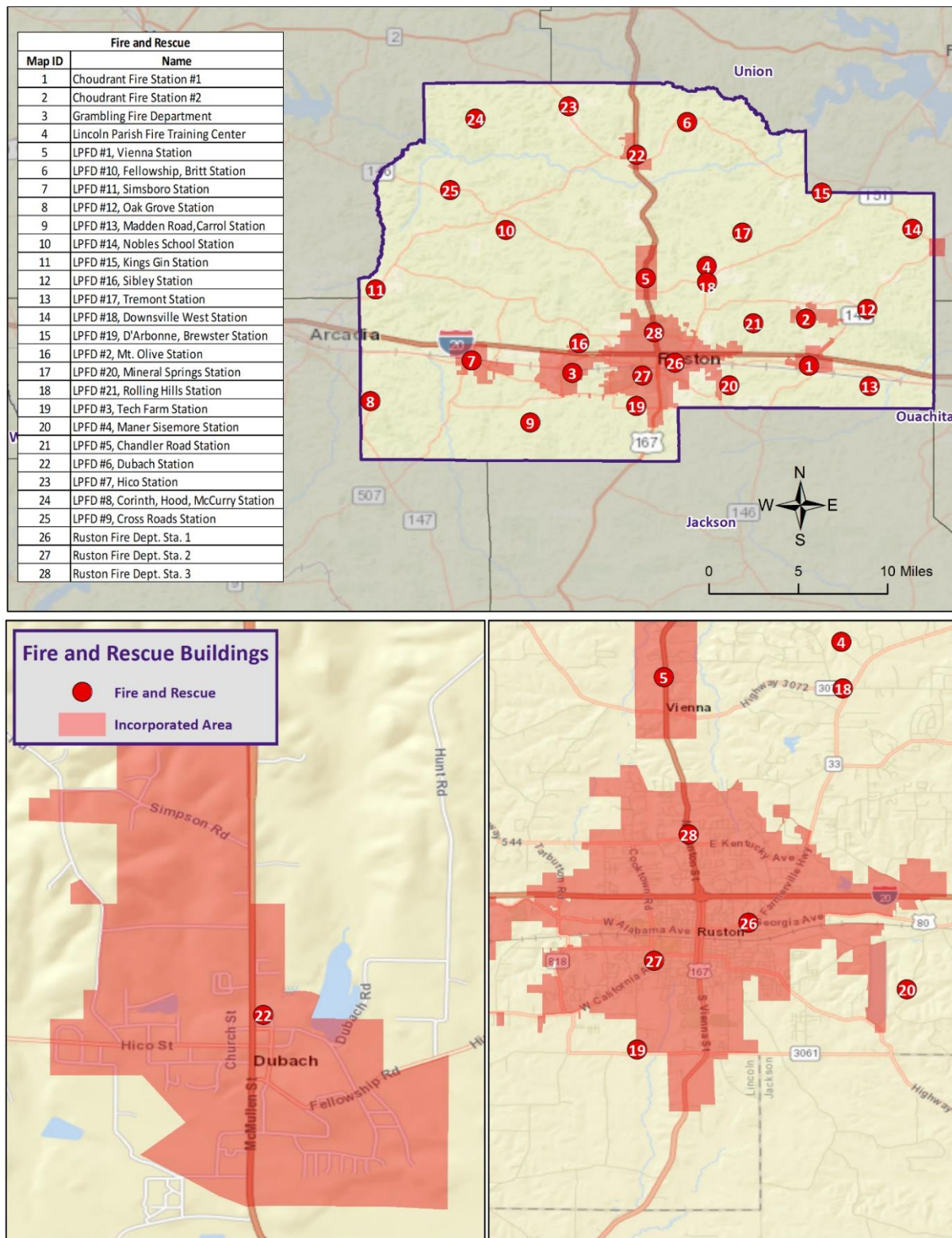


Figure 2-2: Fire and Rescue Facilities in Lincoln Parish.

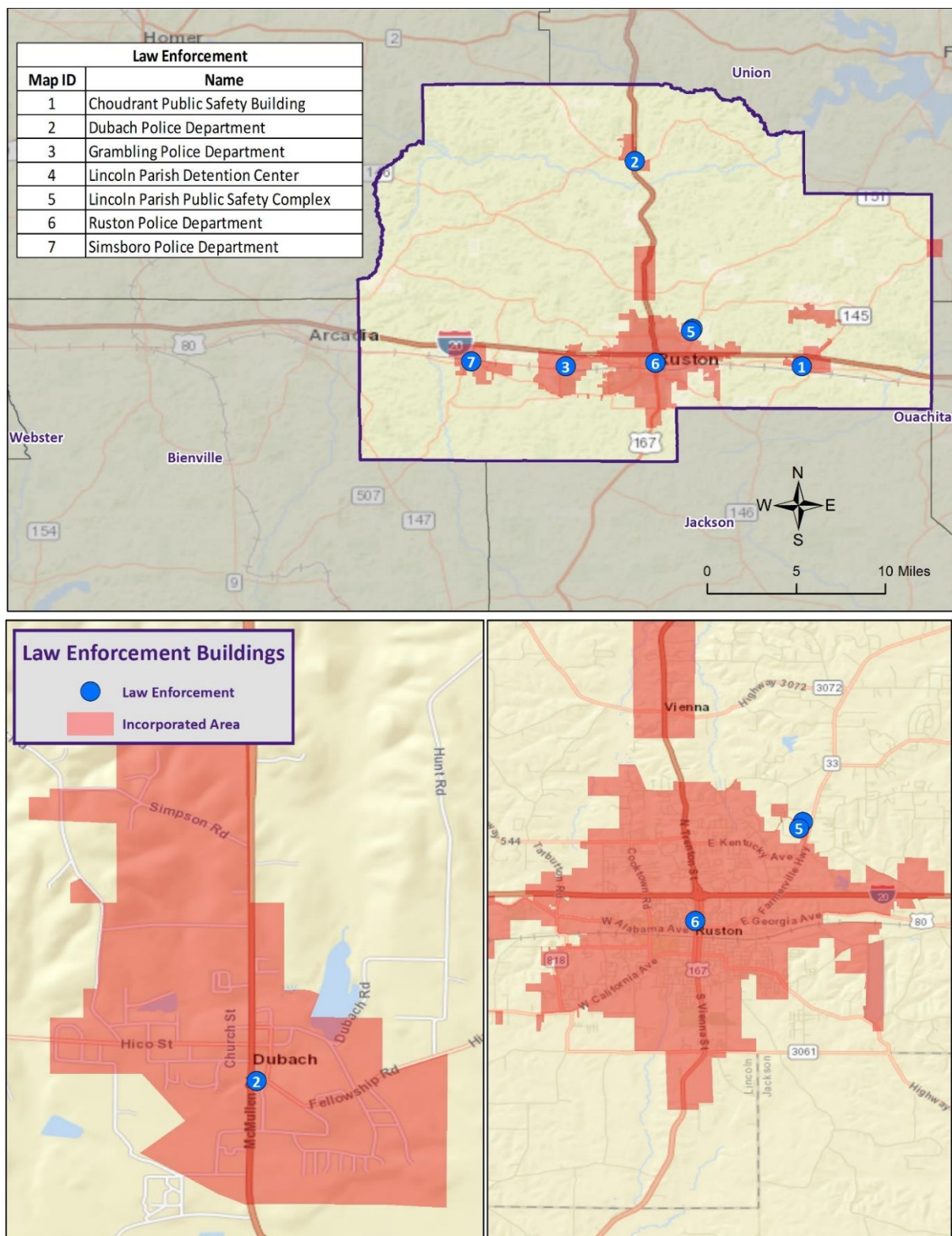


Figure 2-3: Law Enforcement in Lincoln Parish.

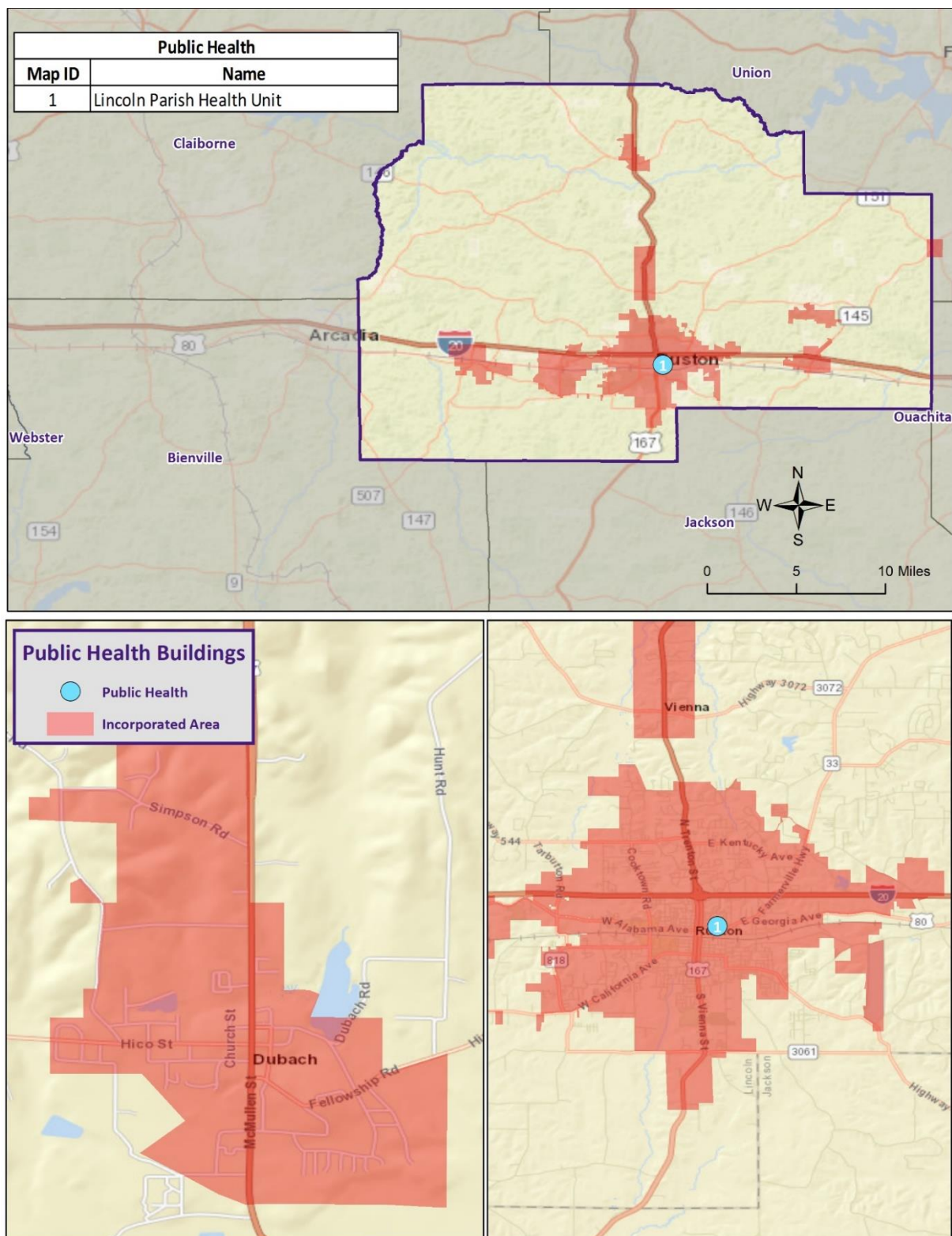


Figure 2-4: Public Health Facilities in Lincoln Parish.

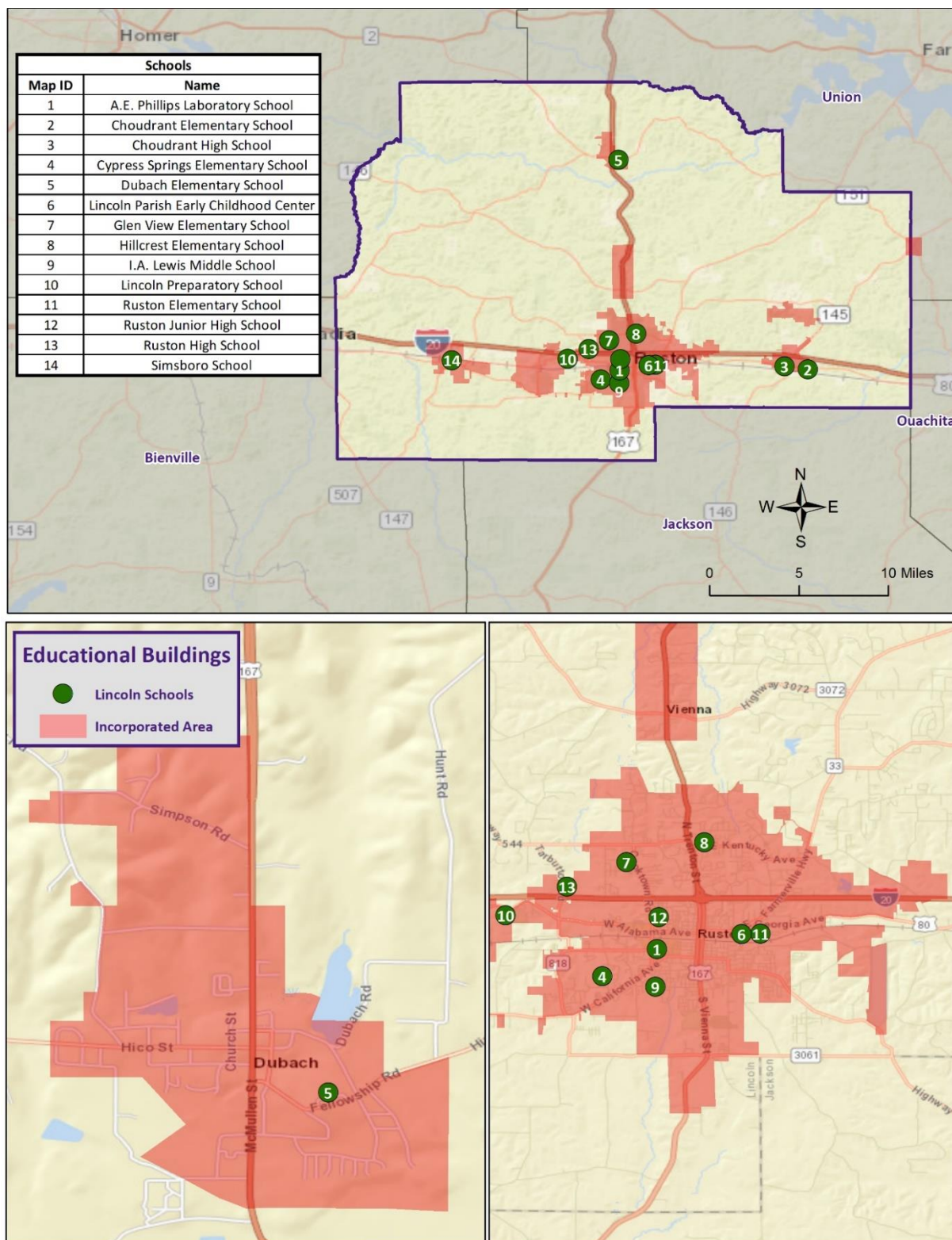


Figure 2-5: Educational Facilities in Lincoln Parish.

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 Lincoln 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 location. 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. Further, 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 Lincoln 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.

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

Priority Risk Index and Hazard Risk

Hazard risk is determined by calculating the Risk Factor for each hazard impacting Lincoln 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 2-6: 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 2-7: 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 2-8: Risk Assessment for Lincoln Parish.

Hazard	Probability	Impact	Spatial Extent	Warning Time	Duration	Overall Risk
Drought	3	2	4	2	3	2.8
Excessive Heat	3	1	4	1	4	2.55
Flooding	3	4	3	4	3	3.4
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	4	1	2	2.25
Winter Weather	3	2	2	4	2	2.55

Future Development Trends

Lincoln Parish experienced a growth in population and housing between the years of 2000 and 2020, increasing in population from 42,575 with 17,000 housing units in the year 2000 to a population of 48,396 with 20,370 housing units in the year 2020. Vienna experienced the largest increase within the parish growing from a populace of 387 in 2010 to 483 in 2020 (24.8% overall growth). This is followed by the incorporated area of Choudrant at 16.9% overall growth, the incorporated area of Grambling at 5.8% overall growth, the unincorporated area of the parish at 5.2% overall growth, and the incorporated area of Ruston at 1.3% overall growth. The incorporated areas of Dubach and Simsboro experienced a decline in population during this same time period.

The incorporated area of Choudrant experienced the largest increase in housing units from 2010 to 2020 growing from 387 in 2010 to 450 in 2020 (16.3% overall growth). The incorporated area of Vienna experienced the second largest increase in housing units during this time period with a 14.5% overall growth followed by the incorporated area of Grambling with a 5.5% overall growth, the incorporated area of Ruston with a 4.6% overall growth, the unincorporated area of the parish with a 4.2% overall growth, and the incorporated area of Simsboro with a 1.4% overall growth. The future population and number of buildings can be estimated using U.S. Census Bureau housing and population data. The following tables show population and housing unit estimates from 2000 to 2020:

Table 2-9: Population Growth Rate for Lincoln Parish.

Total Population	Lincoln Parish	Unincorporated Area	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
1-Apr-00	42,575	14,271	633	947	4,766	20,778	759	421
1-Apr-10	46,801	16,920	846	963	4,953	21,890	842	387
1-Apr-20	48,396	17,808	989	908	5,239	22,166	803	483
Population Growth between 2000 – 2010	9.9%	18.6%	33.6%	1.7%	3.9%	5.4%	10.9%	-8.1%
Average Annual Growth Rate between 2000 – 2010	1.0%	1.9%	3.4%	0.2%	0.4%	0.5%	1.1%	-0.8%
Population Growth between 2010 – 2020	3.4%	5.2%	16.9%	-5.7%	5.8%	1.3%	-4.6%	24.8%
Average Annual Growth Rate between 2010 – 2020	0.34%	0.52%	1.69%	-0.57%	0.58%	0.13%	-0.46%	2.48%

Table 2-10: Housing Growth Rate for Lincoln Parish.

Total Population	Lincoln Parish	Unincorporated Area	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
1-Apr-00	17,000	6,043	257	390	1,408	8,397	338	167
1-Apr-10	19,479	7,384	387	464	1,442	9,275	355	172
1-Apr-20	20,370	7,696	450	446	1,522	9,699	360	197
Housing Growth between 2000 – 2010	14.6%	22.2%	50.6%	19.0%	2.4%	10.5%	5.0%	3.0%
Average Annual Growth Rate between 2000 – 2010	1.5%	2.2%	5.1%	1.9%	0.2%	1.0%	0.5%	0.3%
Housing Growth between 2010 – 2020	4.6%	4.2%	16.3%	-3.9%	5.5%	4.6%	1.4%	14.5%
Average Annual Growth Rate between 2010 – 2020	0.5%	0.4%	1.6%	-0.4%	0.6%	0.5%	0.1%	1.5%

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 Lincoln 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 2-11: Estimated Future Impacts, 2020 - 2030.

(Source: Hazus, US Census Bureau)

Hazard / Impact	Total in Parish (2020)	Hazard Area (2020)	Hazard Area (2025)	Hazard Area (2030)
Flood Damage				
Structures	20,463	792	811	826
Value of Structures	\$6,621,428,760	\$256,396,345	\$275,967,957	\$292,695,551
# of People	48,561	1,880	1,913	1,939
Tropical Cyclone Damage				
Structures	20,463	20,463	20,935	21,321
Value of Structures	\$6,621,428,760	\$6,621,428,760	\$7,126,865,114	\$7,558,854,783
# of People	48,561	48,561	49,394	50,071

Population and housing numbers have continued to increase steadily since the last update to the Lincoln Parish Hazard Mitigation Plan. However, Lincoln 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 Lincoln 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.

Land Use

The Lincoln Parish Land Use table is provided below and the land use map for the parish can be found on the next page. Residential, commercial, and industrial areas account for only 10% of the parish's land use. Forested land at 169,918 acres is the largest category accounting for 56% of land in the parish. The parish also consists of agricultural lands (18%), wetlands (15%), and water areas (1%).

Table 2-12: Lincoln Parish Land Use.

(Source: USGS Land Use Map)

Land Use	Acres	Percentage
Agricultural Land, Cropland, and Pasture	55,082	18%
Wetlands	46,815	15%
Forest Land (Not including forested wetlands)	169,918	56%
Urban/Development	28,752	10%
Water	1,607	1%

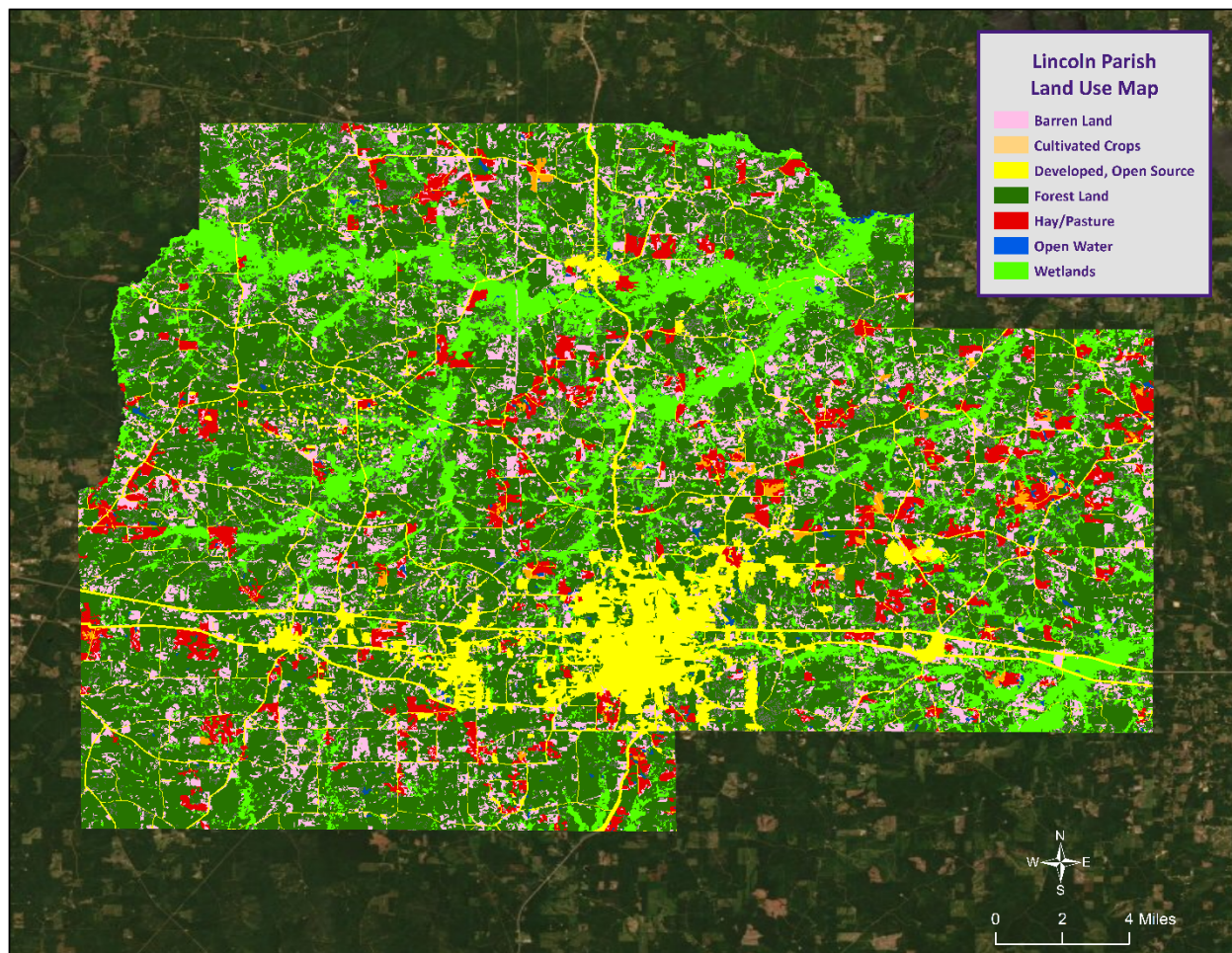


Figure 2-6: Lincoln Parish Land Use Map.
(Source: USGS Land Use Map)

Hazard Identification

Dam Failure

Dams are water storage, control, or diversion barriers that impound water upstream and in reservoirs. Dams are a vital part of our nation's infrastructure, providing drinking water, flood protection, renewable hydroelectric power, navigation, irrigation, and recreation. These critical daily benefits are also inextricably linked to the potential harmful consequences of a dam failure.

Dam failure is a collapse or breach in a structure. A dam failure can result in severe loss of life, economic disaster, and extensive environmental damage. While most dams have storage volumes small enough that failures have few repercussions, dams with large storage volumes can cause significant flooding downstream. Dam failures often have a rapid rate of onset, leaving little time for evacuation. The first signs of the failure may go unnoticed upon visual inspection of the dam structure. However, continual maintenance and inspection of dams often provide the opportunity to identify possible deficiencies in their earlier stages and can prevent a possible catastrophic failure event.

The duration of the flooding event caused by the failure depends largely on the amount of water and downstream topography. Given smaller volumes of water and topography suited for transporting the water rapidly downstream, the event may only last hours. Because of the lack of seasonality and other predictive factors, a predictive frequency or likelihood of dam failures cannot be determined. However, the National Dam Safety Program (NDPS) produces hazard rankings (high, significant, and low) and definitions of dam structures, based on potential impact. These rankings can be defined as the following:

- **High:** Dams assigned the high hazard potential classification are those where failure or mis operation will probably cause loss of human life.
- **Significant:** Dams assigned the significant hazard potential classification are those dams where failure or mis operation results in no probable loss of human life, but can cause economic loss, environmental damage, disruption of lifeline facilities, or can impact other concerns. Significant hazard potential classification dams are often located in predominately rural or agricultural areas, but could be located in areas with population and significant infrastructure.
- **Low:** Dams assigned the low hazard potential classification are those where failure or mis operation results in no probable loss of human life and low economic and/or environmental losses. Losses are principally limited to the owner's property.

Dam/reservoir failures can result from any one of or a combination of the following causes:

- Prolonged periods of rainfall and flooding, which cause most failures.
- Inadequate spillway capacity, resulting in excess overtopping flows;
- Internal erosion caused by embankment or foundation leakage or piping;
- Improper maintenance, including failure to remove trees, repair internal seepage problems, replace lost material from the cross-section of the dam and abutments, or maintain gates, valves, and other operational components;
- Improper design, including the use of improper construction materials and construction practices;
- Negligent operation, including the failure to remove or open gates or valves during high flow periods;
- Failure of upstream dams on the same waterway;
- Landslides into reservoirs, which cause surges that result in overtopping;
- High winds, which can cause significant wave action and result in substantial erosion; and
- Earthquakes, which typically cause longitudinal cracks at the tops of the embankments that can weaken entire structures.

In Louisiana, there are 513 dams included in the Army Corps of Engineers National Inventory of Dams. Of these, 41 are considered high hazard, 63 are significant hazard, and 409 are low hazard potential dams.

Location

According to the National Inventory of Dams, there are no dams of high or significant classification located within the borders of Lincoln Parish. Therefore, the hazard is discounted and not carried forward to risk assessment.

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 demise) of agricultural drought is quick, as crops need water every few days; once they get rainfall, they improve. But hydrologic drought sets in (and is alleviated) only over longer time periods. A few dry days will not drain a reservoir, but a few rain showers cannot replenish it either. Moreover, different geographical regions define drought differently based on the deviation from local, normal precipitation. And 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), droughts can potentially have direct, disastrous effects on human populations. The indirect consequences of drought, such as unemployment, reduced tax revenues, increased food prices, reduced outdoor recreation opportunities, higher energy costs as water levels in reservoirs decrease and consumption increases, and water rationing, are not often fully known. This complex web of impacts causes drought to affect people and economies well beyond the area physically experiencing the drought.

This hazard is often measured using the Palmer Drought Severity Index (PDSI, also known operationally as the Palmer Drought Index). The PDSI, first developed by Wayne Palmer in a 1965 paper for the U.S. Weather Bureau, measures drought through recent precipitation and temperature data with regard to a basic supply-and-demand model of soil moisture. It is most effective in long-term calculations. Three other indices used to measure drought are the Palmer Hydrologic Drought Index (PHDI), the Crop Moisture Index (CMI), which is derived from the PDSI, and the Keetch-Byram Drought Index (KBDI), created by John Keetch and George Byram in 1968 for the U.S. Forest Service. The KBDI is used mainly for predicting the likelihood of wildfire outbreaks. As a compromise, 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 *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 Lincoln Parish.

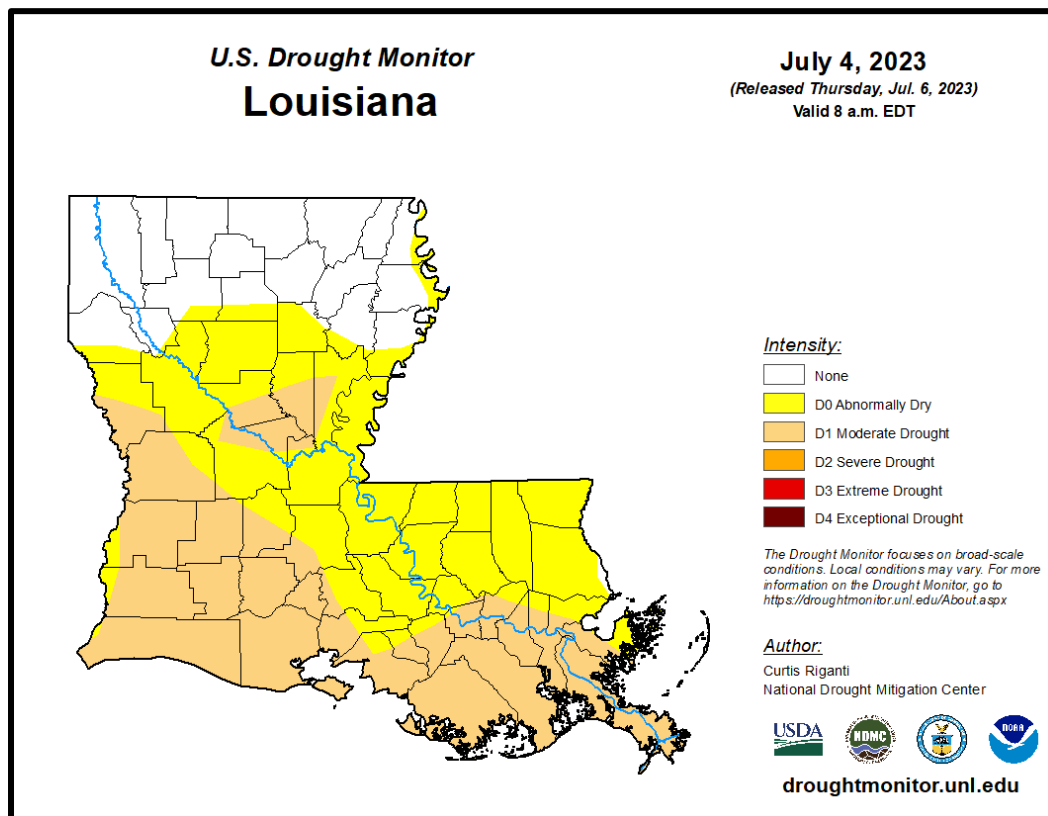


Figure 2-7: United States Drought Monitor for the State of Louisiana and its Parishes.
(Source: The National Drought Mitigation Center)

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 in Lincoln Parish is on the agricultural community. However, droughts do have the potential to reduce the stability of soil leading to shifting structures and damage to foundations. The worst-case drought scenario for Lincoln Parish would be an extreme drought (D3).

Previous Occurrences / Extent

Historically, there have been six drought incidents in Lincoln Parish. Drought events have ranged from Mild to Severe per the National Climatic Data Center. Since the last update in 2016, there have been two drought events within the boundaries of Lincoln Parish. Below is a brief synopsis of that event:

Table 2-14: Historical Droughts in Lincoln Parish since the 2016 Lincoln Parish HMP Update.

Date	Extents	Drought Magnitude	Estimated Damages
November 2017 – February 2018	Severe (D2) drought conditions present across much of North Louisiana during December continued through the entire month of January, as below normal rainfall again was observed across much of this area. Monthly rainfall amounts ranged from just under 1.50 inches to around 3.00 inches, with the lower amounts having fallen across much of Caddo and Bossier Parishes. In fact, Shreveport ranked as having the 16th driest January on record with just 1.41 inches recorded, which was 2.79 inches below normal. The continued dry conditions since September resulted in hydrological impacts being felt across much of this area, with low streamflows reported across many rivers and their tributaries.	D2	\$0
August – September 2018	Severe (D2) drought conditions developed across much of Lincoln Parish to start the second week of August, as a result of prolonged above normal temperatures and dryness which developed throughout July and early August. Monthly rainfall amounts during August ranged from three-quarters of an inch to around two inches across Lincoln Parish, which was some one to two inches below normal. Temperatures in the mid 90s to near 100 degrees during the middle and latter half of the month only helped to exasperate drought conditions, which continued into September.	D2	\$0

Frequency / Probability

Based on six drought events since 1990, the annual chance of occurrence of a drought event occurring within a given year is calculated at 19% for Lincoln Parish.

Estimated Potential Losses

According to the NCEI Storm Events Database, there have been six drought events which have impacted Lincoln Parish which resulted in \$1,000 in damage to crops in the parish. When examining the drought hazard, the main impact will primarily be on the crops. The table on the following page presents an analysis of agricultural exposure which are susceptible to droughts by type for Lincoln Parish.

*Table 2-15: Agricultural Exposure by Crop Type for Droughts in Lincoln Parish.
(Source: LSU AG Center 2020 Parish Totals)*

Agricultural Exposure by Type for Drought					
Blueberries	Forestry	Hay	Home Gardens	Honey	Peaches
\$214,345	\$20,494,944	\$2,643,934	\$3,812,213	\$7,211	\$135,883

There have been no reported injuries or deaths as a direct result of drought in Lincoln Parish.

Impacts of Climate Change

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

The National Risk Index (NRI) includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the parish and Census tract level. The following table provides an overview of each category at the parish level for drought.

*Table 2-16: National Risk Index (NRI) Summarization of Drought Occurrences for the Parish
(Source: National Risk Index)*

Expected Annual Losses	Overall Risk Rating
Very Low	Very Low

Drought-induced water scarcity and agricultural failures can lead to population displacement. When water and food resources become scarce, vulnerable communities may be forced to migrate to areas with more favorable conditions, which can lead to increased competition and conflicts over limited resources. Displacement also puts additional strains on host communities, exacerbating social, economic, and political tensions.

Droughts associated with climate change can have adverse health effects on vulnerable populations. Water scarcity and poor sanitation conditions can increase the risk of waterborne diseases, such as diarrhea and cholera. Droughts can also lead to malnutrition, as food supplies become scarce, and prices rise. Moreover, the stress and anxiety caused by prolonged droughts can have detrimental effects on mental health within vulnerable communities.

Addressing the impacts of climate change on drought and vulnerable populations requires a multi-faceted approach. This includes implementing sustainable water management practices, promoting drought-resistant agricultural techniques, improving early warning systems for droughts, supporting vulnerable communities with access to clean water and food, examining future land use patterns, and implementing climate adaptation strategies that enhance resilience and reduce vulnerability to drought events.

Vulnerability

See [Appendix C](#) 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 2-17](#) 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.

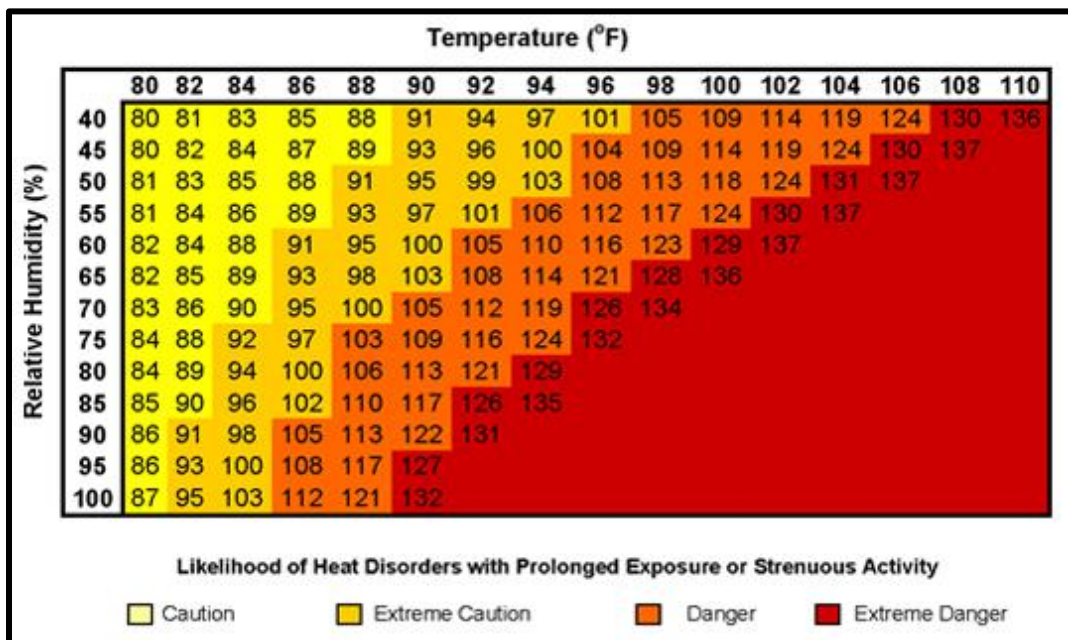


Figure 2-8: Heat Index Advisor based on Air Temperature (°F) and Relative Humidity.
(Source: National Weather Service)

Table 2-17: 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

Extreme heat typically impacts a region and not one specific parish or jurisdiction. Because extreme heat is a climatological based hazard, it has the same probability of occurring in Lincoln Parish as all of the adjacent parishes. The entire planning area of Lincoln Parish is equally at risk for extreme heat. Based on historical data, the worst-case scenario for Lincoln Parish involving extreme 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 eight incidents of an extreme heat event in Lincoln Parish since 1990. Since the 2016 Lincoln Parish HMP update, there have been three events. On the following page is a brief synopsis of those events.

Table 2-18: Historical Extreme Heat Events in Lincoln Parish since the 2016 Lincoln Parish HMP Update.

Date	Extents	Magnitude (°F)	Estimated Damages
August 11 – 13, 2019	An upper level ridge of high pressure over the Southern Plains eventually shifted east and became centered over Southwest Arkansas and North Louisiana during the second week of August, resulting in a period of excessive heat as afternoon temperatures climbed into the upper 90s to in excess of 100 degrees from the 11 th to the 14 th . This ridge, which resulted in sinking air that compressed atop a dry ground, occurred over an area south of a weak stationary front over Southeast Oklahoma and Southwest Arkansas, which only allowed for minimal mixing each afternoon. This resulted in heat indices consistently ranging from 110-114 degrees each day across much of North Louisiana. The approach of a weak surface front, increased cloud, and isolated to scattered showers and thunderstorms during the 14 th resulted in slightly cooler temperatures and lower heat indices over the region.	110 – 144	\$0
July 11 – 14, 2020	An upper level ridge of high pressure centered over the Southern Plains began to amplify and expand north-northeast into the Plains and Mississippi Valley through the middle portions of July, resulting in increased subsidence and hence, hotter temperatures as readings climbed into the mid to upper 90s across much of the Ark-La-Tex. A weak surface boundary became stationary on the 13th across portions of Northeast Texas, Southern Arkansas, and North Louisiana, which resulted in low level moisture pooling near and south of this boundary. Thus, very oppressive heat indices were observed across North-central Louisiana from the 12th-14th, with heat indices ranging from 110-115 degrees each day.	110 – 115	\$0
July 30 – 31, 2021	An upper level ridge of high pressure was anchored from Nebraska/Kansas southeast into portions of the Lower Mississippi Valley from July 30th through the end of the month, resulting in very hot temperatures across the Ark-La-Tex as readings climbed into the mid and upper 90s each day. Little mixing of dew points occurred each day, which when combined with these hot temperatures, resulted in oppressively hot conditions as heat indices ranged from 110-115 degrees each day across much of Northcentral Louisiana. The heat wave continued through the first day of August before finally ending on August 2nd as a weak cool front and scattered showers and thunderstorms moved through the region.	110 - 115	\$0

Frequency / Probability

Based on historical data, the annual chance of occurrence of an extreme heat event occurring within a given year is calculated at 26% for Lincoln Parish.

Estimated Potential Losses

Since 1990, there have been eight significant extreme heat events that have resulted in property damages according to NCEI Storm Events Database. The total property damages associated with those events have totaled approximately \$1,000. To estimate the potential losses of an extreme heat event on an annual basis, the total damages recorded for these events was divided by the total number of years of available data in the NCEI Storm Events Database (1990 - 2021). This provides an annual estimated potential loss of \$32 and \$125 per event. The following table provides an estimate of potential property losses for Lincoln Parish:

Table 2-19: Estimated Annual Losses Lincoln Parish and its Jurisdictions Resulting from Excessive Heat.

Extreme Heat Estimated Annual Potential Losses From Excessive Heat						
Unincorporated Area	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
\$12	\$1	\$1	\$3	\$15	\$1	< \$1

There have been no reported injuries or fatalities as a result of extreme heat events in Lincoln Parish.

Impacts of Climate Change

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

The National Risk Index (NRI) includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the parish and Census tract level. The following table provides an overview of each category at the parish level for excessive heat.

Table 2-20: National Risk Index (NRI) Summarization of Excessive Heat Occurrences for the Parish

(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively Moderate	Relatively Moderate

Vulnerable populations often face socioeconomic disparities that contribute to their increased vulnerability to heatwaves. Limited access to air conditioning, healthcare services, and cooling centers can exacerbate the health risks associated with excessive heat. Additionally, low-income communities may lack the financial resources to adequately adapt to heatwaves, such as purchasing cooling equipment or renovating housing to improve insulation.

To address the impacts of excessive heat on vulnerable populations, it is crucial to implement heatwave preparedness and response strategies. These may include providing cooling centers and shelters during heatwaves, improving access to air conditioning for vulnerable individuals, enhancing urban planning to

incorporate green spaces and heat-reducing infrastructure, and implementing public health campaigns to raise awareness about heat-related risks and protective measures. Additionally, addressing the underlying socioeconomic disparities through targeted policies and support can help reduce the vulnerability of marginalized communities to heatwaves. The hazard of excessive heat has no direct impact on land use planning.

Vulnerability

See [Appendix C](#) 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, in Lincoln Parish, all types of flooding events have historically 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 precipitation thunderstorms

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

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

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

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

very different impacts. The 100-year flood event in two separate locations have the same likelihood to occur, but they do not necessarily have the same magnitude. For example, a 100-year event for the Mississippi River means something completely different in terms of discharge values (ft^3/s) than for the Amite River. Not only are the magnitudes of 100-year events different between rivers, but they can also be different along any 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, river, 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*.

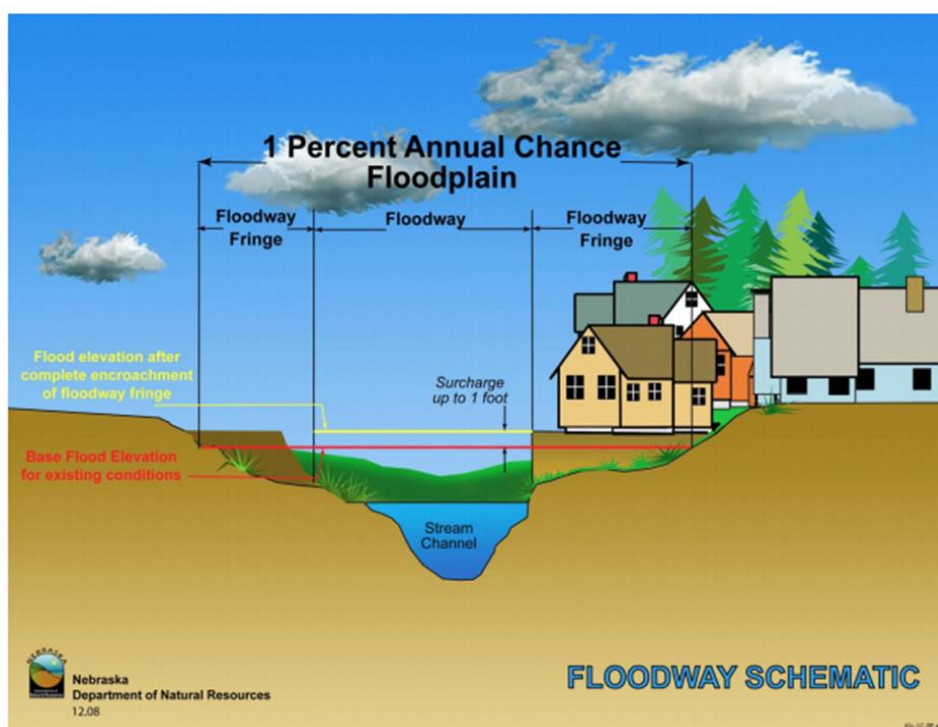


Figure 2-9: Schematic of 100-year Floodplain. The Special Flood Hazard Area (SFHA) extends to the end of the floodway fringe.

(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 bumped before it has time to completely dry. The longer these materials are saturated, the more moisture, sediment, and pollutants they absorb.

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

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

Repetitive Loss Properties

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

- 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 Lincoln Parish are provided in the table below:

Table 2-21: Repetitive Loss Structures for Lincoln Parish.

Jurisdiction	Number of Structures	Residential	Commercial	Government	Total Claims	Total Claims Paid	Average Claim Paid
Unincorporated Lincoln Parish	6	6	0	0	20	\$129,564	6
Choudrant	0	0	0	0	\$0	\$0	\$0
Dubach	0	0	0	0	\$0	\$0	\$0
Grambling	0	0	0	0	\$0	\$0	\$0
Ruston	1	1	0	0	3	\$53,870	1
Simbsoro	0	0	0	0	\$0	\$0	\$0
Vienna	0	0	0	0	\$0	\$0	\$0
TOTAL	7	7	0	0	23	\$183,434	7

All seven 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 incorporated area of Ruston.

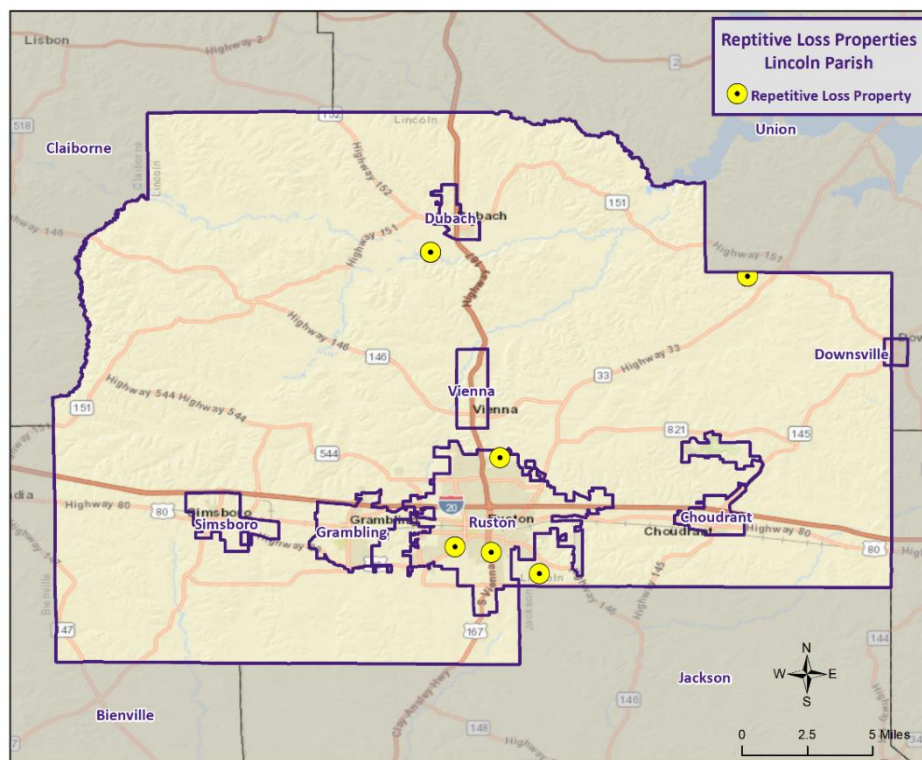


Figure 2-10: Repetitive Loss Properties in Lincoln Parish.

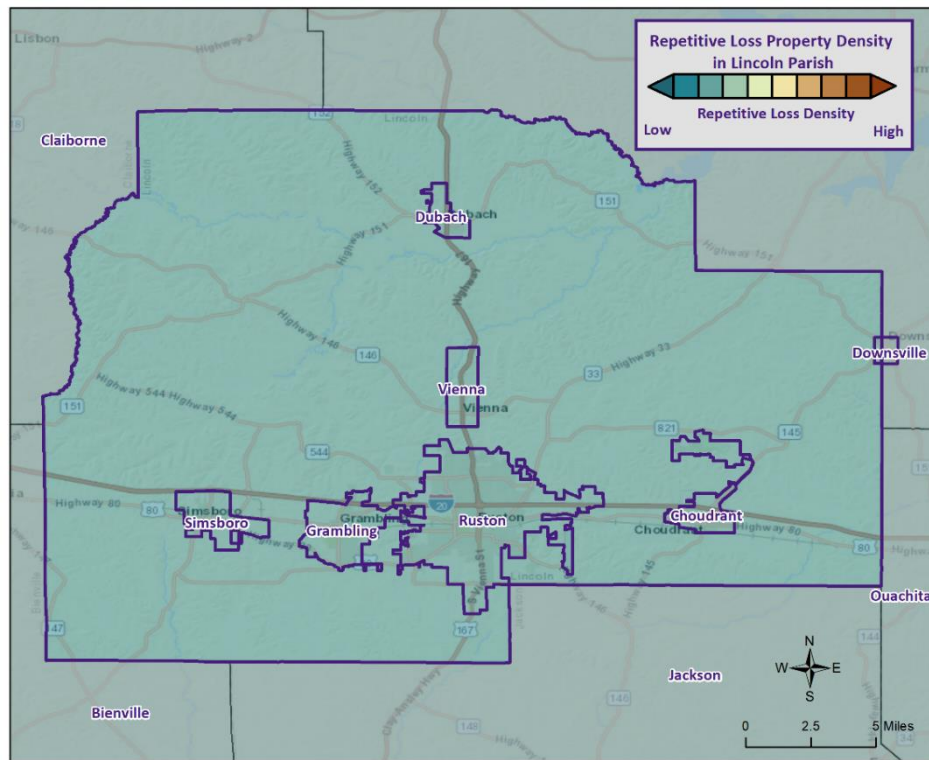


Figure 2-11: Repetitive Loss Property Densities in Lincoln Parish.

National Flood Insurance Program

Flood insurance statistics indicate that Lincoln Parish has 1,323 flood insurance policies with the NFIP, with total annual premiums of \$81,757. Lincoln Parish and the jurisdictions of Choudrant, Grambling, Ruston, and Simsboro are all participants in the NFIP. The incorporated areas of Dubach and Vienna do not participate in the NFIP. Those particular jurisdictions are very limited when it comes to personnel, funding, and resources needed to administer the NFIP program. The jurisdictions have determined that participation in the NFIP has little or no benefit or impact on the residents or the economies of their respective jurisdictions. Lincoln Parish and the jurisdictions of Choudrant, Grambling, Ruston, and Simsboro will continue to adopt and enforce floodplain management requirements, including regulating new construction Special Flood Hazard Areas, making substantial improvement and/or damage determinations, or determining the necessary permits required of owners to bring a substantially improved/damaged structure back into compliance. The parish will also continue to monitor activities including local requests for new map updates. Flood insurance statistics and additional NFIP participation details for Lincoln Parish and its jurisdictions is provided in the tables to follow.

Table 2-22: Summary of NFIP Policies for Lincoln Parish.

Location	No. of Insured Structures	Total Insurance Coverage Value	Annual Premiums Paid	No. of Insurance Claims Filed Since 1978	Total Loss Payments
Lincoln Parish	32	\$8,895,400	\$18,879	1	\$3,283
Choudrant	0	\$0	\$0	0	\$0
Dubach	0	\$0	\$0	0	\$0
Grambling	8	\$2,339,300	\$7,814	2	\$115,406
Ruston	68	\$20,205,500	\$54,597	19	\$128,058
Simsboro	1	\$350,000	\$467	0	\$0
Vienna	0	\$0	\$0	0	\$0
Total	109	\$31,790,200	\$81,757	22	\$246,747

Table 2-23: Summary of Community Flood Maps for Lincoln Parish.

CID	Community Name	Adoption Date	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date	Date Joined the NFIP	Tribal
220366	Lincoln Parish	4/2/2009	11/29/1977	3/1/1991	4/2/2009	3/1/1991	No
220319	Choudrant	4/2/2009	6/27/1975	4/2/2009	4/2/09 (M)	3/17/2010	No
220328	Grambling	4/2/2009	11/19/1976	4/2/2009	4/2/2009	4/2/2009	No
220347	Ruston	4/2/2009	12/24/1976	6/15/1981	4/2/2009	6/15/1981	No
220312	Simsboro	4/2/2009	2/7/1975	4/2/2009	4/2/2009	4/2/2009	No

According to the Community Rating System (CRS) list of eligible communities dated April 1, 2023, Lincoln Parish and the jurisdictions of Choudrant, Dubach, Grambling, Simsboro, and Vienna do not participate in the CRS program. The incorporated area of Ruston does participate in the CRS program.

Table 2-24: Summary of Community Rating System (CRS) for Ruston Parish.

CID	Community Name	CRS Entry Date	Current Effective Date	Current Class	%Discount for SFHA	%Discount for Non-SFHA
220347	Ruston	10/1/1992	10/1/1992	9	5	5

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 Lincoln 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 Lincoln 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 digital elevation model (DEM) in the figure on the next page for Lincoln Parish is instructive in visualizing where the low-lying and high-risk areas are for the parish. Elevations in the parish range from less than 80 feet (NAVD88) to over 420 feet (NAVD88). The highest elevations in the parish are approximately 420 feet (NAVD88), located in the southwest unincorporated area of the parish. The incorporated areas range in elevation from 157 feet (NAVD88) to 331 feet (NAVD88), with Choudrant averaging 157 feet (NAVD88), Dubach averaging 164 feet (NAVD88), Vienna averaging 262 feet (NAVD88), Grambling averaging 308 feet (NAVD88), Simsboro averaging 322 (NAVD88), and Ruston averaging 331 feet (NAVD88). The lowest elevations of the parish are less than 80 feet (NAVD88), and they are located in the unincorporated areas of Lincoln Parish.

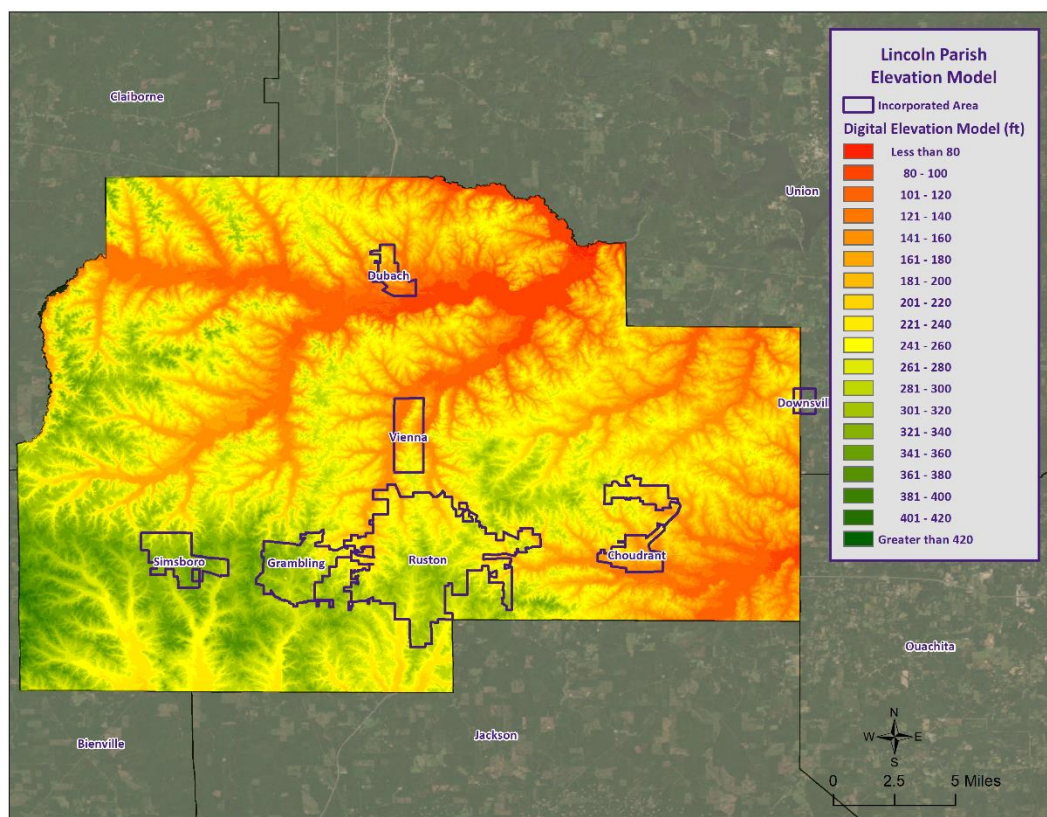


Figure 2-12: Elevation throughout Lincoln Parish.

Location

Lincoln Parish has experienced significant flooding in its history and can expect more in the future. Most flooding in Lincoln Parish results from poor interior drainage, which is a function of under-performing, inadequate and/or deteriorating drainage infrastructure. Specifically, areas around the southcentral portion of Ruston along Arlington Street experience some backwater flooding from Shepherd Creek. Some areas along Lee Street south of Interstate 20 and west of US Highway 167 are subject to periodic flooding from the Chautauqua Creek, while similar isolated areas exist on the upstream reaches of Choudrant Creek, Colvin Creek and its tributaries.

Based on previous flood events, the worst-case scenarios are based on several different types of flooding events. Storm water excesses and riverine flooding primarily affect the low-lying areas of the parish, and flood depths of up to six feet can be expected in the unincorporated areas of the parish. The incorporated areas of Ruston and Vienna can expect flood depths of four to six feet, while the incorporated areas of Choudrant, Dubach, and Grambling can expect flood depths of two to four feet. The incorporated area of Simsboro can expect flood depths up to two feet.

The following pages contain flood zone maps displaying 100- and 500-year flood zones for Lincoln Parish.

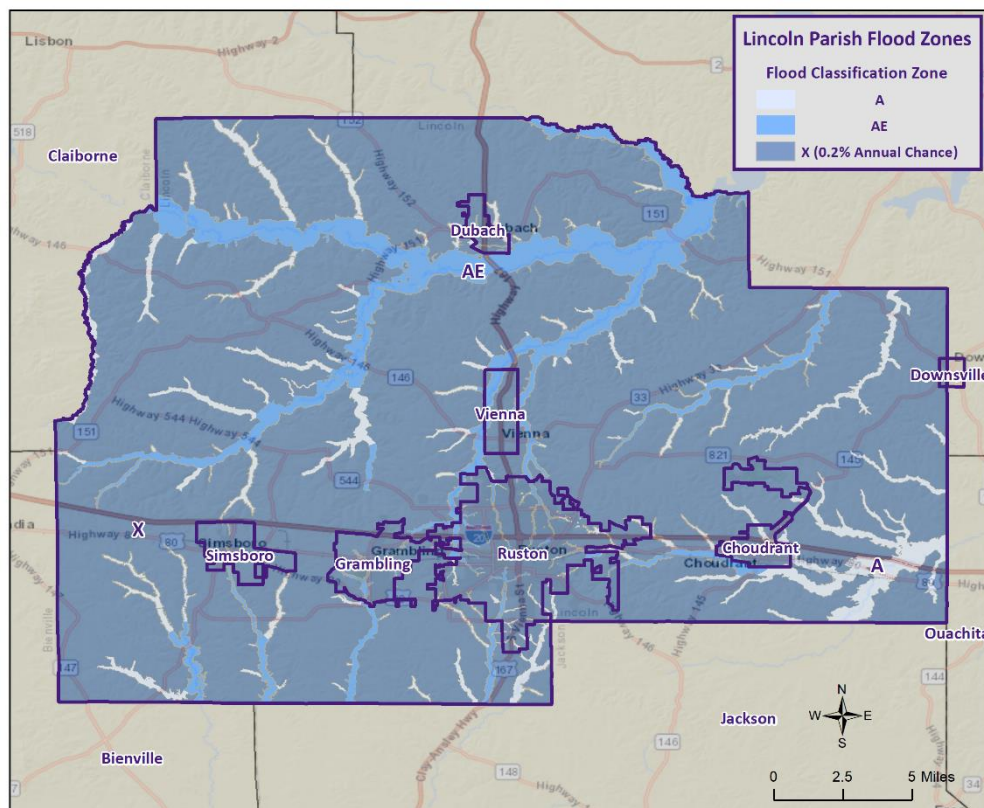


Figure 2-13: Lincoln Parish Areas within the Flood Zones.

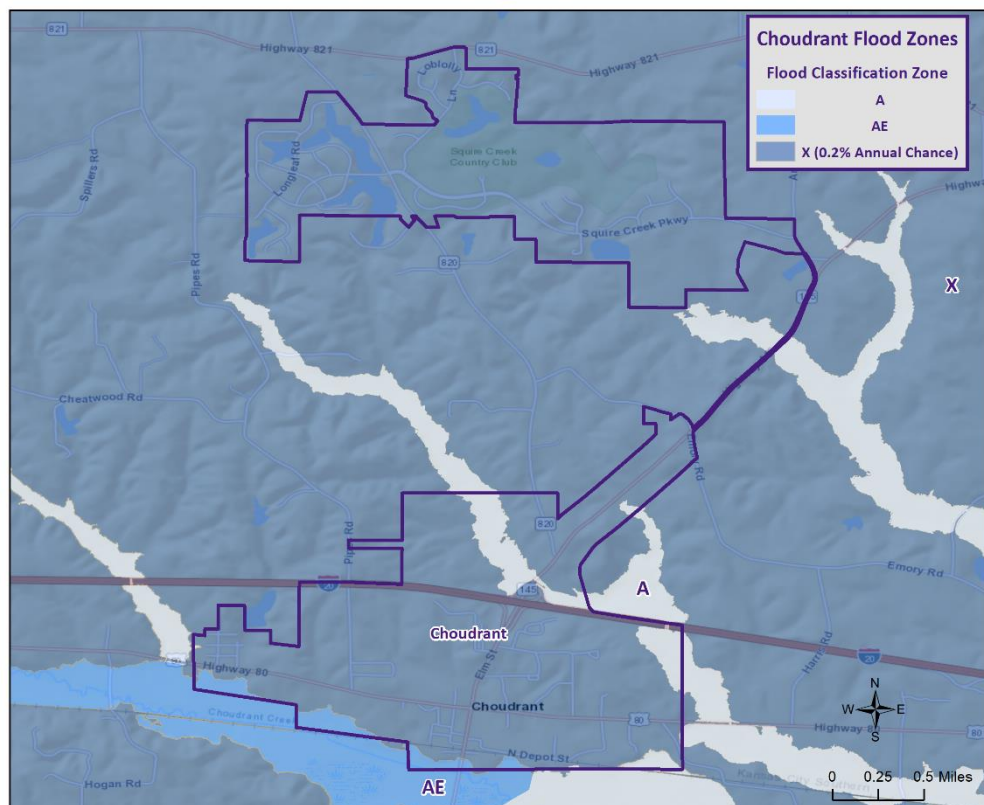


Figure 2-14: Choudrant Areas within the Flood Zones.

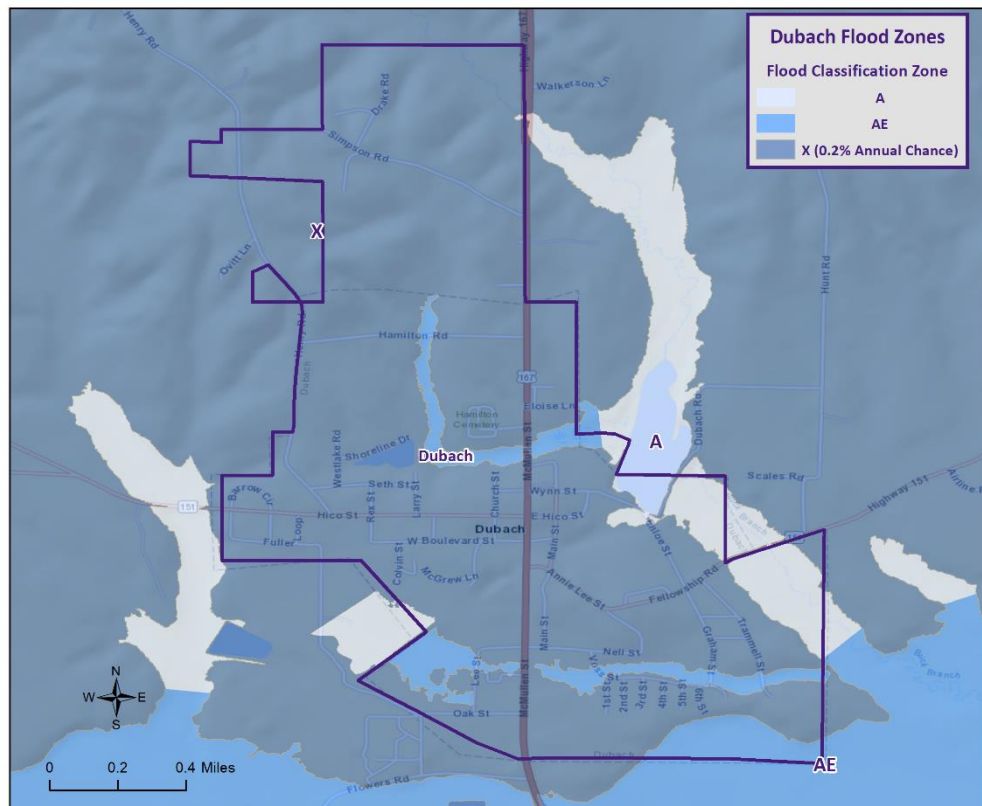


Figure 2-15: Dubach Areas within the Flood Zones.

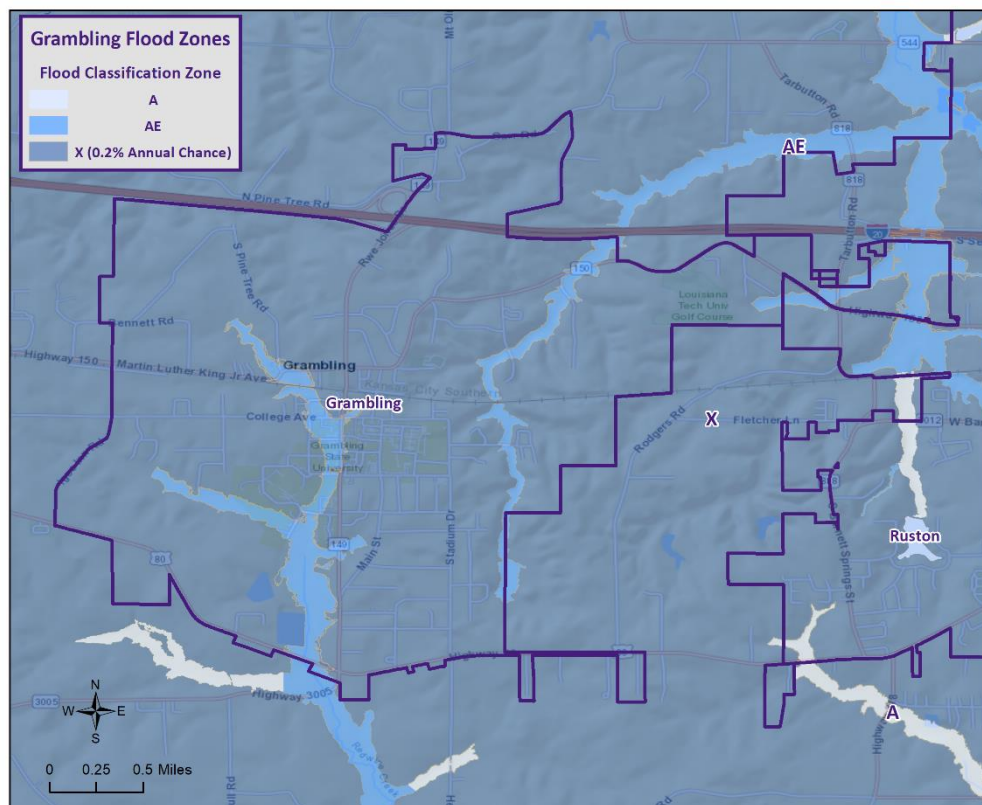


Figure 2-16: Grambling Areas within the Flood Zones.

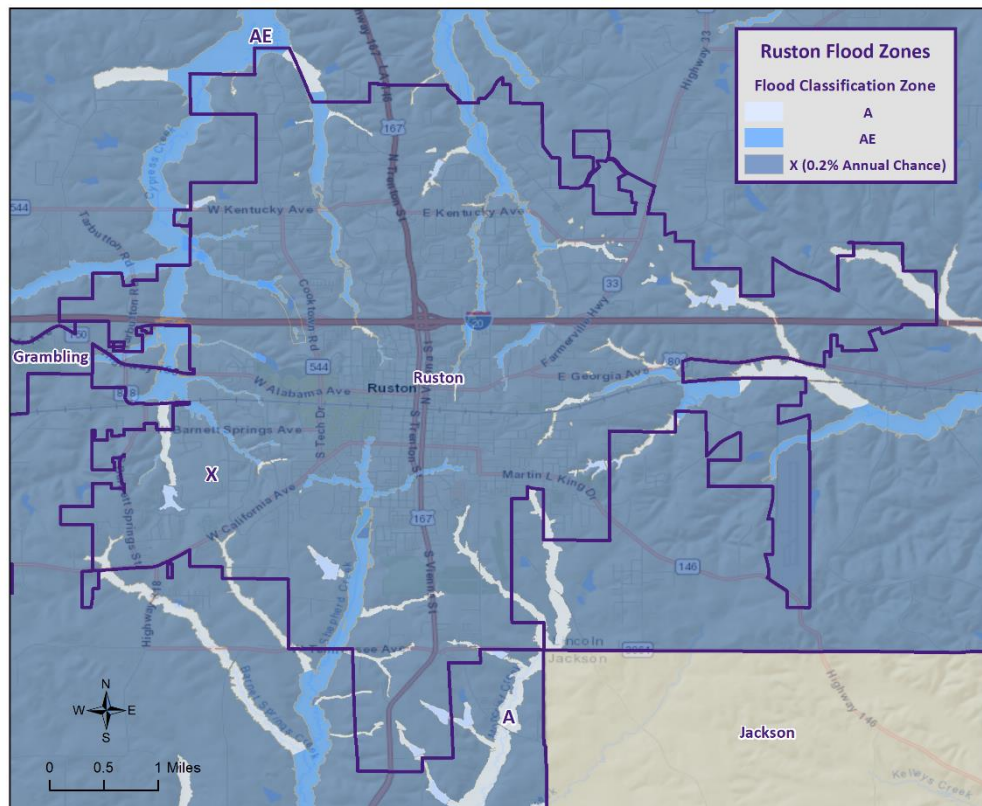


Figure 2-17: Ruston Areas within the Flood Zones.

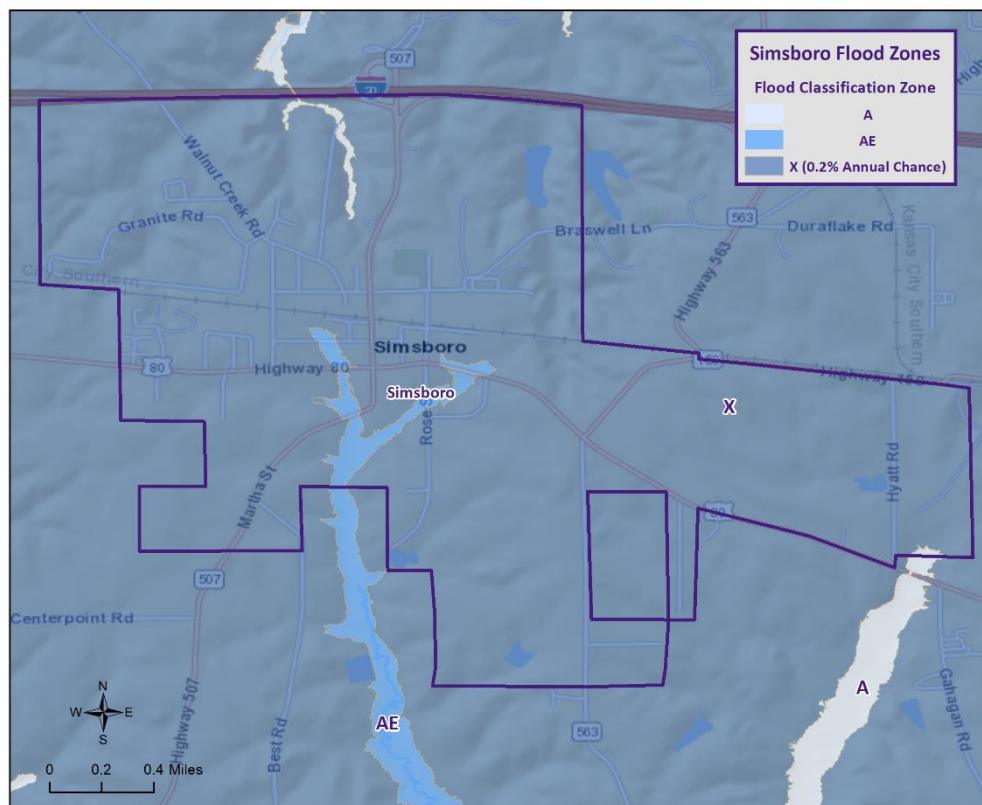


Figure 2-18: Simsboro Areas within the Flood Zones.

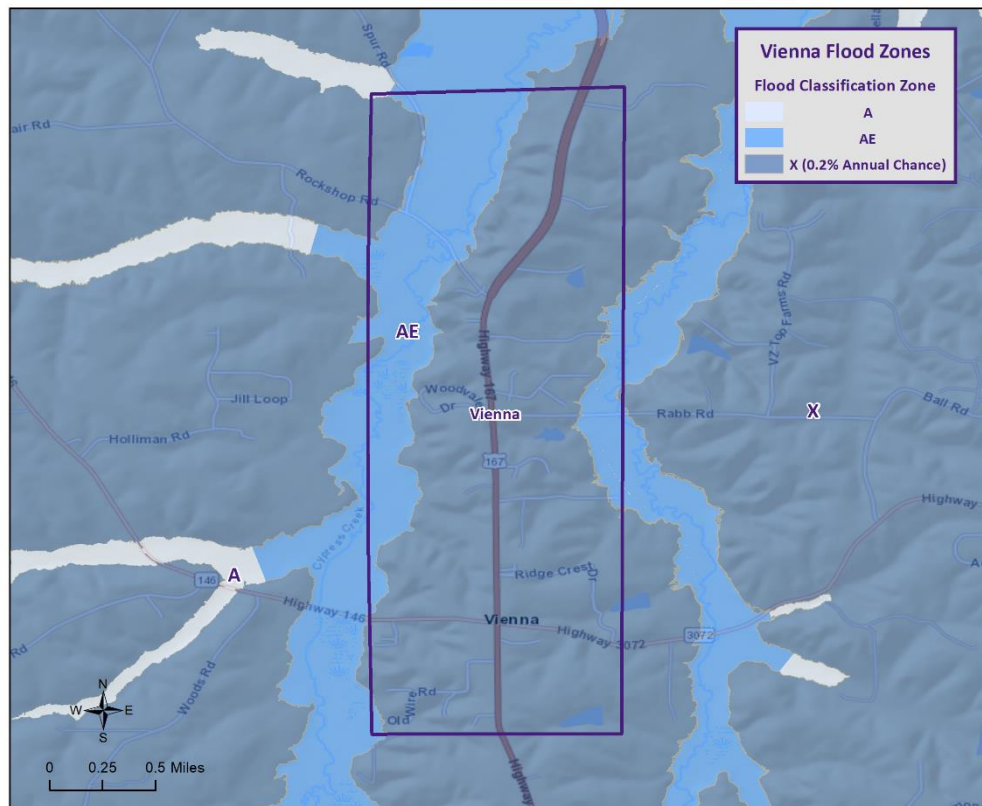


Figure 2-19: Vienna Areas within the Flood Zones.

Previous Occurrences / Extents

Historically, there have been 31 flooding events that have caused significant flooding in Lincoln Parish and its jurisdictions between 1990 and 2021. Below is a brief synopsis of the flooding events which occurred since the last Lincoln Parish HMP Update in 2016.

Table 2-25: Historical Floods in Lincoln Parish with Locations since the 2016 Lincoln Parish HMP Update.

Date	Extents	Type of Flooding	Estimated Damages	Location
February 21, 2018	High water covered portions of Virgil, Morrison, Frazier, and Auds Roads in Lincoln Parish.	Flash Flood	\$0	PARISHWIDE
February 22, 2018	Over 30 roads were flooded and closed throughout Lincoln Parish.	Flash Flood	\$0	PARISHWIDE
January 4, 2019	LA 818 near Mondy Road was closed due to flooding well after the rains had ended during the afternoon of January 3rd.	Flood	\$0	BARNET SPRINGS
April 7, 2019	Extensive flash flooding occurred throughout the campus of Grambling State University. Numerous roads were underwater and closed, and several cars were submerged. Water entered a number of buildings on campus. This flooding forced the closure of the university.	Flash Flood	\$0	GRAMBLING
April 13, 2019	Several roads were flooded throughout Lincoln Parish.	Flash Flood	\$0	PARISHWIDE

Frequency / Probability

The NCEI Storm Events Database identified 31 flooding events within the Lincoln Parish planning area since 1990. The table below shows the probability and return frequency for each jurisdiction.

Table 2-26: Annual Flood Probabilities for Lincoln Parish.

Jurisdiction	Annual Probability	Return Frequency
Unincorporated Lincoln Parish	32%	1 event every 3 to 4 years
Choudrant	6%	1 event every 15 to 16 years
Dubach	6%	1 event every 15 to 16 years
Grambling	10%	1 event every 10 to 1 years
Ruston	26%	1 event every 3 to 4 years
Simbsoro	6%	1 event every 15 to 16 years
Vienna	13%	1 event every 8 to 9 years

Based on historical record, the overall flooding probability for the entire Lincoln Parish Planning area is 100% with 36 events occurring over a 31-year period.

Estimated Potential Losses

Using the Hazus Flood Model, the 100-year flood scenario, along with the Parish DFIRM, was analyzed to determine losses from this worst-case scenario. *Table 2-27* shows the total economic losses that would result from this occurrence.

Table 2-27: Estimated Losses in Lincoln Parish from a 100-year Flood Event.
(Source: Hazus)

Jurisdiction	Estimated Total Losses from 100-Year Flood Event
Unincorporated Lincoln Parish	\$21,201,000
Choudrant	\$183,000
Dubach	\$754,000
Grambling	\$25,045,000
Ruston	\$4,287,000
Simbsoro	\$0
Vienna	\$763,000
Total	\$52,233,000

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

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

Unincorporated Lincoln Parish	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$41,000
Commercial	\$4,566,000
Government	\$4,000
Industrial	\$1,007,000
Religious / Non-Profit	\$765,000
Residential	\$14,777,000
Schools	\$41,000
Total	\$21,201,000

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

Choudrant	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$40,000
Government	\$1,000
Industrial	\$0
Religious / Non-Profit	\$0
Residential	\$142,000
Schools	\$0
Total	\$183,000

*Table 2-30: Estimated 100-year Flood Losses for Dubach by Sector.
(Source: Hazus)*

Dubach	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$1,000
Government	\$0
Industrial	\$0
Religious / Non-Profit	\$80,000
Residential	\$673,000
Schools	\$0
Total	\$754,000

*Table 2-31: Estimated 100-year Flood Losses for Grambling by Sector.
(Source: Hazus)*

Grambling	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$861,000
Government	\$0
Industrial	\$4,000
Religious / Non-Profit	\$370,000
Residential	\$23,383,000
Schools	\$427,000
Total	\$25,045,000

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

Ruston	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$8,000
Commercial	\$253,000
Government	\$0
Industrial	\$78,000
Religious / Non-Profit	\$157,000
Residential	\$3,629,000
Schools	\$162,000
Total	\$4,287,000

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

Vienna	Estimated Total Losses from 100-Year Flood Event
Agricultural	\$0
Commercial	\$10,000
Government	\$0
Industrial	\$0
Religious / Non-Profit	\$0
Residential	\$753,000
Schools	\$0
Total	\$763,000

Threat to People

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

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

Number of People Exposed to Flood Hazards			
Location	# in Community	# in Hazard Area	% in Hazard Area
Unincorporated Lincoln Parish	17,808	483	2.7%
Choudrant	989	111	11.2%
Dubach	908	217	23.9%
Grambling	5,239	34	0.6%
Ruston	22,166	904	4.1%
Total	48,396	1,874	21.1%

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

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

Unincorporated Lincoln Parish		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	483	2.7%
Persons Under 5 Years	27	5.5%
Persons Under 18 Years	97	20.0%
Persons 65 Years and Over	66	13.6%
White	260	53.8%
Minority	223	46.2%

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

Choudrant		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	111	11.2%
Persons Under 5 Years	5	4.9%
Persons Under 18 Years	36	32.4%
Persons 65 Years and Over	12	11.2%
White	95	85.7%
Minority	16	14.3%

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

Dubach		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	217	23.9%
Persons Under 5 Years	23	10.4%
Persons Under 18 Years	38	17.5%
Persons 65 Years and Over	33	15.1%
White	113	52.3%
Minority	104	47.7%

*Table 2-38: Vulnerable Populations Susceptible to a 100-year Flood Event in Grambling.
(Source: Hazus)*

Grambling		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	34	0.6%
Persons Under 5 Years	3	8.3%
Persons Under 18 Years	9	26.9%
Persons 65 Years and Over	4	11.5%
White	0	1.1%
Minority	34	98.9%

*Table 2-39: Vulnerable Populations Susceptible to a 100-year Flood Event in Ruston.
(Source: Hazus)*

Ruston		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	904	4.1%
Persons Under 5 Years	35	3.9%
Persons Under 18 Years	142	15.7%
Persons 65 Years and Over	89	9.9%
White	466	51.5%
Minority	438	48.5%

Table 2-40: Vulnerable Populations Susceptible to a 100-year Flood Event in Vienna.
(Source: Hazus)

Vienna		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	125	25.9%
Persons Under 5 Years	6	5.0%
Persons Under 18 Years	28	22.2%
Persons 65 Years and Over	31	24.7%
White	107	85.3%
Minority	18	14.7%

Impacts of Climate Change

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

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

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

Table 2-41: National Risk Index (NRI) Summarization of Flooding Occurrences for the Parish
(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively Low	Relatively Low

Vulnerable populations living in floodplain areas or near rivers are at higher risk of displacement, property damage, and loss of essential services and infrastructure during riverine flooding events. Flooding events associated with climate change can pose significant health risks to vulnerable populations. Floodwaters can be contaminated with pollutants, sewage, and harmful chemicals, increasing the risk of waterborne diseases and infections. Disruption of sanitation systems and access to clean water during floods can exacerbate health issues, particularly for communities with limited resources and inadequate healthcare infrastructure.

To address the impacts of flooding on vulnerable populations, it is crucial to implement comprehensive strategies that include:

- Improved early warning systems and evacuation plans to ensure the timely and safe evacuation of vulnerable populations before floods occur.
- Enhancing infrastructure resilience, such as constructing or retrofitting buildings to withstand flood events and implementing effective drainage systems.
- Investing in floodplain management and land-use planning to restrict development in high-risk flood areas and promote sustainable urban design.
- Strengthening social safety nets and community-based adaptation measures to support vulnerable populations during and after flood events.
- Enhancing access to affordable flood insurance and financial assistance for vulnerable communities.
- Promoting climate change adaptation and mitigation measures to reduce the severity and frequency of flooding events in the long term.

By integrating these measures, it is possible to reduce the impacts of flooding on vulnerable populations and enhance their resilience in the face of climate change.

Vulnerability

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

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 2-42: TORRO Hailstorm Intensity Scale.

Intensity Category		Hail Diameter (mm)	Probable Kinetic Energy	Typical Damage Impacts
H0	Hard Hail	5	0 - 20	No damage
H1	Potentially Damaging	5 - 15	>20	Slight general damage to plant, crops
H2	Significant	10 - 20	>100	Significant damage to fruit, crops, vegetation
H3	Severe	20 - 30	>300	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	25 - 40	>500	Widespread glass damage, vehicle body work
H5	Destructive	30 - 50	>800	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	40 - 60		Bodywork of grounded aircraft dented, brick walls pitted
H7	Destructive	50 - 75		Severe roof damage, risk of serious injuries
H8	Destructive	60 - 90		Severe damage to aircraft bodywork
H9	Super Hailstorms	75 - 100		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	>100		Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

Table 2-43: Spectrum of Hailstone Diameters and their Everyday 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 2-44*.

Table 2-44: 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 2-45 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 2-45: 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 2-46: 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	

Impacts of Climate Change

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

The National Risk Index (NRI) includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the parish and Census tract level. The table on the next page provides an overview of each category at the parish level for thunderstorms.

Table 2-47: National Risk Index (NRI) Summarization of Thunderstorm Occurrences for the Parish
(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively Low	Relatively Low

Intense thunderstorms associated with climate change can damage infrastructure and disrupt essential services. Strong winds and heavy rainfall can cause power outages, damage to electrical grids, and interruptions in communication systems. Vulnerable populations relying on these services, such as healthcare facilities, emergency response systems, and communities with limited resources, may face additional challenges and risks during and after thunderstorm events.

To address the impacts of thunderstorms on vulnerable populations, it is important to:

- Strengthen early warning systems and dissemination of weather alerts to ensure that vulnerable populations receive timely and accurate information.
- Improve infrastructure resilience to withstand severe weather events, including thunderstorms, through measures such as reinforcing buildings, implementing effective drainage systems, and securing power and communication networks.
- Enhance community preparedness through education and training on thunderstorm safety measures, including appropriate responses to lightning hazards and flash flooding.
- Develop and implement emergency response plans that consider the specific needs and vulnerabilities of the local population, including the elderly, disabled individuals, and those with limited mobility or access to transportation.
- Promote the availability of safe shelters or evacuation centers for vulnerable populations during thunderstorms and other severe weather events.
- Implement climate change adaptation strategies, including land-use planning and ecosystem-based approaches, to mitigate the impacts of thunderstorms and reduce vulnerabilities in the long term.

Hazard Profile

Hailstorms

Location

Hailstorms are a meteorological phenomenon that can occur anywhere. Therefore, the entire planning area for Lincoln 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 Lincoln 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 Lincoln Parish planning area since the 2016 Lincoln Parish HMP update. The table on the next page provides a brief synopsis of those events.

Table 2-48: 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
April 26, 2017	1	\$0	\$0
April 13, 2019	1	\$0	\$0
April 9, 2021	1.5	\$0	\$0
April 9, 2021	0.75	\$0	\$0
April 9, 2021	0.88	\$0	\$0
June 7, 2021	1	\$0	\$0

Frequency

Hailstorms occur frequently within Lincoln Parish with an annual chance of occurrence calculated at 100% based on the records for the past 32 years (1990 - 2022). *Figure 2-20* displays the density of hailstorm events in Lincoln Parish, while *Figure 2-21* provides an overview of hailstorm size based on location.

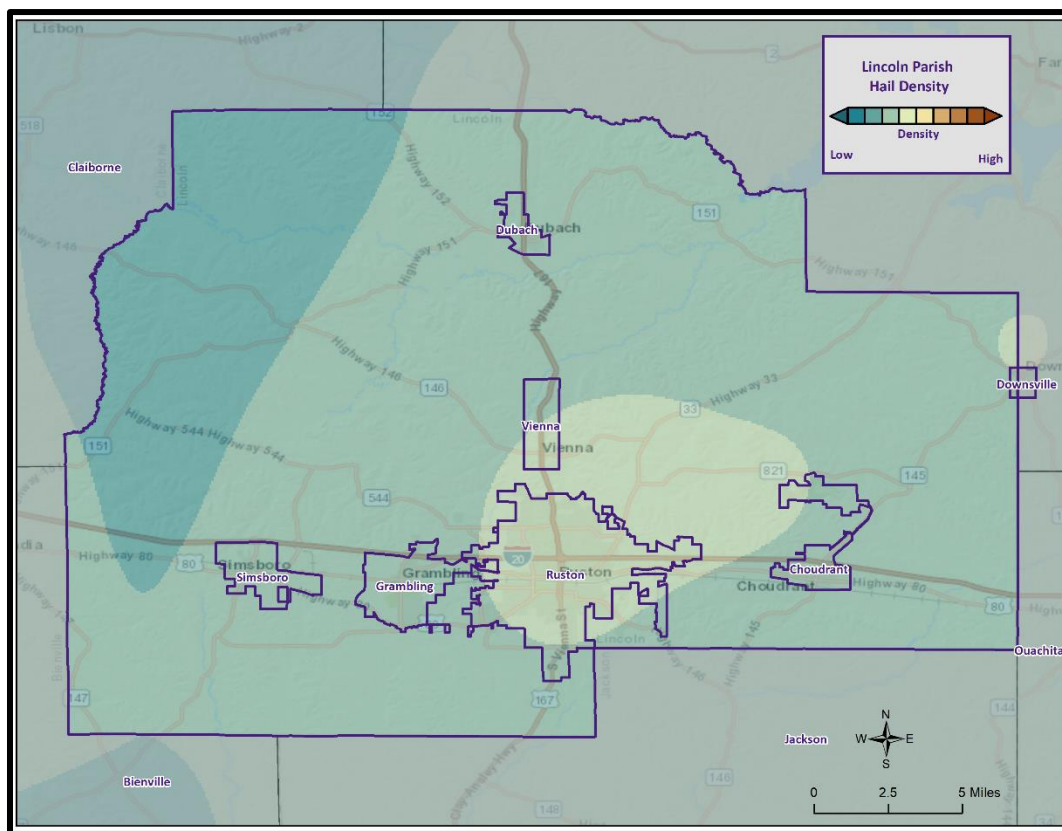


Figure 2-20: Density of Hailstorms by Diameter from 1950-2022.

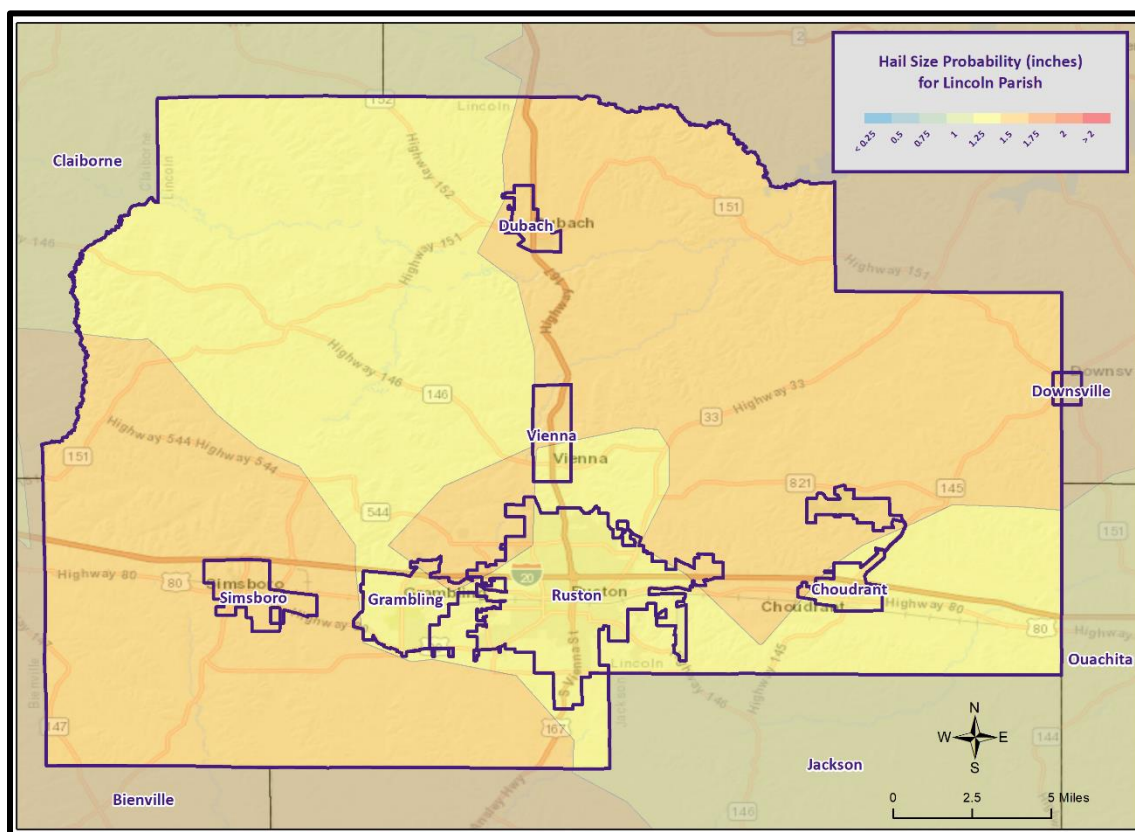


Figure 2-21: Hail Size Probability in Inches for Lincoln Parish Planning Area.

Estimated Potential Losses

Since 1990, there have been 115 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 \$251,500. To estimate the potential losses of a hailstorm event on an annual basis, the total damages recorded for these events was divided by the total number of years of available data in the NCEI Storm Events Database (1990 - 2022). This provides an annual estimated potential loss of \$8,113 and \$2,187 per event. The following table provides an estimate of potential property losses for Lincoln Parish:

Table 2-49: Estimated Annual Losses Lincoln Parish and its Jurisdictions Resulting from Hailstorms.

Estimated Annual Potential Losses From Hail						
Unincorporated Area	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
\$2,985	\$166	\$152	\$878	\$3,716	\$135	\$81

There have been no reported injuries or fatalities as a result of a hail events over the 31-year record.

Vulnerability

See [Appendix C](#) 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 Lincoln Parish is equally at risk from high winds. The worst-case scenario for thunderstorm high wind is wind speeds of approximately 92 mph.

Previous Occurrences / Extents

Historically, there have been 175 thunderstorm high wind events in Lincoln Parish. The high wind events have ranged in windspeeds from 58 mph to 92 mph per the National Climatic Data Center since 1990. There have been 22 high wind speeds events which impacted the Lincoln Parish Planning area since the 2016 Lincoln Parish HMP update. On the following page is a brief synopsis of those events.

Table 2-50: 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
April 2, 2017	75	\$0	\$0
April 26, 2017	60	\$0	\$0
April 26, 2017	59	\$0	\$0
July 14, 2017	64	\$0	\$0
April 14, 2018	85	\$0	\$0
August 20, 2018	64	\$0	\$0
August 20, 2018	64	\$0	\$0
August 20, 2018	60	\$0	\$0
June 23, 2019	64	\$0	\$0
June 23, 2019	64	\$0	\$0
June 23, 2019	64	\$0	\$0
June 23, 2019	64	\$0	\$0
June 23, 2019	64	\$0	\$0
June 28, 2019	64	\$0	\$0
March 4, 2020	64	\$0	\$0
March 4, 2020	64	\$0	\$0
April 12, 2020	75	\$0	\$0
March 17, 2021	85	\$0	\$0
June 7, 2021	75	\$0	\$0
March 30, 2022	85	\$0	\$0
March 30, 2022	85	\$0	\$0
March 30, 2022	81	\$0	\$0

Frequency

High winds are a common occurrence across the entirety of the Lincoln Parish planning area, with an annual chance of occurrence calculated at 100% based on the records for the past 32 years (1990-2022). On the following page, [Figure 2-22](#) displays the thunderstorm wind speed probability for all jurisdictions within the Lincoln Parish planning area.

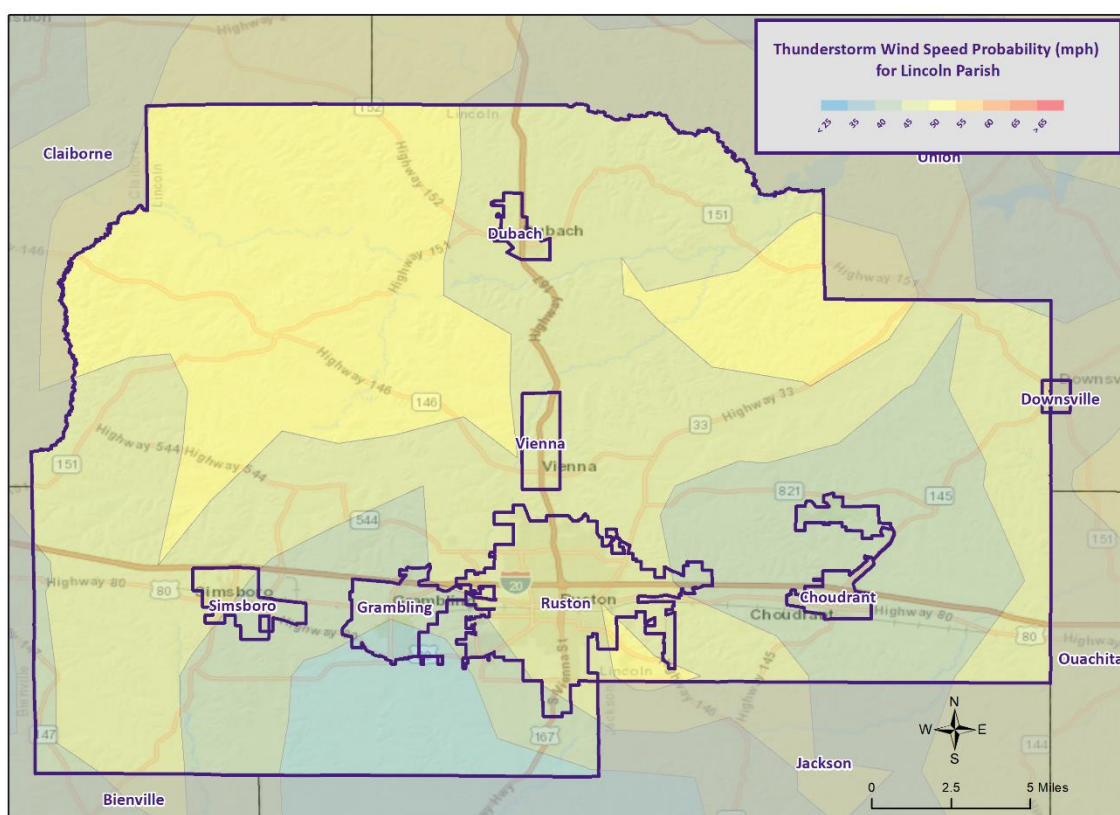


Figure 2-22: Thunderstorm High Wind Speed Probability in Miles Per Hour for Lincoln Parish Planning Area.

Estimated Potential Losses

Since 1990, there has been 175 significant wind events that have resulted in property damages according to NCEI Storm Events Database. The total property damage associated with this storm totaled approximately \$3,100,000. 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 - 2022). This provides an annual estimated potential loss of \$100,000 and \$17,714 per event. The following table provides an estimate of potential property losses for Lincoln Parish:

Table 2-51: Estimated Annual Property Losses in Lincoln Parish resulting from Wind Damage.

Estimated Annual Potential Losses From High Winds						
Unincorporated Area	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
\$36,796	\$2,044	\$1,876	\$10,825	\$45,801	\$1,659	\$998

There have been no fatalities and two injuries as a result of a thunderstorm high wind event over the 32-year record.

Vulnerability

See [Appendix C](#) 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 Lincoln 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 11 lightning events in Lincoln Parish and its jurisdictions between the years 1990 and 2021. Most notably, a lightning strike caused a building fire in the Town of Dubach at Mineral Springs Baptist Church on May 23, 2020. According to the Lincoln Parish Fire Department, it is estimated that the event accrued a total of \$950,000 in damages to the church.

Frequency

Lightning can strike anywhere and is produced by every thunderstorm, so the chance of lightning occurring in Lincoln Parish is high. However, lightning that meets the definition that is used by the NCEI Storm Events Database that results in damages to property and injury or death to people is a less likely event. Lincoln Parish experienced four significant lightning events between the years 1990 and 2021 resulting in a 35% annual chance of occurrence.

Estimated Potential Losses

Since 1990, there have been 11 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 \$275,000. To estimate the potential losses of a lightning event on an annual basis, the total damages recorded for lightning events was divided by the total number of years of available lightning data in the NCEI Storm Events Database (1990 - 2022). This provides an annual estimated potential loss of \$8,870 and \$25,000 per event. The following table provide an estimate of potential property losses for Lincoln Parish:

Table 2-52: Estimated Annual Property Losses in Lincoln Parish resulting from Lightning Damage.

Estimated Annual Potential Losses From Lightning						
Unincorporated Area	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
\$2,991	\$166	\$153	\$880	\$3,723	\$135	\$81

Per the NCEI Storm Events Database, there has been no fatalities and one injury as a result of lightning in Lincoln Parish.

Vulnerability

See [Appendix C](#) 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 2-53* 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 2-53: 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 2-54: Fujita and Enhanced Fujita Tornado Damage Scales.

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

The National Weather Service (NWS) has the ability to issue advisory messages based on forecasts and observations. The following are the advisory messages that may be issued 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 Lincoln Parish with actual locations, tornadoes in general are a climatological based hazard and have the same approximate probability of occurring in Lincoln Parish as all of its jurisdictions. Because a tornado has a similar probability of striking anywhere within the planning area for Lincoln Parish, all areas in the parish are equally at risk for tornadoes.

Previous Occurrences / Extent

The NCEI Storm Events Database reports a total of 15 tornadoes or waterspouts occurring within the boundaries of Lincoln Parish since 1990 ranging in extent from F0 to F2 under the Fujita Scale and EF0 to EF3 on the Enhanced Fujita Scale. Lincoln Parish can expect future tornadoes up to an EF3 under the Enhanced Fujita Scale as a worst-case scenario.

The most destructive tornado to impact Lincoln Parish was an EF3 tornado which occurred on April 25, 2019. An EF3 tornado with a maximum wind speed of 145 mph caused approximately \$50 million dollars’ worth of damage when it touched down just northeast of the intersection of Highway 80 and Highway 818. On the following pages is a list and brief description of the impact for the events that have occurred since the 2016 Lincoln Parish HMP update.

Table 2-55: Historical Tornadoes in Lincoln Parish with Locations since the 2016 Update.

Date	Impacts	Property Damage	Location	Magnitude
April 14, 2018	<p>6.45 mile path with a width of 470 yards. An EF-1 tornado with estimated maximum winds between 95-105 mph touched down south of Grambling near the intersection of Null and Mondy Roads. The tornado moved east along Mondy Road, turning northeast crossing Tennessee Avenue, and across the Ruston County Club and the south and southeast sections of Ruston snapping and uprooting trees and several wooden power poles along its path. As the tornado entered the southeast sections of Ruston, numerous trees were snapped, falling on homes and vehicles along Highway 167 and Love Avenue. Another tree was snapped and fell onto a car on McAllister Street, with additional trees snapped and uprooted onto homes, power lines, and vehicles on Terrill Drive and Lewis Street before lifting near the intersection of Lewis and Richardson Streets.</p> <p>A total of 99 conventional and manufactured homes were affected by this tornado throughout Lincoln Parish, with 39 of these classified as Affected, 34 with Minor Damage, 23 with Major Damage, and 3 as Destroyed.</p>	\$1,400,000	RUSTON	EF1
April 14, 2018	<p>4.6 mile path with a width of 865 yards. An EF-1 tornado with estimated maximum winds between 95-105 mph touched down along Highway 80 just west of Choudrant, and moved east into the community of Choudrant, snapping several trees and large limbs. The tornado then turned northeast, crossing Interstate 20, and moved across Emory Road, snapping and uprooting several trees, before lifting near the intersection of Norris and Aulds Roads.</p>	\$0	CHOUDRANT	EF1
April 14, 2018	<p>0.04 mile path with a width of 250 yards. An EF-1 tornado with estimated maximum winds around 95 mph touched down along Roach Road less than a tenth of a mile west of the Ouachita Parish line, snapping a couple of pine trees before moving into Northwest Ouachita Parish.</p>	\$0	DOWNSVILLE	EF1

Date	Impacts	Property Damage	Location	Magnitude
April 25, 2019	<p>11.15 mile path with a width of 1000 yards. An EF-3 tornado with maximum estimated winds near 145 mph touched down just northeast of the intersection of Highway 80 and Highway 818 where several trees were uprooted. It continued northeast, crossing South Maple Street where the tornado intensified, resulting in widespread tree damage just south of Highway 3012 along Wade Drive, Lind Drive, Robert Street, University Boulevard, and Shelor Drive. Many of these streets were impassable due to the significant number of trees snapped, twisted, and uprooted. Many more trees were downed on Highway 3012 before the tornado tracked northeast towards Westwood Drive. It uprooted a number of trees onto fraternity houses before it crossed the Kansas City Southern Railroad. The tornado crossed the railroad and bent or uprooted several large light poles on Louisiana Tech's softball, baseball, and neighboring athletic fields. It snapped a number of power poles as well. The tornado crossed Tech Drive and damaged a number of dormitories where it removed their metal roofs and blew out windows. It continued northeast where it uprooted more trees on Louisiana Tech's and Ruston High School's campuses. The estimated winds as the tornado tore through the western and northern sections of Louisiana Tech University ranged from 115-130 mph. The tornado crossed Greenwood Cemetery where it intensified again, resulting in a large number of trees being debarked with just the stubs of the large branches remaining in several areas. It continued with several business sustaining significant damage to their exterior brick walls and some interior walls. A hotel along Interstate 20 suffered the collapse of its top story's exterior walls. The tornado continued on to severely damage a gas station between Trenton and Vienna Streets just south of I-20, before crossing the interstate and weakened slightly</p>	\$50,000,000	RUSTON	EF3

Date	Impacts	Property Damage	Location	Magnitude
	<p>but still resulted in considerable roof damage to several businesses along North Service Road East. The tornado then began to weaken, with more sporadic wind damage noted as it moved northeast towards Farmerville Highway. It crossed Farmerville Highway near Timberline Court uprooting a number of trees and continued northeast towards Haddox Road. The tornado then lifted and touched back down a few more times with the intermittent damage noted for the rest of its path. It uprooted a few more trees along Stable and Baxter Roads, destroyed a chicken house along Highway 820, before finally lifting just south of Oak Tree Road.</p> <p>The tornado resulted in two fatalities when a tree fell through their home, killing a 35 year old female and her 14 year old son just south of Interstate 20 in Ruston.</p> <p>The Louisiana State Fire Marshal concluded that 22 buildings were destroyed by the tornado, 154 buildings sustained major damage, with 254 buildings receiving minor damage in the city of Ruston. The Louisiana Tech University campus had 16 buildings that could not be occupied, with the softball, baseball, and soccer fields, as well as 2 dormitories, suffering major damage.</p> <p>In all, approximately 1220 structures were affected by this tornado throughout Lincoln Parish.</p> <p>Entergy Power Company concluded that 35 power poles were broken throughout the city of Ruston, with numerous spans of power lines also downed. Given the extensive damage throughout the city of Ruston, mandatory curfews were enforced by the Ruston Police Department, Lincoln Parish Sheriff's Department, and the Louisiana State Police.</p>			
May 8, 2019	<p>2.16 mile path with a width of 80 yards. This is a continuation of the Jackson Parish EF-1 tornado. This tornado, with maximum estimated winds near 110 mph, crossed over into extreme Southeast Lincoln Parish along Highway 167 and</p>	\$100,000	LINCOLN PARISH	EF1

Date	Impacts	Property Damage	Location	Magnitude
	destroyed a single wide mobile home on Winborn Farm Road. This is where high-end EF-1 tornado damage was observed when the mobile home rolled off its foundation, briefly tossed into the air, was thrown approximately 10 yards, and was destroyed as it landed. The anchoring into weakened saturated soil and lack of bending of the frame which was maintained despite the mobile home being destroyed contributed to this being adjusted down to high-end EF-1 damage. The tornado continued east and snapped/uprooted numerous trees as it crossed Riser Road back into Jackson Parish.			

Frequency / Probability

Tornadoes occur frequently within Lincoln Parish and its jurisdictions with an annual chance of occurrence calculated at 48% based on the records for the past 31 years (1990 - 2021). *Figure 2-23* displays the density of tornado touchdowns in Lincoln Parish and neighboring parishes.

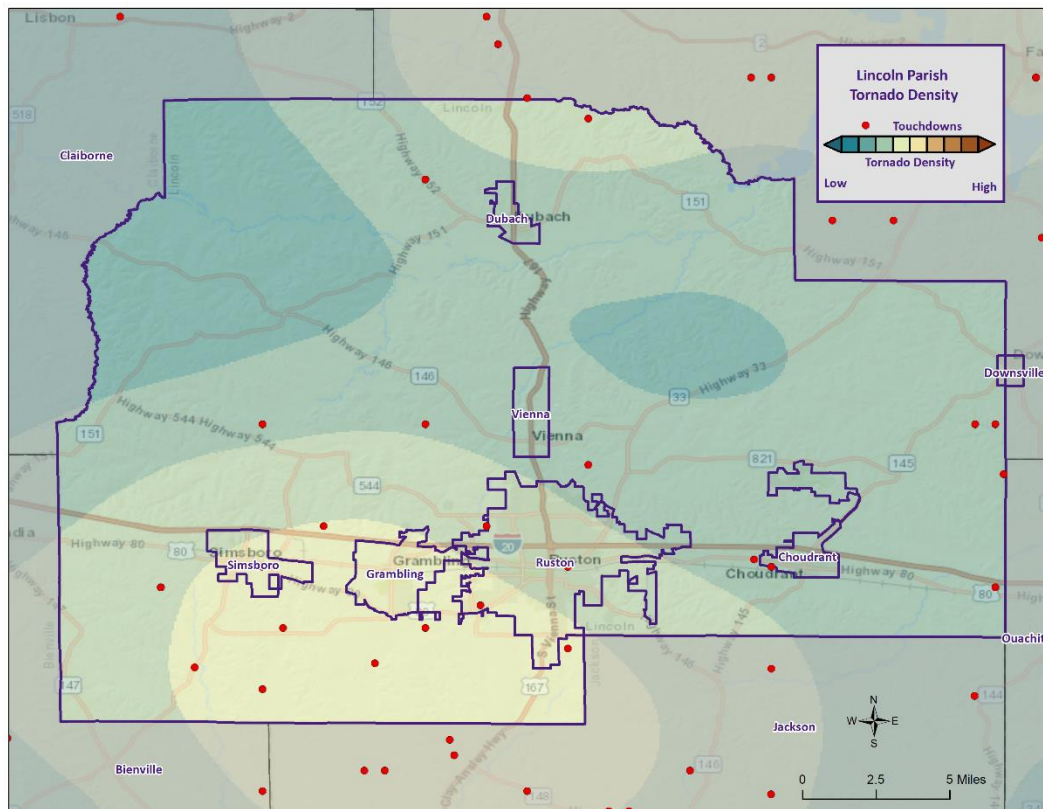


Figure 2-23: Location and Density of Tornadoes to Touchdown in the Lincoln Parish.
(Source: NOAA/SPC Severe Weather Database)

Estimated Potential Losses

According to the NCEI Storm Events Database, there have been 15 tornadoes that have caused some level of property damage. The total damage from the actual claims for property is approximately \$53,800,000 with an average cost of \$3,586,667 per tornado event. When annualizing the total cost over the 31-year record, total annual losses based on tornadoes are estimated to be \$1,735,484. The following table provide an annual estimate of potential losses for Lincoln Parish.

Table 2-56: Estimated Annual Losses for Tornadoes in Lincoln Parish.

Tornado Estimated Annual Potential Losses						
Unincorporated Area	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
\$638,596	\$35,466	\$32,561	\$187,871	\$794,874	\$28,796	\$17,320

Table 2-57 presents an analysis of building exposure that are susceptible to tornadoes by general occupancy type for Lincoln Parish along with the percentage of building stock that are mobile homes.

Table 2-57: Building Exposure by General Occupancy Type for Tornadoes in Lincoln Parish.

(Source: Hazus)

Building Exposure by General Occupancy Type for Tornadoes (\$1,000)							
Residential	Commercial	Industrial	Agricultural	Religion	Government	Education	Mobile Homes (%)
4,714,742	1,075,971	332,919	19,904	178,964	37,334	164,893	17.9%

The Parish has suffered through a total of 15 events in which tornadoes or waterspouts have accounted for 11 injuries and four fatalities during this 31-year period.

In accessing the overall risk to population, the most vulnerable population throughout the parish are those residing in manufacturing housing. Approximately 17.9% of all housing in Lincoln Parish consists of manufactured housing. The location and density of manufactured houses can be seen on the next page in *Figure 2-24*

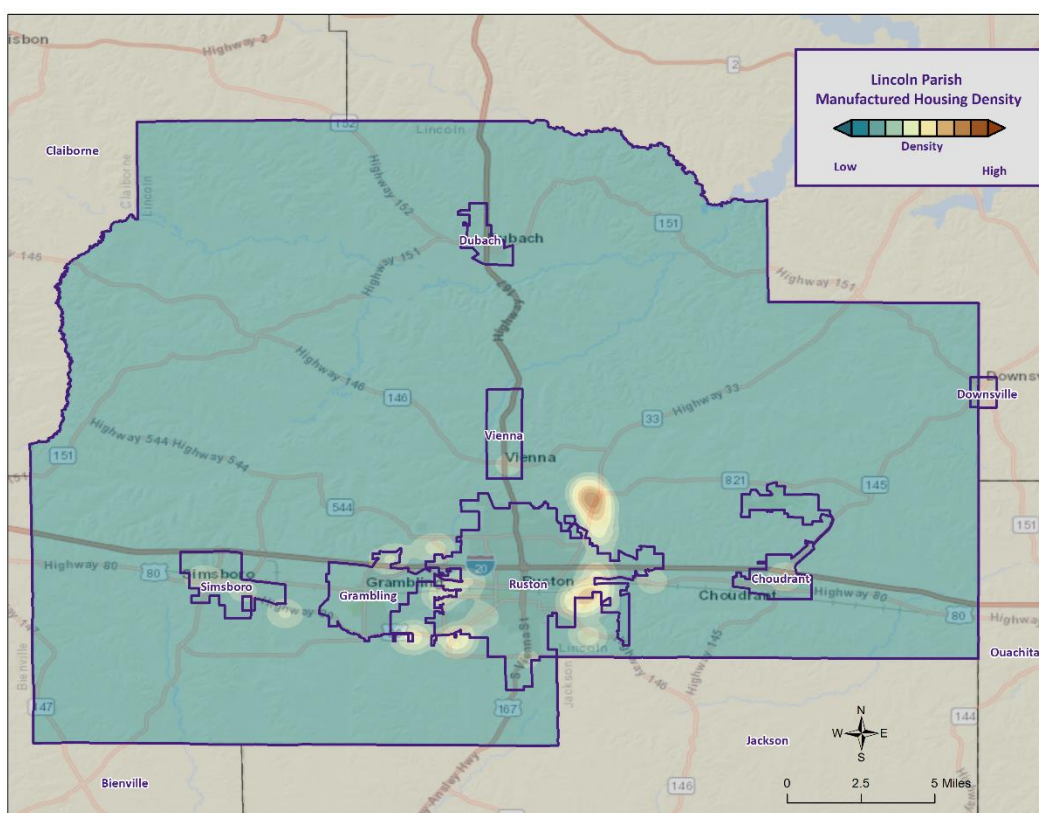


Figure 2-24: Location and Approximate Number of Units in Manufactured Housing Locations throughout Lincoln Parish.

Impacts of Climate Change

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

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

Table 2-58: National Risk Index (NRI) Summarization of Tornado Occurrences for the Parish
(Source: National Risk Index)

Expected Annual Losses	Overall Risk Rating
Relatively Moderate	Relatively Moderate

Tornadoes are inherently dangerous and pose risks to all populations in their path. Vulnerable populations, including low-income communities, those with limited access to shelter or adequate warning systems, and individuals with mobility or communication challenges, may face heightened risks during tornado events. These populations may have limited resources or support systems to effectively prepare for, respond to, and recover from tornadoes, increasing their vulnerability to the associated impacts.

Socioeconomic factors, such as housing quality, access to safe shelters, and the ability to afford insurance coverage, can significantly influence vulnerability to tornadoes. Climate change can indirectly impact vulnerable populations through its socioeconomic effects, such as shifts in employment patterns, changes in housing affordability, or the availability of resources for disaster preparedness and recovery. These factors can affect a community's ability to withstand tornado impacts and recover in the aftermath.

It is important to note that tornadoes are highly localized and short-lived events, making it challenging to draw direct links between climate change and their occurrence or impacts. However, addressing the broader impacts of climate change, such as strengthening disaster preparedness, improving early warning systems, promoting resilient infrastructure, and reducing socioeconomic vulnerabilities, can enhance the overall resilience of vulnerable populations to tornadoes and other severe weather events.

Vulnerability

See [Appendix C](#) 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 2-59: 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 Lincoln Parish planning area. The worst-case scenario for a tropical cyclone event in Lincoln Parish is a Category 1 Hurricane.

Previous Occurrences / Extents

Lincoln Parish has experienced five major tropical cyclone events since 2002. The table on the following page provides a list of tropical cyclones which have impacted Lincoln Parish since 2002.

Table 2-60: Historical Tropical Cyclone Events in the Lincoln Parish from 2002 – 2020.

Date	Name	Storm Type at Time of Impact
2005	Rita	Hurricane
2008	Gustav	Tropical Storm
2008	Ike	Tropical Storm
2020	Laura	Tropical Storm
2020	Delta	Tropical Storm

Since the last Lincoln 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 Lincoln Parish.

Tropical Storm Laura (2020)

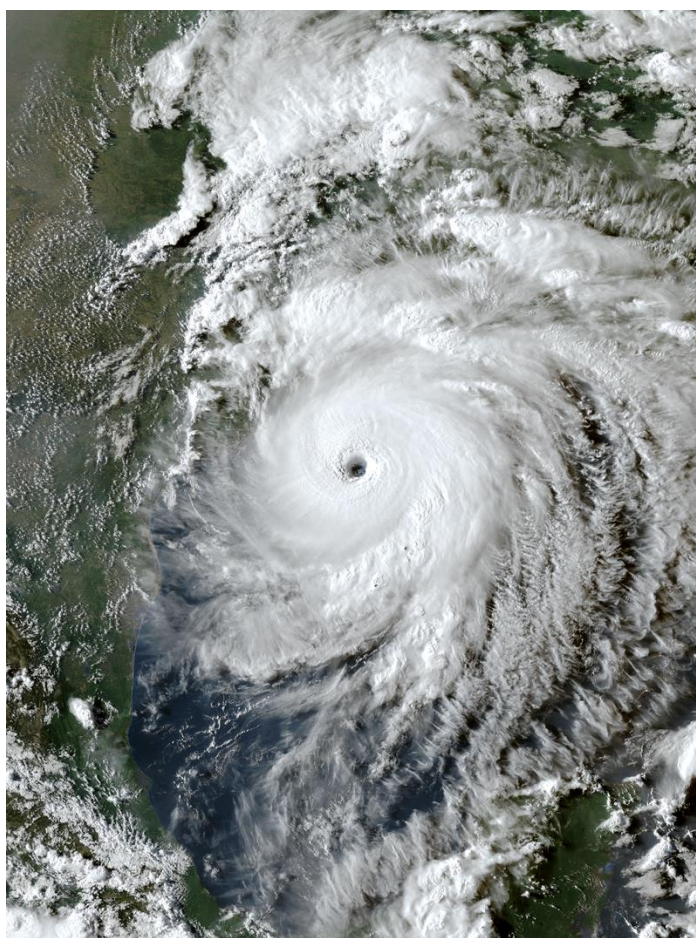
Laura began as a large tropical wave that emerged off the west coast of Africa on August 16th. The wave traversed the tropical Atlantic for the next several days with little additional organization. On August 19th, the system became better organized, closed off a low-level circulation, and subsequently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

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

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

With little change in strength, Laura made landfall at Cameron, Louisiana around 1 AM CDT August 27th, with sustained winds of 150 mph (130 knots) and a minimum central pressure of 938 millibars (27.70 inches of mercury). Laura was the strongest hurricane to strike Southwest Louisiana since records began in 1851. Laura slowly weakened after landfall but maintained major hurricane status throughout its passage across Cameron, Calcasieu, and southern Beauregard Parishes, and category 2 status across northern Beauregard and Richland Parishes as daybreak approached on August 27th. Laura finally weakened below hurricane strength by Noon as it was crossing I-20 in North Louisiana. With this being the strongest hurricane to affect Southwest Louisiana, wind damage to buildings and trees was major to catastrophic across Cameron and Calcasieu parishes, with considerable damage across Beauregard and Richland 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 2-25: Hurricane Laura in the Gulf Coast Area.
(Source: NOAA)*

A total of 33 fatalities occurred throughout the state with four of them coming from falling trees. They included a 14-year-old girl in Richland 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 Richland Parish due to heat-related illnesses following the loss of electricity.

In Lincoln Parish, damage surveyed observed scattered damage across most of the parish with more sporadic damage across western portions of the parish. The center of Laura moved into the southern portion of the parish and the system weakened into a tropical storm as it moved into the northern part of the parish. Tree damage mostly occurred from uprooted trees with a few tree trunks snapped. Survey suggests sustained winds were 50 to 60 mph with peak wind gusts to 70 mph in the far southern portion of the parish.

Tropical Storm Delta (2020)

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



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

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

In Lincoln Parish, Delta downed trees and powerlines throughout the parish. Approximately 20% of parish residents were without power for a significant amount of time.

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

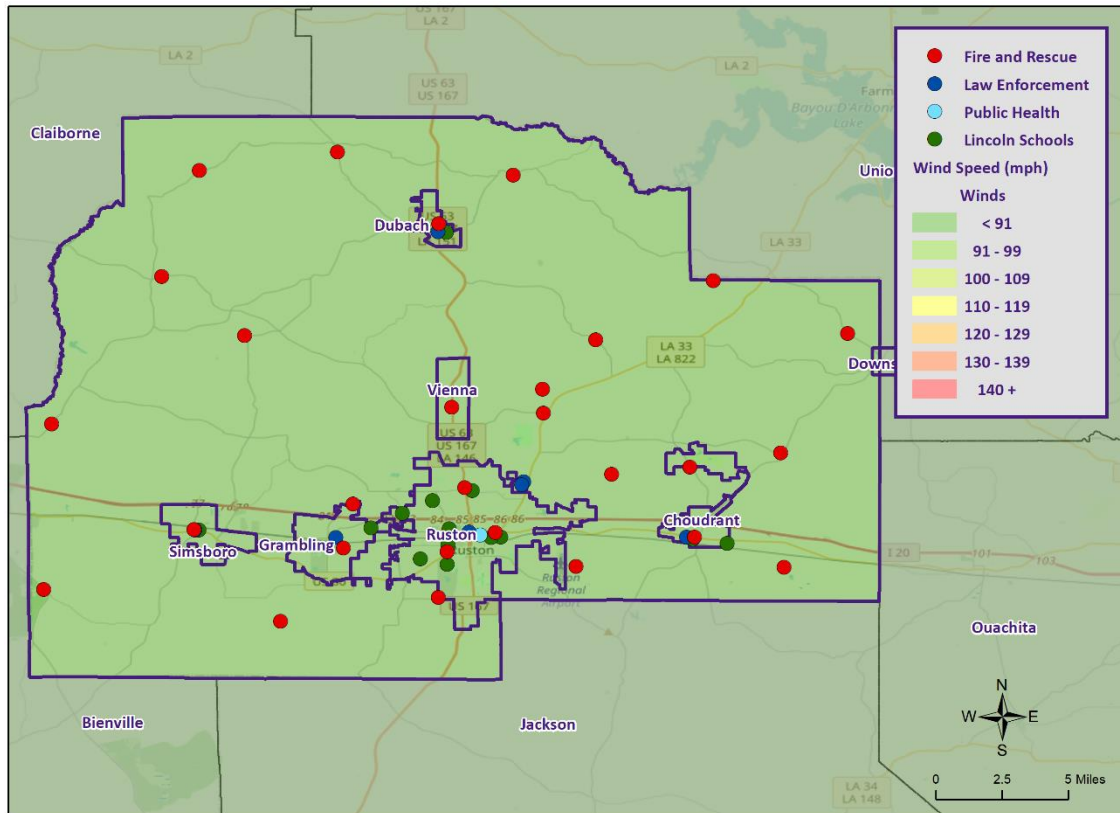


Figure 2-27: Winds Zones for Lincoln Parish in Relation to Critical Facilities

Frequency / Probability

Tropical cyclones are large natural hazard events that regularly impact Lincoln Parish. The annual chance of occurrence for a tropical cyclone is estimated at 26% for Lincoln Parish with nine events occurring within 19 years (2002 to 2021). The tropical cyclone season for the Atlantic Basin is from June 1st through November 30th, 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 Lincoln Parish and its jurisdictions are highly vulnerable to tropical cyclones. This area has experienced several tropical cyclone events in the past and can expect more in the future.

Estimated Potential Losses

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

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

Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event
Unincorporated Lincoln Parish	\$720,277
Choudrant	\$40,002
Dubach	\$36,726
Grambling	\$211,901
Ruston	\$896,544
Simbsoro	\$32,479
Vienna	\$19,536
Total	\$1,957,464

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

*Table 2-62: Ratio of Total Losses to Total Estimated Value of Assets for Lincoln Parish
(Source: Hazus)*

Jurisdiction	Estimated Total Losses from 100-Year Hurricane Event	Total Estimated Value of Assets	Ratio of Estimated Losses to Total Value
Unincorporated Lincoln Parish	\$720,277	\$2,125,285,000	< 0.1%
Choudrant	\$40,002	\$95,323,000	< 0.1%
Dubach	\$36,726	\$108,824,000	< 0.1%
Grambling	\$211,901	\$575,172,000	< 0.1%
Ruston	\$896,544	\$3,430,762,000	< 0.1%
Simbsoro	\$32,479	\$122,165,000	< 0.1%
Vienna	\$19,536	\$67,196,000	< 0.1%

Based on the Hazus Hurricane Model, estimated total losses for Lincoln Parish and its jurisdictions was less than 0.1% of the total estimated value of all assets.

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

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

Unincorporated Lincoln Parish	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$225
Commercial	\$16,218
Government	\$465
Industrial	\$3,165
Religious / Non-Profit	\$1,991
Residential	\$697,581
Schools	\$633
Total	\$720,277

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

Choudrant	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$12
Commercial	\$901
Government	\$26
Industrial	\$176
Religious / Non-Profit	\$111
Residential	\$38,741
Schools	\$35
Total	\$40,002

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

Dubach	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$11
Commercial	\$827
Government	\$24
Industrial	\$161
Religious / Non-Profit	\$102
Residential	\$35,568
Schools	\$32
Total	\$36,726

*Table 2-66: Estimated Losses in Grambling for a 100-Year Hurricane Event
(Source: Hazus)*

Grambling	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$66
Commercial	\$4,771
Government	\$137
Industrial	\$931
Religious / Non-Profit	\$586
Residential	\$205,224
Schools	\$186
Total	\$211,901

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

Ruston	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$279
Commercial	\$20,187
Government	\$579
Industrial	\$3,939
Religious / Non-Profit	\$2,478
Residential	\$868,294
Schools	\$788
Total	\$896,544

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

Simsboro	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$10
Commercial	\$731
Government	\$21
Industrial	\$143
Religious / Non-Profit	\$90
Residential	\$31,455
Schools	\$29
Total	\$32,479

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

Vienna	Estimated Total Losses from 100-Year Hurricane Event
Agricultural	\$6
Commercial	\$440
Government	\$13
Industrial	\$86
Religious / Non-Profit	\$54
Residential	\$18,920
Schools	\$17
Total	\$19,536

Threat to People

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

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

Number of People Exposed to Hurricane Hazards			
Location	# in Community	# in Hazard Area	% in Hazard Area
Unincorporated Lincoln Parish	17,808	17,808	100.0%
Choudrant	989	989	100.0%
Dubach	908	908	100.0%
Grambling	5,239	5,239	100.0%
Ruston	22,166	22,166	100.0%
Simbsoro	803	803	100.0%
Vienna	483	483	100.0%
Total	48,396	48,396	100%

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

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

Unincorporated Lincoln Parish		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	17,808	100.0%
Persons Under 5 Years	979	5.5%
Persons Under 18 Years	3,562	20.0%
Persons 65 Years and Over	2,422	13.6%
White	9,581	53.8%
Minority	8,227	46.2%

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

Choudrant		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	989	100.0%
Persons Under 5 Years	48	4.9%
Persons Under 18 Years	320	32.4%
Persons 65 Years and Over	111	11.2%
White	848	85.7%
Minority	141	14.3%

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

Dubach		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	908	100.0%
Persons Under 5 Years	94	10.4%
Persons Under 18 Years	159	17.5%
Persons 65 Years and Over	137	15.1%
White	475	52.3%
Minority	433	47.7%

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

Grambling		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	5,239	100.0%
Persons Under 5 Years	435	8.3%
Persons Under 18 Years	1,409	26.9%
Persons 65 Years and Over	602	11.5%
White	58	1.1%
Minority	5,181	98.9%

*Table 2-75: Vulnerable Populations in Ruston for a 100-Year Hurricane Event
(Source: Hazus)*

Ruston		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	22,166	100.0%
Persons Under 5 Years	864	3.9%
Persons Under 18 Years	3,480	15.7%
Persons 65 Years and Over	2,194	9.9%
White	11,415	51.5%
Minority	10,751	48.5%

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

Simsboro		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	803	100.0%
Persons Under 5 Years	61	7.6%
Persons Under 18 Years	164	20.4%
Persons 65 Years and Over	131	16.3%
White	456	56.8%
Minority	347	43.2%

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

Vienna		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	483	100.0%
Persons Under 5 Years	24	5.0%
Persons Under 18 Years	107	22.2%
Persons 65 Years and Over	119	24.7%
White	412	85.3%
Minority	71	14.7%

Impacts of Climate Change

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

The National Risk Index (NRI) includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the parish and Census tract level. The following table provides an overview of each category at the parish level for tropical cyclones.

*Table 2-78: National Risk Index (NRI) Summarization of Tropical Cyclones Occurrences for the Parish
(Source: National Risk Index)*

Expected Annual Losses	Overall Risk Rating
Relatively Low	Relatively Low

Tropical cyclones can cause severe damage to infrastructure, including power grids, communication networks, and transportation systems. Climate change may exacerbate these impacts, affecting the ability of vulnerable populations to access critical services and support systems during and after a storm. Disruptions in healthcare facilities, emergency response services, and other essential infrastructure can further increase the vulnerability of impacted communities.

Vulnerable populations are often disproportionately affected by tropical cyclones and may face challenges in coping with the aftermath of a storm. The destruction of homes, loss of livelihoods, and displacement can lead to social disruption and exacerbate existing socioeconomic disparities. Vulnerable communities may struggle to recover and rebuild, facing prolonged periods of economic hardship and increased vulnerability to subsequent storms.

Addressing the impacts of tropical cyclones on vulnerable populations requires a comprehensive approach, including:

- Strengthening early warning systems and disaster preparedness to ensure timely evacuation and reduce loss of life.
- Investing in resilient infrastructure, including building codes, to withstand the impacts of tropical cyclones, such as strong winds, storm surge, and heavy rainfall.
- Enhancing access to safe shelters and evacuation routes for vulnerable populations, including those with mobility challenges or limited resources.
- Implementing climate change adaptation strategies, such as coastal zone management and ecosystem restoration, to reduce the vulnerability of coastal communities to storm impacts.
- Improving post-disaster recovery and support systems to facilitate the long-term recovery and resilience of vulnerable populations.
- Addressing socioeconomic disparities and promoting equitable access to resources and support systems to enhance the resilience of vulnerable communities to tropical cyclones.

Vulnerability

See [Appendix C](#) 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 2-79: 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 Lincoln Parish is a level 5; Choudrant, Dubach, Grambling, Ruston, and Simsboro a level 3; and Vienna a level 2. The following figure displays the areas of wildland-urban interface and intermix in Bossier Parish and its jurisdictions.

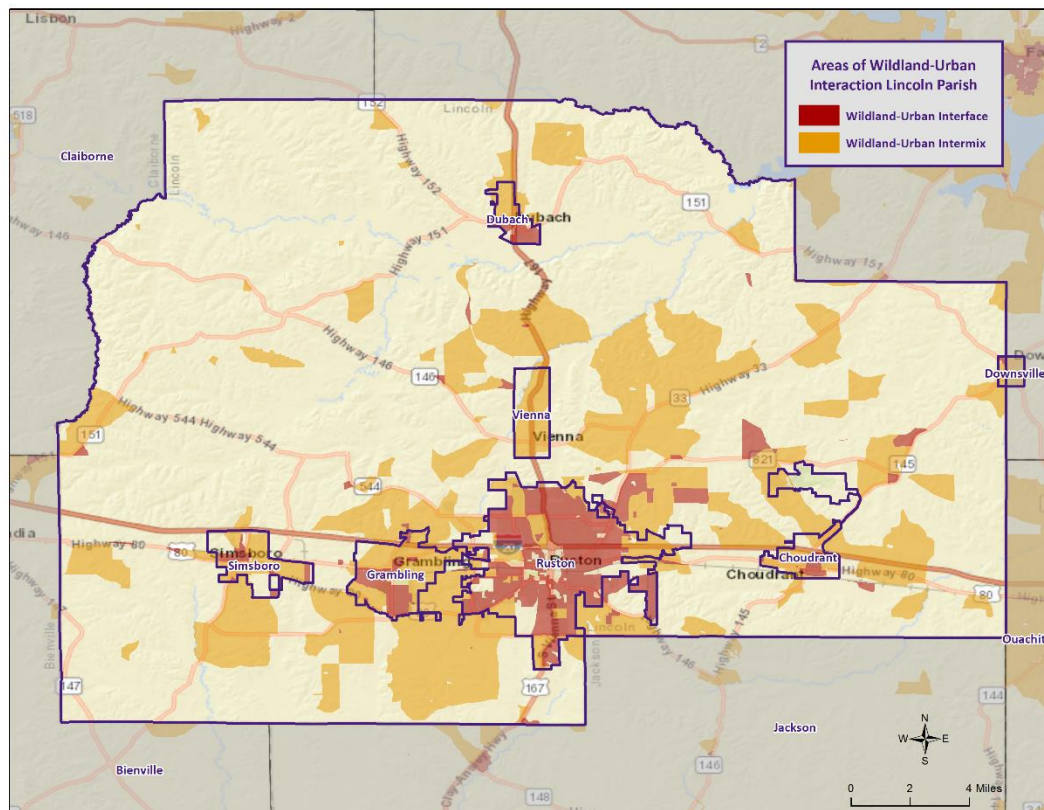


Figure 2-28: Wildland-Urban Interaction in Lincoln Parish.

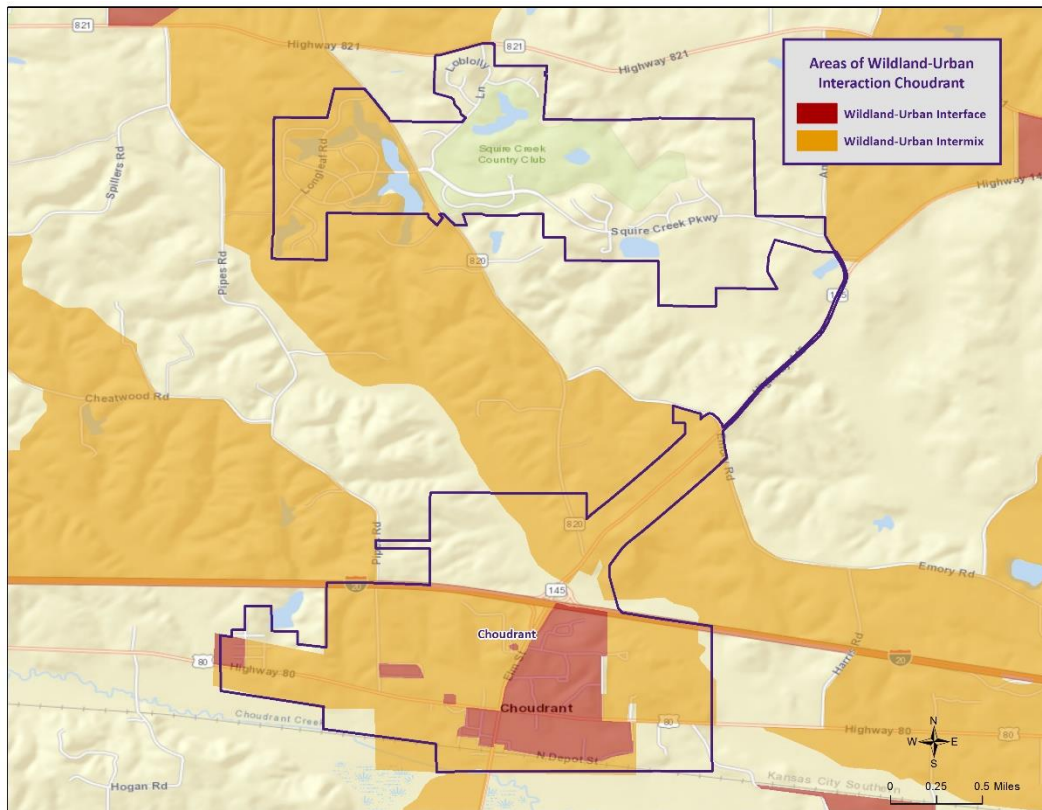


Figure 2-29: Wildland-Urban Interaction in Choudrant.

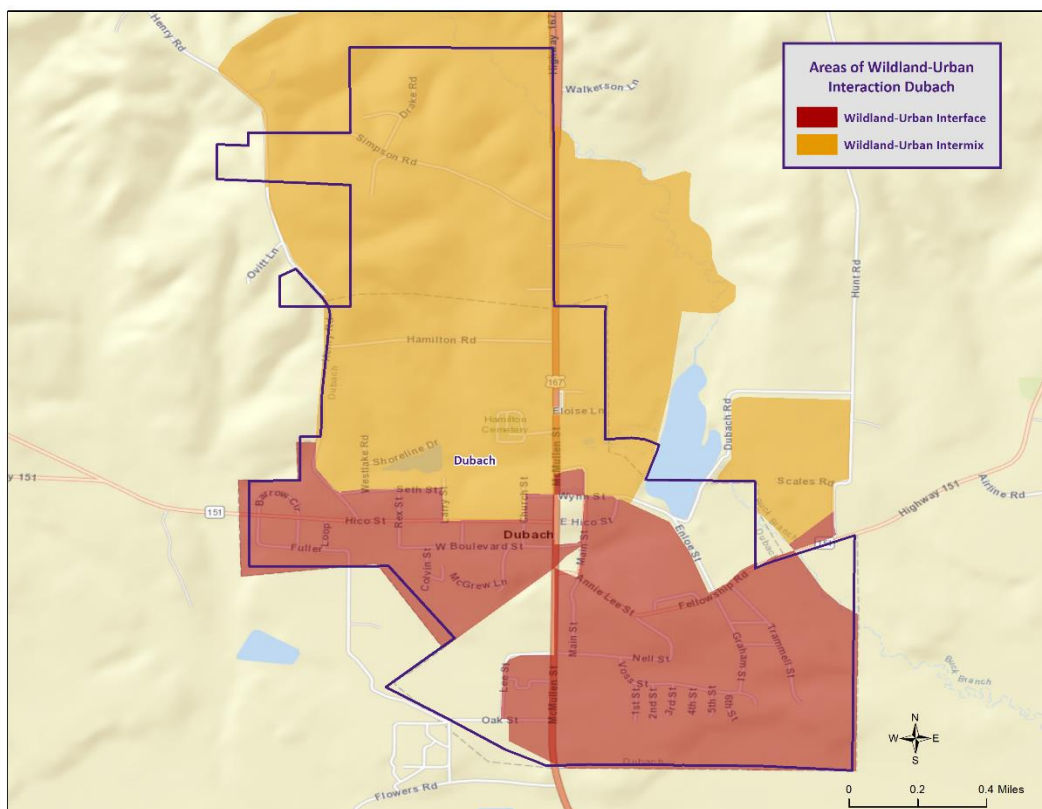


Figure 2-30: Wildland-Urban Interaction in Dubach.

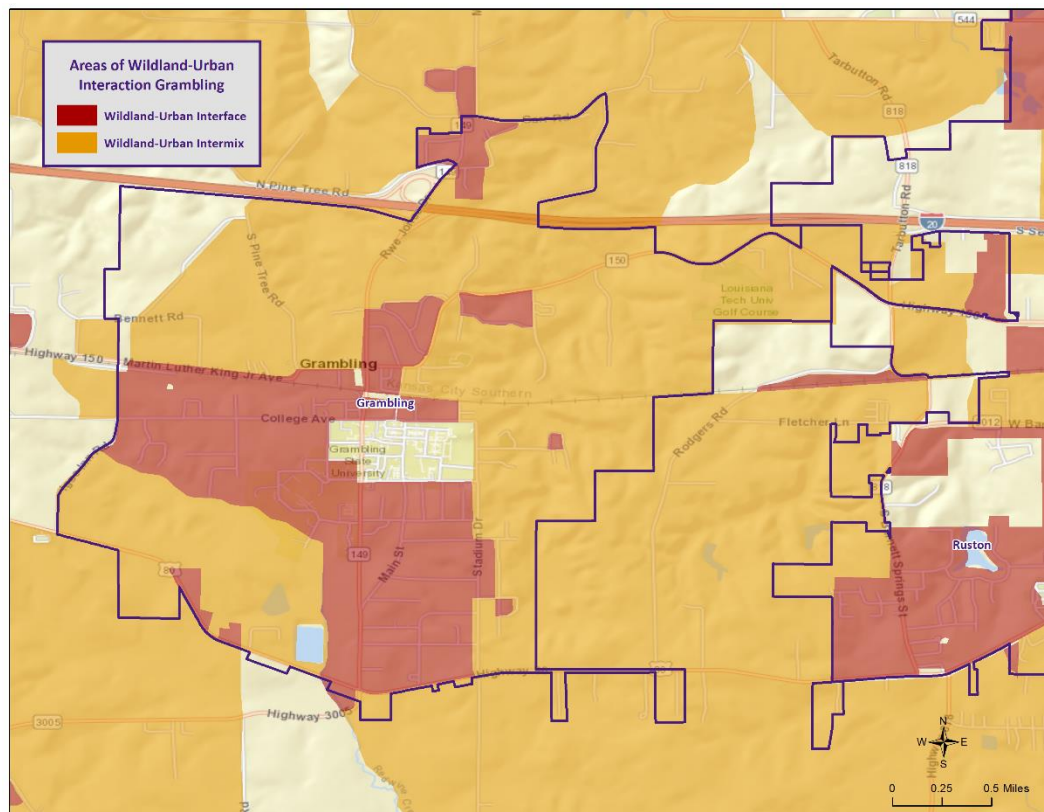


Figure 2-31: Wildland-Urban Interaction in Grambling.

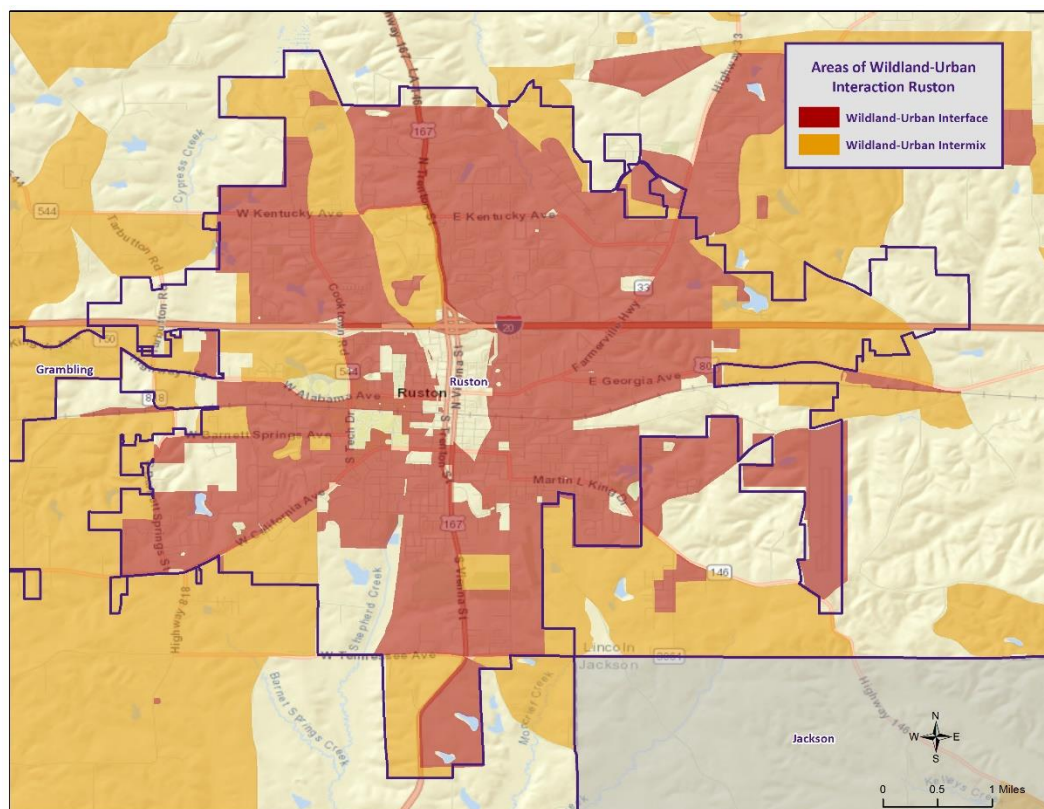


Figure 2-32: Wildland-Urban Interaction in Ruston.

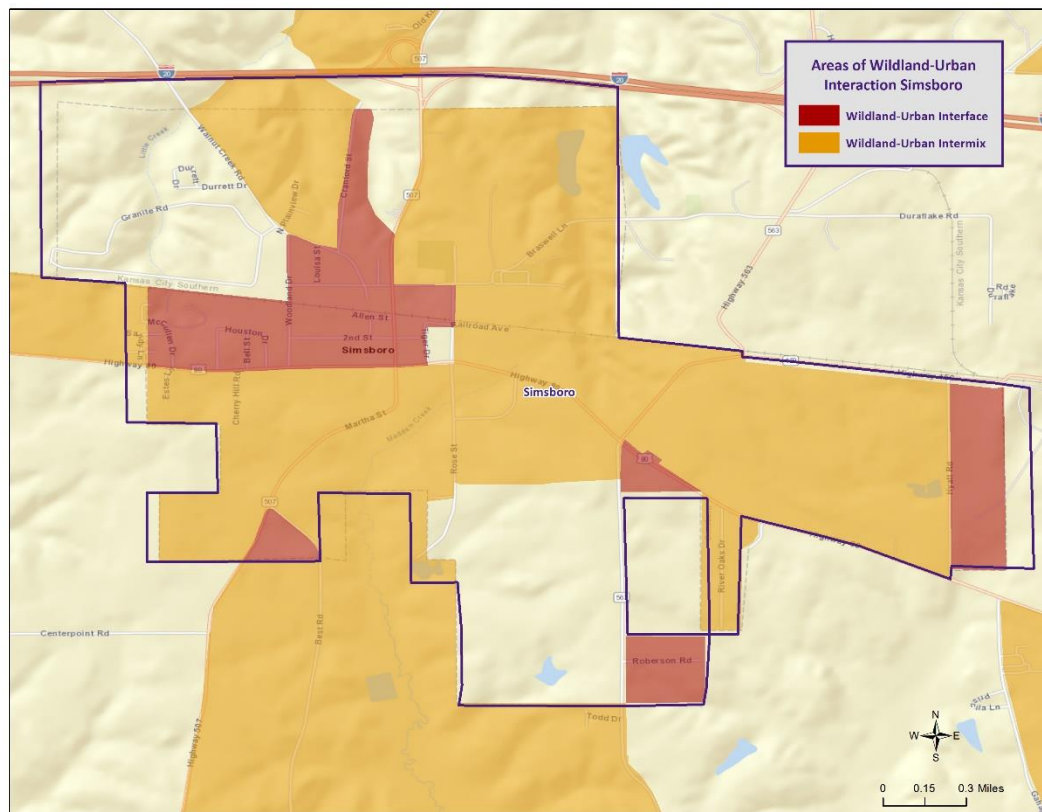


Figure 2-33: Wildland-Urban Interaction in Simsboro.

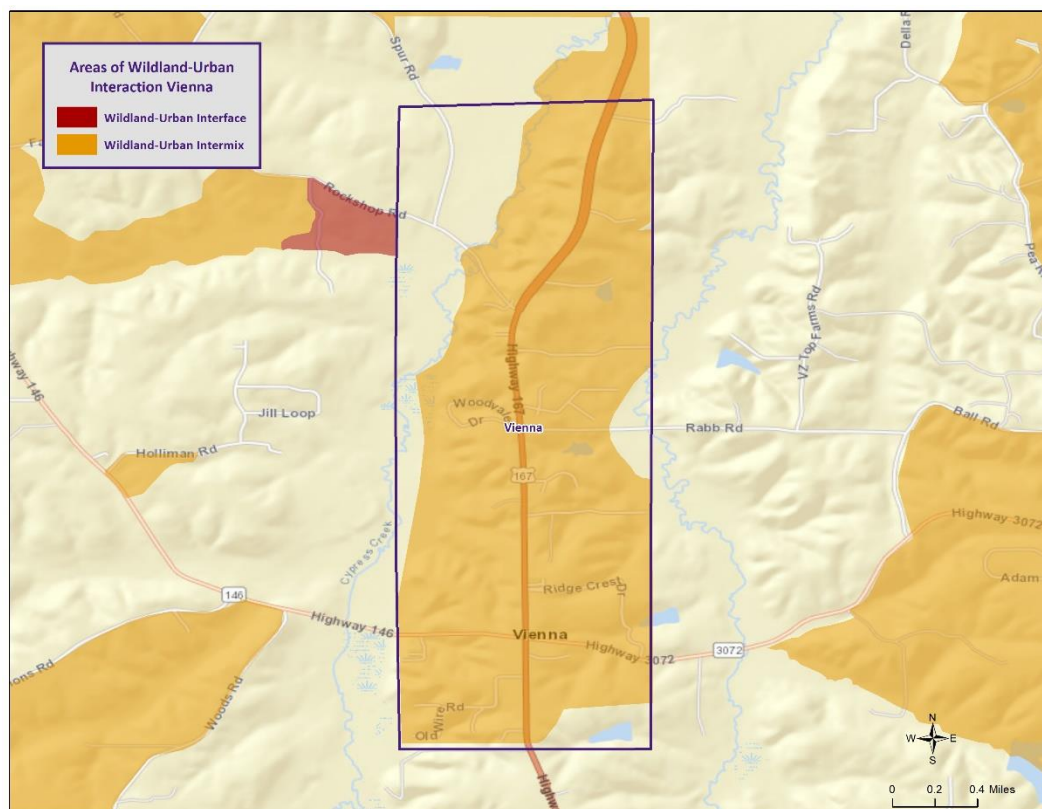


Figure 2-34: Wildland-Urban Interaction in Vienna.

Previous Occurrences / Extents

The NCEI Storm Events report no wildfire events occurring within the boundaries of Lincoln Parish between the years 1990 and 2021.

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

*Table 2-80: Potential Wildfire Intensity Levels for Lincoln Parish.
(Source: Southern Wildfire Assessment Portal)*

Fire Intensity	
Unincorporated Lincoln Parish	High Intensity Level 5
Choudrant	Moderate Intensity Level 3
Dubach	Moderate Intensity Level 3
Grambling	Moderate Intensity Level 3
Ruston	Moderate Intensity Level 3
Simsboro	Moderate Intensity Level 3
Vienna	Low Intensity Level 2

Frequency / Probability

Based on historical records, there have been no significant wildfire events within the boundaries of Lincoln Parish and the jurisdictions of Choudrant, Dubach, Grambling, Ruston, Simsboro, and Vienna; therefore, the annual chance of occurrence for wildfires is estimated at less than 1%.

Estimated Potential Losses

According to the NCEI Storm Events database, there have been no wildfire events which have caused property damage, crop damage, injuries, or fatalities in Lincoln Parish and its jurisdictions. In assessing over risk to population, the most vulnerable population throughout the parish consists of those residing in areas of wildland-urban interaction.

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 2-81: Total Building Exposure by Wildland-Urban Interaction Areas.
(Source: Hazus)*

Jurisdiction	Estimated Total Building Exposure
Unincorporated Lincoln Parish	\$1,819,810,000
Choudrant	\$80,641,000
Dubach	\$103,293,000
Grambling	\$555,280,000
Ruston	\$3,321,800,000
Simbsoro	\$117,877,000
Vienna	\$67,196,000
Total	\$6,065,897,000

Hazus also provides a breakdown by jurisdiction for seven primary sectors (Hazus occupancy) throughout the parish. Utilizing this information with the wildland-urban interaction areas allows for identifying the total exposure by jurisdiction. 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 2-82: Estimated Exposure for Unincorporated Lincoln Parish by Sector.
(Source: Hazus)*

Unincorporated Lincoln Parish	Estimated Total Building Exposure by Sector
Agricultural	\$7,540,000
Commercial	\$140,546,000
Government	\$5,908,000
Industrial	\$125,077,000
Religious / Non-Profit	\$31,140,000
Residential	\$1,504,851,000
Schools	\$4,748,000
Total	\$1,819,810,000

*Table 2-83: Estimated Exposure for Choudrant by Sector.
(Source: Hazus)*

Choudrant	Estimated Total Building Exposure by Sector
Agricultural	\$1,504,000
Commercial	\$4,242,000
Government	\$750,000
Industrial	\$1,438,000
Religious / Non-Profit	\$2,098,000
Residential	\$69,609,000
Schools	\$1,000,000
Total	\$80,641,000

*Table 2-84: Estimated Exposure in Dubach by Sector.
(Source: Hazus)*

Dubach	Estimated Total Building Exposure by Sector
Agricultural	\$420,000
Commercial	\$8,004,000
Government	\$4,802,000
Industrial	\$1,489,000
Religious / Non-Profit	\$10,112,000
Residential	\$75,556,000
Schools	\$2,910,000
Total	\$103,293,000

Table 2-85: Estimated Exposure in Grambling by Sector.
(Source: Hazus)

Grambling	Estimated Total Building Exposure by Sector
Agricultural	\$0
Commercial	\$35,851,000
Government	\$1,602,000
Industrial	\$3,151,000
Religious / Non-Profit	\$21,448,000
Residential	\$430,345,000
Schools	\$62,883,000
Total	\$555,280,000

Table 2-86: Estimated Exposure in Ruston by Sector.
(Source: Hazus)

Ruston	Estimated Total Building Exposure by Sector
Agricultural	\$5,832,000
Commercial	\$754,423,000
Government	\$19,342,000
Industrial	\$148,811,000
Religious / Non-Profit	\$97,850,000
Residential	\$2,211,468,000
Schools	\$84,074,000
Total	\$3,321,800,000

Table 2-87: Estimated Exposure in Simsboro by Sector.
(Source: Hazus)

Simsboro	Estimated Total Building Exposure by Sector
Agricultural	\$270,000
Commercial	\$8,772,000
Government	\$1,128,000
Industrial	\$27,429,000
Religious / Non-Profit	\$0
Residential	\$80,278,000
Schools	\$0
Total	\$117,877,000

Table 2-88: Estimated Exposure in Vienna by Sector.
(Source: Hazus)

Vienna	Estimated Total Building Exposure by Sector
Agricultural	\$404,000
Commercial	\$2,278,000
Government	\$0
Industrial	\$0
Religious / Non-Profit	\$1,304,000
Residential	\$63,210,000
Schools	\$0
Total	\$67,196,000

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 2-89: Population Located within a Wildland-Urban Interaction Areas.
(Source: 2020 U.S. Census Data)

Number of People Located in Wildland-Urban Interaction Areas			
Location	# in Community	# in Hazard Area	% in Hazard Area
Unincorporated Lincoln Parish	17,808	17,808	100.0%
Choudrant	989	989	100.0%
Dubach	908	908	100.0%
Grambling	5,239	5,239	100.0%
Ruston	22,166	22,166	100.0%
Simbsoro	803	803	100.0%
Vienna	483	483	100.0%
Total	48,396	48,396	100.0%

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

Table 2-90: Population in Unincorporated Lincoln Parish Located within a Wildland-Urban Interaction Area.

(Source: 2020 Census Data)

Unincorporated Lincoln Parish		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	17,808	100.0%
Persons Under 5 Years	979	5.5%
Persons Under 18 Years	3,562	20.0%
Persons 65 Years and Over	2,422	13.6%
White	9,581	53.8%
Minority	8,227	46.2%

Table 2-91: Population in Choudrant Located within a Wildland-Urban Interaction Area.

(Source: 2020 Census Data)

Choudrant		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	989	100.0%
Persons Under 5 Years	48	4.9%
Persons Under 18 Years	320	32.4%
Persons 65 Years and Over	111	11.2%
White	848	85.7%
Minority	141	14.3%

Table 2-92: Population in Dubach Located within a Wildland-Urban Interaction Area.

(Source: 2020 Census Data)

Dubach		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	908	100.0%
Persons Under 5 Years	94	10.4%
Persons Under 18 Years	159	17.5%
Persons 65 Years and Over	137	15.1%
White	475	52.3%
Minority	433	47.7%

*Table 2-93: Population in Grambling Located within a Wildland-Urban Interaction Area.
(Source: 2020 Census Data)*

Grambling		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	5,239	100.0%
Persons Under 5 Years	435	8.3%
Persons Under 18 Years	1,409	26.9%
Persons 65 Years and Over	602	11.5%
White	58	1.1%
Minority	5,181	98.9%

*Table 2-94: Population in Ruston Located within a Wildland-Urban Interaction Area.
(Source: 2020 Census Data)*

Ruston		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	22,166	100.0%
Persons Under 5 Years	864	3.9%
Persons Under 18 Years	3,480	15.7%
Persons 65 Years and Over	2,194	9.9%
White	11,415	51.5%
Minority	10,751	48.5%

*Table 2-95: Population in Simsboro Located within a Wildland-Urban Interaction Area.
(Source: 2020 Census Data)*

Simsboro		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	803	100.0%
Persons Under 5 Years	61	7.6%
Persons Under 18 Years	164	20.4%
Persons 65 Years and Over	131	16.3%
White	456	56.8%
Minority	347	43.2%

*Table 2-96: Population in Vienna Located within a Wildland-Urban Interaction Area.
(Source: 2020 Census Data)*

Vienna		
Category	Total Numbers	Percentage of People in Hazard Area
Number in Hazard Area	483	100.0%
Persons Under 5 Years	24	5.0%
Persons Under 18 Years	107	22.2%
Persons 65 Years and Over	119	24.7%
White	412	85.3%
Minority	71	14.7%

Impacts of Climate Change

The increasing probability and intensity of drought caused by climate change across Lincoln Parish and the jurisdictions of Choudrant, Dubach, Grambling, Ruston, Simsboro, and Vienna indicates that the risk of wildfires will also increase. The presence of drought or prolonged dry spells will lead to an increase in dry grasses, brush, and forests that act as fuel for fires.

The National Risk Index (NRI) includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the parish and Census tract level. The following table provides an overview of each category at the parish level for wildfires.

*Table 2-97: National Risk Index (NRI) Summarization of Wildfire Occurrences for the Parish
(Source: National Risk Index)*

Expected Annual Losses	Overall Risk Rating
Very Low	Very Low

Wildfires and their aftermath can have significant psychological impacts on individuals and communities. Evacuations, loss of homes, and the destruction of familiar landscapes can lead to feelings of loss, anxiety, and trauma. Vulnerable populations, including those with pre-existing mental health conditions or limited access to support services, may be particularly affected. Additionally, the prolonged exposure to smoke, evacuation stress, and uncertainty about the future can contribute to mental health challenges.

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To address the impacts of wildfires on vulnerable populations, it is important to:

- Improve wildfire prevention and mitigation measures, including land management practices, controlled burns, and the removal of hazardous vegetation near communities.
- Enhance early warning systems and evacuation plans to ensure the timely and safe evacuation of vulnerable populations.
- Strengthen building codes and land-use planning to promote fire-resistant construction and discourage development in high-risk areas.

- Increase access to resources and support for vulnerable populations during and after wildfires, including emergency shelters, healthcare services, and mental health support.
- Promote community resilience through education and outreach programs, empowering individuals to take proactive measures to protect themselves and their communities from wildfires.
- Address underlying socioeconomic disparities and ensure that vulnerable populations have the necessary resources and support to recover and rebuild after a wildfire event.

Vulnerability

See [Appendix C](#) 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 2-98: 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 in Lincoln Parish as all of the adjacent parishes, the entire planning area for Lincoln Parish is equally at risk for winter storms. The worse-case scenario for Lincoln Parish and all of its jurisdictions is a level 2 on the Sperry-Piltz Ice Accumulation Index.

Previous Occurrences / Extents

The NCEI Storm Events Database reports 15 winter weather events occurring within the boundaries of Lincoln Parish between the years 1990 and 2021. There have been six winter weather events since the last Lincoln Parish HMP Update in 2016. The table below contains a brief synopsis of the events.

Table 2-99: Historical Winter Weather Events in Lincoln Parish since the 2016 Lincoln Parish HMP Update.

Date	Extents	Estimated Damages
January 16, 2018	In Lincoln Parish, 1 mile north of Ruston recorded 2.0 inches of snow, and Ruston 1.3 inches.	\$0
November 14, 2018	In Lincoln Parish, Choudrant measured 0.2 inches of snow.	\$0
February 8, 2019	An arctic cold front progressed southeast across the Ark-La-Tex during the daytime hours on February 7th, with temperatures falling from the 70s on the 7th, into the 20s and lower 30s by the morning of February 8th.	\$0

Date	Extents	Estimated Damages
January 10, 2021	Lincoln Parish: 5.3 ENE Ruston: 3.5 inches, Ruston: 3.3 inches, Dubach: 3.0 inches, Simmsboro: 3.0 inches, Choudrant: 3.0 inches.	\$0
February 14, 2021	Lincoln Parish: Ruston: 6.0 inches of snow.	\$0
February 16, 2021	Lincoln Parish: Choudrant: 1.5 inches of snow.	\$0

Frequency / Probability

Based on historical records, there have been 15 significant winter weather events within the boundaries of Lincoln Parish and its jurisdictions; therefore, the annual chance of occurrence for winter weather is estimated at 48%.

Estimated Potential Losses

Since 1990, there have been 15 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 \$1,000. 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 - 2022). This provides an annual estimated potential loss of \$32 and \$67 per event. The following table provides an estimate of potential property losses for Lincoln Parish:

Table 2-100: Estimated Annual Losses Lincoln Parish and its Jurisdictions Resulting from Winter Weather.

Estimated Annual Potential Losses From Winter Weather						
Unincorporated Area	Choudrant	Dubach	Grambling	Ruston	Simmsboro	Vienna
\$12	\$1	\$1	\$3	\$15	\$1	< \$1

There have been no reported injuries or fatalities as a result of winter weather over the 32-year period.

Impacts of Climate Change

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

The National Risk Index (NRI) includes data on the expected annual losses to individual natural hazards, historical losses, and overall risk at the parish and Census tract level. The following table provides an overview of each category at the parish level for winter weather.

*Table 2-101: National Risk Index (NRI) Summarization of Winter Weather Occurrences for the Parish
(Source: National Risk Index)*

Expected Annual Losses	Overall Risk Rating
Relatively Low	Relatively Low

Winter weather impacts can have significant health implications for vulnerable populations. Cold temperatures, coupled with inadequate heating or insulation in homes, can increase the risk of hypothermia and other cold-related illnesses. Additionally, extreme winter weather events can impede access to healthcare services, disrupt supply chains for essential medications, and create challenges for emergency response systems, putting vulnerable populations at higher risk.

Changes in winter weather patterns can have socioeconomic implications for vulnerable populations. For example, communities that rely on winter tourism, such as ski resorts or winter recreational activities, may experience reduced economic opportunities due to shorter snow seasons or less predictable weather conditions. Additionally, vulnerable populations engaged in winter-dependent industries, such as agriculture or seasonal employment, may face livelihood challenges due to altered growing seasons or disruptions in work availability.

Addressing the impacts of climate change on winter weather and vulnerable populations requires comprehensive approaches, including:

- Enhancing climate monitoring and prediction systems to better understand and anticipate changes in winter weather patterns.
- Developing and implementing climate adaptation strategies that consider the specific vulnerabilities and needs of vulnerable populations during winter events.
- Improving energy efficiency and access to affordable heating systems to reduce the health risks associated with cold temperatures.
- Strengthening infrastructure resilience to withstand extreme winter weather events, such as upgrading power grids and transportation systems.
- Enhancing public awareness and education on winter weather safety, including cold-related health risks and emergency preparedness.
- Promoting social support networks, including community outreach programs, to ensure vulnerable populations have access to resources, shelters, and healthcare during extreme winter events.
- Implementing sustainable land and water management practices to mitigate the impacts of altered snowfall patterns and earlier snowmelt on ecosystems and water resources.

Vulnerability

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

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

Policies, Plans and Programs

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

Table 3-1: Planning and Regulatory Capabilities

Capability Assessment Worksheet									
Local mitigation capabilities are existing authorities, policies and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.									
Planning and Regulatory									
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.									
	Lincoln Parish	Cloutier	Dulac	Grambling	Ruston	Shreveport	Vienna	Comments	
Plans	Yes / No								
Comprehensive / Master Plan	No	Yes	No	No	Yes	No	No		
Capital Improvements Plan	Yes	Yes	No	No	Yes	No	No		
Economic Development Plan	No	Yes	No	Yes	Yes	No	No		
Local Emergency Operations Plan	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Continuity of Operations Plan	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Transportation Plan	Yes	No	No	No	Yes	No	No		
Stormwater Management Plan	Yes	No	No	No	Yes	No	No		
Community Wildfire Protection Plan	Yes	No	No	No	No	No	No		
(management)	No	No	No	No	No	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	No	No	No	No	No		
Fire Department ISO/PIAL rating	5	4	5	Yes	2	5	Yes		
Site plan review requirements	Yes	Yes	Yes	Yes	Yes	No	Yes		
Land Use Planning and Ordinances	Yes / No								
Zoning Ordinance	No	Yes	Yes	Yes	Yes	Yes	Yes		
Subdivision Ordinance	Yes	Yes	No	Yes	Yes	No	Yes		
Floodplain Ordinance	Yes	Yes	No	Yes	Yes	Yes	No		
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	No	No	No	No	No	No		
Flood Insurance Rate Maps	Yes	Yes	Yes	Yes	Yes	Yes	Yes		
Acquisition of land for open space and public recreation uses	No	Yes	Yes	Yes	Yes	Yes	No		
Other	Yes	No	No	No	No	No	No		

All jurisdictions within the Lincoln 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

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

As of the 2023 update, Lincoln Parish and the incorporated communities ensure that all adopted building codes are enforced and in compliance relating to the construction of any structure within the boundaries of the parish. Building permits are required prior to beginning any type of construction or renovation projects, installation of electrical wiring, plumbing or gas piping, moving manufactured/modular or portable buildings, and reroofing or demolitions.

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

The Lincoln Parish Police Jury 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 Lincoln 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 Lincoln 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								
	Lincoln parish	Choudrant	Dubach	Grambling	Ruston	Simaboro	Vienna	Comments
Administration	Yes / No							
Planning Commission	No	Yes	No		Yes	No	Yes	
Mitigation Planning Committee	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	Yes	Yes	Yes		Yes	No	No	
Staff	Yes / No							
Chief Building Official	Yes	Yes	Yes		Yes	No	No	
Floodplain Administrator	Yes	Yes	No	Yes	Yes	Yes	No	
Emergency Manager	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Community Planner	No	Yes	No	Yes	Yes	No	No	
Civil Engineer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
GIS Coordinator	Yes	No	Yes		Yes	Yes	Yes	
Grant Writer	No	Yes	Yes	No	Yes	No	No	
Other	No	No	No	No	No	No	No	
Technical	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	No	No	
Grant Writing	No	Yes	No	No	Yes	No	No	
Hazus Analysis	No	No	No	No	No	No	No	
Other	No	No	No	No	No	No	No	

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

The following financial resources are available to fund mitigation actions in the Lincoln 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.								
	Lincoln parish	Choudrant	Dubach	Grambling	Ruston	Simaboro	Vienna	Comments
Funding Resource	Yes / No							
Capital Improvements project funding	Yes	Yes	No	Yes	Yes	No	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	Yes	Yes	Yes	Yes	No	
Stormwater Utility Fee	No	No	No	No	No	No	No	
Community Development Block Grant (CDBG)	Yes	Yes	Yes	Yes	Yes	Yes	No	
Other Funding Programs	No	No	No	No	No	Yes	No	

Education and Outreach

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

The jurisdictions within the Lincoln 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.								
	Lincoln Parish	Coudray	Dibach	Grambling	Ruston	Simsboro	Vienna	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	Yes	Yes	Yes	Yes	Yes	Yes	
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	No	
Storm Ready certification	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Firewise Communities certification	No	No	No	No	No	No	No	
Public/Private partnership initiatives addressing disaster-related issues	Yes	Yes	No	No	Yes	No	No	
Other	No	No	No	No	No	No	No	

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

Flood Insurance and Community Rating System

Participation in the CRS strengthens local capabilities by lowering flood insurance premiums for jurisdictions that exceed NFIP minimum requirements. As noted in the CRS Eligible Communities List effective October 1, 2022, the City of Ruston is rated as a class 9 community.

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 2023, 318 communities in the State of Louisiana participate in the Federal Emergency Management Agency's National Flood Insurance Program (NFIP). Of these communities, 47 (or 13%) participate in the Community Rating System (CRS). Jefferson Parish leads the state with a rating of Class 5, followed by four cities with a rating of Class 6: the Cities of Gretna and Kenner in Jefferson Parish and the Cities of Mandeville and Slidell

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

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

In 2011¹, the National Flood Insurance Program (NFIP) completed a comprehensive review of the Community Rating System (CRS) that resulted in the release of a new CRS Coordinator's Manual. The changes to the 2013 CRS Coordinator's Manual are the result of a multi-year program evaluation that included input from a broad group of contributors to evaluate the CRS and refine the program to meet its stated goals. The changes helped to drive new achievements in the following six core flood loss reduction areas important to the NFIP: (1) reduce liabilities to the NFIP Fund; (2) improve disaster resiliency and sustainability of communities; (3) integrate a Whole Community approach to addressing emergency management; (4) promote natural and beneficial functions of floodplains; (5) increase understanding of risk, and; (6) strengthen adoption and enforcement of disaster-resistant building codes.

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

¹ <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 Lincoln Parish and its incorporated communities have a common guiding principle and is the demonstration of the parish's commitment to reduce risks from hazards. The strategy also serves as a guide for parish and local decision makers as they commit resources to reducing the effects of hazards.

Officials from all jurisdictions within the planning area confirmed the goals, objectives, actions and projects over the period of the hazard mitigation plan update process. The mitigation actions and projects in this 2023 HMP update are a product of analysis and review of the Lincoln Parish Hazard Mitigation Plan Planning Committee under the coordination of the Lincoln 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 2023 – April 2023

An online public opinion survey of Lincoln Parish residents was conducted between January 2023 and April 2023. The survey was designed to capture public perceptions and opinions regarding natural hazards in the Lincoln Parish planning area. In addition, the survey collected information regarding the methods and techniques preferred by the respondents for reducing the risks and losses associated with local hazards.

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

<https://www.surveymonkey.com/r/LincolnHM2022>

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

The goals are as follows:

1. Identifying and pursuing preventive measures that will reduce future damages from hazards
2. Enhancing public awareness and understanding of disaster preparedness
3. Reducing repetitive flood losses in the parish
4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards

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

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

2023 Mitigation Actions and Update on Previous Plan Actions

The Lincoln Parish Hazard Mitigation Plan Planning Committee identified new actions that would reduce and/or prevent future damage within the Lincoln 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 Lincoln Parish with a solid mitigation strategy through which risk and losses will be reduced throughout the parish and its communities.

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

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

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

Lincoln Parish Mitigation Actions

Previous Action Update

Unincorporated Lincoln Parish						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
LIN1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tropical Cyclones, Tornadoes, Winter Weather	Not Started - Carried Over (See Lincoln Parish Mitigation Action 1)
LIN2: Drainage Improvement	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Lincoln Parish Mitigation Action 2)
LIN3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Lincoln Parish Mitigation Action 3)
LIN4: Safe Room Projects	Construction of a safe room for first responders located in Lincoln Parish. Other locations will be identified based on funding availability.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started - Carried Over (See Lincoln Parish Mitigation Action 4)

LIN5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for, Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, and Winter Weather 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.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
LIN6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Excessive Heat, Thunderstorm, Tornadoes, Tropical Cyclones, Winter Weather	In Progress
LIN7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms	Not Started - Carried Over (See Lincoln Parish Mitigation Action 5)
LIN8: Warning Systems	Update/upgrade public warning system components throughout Lincoln Parish as necessary. Install audible and/or reverse 911 warning system(s)	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Not Started - Carried Over (See Lincoln Parish Mitigation Action 6)
LIN9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought, Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Lincoln Parish Mitigation Action 7)
LIN10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Lincoln Parish Mitigation Action 8)
LIN11: Community Wide Shelter Facility	Examine feasibility of constructing a community wide shelter facility.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See Lincoln Parish Mitigation Action 9)

LIN12: Flood Control Measures	Install and/or upgrade minor flood control structures including berms and floodwalls to protect critical facilities.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Deleted (Duplicate Action)
LIN13: Dam Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Dam Failure, Flooding, Tropical Cyclones	Deleted – Action not applicable to Lincoln Parish
LIN14: Drought Ordinances	Adopt ordinances requiring water-saving measures in time of drought.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought	Not Started - Carried Over (See Lincoln Parish Mitigation Action 10)
LIN15: Wildfire Ordinances	Strengthen penalties and improve enforcement capabilities of burn ban ordinances	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Wildfires	Not Started - Carried Over (See Lincoln Parish Mitigation Action 11)
LIN16: Localized Interior Drainage Projects	Investigate and implement localized interior drainage projects to reduce flood potential. Consider levees and drainage projects as well as purchase of sand bagging equipment.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
LIN17: Comprehensive Drainage Plan	Develop a comprehensive drainage plan that will provide future protection for areas in the Parish that experience flooding and drainage problems.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
LIN18: Stormwater Drainage Issues	Improve stormwater drainage issues throughout the Parish.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
LIN19: Storm Water and Sewer Adequacy	Review adequacy of current storm water and sewer system	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted
LIN20: Check Valve Addition	Review adding check valves to at risk structures.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted
LIN21: Highline Right of Ways Debris	Examine Highline Right of Ways for potential debris.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Not Started - Carried Over (See Lincoln Parish Mitigation Action 12)
LIN22: Alternate Water Source for Firefighting	Examine alternate water source (interconnecting water pipeline system from Lake D'Arbonne) for firefighting.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Wildfires	Completed
LIN23: Fire Station Wind Strapping	Hardening project to add wind strapping to fire stations.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Deleted (Duplicate Action)

LIN24: Dry Hydrant Program	Implement improvements to dry hydrant program	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Wildfires	Deleted (Duplicate Action)
LIN25: Improve Power Distribution	Harden and improve power distribution by maintaining right-of-ways, upgrading power lines and burying power lines where feasible.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Lincoln Parish Mitigation Action 13)
LIN26: Fire Station Bay Doors	Harden bay doors of all fire stations	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones	Deleted (Duplicate Action)
LIN27: Radio Repeater Site Hardening	Harden Radio Repeater sites. Add transient electrical protection and arrestors for radio equipment at repeater sites.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones	Deleted (Duplicate Action)
LIN28: Vegetation Study	Vegetation study to determine appropriate buffer zones for government facilities.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Wildfires	Deleted (Duplicate Action)
LIN29: Water Facility Transient Electrical Protection	Install appropriate transient electrical protection for all water facilities.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones	Deleted (Duplicate Action)
LIN30: Fire Proof Paint to Government Facilities	Apply fire proof paint to government facilities.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Wildfires	Deleted (Duplicate Action)
LIN31: Public Works Facility Transient Electrical Protection	Install appropriate transient electrical protection for public works facility.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones	Deleted (Duplicate Action)
LIN32: Exterior Door Hardening at Public Works Facility	Harden exterior doors at the public works facility.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones	Deleted (Duplicate Action)
LIN33: Radio Repeater Site Hardening	Harden radio repeater sites for Police (1), Fire Service (2) and Public Works (4).	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones	Deleted (Duplicate Action)
LIN34: Fire Station #2 Roof Retrofitting	Roof retrofit for Fire Station #2 (current roof is flat gravel) and for historic fire station.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones, Winter Weather	Deleted (Duplicate Action)
LIN35: Sewer Rehab Project	Review of City wide sewer rehab project	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
LIN36: City Hall Wind Retrofitting	Wind retrofit for City Hall.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones	Deleted (Duplicate Action)
LIN37: Civic Center Hardening	Harden the Civic Center.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones, Winter Weather	Deleted (Duplicate Action)

LIN38: City Hall Safe Room	Install Safe Room at City Hall.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
LIN39: Check Valve Installation	Install check valves for at risk facilities to prevent sewer backup	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
LIN40: Highline Examination	Examine Highlines to make sure lines are strong enough to support Ice accumulations.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Winter Weather	Deleted (Duplicate Action)
LIN41: De-Icing Plan	Develop a de-icing plan for roads and bridges.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Winter Weather	Not Started - Carried Over (See Lincoln Parish Mitigation Action 14)
LIN42: Fans and Cooling Devices	Examine funding source to purchase fans and other cooling devices for at risk population	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Excessive Heat	Ongoing
LIN43: Community Wide Shelter Facility	Examine feasibility of constructing a community wide shelter facility.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Excessive Heat, Tornadoes, Tropical Cyclones, Winter Weather, Wildfires	Deleted (Duplicate Action)
LIN44: TV and Radio PSAs	Develop TV/Radio PSAs to educate the public on winter storms (fire safety and emergency preparedness), flooding (evacuation, emergency preparedness, retrofitting, and flood insurance), Hazmat incidents (sheltering in place and evacuation), thunderstorms and lightning (emergency preparedness), hurricane and tornadoes (sheltering in place, evacuation, emergency preparedness, and structural retrofitting), hailstorms (sheltering your car during hailstorms), terrorism (sheltering in place and evacuation), drought (water conservation), and Wildfires (fire safety and evacuation) .	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought, Flooding, Tornadoes, Tropical Cyclones, Winter Weather, Wildfires	Deleted (Duplicate Action)

LIN45: Public Awareness	Increase public awareness of hazards and hazardous areas. Distribute public awareness information regarding seeking shelter during severe weather or other emergencies 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.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought, Flooding, Tornadoes, Tropical Cyclones, Winter Weather, Wildfires	Deleted (Duplicate Action)
LIN46: Emergency Response Effort Enhancement	Enhance the Parish's emergency response efforts and communication through frequent meetings with all agencies to include fixed facilities, transportation representatives, law enforcement officials, the local fire departments, and public utilities departments.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought, Flooding, Tornadoes, Tropical Cyclones, Winter Weather, Wildfires	Ongoing
LIN47: Public Education	Public Education and Outreach regarding specific hazards, risks, and vulnerabilities	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought, Flooding, Tornadoes, Tropical Cyclones, Winter Weather, Wildfires	Deleted (Duplicate Action)
LIN48: Repetitive Loss Structure Goals	Continue elevation/acquisition/ floodproofing projects and structural solutions to flooding by pursuing funding opportunities for repetitive loss structures. Annually review and correct the Repetitive Loss List by submitting correction sheets to FEMA.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)

LIN49: Community Rating System	Document Parish's activities according to the "Community Rating System (CRS). Apply for rating in CRS. Review and improve floodplain ordinance. Consider other higher regulatory standards (e.g. higher BFEs).	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Not Started - Carried Over (See Lincoln Parish Mitigation Action 15)
LIN50: RL List	Work with FEMA Region VI and GOHSEP to refine the RL list.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
LIN51: Improve Notification and Communication Systems	Improve communication and notifications before and during disasters including improvements to existing call down system, evacuation signage, new electrical substations, traffic control planning, sheltering plan, alternate transportation for critical and nursing care people, and timely TV / cable / radio notifications.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought, Flooding, Tornadoes, Tropical Cyclones, Winter Weather, Wildfires	Deleted (Duplicate Action)
LIN52: NOAA All Hazards Radios	Examine funding for purchase of NOAA All Hazards Radios	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Tornadoes, Tropical Cyclones, Winter Weather	Ongoing
LIN53: Fire Station Backup Generators	Backup Generators needed at 16 fire stations.	HMGP, BRIC, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Thunderstorm, Tornadoes, Winter Weather	Deleted (Duplicate Action)
LIN54: Public Alert System Funding	Examine funding source for Public Alert System.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Deleted (Duplicate Action)
LIN55: Fuel Strategies	Review/implement fuel strategy parish-wide for all hazards.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See Lincoln Parish Mitigation Action 16)
LIN56: International Building Codes	Review Implementation / Enforcement of International Building Codes.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
LIN57: Culvert Installation Policies	Review policies on culvert installation.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Deleted (Duplicate Action)

LIN58: Local Hazard Data Recording and Reporting	Develop a system to record and report local hazard data to the National Weather Service.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See Lincoln Parish Mitigation Action 17)
LIN59: ICS/NIMS Implementation	Continue ICS/NIMS implementation for all key participants.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones	Ongoing
LIN60: Beaver Problem Alleviation	Alleviate beaver problems @ 2nd Street running East to West while pond runs North to South to Allen Street and Hwy 80.	HMGP, BRIC, FMA, Local	1-5 years	Lincoln Parish Police Jury/Lincoln Parish OHSEP	Flooding	Not Started - Carried Over (See Lincoln Parish Mitigation Action 18)

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 1	Building Retrofits
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces damage from high wind related events and helps assure that the public buildings can be used, occupied and operable during or after storms.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 2	Drainage Improvements
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	High
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual 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.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns 4. Facilitate sound development in the parish and towns to reduce or eliminate hazard damages
PRIORITY	High
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects, Natural System Protection
How Action Aligns with Risk Reduction	Eliminates flooding risk of repetitive and severe repetitive loss structures.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 4	Safe Room Projects
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Construction of a safe room for first responders located in Lincoln Parish. Other locations will be identified based on funding availability.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 5	Lightning Mitigation
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	The installation of lightning rods and surge protectors in public buildings and critical infrastructure will reduce losses due to lightning strikes and surges in electricity.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 6	Warning Systems
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Update/upgrade public warning system components throughout Lincoln Parish as necessary. Install audible and/or reverse 911 warning system(s).
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 7	Potable Water
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	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.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 8	Promote Flood Insurance
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns
PRIORITY	High
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 9	Community Wide Shelter Facility
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Examine feasibility of constructing a community wide shelter facility.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Community wide shelter facility will allow vulnerable populations to have a safe place to take cover during imminent hazards
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 10	Drought Ordinances
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Adopt ordinances requiring water-saving measures in time of drought.
Type of Mitigation Action	Local Plans and Regulations, Natural System Protection
How Action Aligns with Risk Reduction	Adopting water saving ordinances will allow for water to be regulated and distributed throughout the community when drought related events are imminent
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 11	Wildfire Ordinances
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	Strengthen penalties and improve enforcement capabilities of burn ban ordinances
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Penalties will sue the public to be more cautious when burning items for recreation purposes
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 12	Highline Right of Ways Debris
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury, Entergy
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	Examine Highline Right of Ways for potential debris.
Type of Mitigation Action	Natural System Protection
How Action Aligns with Risk Reduction	Examining highlines will allow for crews to determine what needs to be cleared to avoid prolonging power outages
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 13	Improve Power Distribution
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	High
Action Description	Harden and improve power distribution by maintaining right-of-ways, upgrading power lines and burying power lines where feasible.
Type of Mitigation Action	Structure and Infrastructure Projects, Local Plans and Regulations
How Action Aligns with Risk Reduction	Improving power distribution will allow critical facilities to receive priority power allowing them to continue operations during hazards/disasters
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 14	De-Icing Plan
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Low
Action Description	Develop a de-icing plan for roads and bridges.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	De-icing plan will allow the opportunity to dispatch crews to deice roads and bridges which in return makes them safer for the public
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 15	Community Rating System (CRS)
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Document Parish's activities according to the "Community Rating System (CRS). Apply for rating in CRS. Review and improve floodplain ordinance. Consider other higher regulatory standards (e.g. higher BFEs).
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Applying for a rating in the CRS program will allow the parish to provide discounts to residents on their flood insurance policies.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 16	Fuel Strategies
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Review/implement fuel strategy parish-wide for all hazards.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Implementing fuel strategies will allow the parish to be equipped to respond to hazards with respect to machinery that needs fuel
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 17	Local Hazard Data Recording and Reporting
LEAD AGENCY	Lincoln Parish OHSEP
SUPPORTING AGENCIES	Lincoln Parish Police Jury
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Develop a system to record and report local hazard data to the National Weather Service.
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Data reporting will allow mitigation personnel to focus efforts to repeat hazards
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS LINCOLN PARISH	
DESCRIPTION	
LINCOLN PARISH MITIGATION ACTION 18	Beaver Problem Alleviation
LEAD AGENCY	Lincoln Parish Police Jury
SUPPORTING AGENCIES	Lincoln parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Alleviate beaver problems @ 2nd Street running East to West while pond runs North to South to Allen Street and Hwy 80.
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection
How Action Aligns with Risk Reduction	Removal of beaver dams will reduce the risk of backwater flooding in the area
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding

Village of Choudrant Mitigation Actions

Previous Action Update

Village of Choudrant						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
CHO1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tropical Cyclones, Tornadoes, Winter Weather	Not Started - Carried Over (See Village of Choudrant Mitigation Action 1)
CHO2: Drainage Improvement	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Village of Choudrant Mitigation Action 2)
CHO3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Village of Choudrant Mitigation Action 3)
CHO4: Safe Room Projects	Construction of a safe room for first responders located in Choudrant. Other locations will be identified based on funding availability.	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started - Carried Over (See Village of Choudrant Mitigation Action 4)
CHO5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, and Winter Weather 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.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing

CHO6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorm, Tornadoes, Tropical Cyclones, Winter Weather	In Progress
CHO7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Thunderstorms	Not Started - Carried Over (See Village of Choudrant Mitigation Action 5)
CHO8: Warning Systems	Update/upgrade public warning system components throughout Choudrant as necessary. Install audible and/or reverse 911 warning system(s)	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Not Started - Carried Over (See Village of Choudrant Mitigation Action 6)
CHO9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Village of Choudrant Mitigation Action 7)
CHO10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Village of Choudrant Mitigation Action 8)
CHO11: Community Wide Shelter Facility	Examine feasibility of constructing a community wide shelter facility.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See Village of Choudrant Mitigation Action 9)
CHO12: Flood Control Measures	Install and/or upgrade minor flood control structures including berms and floodwalls to protect critical facilities.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Deleted (Duplicate Action)
CHO13: Dam Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Dam Failure, Flooding, Tropical Cyclones	Deleted-action not applicable to Village of Choudrant
CHO14: Drought Ordinances	Adopt ordinances requiring water-saving measures in time of drought.	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Drought	Not Started - Carried Over (See Village of Choudrant Mitigation Action 10)
CHO15: Wildfire Ordinances	Strengthen penalties and improve enforcement capabilities of burn ban ordinances	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Wildfires	Not Started - Carried Over (See Village of Choudrant Mitigation Action 11)

CHO16: Elm Street and Hwy 145 Storm Water Drainage	Improve storm water drainage near Elm Street and Hwy 145.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
CHO17: Railroad Crossing Forced Drainage	Improve forced drainage near railroad crossing at south end of town.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
CHO18: Hwy 145 and Railroad Storm Water Drainage	Improve storm water drainage near hwy 145 and railroad intersection.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
CHO19: Choudrant High School and Elementary School Safe Rooms	Install safe rooms at Choudrant High School and Elementary School.	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
CHO20: City Hall and Police Station Roof Retrofitting	Roof retrofit of City Hall and Police Station	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Deleted (Duplicate Action)
CHO21: Stranded Motorist Shelter	Examine the feasibility of a shelter facility for stranded motorists.	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Tropical Cyclone, Winter Weather	Deleted (Duplicate Action)
CHO22: Back Up Power Supply and Generators for Choudrant and Simsboro High Schools	Add backup power supply/generators at drinking water supply stations Choudrant and Simsboro High Schools, and Wheatley and McCall Halls, and evaluate how best to link water supply systems for better distribution during partial system failures.	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclone, Winter Weather	Deleted (Duplicate Action)
CHO23: Police Station Backup Generator	Install a backup generator at the police station	HMGP, BRIC, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclone, Winter Weather	Deleted (Duplicate Action)
CHO24: Road Surface Layers	Increase surface layer of roadway and seal base to reduce losses from flood damage on (Campbell Rd at Choudrant Creek; Hogan Rd at Choudrant Creek; Norris Rd at Choudrant Creek; Beacon Light Rd; Sizemore Rd; Kouhn Rd; Gills Ferry Rd; CCC Rd @ Line Rd; Rockshop Rd @ Hwy 167; Gick Creek Rd @ Big Creek; Flowers Rd @ D'Arbonne Creek; Mays Crossing Rd @ D'Arbonne Creek; Wise Rd @ creek crossing; Tippit Rd on Parish Line; Young Rd; Kens Landing Rd; Della Rd).	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted

CHO25: Drainage Improvements	Drainage improvements to locations at Beacon Light Road, Hogan Road, Millie Road, and Sisemore Road.	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
CHO26: Beaver Problem Alleviation	Alleviate beaver problems	HMGP, BRIC, FMA, Local	1-5 years	Village of Choudrant Mayor's Office/Lincoln Parish OHSEP	Flooding	New

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 1	Building Retrofits
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces damage from high wind related events, and helps assure that the public buildings can be used, occupied and operable during or after storms.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 2	Drainage Improvements
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	High
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual 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.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns 4. Facilitate sound development in the parish and towns to reduce or eliminate hazard damages
PRIORITY	High
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects, Natural System Protection
How Action Aligns with Risk Reduction	Eliminates flooding risk of repetitive and severe repetitive loss structures.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 4	Safe Room Projects
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Construction of a safe room for first responders located in Choudrant. Other locations will be identified based on funding availability.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 5	Lightning Mitigation
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	The installation of lightning rods and surge protectors in public buildings and critical infrastructure will reduce losses due to lightning strikes and surges in electricity.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 6	Warning Systems
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Update/upgrade public warning system components throughout Choudrant as necessary. Install audible and/or reverse 911 warning system(s).
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 7	Potable Water
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	FEMA HGMP, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	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.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 8	Promote Flood Insurance
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns
PRIORITY	High
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 9	Community Wide Shelter Facility
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Examine feasibility of constructing a community wide shelter facility.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Community wide shelter facility will allow vulnerable populations to have a safe place to take cover during imminent hazards
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 10	Drought Ordinances
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Adopt ordinances requiring water-saving measures in time of drought.
Type of Mitigation Action	Local Plans and Regulations, Natural System Protection
How Action Aligns with Risk Reduction	Adopting water saving ordinances will allow for water to be regulated and distributed throughout the community when drought related events are imminent
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 11	Wildfire Ordinances
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	Strengthen penalties and improve enforcement capabilities of burn ban ordinances
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Penalties will sue the public to be more cautious when burning items for recreation purposes
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF CHOUDRANT	
DESCRIPTION	
VILLAGE OF CHOUDRANT MITIGATION ACTION 12	Beaver Problem Alleviation
LEAD AGENCY	Village of Choudrant Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Alleviate beaver problems
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection
How Action Aligns with Risk Reduction	Removal of beaver dams will reduce the risk of backwater flooding in the area
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding

Town of Dubach Mitigation Actions

Previous Action Update

Town of Dubach						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
DUB1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tropical Cyclones, Tornadoes, Winter Weather	Not Started - Carried Over (See Town of Dubach Mitigation Action 1)
DUB2: Drainage Improvement	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Town of Dubach Mitigation Action 2)
DUB3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Town of Dubach Mitigation Action 3)
DUB4: Safe Room Projects	Construction of a safe room for first responders located in Dubach. Other locations will be identified based on funding availability.	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started - Carried Over (See Town of Dubach Mitigation Action 4)

DUB5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, and Winter Weather 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.	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
DUB6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorm, Tornadoes, Tropical Cyclones, Winter Weather	In Progress
DUB7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Thunderstorms	Not Started - Carried Over (See Town of Dubach Mitigation Action 5)
DUB8: Warning Systems	Update/upgrade public warning system components throughout Dubach as necessary. Install audible and/or reverse 911 warning system(s)	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Not Started - Carried Over (See Town of Dubach Mitigation Action 6)
DUB9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Town of Dubach Mitigation Action 7)
DUB10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Town of Dubach Mitigation Action 8)
DUB11: Community Wide Shelter Facility	Examine feasibility of constructing a community wide shelter facility.	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See Town of Dubach Mitigation Action 9)

DUB12: Flood Control Measures	Install and/or upgrade minor flood control structures including berms and floodwalls to protect critical facilities.	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Deleted (Duplicate Action)
DUB13: Dam Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Dam Failure, Flooding, Tropical Cyclones	Deleted - Action not applicable to Town of Dubach
DUB14: Drought Ordinances	Adopt ordinances requiring water-saving measures in time of drought.	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Drought	Not Started - Carried Over (See Town of Dubach Mitigation Action 10)
DUB15: Wildfire Ordinances	Strengthen penalties and improve enforcement capabilities of burn ban ordinances	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Wildfires	Not Started - Carried Over (See Town of Dubach Mitigation Action 11)
DUB16: Town Hall and Community Center Wind Strengthening	Harden the roof and provide wind strengthening measures for Town Hall and the Community Center	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Deleted (Duplicate Action)
DUB17: Town Hall and Dubach High School Safe Rooms	Install safe rooms at Town Hall and Dubach High School	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
DUB18: Fire Proof Paint	Apply fire proof paint to Non Profit (DRABO).	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Wildfires	Deleted
DUB19: Community Center Backup Generator	Install a backup generator at the Community Center	HMGP, BRIC, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Deleted (Duplicate Action)
DUB20: Graham and Trammel Street Storm Water Drainage	Improve storm water drainage at Graham Street and Trammel Street.	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
DUB20: Beaver Problem Alleviation	Alleviate beaver problems	HMGP, BRIC, FMA, Local	1-5 years	Town of Dubach Mayor's Office/Lincoln Parish OHSEP	Flooding	New

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 1	Building Retrofits
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces damage from high wind related events, and helps assure that the public buildings can be used, occupied and operable during or after storms.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 2	Drainage Improvements
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	High
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual 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.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns 4. Facilitate sound development in the parish and towns to reduce or eliminate hazard damages
PRIORITY	High
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects, Natural System Protection
How Action Aligns with Risk Reduction	Eliminates flooding risk of repetitive and severe repetitive loss structures.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 4	Safe Room Projects
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Construction of a safe room for first responders located in Dubach. Other locations will be identified based on funding availability.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 5	Lightning Mitigation
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	The installation of lightning rods and surge protectors in public buildings and critical infrastructure will reduce losses due to lightning strikes and surges in electricity.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 6	Warning Systems
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Update/upgrade public warning system components throughout Dubach as necessary. Install audible and/or reverse 911 warning system(s).
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 7	Potable Water
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	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.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 8	Promote Flood Insurance
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns
PRIORITY	High
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 9	Community Wide Shelter Facility
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Examine feasibility of constructing a community wide shelter facility.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Community wide shelter facility will allow vulnerable populations to have a safe place to take cover during imminent hazards
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 10	Drought Ordinances
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Adopt ordinances requiring water-saving measures in time of drought.
Type of Mitigation Action	Local Plans and Regulations, Natural System Protection
How Action Aligns with Risk Reduction	Adopting water saving ordinances will allow for water to be regulated and distributed throughout the community when drought related events are imminent
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 11	Wildfire Ordinances
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	Strengthen penalties and improve enforcement capabilities of burn ban ordinances
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Penalties will sue the public to be more cautious when burning items for recreation purposes
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF DUBACH	
DESCRIPTION	
TOWN OF DUBACH MITIGATION ACTION 12	Beaver Problem Alleviation
LEAD AGENCY	Town of Dubach Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Alleviate beaver problems
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection
How Action Aligns with Risk Reduction	Removal of beaver dams will reduce the risk of backwater flooding in the area
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding

City of Grambling Mitigation Actions

Previous Action Update

City of Grambling						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
GRA1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tropical Cyclones, Tornadoes, Winter Weather	Not Started - Carried Over (See City of Grambling Mitigation Action 1)
GRA2: Drainage Improvement	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See City of Grambling Mitigation Action 2)
GRA3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See City of Grambling Mitigation Action 3)
GRA4: Safe Room Projects	Construction of a safe room for first responders located in Grambling. Other locations will be identified based on funding availability.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started - Carried Over (See City of Grambling Mitigation Action 4)
GRA5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, and Winter Weather 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.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing

GRA6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorm, Tornadoes, Tropical Cyclones, Winter Weather	In Progress
GRA7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Thunderstorms	Not Started - Carried Over (See City of Grambling Mitigation Action 5)
GRA8: Warning Systems	Update/upgrade public warning system components throughout Grambling as necessary. Install audible and/or reverse 911 warning system(s)	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Not Started - Carried Over (See City of Grambling Mitigation Action 6)
GRA9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See City of Grambling Mitigation Action 7)
GRA10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See City of Grambling Mitigation Action 8)
GRA11: Community Wide Shelter Facility	Examine feasibility of constructing a community wide shelter facility.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See City of Grambling Mitigation Action 9)
GRA12: Flood Control Measures	Install and/or upgrade minor flood control structures including berms and floodwalls to protect critical facilities.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Deleted (Duplicate Action)
GRA13: Dam Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Dam Failure, Flooding, Tropical Cyclones	Deleted – Not and applicable action for City of Grambling
GRA14: Drought Ordinances	Adopt ordinances requiring water-saving measures in time of drought.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Drought	Not Started - Carried Over (See City of Grambling Mitigation Action 10)

GRA15: Wildfire Ordinances	Strengthen penalties and improve enforcement capabilities of burn ban ordinances	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Wildfires	Not Started - Carried Over (See City of Grambling Mitigation Action 11)
GRA16: Harden Foster Johnson Infirmary	Harden Foster Johnson Infirmary at Grambling State University.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
GRA17: Harden University Police Headquarters	Harden University Police Headquarters at Grambling State University.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
GRA18: Intramural Center Safe Rooms	Construct safe rooms at Intramural Center Grambling State University.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
GRA19: Town Hall and Chamber of Commerce Roof Retrofitting	Retrofit the roof of Town Hall, Chamber of Commerce, and lift stations for hail protection.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Thunderstorms	Deleted (Duplicate Action)
GRA20: Town Hall and Police Department Safe Rooms	Retrofit Town Hall and Police Department to serve as safe rooms.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
GRA21: Chamber of Commerce Wind Retrofitting	Wind retrofit Chamber of Commerce building	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Deleted (Duplicate Action)
GRA22: Excessive Heat Shelter	Examine a plan to move at risk population to shelter locations during Excessive heat events.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Excessive Heat	Not Started - Carried Over (See City of Grambling Mitigation Action 12)
GRA23: City Hall, Police Station, and Community Center Backup Generators	Install a backup generator at City Hall, Police Station, and Community Center.	HMGP, BRIC, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Deleted (Duplicate Action)

GRA24: Continued Storm Water Drainage	Improve storm water drainage at Adams building and Woodson Hall on Grambling University Campus.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
GRA25: Beaver Storm Water Drainage	Improve storm water drainage due to beavers at South Pine Street and Hwy 150, RWE Jones and College Street, Kennedy and Main Street, RWE Jones Street at the Alumni House, Adams and Jackson Street, and on Oliver street.	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
GRA26: Beaver Problem Alleviation	Alleviate beaver problems	HMGP, BRIC, FMA, Local	1-5 years	City of Grambling Mayor's Office/Lincoln Parish OHSEP	Flooding	New

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 1	Building Retrofits
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces damage from high wind related events, and helps assure that the public buildings can be used, occupied and operable during or after storms.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 2	Drainage Improvements
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	High
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual 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.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns 4. Facilitate sound development in the parish and towns to reduce or eliminate hazard damages
PRIORITY	High
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects, Natural System Protection
How Action Aligns with Risk Reduction	Eliminates flooding risk of repetitive and severe repetitive loss structures.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 4	Safe Room Projects
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Construction of a safe room for first responders located in Grambling. Other locations will be identified based on funding availability.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 5	Lightning Mitigation
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	The installation of lightning rods and surge protectors in public buildings and critical infrastructure will reduce losses due to lightning strikes and surges in electricity.
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 6	Warning Systems
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Update/upgrade public warning system components throughout Grambling as necessary. Install audible and/or reverse 911 warning system(s).
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 7	Potable Water
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	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.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 8	Promote Flood Insurance
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns
PRIORITY	High
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 9	Community Wide Shelter Facility
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Examine feasibility of constructing a community wide shelter facility.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Community wide shelter facility will allow vulnerable populations to have a safe place to take cover during imminent hazards
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 10	Drought Ordinances
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Adopt ordinances requiring water-saving measures in time of drought.
Type of Mitigation Action	Local Plans and Regulations, Natural System Protection
How Action Aligns with Risk Reduction	Adopting water saving ordinances will allow for water to be regulated and distributed throughout the community when drought related events are imminent
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 11	Wildfire Ordinances
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	Strengthen penalties and improve enforcement capabilities of burn ban ordinances
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Penalties will sue the public to be more cautious when burning items for recreation purposes
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 12	Excessive Heat Shelter
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Examine a plan to move at risk population to shelter locations during Excessive heat events.
Type of Mitigation Action	Structure and Infrastructure Projects, Local Plans and Regulations
How Action Aligns with Risk Reduction	Shelters will serve as a back up safe space for at risk populations and public during a prolonged power outage during excessive heat events
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Excessive Heat

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF GRAMBLING	
DESCRIPTION	
CITY OF GRAMBLING MITIGATION ACTION 13	Beaver Problem Alleviation
LEAD AGENCY	City of Grambling Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Alleviate beaver problems
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection
How Action Aligns with Risk Reduction	Removal of beaver dams will reduce the risk of backwater flooding in the area
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding

City of Ruston Mitigation Actions

Previous Action Update

City of Ruston						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
RUS1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tropical Cyclones, Tornadoes, Winter Weather	Not Started - Carried Over (See City of Ruston Mitigation Action 1)
RUS2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See City of Ruston Mitigation Action 2)
RUS3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See City of Ruston Mitigation Action 3)
RUS4: Safe Room Projects	Construction of a safe room for first responders located in Ruston. Other locations will be identified based on funding availability.	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started - Carried Over (See City of Ruston Mitigation Action 4)
RUS5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, and Winter Weather 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.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
RUS6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorm, Tornadoes, Tropical Cyclones, Winter Weather	In Progress

RUS7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Thunderstorms	Not Started - Carried Over (See City of Ruston Mitigation Action 5)
RUS8: Warning Systems	Update/upgrade public warning system components throughout Ruston as necessary. Install audible and/or reverse 911 warning system(s)	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	In Progress
RUS9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See City of Ruston Mitigation Action 6)
RUS10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See City of Ruston Mitigation Action 7)
RUS11: Community Wide Shelter Facility	Examine feasibility of constructing a community wide shelter facility.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See City of Ruston Mitigation Action 8)
RUS12: Flood Control Measures	Install and/or upgrade minor flood control structures including berms and floodwalls to protect critical facilities.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Deleted (Duplicate Action)
RUS13: Dam Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Dam Failure, Flooding, Tropical Cyclones	Deleted - Not an applicable action for City of Ruston
RUS14: Drought Ordinances	Adopt ordinances requiring water-saving measures in time of drought.	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Drought	Not Started - Carried Over (See City of Ruston Mitigation Action 9)
RUS15: Wildfire Ordinances	Strengthen penalties and improve enforcement capabilities of burn ban ordinances	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Wildfires	Ongoing
RUS16: Storm Water Drainage	Improve Storm Water Drainage at Trenton & Georgia Streets, Alabama & Monroe Streets, Groveland Street, Jackson Street, Cornell Street, 2nd Street, Jefferson Street (caused by beaver dams upstream).	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)

RUS17: Elevate Lift Stations	Elevate Lift Stations within flood prone areas	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding	Not Started - Carried Over (See City of Ruston Mitigation Action 10)
RUS18: Excessive Heat Shelter	Examine a plan to move at risk population to shelter locations during Excessive heat events.	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Excessive Heat	Deleted (Duplicate Action)
RUS19: Public Alert Sirens	Examine feasibility of Public Alert Sirens within corporate limits.	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
RUS20: Lift Stations and Water Wells Backup Generators	Backup generators for 11 water wells and 10 lift stations.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
RUS21: ICS/NIMS Implementation	Continue ICS/NIMS implementation for all key participants.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Weather	Ongoing
RUS22: Beaver Problem Alleviation	Alleviate beaver problems @ 2nd Street running East to West while pond runs North to South to Allen Street and Hwy 80.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding	Not Started - Carried Over (See City of Ruston Mitigation Action 11)
RUS23: Parish Courthouse Safe Room	Construct safe rooms at Lincoln Parish Courthouse	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
RUS24: Northern Louisiana Medical Center Substation	Connect with a separate substation to the Northern Louisiana Medical Center.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Weather	Not Started - Carried Over (See City of Ruston Mitigation Action 12)
RUS25: Northern Louisiana Medical Center Safe Rooms	Construct safe rooms at Northern Louisiana Medical Center.	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)

RUS26: Boys and Girls Roof Retrofitting	Roof retrofit for Boys and Girls building on Memorial Drive.	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones, Winter Weather	Deleted (Duplicate Action)
RUS27: Bobby James Gymnasium Roof Retrofitting	Roof Retrofit for Bobby James Gymnasium	HMGP, BRIC, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones, Winter Weather	Deleted (Duplicate Action)
RUS28: Mays Trailer Park Lift Station Structure	Improve lift station structure at Mays trailer park and/or reroute lines to different lift station.	HMGP, BRIC, FMA, Local	1-5 years	City of Ruston Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 1	Building Retrofits
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces damage from high wind related events, and helps assure that the public buildings can be used, occupied and operable during or after storms.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 2	Drainage Improvements
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	High
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual 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.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns 4. Facilitate sound development in the parish and towns to reduce or eliminate hazard damages
PRIORITY	High
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects, Natural System Protection
How Action Aligns with Risk Reduction	Eliminates flooding risk of repetitive and severe repetitive loss structures.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 4	Safe Room Projects
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Construction of a safe room for first responders located in Ruston. Other locations will be identified based on funding availability.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 5	Lightning Mitigation
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	The installation of lightning rods and surge protectors in public buildings and critical infrastructure will reduce losses due to lightning strikes and surges in electricity.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 6	Potable Water
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	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.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 7	Promote Flood Insurance
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns
PRIORITY	High
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 8	Community Wide Shelter Facility
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Examine feasibility of constructing a community wide shelter facility.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Community wide shelter facility will allow vulnerable populations to have a safe place to take cover during imminent hazards
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 9	Drought Ordinances
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Adopt ordinances requiring water-saving measures in time of drought.
Type of Mitigation Action	Local Plans and Regulations, Natural System Protection
How Action Aligns with Risk Reduction	Adopting water saving ordinances will allow for water to be regulated and distributed throughout the community when drought related events are imminent
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 10	Elevate Lift Stations
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP, Ruston Public Works
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Elevate Lift Stations within flood prone areas
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Elevations of lift stations will allow them to continue effective operations during flood related events and to be less susceptible to flood water
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 11	Beaver Problem Alleviation
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Alleviate beaver problems @ 2nd Street running East to West while pond runs North to South to Allen Street and Hwy 80.
Type of Mitigation Action	Natural Systems Protection
How Action Aligns with Risk Reduction	Removal of beaver dams will decrease the chance of rivers/streams backing up and causing flooding in surrounding areas
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS CITY OF RUSTON	
DESCRIPTION	
CITY OF RUSTON MITIGATION ACTION 12	Northern Louisiana Medical Center Substation
LEAD AGENCY	City of Ruston Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Connect with a separate substation to the Northern Louisiana Medical Center.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Medical substation will allow for the support of more patients during disasters
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Wildfires, Winter Weather

Village of Simsboro Mitigation Actions

Previous Action Update

Village of Simsboro						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
SIM1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tropical Cyclones, Tornadoes, Winter Weather	Not Started - Carried Over (See Village of Simsboro Mitigation Action 1)
SIM2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Village of Simsboro Mitigation Action 2)
SIM3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Village of Simsboro Mitigation Action 3)
SIM4: Safe Room Projects	Construction of a safe room for first responders located in Simsboro. Other locations will be identified based on funding availability.	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started - Carried Over (See Village of Simsboro Mitigation Action 4)

SIM5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, and Winter Weather 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.	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing
SIM6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorm, Tornadoes, Tropical Cyclones, Winter Weather	In Progress
SIM7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Thunderstorms	Not Started - Carried Over (See Village of Simsboro Mitigation Action 5)
SIM8: Warning Systems	Update/upgrade public warning system components throughout Simsboro as necessary. Install audible and/or reverse 911 warning system(s)	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Not Started - Carried Over (See Village of Simsboro Mitigation Action 6)
SIM9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Village of Simsboro Mitigation Action 7)
SIM10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Village of Simsboro Mitigation Action 8)

SIM11: Community Wide Shelter Facility	Examine feasibility of constructing a community wide shelter facility.	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See Village of Simsboro Mitigation Action 9)
SIM12: Flood Control Measures	Install and/or upgrade minor flood control structures including berms and floodwalls to protect critical facilities.	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Deleted (Duplicate Action)
SIM13: Dam Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Dam Failure, Flooding, Tropical Cyclones	Deleted – Not an applicable action for Village of Simsboro
SIM14: Drought Ordinances	Adopt ordinances requiring water-saving measures in time of drought.	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Drought	Not Started - Carried Over (See Village of Simsboro Mitigation Action 10)
SIM15: Wildfire Ordinances	Strengthen penalties and improve enforcement capabilities of burn ban ordinances	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Wildfires	Not Started - Carried Over (See Village of Simsboro Mitigation Action 11)
SIM16: Simsboro High School and Town Hall Safe Rooms	Install safe rooms at Simsboro High School and Town Hall	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
SIM17: Simsboro High School Wind Protection	Add wind protection to Simsboro High School	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Tornadoes	Deleted (Duplicate Action)
SIM18: Town Hall and Police Station Roof Hardening	Harden the roof and provide wind strengthening measures at Town Hall and Police Station	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Deleted (Duplicate Action)
SIM19: Back Up Power Supply and Generators for Choudrant and Simsboro High Schools	Add backup power supply/generators at drinking water supply stations Choudrant and Simsboro High Schools, and Wheatley and McCall Halls, and evaluate how best to link water supply systems for better distribution during partial system failures.	HMGP, BRIC, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tropical Cyclones, Winter Weather	Deleted (Duplicate Action)
SIM20: Power Outage Reporting	Examine community outreach program regarding power outage reporting.	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Deleted

SIM21: Beaver Problem Alleviation	Alleviate beaver problems	HMGP, BRIC, FMA, Local	1-5 years	Village of Simsboro Mayor's Office/Lincoln Parish OHSEP	Flooding	New
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New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 1	Building Retrofits
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces damage from high wind related events, and helps assure that the public buildings can be used, occupied and operable during or after storms.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 2	Drainage Improvements
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	High
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual 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.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns 4. Facilitate sound development in the parish and towns to reduce or eliminate hazard damages
PRIORITY	High
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects, Natural System Protection
How Action Aligns with Risk Reduction	Eliminates flooding risk of repetitive and severe repetitive loss structures.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 4	Safe Room Projects
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Construction of a safe room for first responders located in Simsboro. Other locations will be identified based on funding availability.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 5	Lightning Mitigation
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	The installation of lightning rods and surge protectors in public buildings and critical infrastructure will reduce losses due to lightning strikes and surges in electricity.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 6	Warning Systems
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Update/upgrade public warning system components throughout Simsboro as necessary. Install audible and/or reverse 911 warning system(s).
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 7	Potable Water
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	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.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 8	Promote Flood Insurance
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns
PRIORITY	High
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 9	Community Wide Shelter Facility
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Examine feasibility of constructing a community wide shelter facility.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Community wide shelter facility will allow vulnerable populations to have a safe place to take cover during imminent hazards
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 10	Drought Ordinances
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Adopt ordinances requiring water-saving measures in time of drought.
Type of Mitigation Action	Local Plans and Regulations, Natural System Protection
How Action Aligns with Risk Reduction	Adopting water saving ordinances will allow for water to be regulated and distributed throughout the community when drought related events are imminent
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 11	Wildfire Ordinances
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	Strengthen penalties and improve enforcement capabilities of burn ban ordinances
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Penalties will sue the public to be more cautious when burning items for recreation purposes
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS VILLAGE OF SIMSBORO	
DESCRIPTION	
VILLAGE OF SIMSBORO MITIGATION ACTION 12	Beaver Problem Alleviation
LEAD AGENCY	Village of Simsboro Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Alleviate beaver problems
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection
How Action Aligns with Risk Reduction	Removal of beaver dams will reduce the risk of backwater flooding in the area
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding

Town of Vienna Mitigation Actions

Previous Action Update

Town of Vienna						
Jurisdiction-Specific Action	Action Description	Funding Source	Target Completion Date	Responsible Party, Agency, or Department	Hazard	Status
VIE1: Building Retrofits	Retrofit public buildings exterior shell to maintain use during and after storm events. Benefits: Reduces damage from high winds, and helps assure that the public buildings can be used, occupied and operable during or after storms.	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Flooding, Thunderstorms, Tropical Cyclones, Tornadoes, Winter Weather	Not Started - Carried Over (See Town of Vienna Mitigation Action 1)
VIE2: Drainage Improvements	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation. Benefits: Relieves Parish or local government and property owners of the continual flooding problems, with closed roadways (loss of function). Saves public funds for road repairs, drainage ditch repairs, sandbagging and blocking of roadways during storm periods.	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Town of Vienna Mitigation Action 2)
VIE3: Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Town of Vienna Mitigation Action 3)
VIE4: Safe Room Projects	Construction of a safe room for first responders located in Vienna. Other locations will be identified based on funding availability.	HMGP, BRIC, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires	Not Started - Carried Over (See Town of Vienna Mitigation Action 4)
VIE5: Education and Outreach	Enhance the public outreach programs for the parish and all communities by increasing awareness of risks and safety for Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, and Winter Weather 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.	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Ongoing

VIE6: Generators for continuity of operations and government	Procurement and Installation of generators at public facilities to ensure continued operations during and after events.	HMGP, BRIC, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorm, Tornadoes, Tropical Cyclones, Winter Weather	In Progress
VIE7: Lightning Mitigation	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property	HMGP, BRIC, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Thunderstorms	Not Started - Carried Over (See Town of Vienna Mitigation Action 5)
VIE8: Warning Systems	Update/upgrade public warning system components throughout Vienna as necessary. Install audible and/or reverse 911 warning system(s)	HMGP, BRIC, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather	Not Started - Carried Over (See Town of Vienna Mitigation Action 6)
VIE9: Potable Water	Create redundancy of potable water supply to critical facilities, especially hospitals, and provide protection of potable water supply by acquisition/installation of backflow preventers at appropriate critical locations.	HMGP, BRIC, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Drought, Excessive Heat, Thunderstorms, Tornadoes, Tropical Cyclones	Not Started - Carried Over (See Town of Vienna Mitigation Action 7)
VIE10: Promote Flood Insurance	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Not Started - Carried Over (See Town of Vienna Mitigation Action 8)
VIE11: Community Wide Shelter Facility	Examine feasibility of constructing a community wide shelter facility.	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather	Not Started - Carried Over (See Town of Vienna Mitigation Action 9)
VIE12: Flood Control Measures	Install and/or upgrade minor flood control structures including berms and floodwalls to protect critical facilities.	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Flooding, Tropical Cyclones	Deleted (Duplicate Action)
VIE13: Dam Failure Working Group	Create a working group in order to assess the extent and determine the possible effects of a dam failure.	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Dam Failure, Flooding, Tropical Cyclones	Deleted – Not an applicable action for Town of Vienna

VIE14: Drought Ordinances	Adopt ordinances requiring water-saving measures in time of drought.	HMGP, BRIC, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Drought	Not Started - Carried Over (See Town of Vienna Mitigation Action 10)
VIE15: Wildfire Ordinances	Strengthen penalties and improve enforcement capabilities of burn ban ordinances	HMGP, BRIC, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Wildfires	Not Started - Carried Over (See Town of Vienna Mitigation Action 11)
VIE16: Hwy 146 and Cypress Creek Storm Water Drainage	Improve Storm Water Drainage at Highway 146 and Cypress Creek (Caused by Cypress Creek).	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
VIE17: Rabb Road Storm Water Drainage	Improve Storm Water Drainage at Rabb Rd caused by Colvin Creek.	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Flooding	Deleted (Duplicate Action)
VIE18: Town Hall Hardening	Harden Town Hall and install a Safe Room to protect occupants	HMGP, BRIC, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Thunderstorms, Tornadoes, Tropical Cyclones	Deleted (Duplicate Action)
VIE19: Beaver Problem Alleviation	Alleviate beaver problems	HMGP, BRIC, FMA, Local	1-5 years	Town of Vienna Mayor's Office/Lincoln Parish OHSEP	Flooding	New

New Mitigation Actions

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 1	Building Retrofits
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Retrofit public buildings exterior shell to maintain use during and after storm events
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Reduces damage from high wind related events, and helps assure that the public buildings can be used, occupied and operable during or after storms.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 2	Drainage Improvements
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	High
Action Description	Will relieve flooding problems, reduce flood damage and costs of damage, overtopping of roads with drain water, while also keeping open roadways during periods of high precipitation.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Relieves Parish or local government and property owners of the continual 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.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 3	Mitigation of repetitive loss and severe repetitive loss properties and other hazard prone structures
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns 4. Facilitate sound development in the parish and towns to reduce or eliminate hazard damages
PRIORITY	High
Action Description	Elevation, acquisition-demolition, acquisition-relocations, and reconstruction of repetitive loss or flooding or other hazard prone properties.
Type of Mitigation Action	Local Plans and Regulations, Structure and Infrastructure Projects, Natural System Protection
How Action Aligns with Risk Reduction	Eliminates flooding risk of repetitive and severe repetitive loss structures.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 4	Safe Room Projects
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Construction of a safe room for first responders located in Vienna. Other locations will be identified based on funding availability.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Allows for continued operations of essential personal to actively respond during a natural hazard event
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 5	Lightning Mitigation
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Procurement and Installation of Lightning rods and surge protectors for public buildings to preserve life and property
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	The installation of lightning rods and surge protectors in public buildings and critical infrastructure will reduce losses due to lightning strikes and surges in electricity.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Thunderstorms

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 6	Warning Systems
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Update/upgrade public warning system components throughout Vienna as necessary. Install audible and/or reverse 911 warning system(s).
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	An upgraded public warning system will increase the likelihood of public notification immediately prior to an event
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Thunderstorms, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 7	Potable Water
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	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.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Creating a redundancy of potable water for critical facilities will reduce downtime and allow for the continuity of essential operations during and after an event.
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Drought, Flooding, Thunderstorms, Tornadoes, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 8	Promote Flood Insurance
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	<ol style="list-style-type: none"> 1. Identify and pursue preventative measures that will reduce future damages from hazards 2. Enhance public awareness and understanding of disaster preparedness 3. Reduce repetitive flood losses in the parish and towns
PRIORITY	High
Action Description	Promote the purchase of flood insurance. Advertise the availability, cost, and coverage of flood insurance through the National Flood Insurance Program (NFIP).
Type of Mitigation Action	Education and Awareness Programs
How Action Aligns with Risk Reduction	Educating the public on flood insurance will allow public to obtain insurance at a cost that's affordable to them and will help gain relief to their home and personal items during post-flood events
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Flooding, Tropical Cyclones

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 9	Community Wide Shelter Facility
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 4. Facilitating sound development in the parish to reduce or eliminate the potential impact of hazards
PRIORITY	Medium
Action Description	Examine feasibility of constructing a community wide shelter facility.
Type of Mitigation Action	Structure and Infrastructure Projects
How Action Aligns with Risk Reduction	Community wide shelter facility will allow vulnerable populations to have a safe place to take cover during imminent hazards
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Excessive Heat, Flooding, Tornadoes, Tropical Cyclones, Wildfires, Winter Weather

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 10	Drought Ordinances
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards
PRIORITY	Medium
Action Description	Adopt ordinances requiring water-saving measures in time of drought.
Type of Mitigation Action	Local Plans and Regulations, Natural System Protection
How Action Aligns with Risk Reduction	Adopting water saving ordinances will allow for water to be regulated and distributed throughout the community when drought related events are imminent
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Drought

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 11	Wildfire Ordinances
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 2. Enhancing public awareness and understanding of disaster preparedness
PRIORITY	Medium
Action Description	Strengthen penalties and improve enforcement capabilities of burn ban ordinances
Type of Mitigation Action	Local Plans and Regulations
How Action Aligns with Risk Reduction	Penalties will sue the public to be more cautious when burning items for recreation purposes
Current Status of Action	Not Started - Carried Over from 2016 Plan
Hazard Addressed	Wildfires

IMPLEMENTATION KEY FOR POTENTIAL HAZARD MITIGATION ACTIONS TOWN OF VIENNA	
DESCRIPTION	
TOWN OF VIENNA MITIGATION ACTION 12	Beaver Problem Alleviation
LEAD AGENCY	Town of Vienna Mayor's Office
SUPPORTING AGENCIES	Lincoln Parish OHSEP
TIMELINE	1-5 years
COST ESTIMATE	Unknown
POSSIBLE FUNDING SOURCE(S)	HMGP, BRIC, FMA, Local
ASSOCIATED GOALS	1. Identifying and pursuing preventive measures that will reduce future damages from hazards 3. Reducing repetitive flood losses in the parish
PRIORITY	Medium
Action Description	Alleviate beaver problems
Type of Mitigation Action	Structure and Infrastructure Projects, Natural Systems Protection
How Action Aligns with Risk Reduction	Removal of beaver dams will reduce the risk of backwater flooding in the area
Current Status of Action	Not Started – Carried Over from 2016 Plan
Hazard Addressed	Flooding

Action Prioritization

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

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

The planning committee prioritized the possible activities that could be pursued. Planning committee members consulted appropriate agencies in order to assist with the prioritizations. The results were items that address the major hazards, are appropriate for those hazards, are cost-effective, and are affordable. The planning committee met internally for mitigation action meetings to review and approve mitigation actions for Lincoln Parish 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.

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

Appendix A: Planning Process

Purpose

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

The Lincoln Parish Hazard Mitigation Plan Update

The Lincoln Parish Hazard Mitigation Plan Update process began in October 2022 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
9/20/2022	Kick Off Meeting	Phone Conference	No	Discuss with the Parish OHSEP Director expectations and requirements of the project. Discuss meeting schedules, committee make up, and next steps.
10/12/2022	Initial Planning Committee Meeting	Ruston, LA	No	Discuss with Lincoln Parish Hazard Mitigation Planning Committee the process and expectations of plan participants. Discuss timeline and action items for parish and each jurisdiction.
3/22/2023	Mitigation Action Workshop	Ruston, LA	No	Discussion with Lincoln Parish Hazard Mitigation Planning Committee of the outstanding data required for plan update, as well as discussion of mitigation actions (old and new) for plan update.
4/4/2023	Planning Committee Risk Assessment Review	Ruston, LA	Yes	Presentation of Risk Assessment and profiled hazards to Planning Committee.
4/4/2023	Public Meeting	Ruston, LA	Yes	Presentation of Risk Assessment s and profiled hazards to public. Presentation also includes current mitigation project highlights within communities and public survey discussion.
1/6/2023 – 4/3/2023	Public Opinion Survey	Online	Yes	This survey asked participants about public perceptions and opinions regarding natural hazards in Lincoln Parish. In addition, questions covered the methods and techniques preferred for reducing the risks and losses associated with these hazards. Survey link: https://www.surveymonkey.com/r/LincolnHM2022

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 Lincoln Parish Office of Homeland Security and Emergency Preparedness (OHSEP) oversaw the coordination of the 2023 Hazard Mitigation Plan Update Planning Committee during the update process. The parish OHSEP was responsible for identifying members for the committee. Representatives of relevant local and parish government departments were invited for inclusion in the planning process via email. The parish OHSEP also attempted to include members of private and nonprofit organizations within the parish, but did not receive a response. Representatives of Louisiana Tech University and Grambling State University were also invited to attend as stakeholders of academia units. Both Louisiana Tech and Grambling State had representatives attend various meetings held for Lincoln Parish and provided adequate information that was able to be implemented in this plan update.

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

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

Neighboring Community, Local and Regional Planning Process Involvement

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

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

- Participation in Hazard Mitigation planning meetings at the local and parish level
- 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 20165 update
- Risk Assessment review
- Plan document draft review
- Formal adoption of the Hazard Mitigation Plan

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

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

The 2023 Hazard Mitigation Plan Update Planning Committee consisted of representatives from the following parish, municipal or community stakeholders. Below is a detailed list of the 2023 HMPU Planning Committee:

Lincoln Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	Email
Kip Franklin	Director	Lincoln Parish OHSEP	kfranklin@lincolnparrish.org
Courtney Hall	Administrator	Lincoln Parish Police Jury	chall@lincolnparrish.org
Kevin Klepzig	Asst. Administrator	Lincoln Parish Police Jury	kklepzig@lincolnparrish.org
Jackson Matthews	GIS Manager	Lincoln Parish Police Jury	jmatthews@lincolnparrish.org
Bill Sanderson	Mayor	Village of Choudrant	BillSanderson@RustonLA.gov
Sybil Foster	Mayor	Village of Simsboro	mayor@simsboro.org
Mona Wilson	Mayor	Town of Dubach	townofdubach@att.net
Walter Carpenter	Mayor	Village of Vienna	villageofvienna@gmail.com
Reggie Skains	Mayor	Village of Downs ville	reggieskains@bellsouth.net
Alvin Bradley	Mayor	City of Grambling	abradley@cityofgrambling.org
Aundrea Livingston	Lieutenant	Grambling Police Department	aundrealivin@yahoo.com
John Freeman	Administrator	City of Ruston Public Works	JohnFreeman@RustonLA.gov
Chris Womack	Fire Chief	City of Ruston Fire Department	ChrisWomack@RustonLA.gov
Steve Rogers	Ruston Police Chief	City of Ruston Police Department	SteveRogers@RustonLA.gov

Landon Hunt	Major	Lincoln Parish Sheriff's Office	lhunt@lpsheriff.org
Will Dearmon	President	Ruston/Lincoln Chamber of Commerce	wdearmon@rustonlincoln.org
Kevin Reynolds	Fire Chief	Lincoln Parish Fire District #1	kreynolds@lincolnparrish.org
Susan White	EM/Risk Management	Northern Louisiana Medical Center	susan.white@ahmgt.com
Sam Wallace	Admin & Facilities	Louisiana Tech University	wallace@latech.edu
Don Braswell	Environmental Mgr.	Louisiana Tech University	braswell@latech.edu
Ewing Collier	Consultant	Grambling State University	collier256306@bellsouth.net
James Payton	Construction Mgr.	Lincoln Parish School Board	jpayton@lincolnschools.org
Neal Brown	Director	Ouachita Parish OHSEP	anbrown@ohsep.net
Shannon Futch	Director	Union Parish OHSEP	sfutch@upohsep.net
Todd Smith	Region 8 Coordinator	GOHSEP	Todd.Smith@la.gov
Michael Sutton	Treasurer	Lincoln Parish Police Jury	msutton@lincolnparrish.org

Program Integration

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

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

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

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

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

Meeting Documentation and Public Outreach Activities

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

Meeting #1: Hazard Mitigation Plan Update Kick-Off

Date: September 20, 2022

Location: Conference Call

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

Public Invitation: No

Meeting Invitees:

Lincoln Parish Hazard Mitigation Planning Committee		
Name	Title	Agency
Kip Franklin	Director	Lincoln Parish OHSEP
Chris Rippetoe	Program Manager	LSU-SDMI
Todd Smith	Regional Coordinator	GOHSEP

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

Date : October 12, 2022

Location : Ruston, LA

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

Public Invitation: No

Meeting Invitees:

Lincoln Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	Email
Kip Franklin	Director	Lincoln Parish OHSEP	kfranklin@lincolnparish.org
Courtney Hall	Administrator	Lincoln Parish Police Jury	chall@lincolnparish.org
Kevin Klepzig	Asst. Administrator	Lincoln Parish Police Jury	kklepzig@lincolnparish.org
Jackson Matthews	GIS Manager	Lincoln Parish Police Jury	jmatthews@lincolnparish.org
Bill Sanderson	Mayor	Village of Choudrant	BillSanderson@RustonLA.gov
Sybil Foster	Mayor	Village of Simsboro	mayor@simsboro.org
Mona Wilson	Mayor	Town of Dubach	townofdubach@att.net
Walter Carpenter	Mayor	Village of Vienna	villageofvienna@gmail.com
Reggie Skains	Mayor	Village of DownsVille	reggieskains@bellsouth.net
Alvin Bradley	Mayor	City of Grambling	abradley@cityofgrambling.org
Aundrea Livingston	Lieutenant	Grambling Police Department	aundrealivin@yahoo.com
John Freeman	Administrator	City of Ruston Public Works	JohnFreeman@RustonLA.gov
Chris Womack	Fire Chief	City of Ruston Fire Department	ChrisWomack@RustonLA.gov
Steve Rogers	Ruston Police Chief	City of Ruston Police Department	SteveRogers@RustonLA.gov
Landon Hunt	Major	Lincoln Parish Sheriff's Office	lhunt@lpsheriff.org
Will Dearmon	President	Ruston/Lincoln Chamber of Commerce	wdearmon@rustonlincoln.org
Kevin Reynolds	Fire Chief	Lincoln Parish Fire District #1	kreyolds@lincolnparish.org
Susan White	EM/Risk Management	Northern Louisiana Medical Center	susan.white@ahmgt.com
Sam Wallace	Admin & Facilities	Louisiana Tech University	wallace@latech.edu
Don Braswell	Environmental Mgr.	Louisiana Tech University	braswell@latech.edu
Ewing Collier	Consultant	Grambling State University	collier256306@bellsouth.net
James Payton	Construction Mgr.	Lincoln Parish School Board	jpayton@lincolnschools.org
Neal Brown	Director	Ouachita Parish OHSEP	anbrown@ohsep.net
Shannon Futch	Director	Union Parish OHSEP	sfutch@upohsep.net
Todd Smith	Region 8 Coordinator	GOHSEP	Todd.Smith@la.gov
Michael Sutton	Treasurer	Lincoln Parish Police Jury	msutton@lincolnparish.org

Meeting #3: Hazard Mitigation Plan Update Mitigation Action Workshop

Date: March 22, 2023**Location:** Ruston, LA**Purpose:** Discussion with Lincoln Parish Hazard Mitigation Planning Committee of the outstanding data required for plan update, as well as discussion of mitigation actions (old and new) for plan update. Continued timeline discussions.**Public Invitation:** No**Meeting Invitees:**

Lincoln Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	Email
Kip Franklin	Director	Lincoln Parish OHSEP	kfranklin@lincolnparrish.org
Courtney Hall	Administrator	Lincoln Parish Police Jury	chall@lincolnparrish.org
Kevin Klepzig	Asst. Administrator	Lincoln Parish Police Jury	kklepzig@lincolnparrish.org
Jackson Matthews	GIS Manager	Lincoln Parish Police Jury	jmatthews@lincolnparrish.org
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Mona Wilson	Mayor	Town of Dubach	townofdubach@att.net
Walter Carpenter	Mayor	Village of Vienna	villageofvienna@gmail.com
Reggie Skains	Mayor	Village of Downsville	reggieskains@bellsouth.net
Alvin Bradley	Mayor	City of Grambling	abradley@cityofgrambling.org
Aundrea Livingston	Lieutenant	Grambling Police Department	aundrealivin@yahoo.com
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Chris Womack	Fire Chief	City of Ruston Fire Department	ChrisWomack@RustonLA.gov
Steve Rogers	Ruston Police Chief	City of Ruston Police Department	SteveRogers@RustonLA.gov
Landon Hunt	Major	Lincoln Parish Sheriff's Office	lhunt@lpsheriff.org
Will Dearmon	President	Ruston/Lincoln Chamber of Commerce	wdearmon@rustonlincoln.org
Kevin Reynolds	Fire Chief	Lincoln Parish Fire District #1	kreynolds@lincolnparrish.org
Susan White	EM/Risk Management	Northern Louisiana Medical Center	susan.white@ahmgt.com
Sam Wallace	Admin & Facilities	Louisiana Tech University	wallace@latech.edu
Don Braswell	Environmental Mgr.	Louisiana Tech University	braswell@latech.edu
Ewing Collier	Consultant	Grambling State University	collier256306@bellsouth.net
James Payton	Construction Mgr.	Lincoln Parish School Board	jpayton@lincolnschools.org
Neal Brown	Director	Ouachita Parish OHSEP	anbrown@ohsep.net
Shannon Futch	Director	Union Parish OHSEP	sfutch@upohsep.net
Todd Smith	Region 8 Coordinator	GOHSEP	Todd.Smith@la.gov
Michael Sutton	Treasurer	Lincoln Parish Police Jury	msutton@lincolnparrish.org

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

Date: April 4, 2023

Location: Ruston, LA

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

Public Invitation: No

Meeting Invitees:

Lincoln Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	Email
Kip Franklin	Director	Lincoln Parish OHSEP	kfranklin@lincolnparrish.org
Courtney Hall	Administrator	Lincoln Parish Police Jury	chall@lincolnparrish.org
Kevin Klepzig	Asst. Administrator	Lincoln Parish Police Jury	kklepzig@lincolnparrish.org
Jackson Matthews	GIS Manager	Lincoln Parish Police Jury	jmatthews@lincolnparrish.org
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Sybil Foster	Mayor	Village of Simsboro	mayor@simsboro.org
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Walter Carpenter	Mayor	Village of Vienna	villageofvienna@gmail.com
Reggie Skains	Mayor	Village of Downs ville	reggieskains@bellsouth.net
Alvin Bradley	Mayor	City of Grambling	abradley@cityofgrambling.org
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Steve Rogers	Ruston Police Chief	City of Ruston Police Department	SteveRogers@RustonLA.gov
Landon Hunt	Major	Lincoln Parish Sheriff's Office	lhunt@lpsheriff.org
Will Dearmon	President	Ruston/Lincoln Chamber of Commerce	wdearmon@rustonlincoln.org
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Don Braswell	Environmental Mgr.	Louisiana Tech University	braswell@latech.edu
Ewing Collier	Consultant	Grambling State University	collier256306@bellsouth.net
James Payton	Construction Mgr.	Lincoln Parish School Board	jpayton@lincolnschools.org
Neal Brown	Director	Ouachita Parish OHSEP	anbrown@ohsep.net
Shannon Futch	Director	Union Parish OHSEP	sfutch@upohsep.net
Todd Smith	Region 8 Coordinator	GOHSEP	Todd.Smith@la.gov
Michael Sutton	Treasurer	Lincoln Parish Police Jury	msutton@lincolnparrish.org

Meeting #5: Hazard Mitigation Plan Update Public Meeting

Date: April 4, 2023**Location:** Ruston, LA

Purpose: The Public Meeting allowed the public and community stakeholders to participate and provide input into the hazard mitigation planning process. Presentation also included highlights of current mitigation projects highlights, as well as public survey discussion. The public meeting notice on the following page was presented to stakeholders as well as the general public, including those in underserved communities and those populations deemed as socially vulnerable. This effort was carried out by Lincoln Parish, and with assistance from SDMI, so that these certain populations were presented with the opportunity to be invited to attend the public meeting and provide feedback to this plan update. This notice was distributed via email as well as posted on the front door of the courthouse, published in the local newspaper, and posted via social media.

Public Invitation: Yes**Meeting Invitees:**

Lincoln Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	Email
Kip Franklin	Director	Lincoln Parish OHSEP	kfranklin@lincolnparrish.org
Courtney Hall	Administrator	Lincoln Parish Police Jury	chall@lincolnparrish.org
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Jackson Matthews	GIS Manager	Lincoln Parish Police Jury	jmatthews@lincolnparrish.org
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Mona Wilson	Mayor	Town of Dubach	townofdubach@att.net
Walter Carpenter	Mayor	Village of Vienna	villageofvienna@gmail.com
Reggie Skains	Mayor	Village of Downs ville	reggieskains@bellsouth.net
Alvin Bradley	Mayor	City of Grambling	abradley@cityofgrambling.org
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Shannon Futch	Director	Union Parish OHSEP	sfutch@upohsep.net
Todd Smith	Region 8 Coordinator	GOHSEP	Todd.Smith@la.gov
Michael Sutton	Treasurer	Lincoln Parish Police Jury	msutton@lincolnparrish.org

Meeting Announcement:

LINCOLN PARISH OFFICE OF HOMELAND SECURITY & EMERGENCY PREPAREDNESS

PUBLIC MEETING ANNOUNCEMENT

Lincoln Parish and its partners are seeking community input for the 2023 Lincoln Parish Hazard Mitigation Plan update!

Lincoln 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 Lincoln 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 Tuesday April 4th, for a public meeting at 10:00am to learn more about the plan and share your input on the risks and vulnerabilities that most impact you and your community.

Meeting Location:

Lincoln Parish Clerk of Court
100 W Texas Ave.
Ruston, LA 71270

Residents of Lincoln 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/LincolnHM2022>

The Parish appreciates your input.

If you have questions, please contact the Lincoln Parish OHSEP Office

Outreach Activity #1: Public Opinion Survey

Date: Ongoing throughout planning process

Location: Web survey

Public Invitation: Yes

As referenced in the *Mitigation Strategy* section of this document, an online public opinion survey of Lincoln Parish residents was conducted between January and April 2023. The survey was designed to capture public perceptions and opinions regarding natural hazards in Lincoln Parish. In addition, the survey collected information regarding the methods and techniques preferred by the respondents for reducing the risks and losses associated with local hazards. As of April 3, 2023, there have been 0 responses to the Lincoln Parish Hazard Mitigation Public Opinion Survey. The link to the full survey can be found here: <https://www.surveymonkey.com/r/LincolnHM2022>.

Outreach Activity #2: Public Meeting Activity - Incident Questionnaire

Date: April 4, 2023

Location: Public Meeting

Public Invitation: Yes

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

Outreach Activity #3: 2023 Lincoln Parish Hazard Mitigation Plan Public Review

Date: Ongoing

Location: SDMI Hazard Mitigation Website

Public Initiation: Yes

After an initial review by the Lincoln Parish Planning Committee was completed, the 2023 Lincoln Parish Hazard Mitigation Plan was made available for public review and comment. The plan was hosted on SDMI's Hazard Mitigation website: <https://hmplans.sdmi.lsu.edu/Home/Parish/lincoln>.

LINCOLN PARISH PUBLIC MEETING

PUBLIC ACTIVITY: INCIDENT/ ISSUE QUESTIONNAIRE

1. HAZARD TYPE(S):

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

F. OTHER:

2. DESCRIBE INCIDENT OR ISSUE:

3. LOCATION:

A. CITY:

B. ADDRESS OR AREA:

C. LOCALIZED OR DISPERSED:

4. INTENSITY

A. DEPTH (FLOODING) OR SIZE (HAIL ETC.):

B. WIND STRENGTH:

5. RE-OCCURRING OR ONE-TIME

A. IF RE-OCCURRING, HOW OFTEN?

6. WHAT TYPE OF INTERRUPTIONS
DOES/DID THE INCIDENT OR ISSUE
CAUSE? (BUSINESS CLOSURE,
DAMAGE, EVACUATION, ETC.)

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

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

Appendix B: Plan Maintenance

Purpose

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

Implementing, Monitoring, Evaluating, and Updating the Plan

The Lincoln Parish Hazard Mitigation Planning Committee will be responsible for implementing, monitoring, evaluating, and documenting the plan's progress throughout the year. Part of the plan maintenance process should include a system by which local governing bodies incorporate the HMP into the parish'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 the SDMI 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

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

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

Methods for Monitoring and Evaluating the Plan and Plan Evaluation Criteria

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

and update the plan. The Lincoln Parish OHSEP Director will be responsible for conducting the annual planning committee meetings.

The lead person of the agency responsible for the implementation of a specific mitigation action will submit a progress report to the Director at least thirty days prior to the planning committee meeting. The progress report will provide project status monitoring to include the following: whether the project has started; if not started, reason for not starting; if started, status of the project; if the project is completed, whether it has eliminated the problem; and any changes recommended to improve the implementation of the project etc. In addition, the progress report will provide status monitoring on the plan evaluation, changes to the hazard profile, changes to the risk assessment, and public input on the Hazard Mitigation Plan updates and reviews.

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

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

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

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

The HMP will be updated every five years to remain eligible for continued HMGP funding. The planning committee will be responsible for updating the HMP. The OHSEP Director will be the lead person for the HMP update. The HMP update process will commence at least one year prior to the expiration of the

plan. The HMP will be updated after a major disaster if an annual evaluation of the plan indicates a substantial change in hazard profile and risk assessment in the parish.

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

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

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

2023 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 2023 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 Lincoln Parish Hazard Mitigation Plan Planning Committee and participating jurisdictions to determine additional implementation procedures when appropriate. This may include integrating the requirements of the Lincoln Parish Hazard Mitigation Plan into each jurisdiction's planning documents, processes, or mechanisms as follows:

- Ordinances, Resolutions, Regulations
- Floodplain Ordinances
- Comprehensive/Master Plans
- Capital Improvement Plans
- Economic Development Plans
- Emergency Operations Plans
- Continuity of Operations Plans
- Transportation Plan
- Stormwater Management Plan
- Community Wildfire Protection Plan

Opportunities to integrate the requirements of this plan into other local planning mechanisms will continue to be identified through future meetings of the Lincoln Parish Hazard Mitigation Planning Committee and through the five-year review process described herein. The primary means for integrating mitigation strategies into other local planning mechanisms will be through the revision, update and implementation of each jurisdiction's individual plans that require specific planning and administrative

tasks (e.g. risk assessment, plan amendments, ordinance revisions, capital improvement projects, etc.). While there have been no instances of the mitigation strategy being incorporated into other planning documents since the adoption of the 2016 Lincoln 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 2023 Lincoln Hazard Mitigation Plan into other planning documents when appropriate.

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

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

On behalf of the Village of Choudrant, Town of Dubach, City of Grambling, City of Ruston, Village of Simsboro, and Town of Vienna, Lincoln Parish has the authority to incorporate the contents of the Hazard Mitigation Plan into the parish's existing regulatory mechanisms. Agreements are currently in place with jurisdictions to allow for the parish incorporation mechanisms to take place.

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

Lincoln Parish

<i>Capital Improvements Plan</i>	Updated as needed	Lincoln Parish Police Jury	✓
<i>Continuity of Operations Plan</i>	Updated as needed	Lincoln Parish OHSEP	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	Lincoln Parish OHSEP	✓
<i>Transportation Plan</i>	Updated as needed	Lincoln Parish Police Jury	✓
<i>Stormwater Management Plan</i>	Updated as needed	Lincoln parish Police Jury	✓
<i>Community Wildfire Protection Plan</i>	Updated as needed	Lincoln Parish OHSEP	✓

Village of Choudrant

<i>Comprehensive/Master Plan</i>	Updated as needed	Village of Choudrant Mayor's Office	✓
<i>Capital Improvements Plan</i>	Updated as needed	Village of Choudrant Mayor's Office	✓
<i>Economic Development Plan</i>	Updated as needed	Village of Choudrant Mayor's Office	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	Village of Choudrant Mayor's Office	✓
<i>Continuity of Operations Plan</i>	Updated as needed	Village of Choudrant Mayor's Office	✓

Town of Dubach

<i>Local Emergency Operations Plan</i>	Updated as needed	Town of Dubach Mayor's Office	✓
<i>Continuity of Operations Plan</i>	Updated as needed	Town of Dubach Mayor's Office	✓

City of Grambling

Economic Development Plan	Updated as needed	City of Grambling Mayor's Office	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	City of Grambling Mayor's Office	✓
<i>Continuity of Operations Plan</i>	Updated as needed	City of Grambling Mayor's Office	✓

City of Ruston

<i>Comprehensive/Master Plan</i>	Updated as needed	City of Ruston Mayor's Office	✓
<i>Capital Improvements Plan</i>	Updated as needed	City of Ruston Mayor's Office	✓
<i>Continuity of Operations Plan</i>	Updated as needed	City of Ruston Mayor's Office	✓
<i>Local Emergency Operations Plan</i>	Updated as needed	City of Ruston Mayor's Office	✓
<i>Transportation Plan</i>	Updated as needed	City of Ruston Mayor's Office	✓
<i>Stormwater Management Plan</i>	Updated as needed	City of Ruston Mayor's Office	✓

Village of Simsboro

<i>Local Emergency Operations Plan</i>	Updated as needed	Village of Simsboro Mayor's Office	✓
<i>Continuity of Operations Plan</i>	Updated as needed	Village of Simsboro Mayor's Office	✓

Town of Vienna

<i>Local Emergency Operations Plan</i>	Updated as needed	Town of Vienna Mayor's Office	✓
<i>Continuity of Operations Plan</i>	Updated as needed	Town of Vienna 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 Lincoln Parish Planning Area

Lincoln Parish Planning Area Critical Facilities									
Type	Name	Drought	Flooding	Excessive Heat	Thunderstorms	Tornadoes	Tropical Cyclones	Wildfires	Winter Weather
Government Facilities	Lincoln Parish Courthouse	X			X	X	X		X
	Lincoln Parish Courthouse Annex	X			X	X	X		X
	Lincoln Parish Police Jury Complex	X			X	X	X		X
	Lincoln Parish Public Works Department	X			X	X	X		X
	Choudrant Village Hall	X			X	X	X		X
	Dubach Town Hall	X			X	X	X		X
	Grambling City Hall	X			X	X	X		X
	Ruston City Hall	X			X	X	X		X
	Simsboro Town Hall	X			X	X	X		X
	Vienna Town Hall	X			X	X	X		X
Fire & SAR	LPFD #1, Vienna Station	X			X	X	X	X	X
	LPFD #2, Mt. Olive Station	X			X	X	X	X	X
	LPFD #3, Tech Farm Station	X			X	X	X		X
	LPFD #4, Maner Sisemore Station	X			X	X	X		X
	LPFD #5, Chandler Road Station	X			X	X	X	X	X
	LPFD #6, Dubach Station	X			X	X	X	X	X
	LPFD #7, Hico Station	X			X	X	X		X
	LPFD #8, Corinth, Hood, McCurry Station	X			X	X	X		X
	LPFD #9, Cross Roads Station	X			X	X	X		X
	LPFD #10, Fellowship, Britt Station	X			X	X	X		X
	LPFD #11, Simsboro Station	X			X	X	X	X	X
	LPFD #12, Oak Grove Station	X			X	X	X		X
	LPFD #13, Madden Road, Carrol Station	X			X	X	X	X	X

	LPFD #14, Nobles School Station	X			X	X	X		X
	LPFD #15, Kings Gin Station	X			X	X	X	X	X
	LPFD #16, Sibley Station	X			X	X	X	X	X
	LPFD #17, Tremont Station	X			X	X	X	X	X
	LPFD #18, Downsville West Station	X			X	X	X		X
	LPFD #19, D'Arbonne, Brewster Station	X			X	X	X	X	X
	LPFD #20, Mineral Springs Station	X			X	X	X	X	X
	LPFD #21, Rolling Hills Station	X			X	X	X	X	X
	Lincoln Parish Fire Training Center	X			X	X	X	X	X
	Choudrant Fire Station #1	X			X	X	X	X	X
	Choudrant Fire Station #2	X			X	X	X	X	X
	Grambling Fire Department	X			X	X	X	X	X
	Ruston Fire Dept. Sta. 1	X			X	X	X	X	X
	Ruston Fire Dept. Sta. 2	X			X	X	X	X	X
	Ruston Fire Dept. Sta. 3	X			X	X	X	X	X
Law Enforcement	Lincoln Parish Public Safety Complex	X			X	X	X		X
	Lincoln Parish Detention Center	X			X	X	X		X
	Choudrant Public Safety Building	X			X	X	X		X
	Dubach Police Department	X			X	X	X		X
	Grambling Police Department	X			X	X	X		X
	Ruston Police Department	X			X	X	X		X
	Simsboro Police Department	X			X	X	X		X

Public Health	Lincoln Parish Health Unit	X			X	X	X		X
Education	A.E. Phillips Laboratory School	X			X	X	X		X
	Choudrant Elementary School	X			X	X	X		X
	Choudrant High School	X			X	X	X		X
	Cypress Springs Elementary School	X			X	X	X		X
	Dubach Elementary School	X			X	X	X		X
	Glen View Elementary School	X			X	X	X		X
	Hillcrest Elementary School	X			X	X	X		X
	I.A. Lewis Middle School	X			X	X	X		X
	Lincoln Parish STEM Center	X			X	X	X		X
	Lincoln Parish Early Childhood Center	X			X	X	X		X
	Lincoln Parish School Board	X			X	X	X		X
	Ruston Elementary School	X			X	X	X		X
	Ruston Junior High School	X			X	X	X		X
	Ruston High	X			X	X	X		X
	Simsboro School	X			X	X	X		X

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Appendix D: Plan Adoption

Unincorporated Lincoln Parish

Resolution No. 23-20 of 2023

RESOLUTION ADOPTING THE LINCOLN PARISH HAZARD MITIGATION PLAN

WHEREAS, LINCOLN PARISH is a grant recipient of Hazard Mitigation Grant Program (HMGP) funding through the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and the Federal Emergency Management Agency (FEMA) for the purpose of reviewing and updating the Lincoln Parish Hazard Mitigation Plan.

WHEREAS, the Plan will enable LINCOLN PARISH to better prepare for and reduce the effects of disasters and;

WHEREAS, LINCOLN PARISH formed a Steering Committee consisting of state and local governments and agencies, local organizations, businesses and private citizens and;

WHEREAS, this Lincoln Parish Steering Committee has prepared and reviewed the Lincoln Parish Hazard Mitigation Plan, update 2016 and updated it accordingly, now titled (the "2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan") that will guide the Parish and;

NOW, THEREFORE, BE IT RESOLVED BY THE POLICE JURY OF LINCOLN PARISH, LOUISIANA, in Regular Session convened on the 8th day of August, 2023, that it does hereby formally adopt the 2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan.

/s/ Courtney Hall
Courtney Hall
Interim Parish Administrator

/s/ Richard I. Durrett
Richard I. Durrett
Parish President

I, Courtney Hall, Interim Parish Administrator, Lincoln Parish Police Jury, do hereby certify that the above and foregoing is a true and correct copy of a Resolution adopted by the Police Jury of Lincoln Parish, Louisiana, convened in regular session on the 9th day of August, 2023 at which meeting a quorum was present.


Courtney Hall
Interim Parish Administrator

Village of Choudrant

RESOLUTION
OF THE
TOWN COUNCIL
VILLAGE OF CHOUDRANT

RESOLUTION ADOPTING THE LINCOLN PARISH HAZARD MITIGATION PLAN

WHEREAS LINCOLN PARISH is a grant recipient of Hazard Mitigation Grant Program (HMGP) funding through the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and the Federal Emergency Management Agency (FEMA) for the purpose of reviewing and updating the Lincoln Parish Hazard Mitigation Plan and;

WHEREAS the Plan will enable LINCOLN PARISH to better prepare for and reduce the effects of disasters and;

WHEREAS LINCOLN PARISH formed a Steering Committee consisting of state and local governments and agencies, local organizations, businesses and private citizens and;

WHEREAS, this Lincoln Parish Steering Committee has prepared and reviewed the Lincoln Parish Hazard Mitigation Plan, update 2016 and updated it accordingly, now titled (the "2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan") that will guide the Parish and;

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN COUNCIL, OF THE VILLAGE OF CHOUDRANT, LOUISIANA, in Regular Session convened on the 7th day of August 2023, that it does hereby formally adopt the 2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan.

This Resolution, after having been read and considered by a quorum of the Board of Aldermen, on motion to adopt by Alderman, Thomas Patton and seconded by Alderman, John Croswell, was fully adopted by vote on August 7, 2023.


Mayor Bill Sanderson – Village of Choudrant, Louisiana

Town of Dubach

Resolution No. 435 of 2023

RESOLUTION ADOPTING THE LINCOLN PARISH HAZARD MITIGATION PLAN

WHEREAS, LINCOLN PARISH is a grant recipient of Hazard Mitigation Grant Program (HMGP) funding through the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and the Federal Emergency Management Agency (FEMA) for the purpose of reviewing and updating the Lincoln Parish Hazard Mitigation Plan and;

WHEREAS, the Plan will enable LINCOLN PARISH to better prepare for and reduce the effects of disasters and;

WHEREAS, LINCOLN PARISH formed a Steering Committee consisting of state and local governments and agencies, local organizations, businesses and private citizens and;

WHEREAS, this Lincoln Parish Steering Committee has prepared and reviewed the Lincoln Parish Hazard Mitigation Plan, update 2016 and updated it accordingly, now titled (the "2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan") that will guide the Parish and;

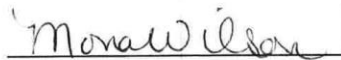
NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE TOWN OF DUBACH, LOUISIANA, in Regular Session convened on the 21st day of August, 2023, that it does hereby formally adopt the 2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan.

Yay: 4

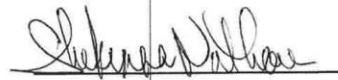
Nay: 0

Absent: 1

Abstain: 0



Mona Wilson, Mayor



Shekenna Nathan, Town Clerk

City of Grambling

Resolution No. 10 of 2023
RESOLUTION ADOPTING THE LINCOLN PARISH HAZARD MITIGATION PLAN

WHEREAS, LINCOLN PARISH is a grant recipient of Hazard Mitigation Grant Program (HMGP) funding through the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and the Federal Emergency Management Agency (FEMA) for the purpose of reviewing and updating the Lincoln Parish Hazard Mitigation Plan and;

WHEREAS, the Plan will enable LINCOLN PARISH to better prepare for and reduce the effects of disasters and;

WHEREAS, LINCOLN PARISH formed a Steering Committee consisting of state and local governments and agencies, local organizations, businesses and private citizens and;

WHEREAS, this Lincoln Parish Steering Committee has prepared and reviewed the Lincoln Parish Hazard Mitigation Plan, update 2016 and updated it accordingly, now titled (the "2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan") that will guide the Parish and;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF GRAMBLING, LOUISIANA, in Regular Session convened on the 14th day of August, 2023, that it does hereby formally adopt the 2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan.

- ❖ 1. The City of Grambling formally adopts the Lincoln Parish Hazard Mitigation Plan.
- ❖ 2. This Resolution shall become effective upon adoption and signature of the Mayor.

This resolution after having been read and considered by motion to adopt by Council Member Jerry Lewis and seconded by Council Member DeVaria H. Ponton a record vote was taken and the roll call was as follows:

YEA: 5 NAY: 0 ABSENT: None

WHEREUPON, the presiding officer declared the above Resolution duly adopted in full this 14th day of August, 2023.

ATTEST:


Alvin Bradley, Mayor


Pamela Stringfellow, LMMC

City of Ruston

RESOLUTION NO. 1459 OF 2023**RESOLUTION ADOPTING THE 2023 LINCOLN PARISH MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN**

WHEREAS, Lincoln Parish is a recipient of Hazard Mitigation Grant Program ("HMGP") funding through the Louisiana Governor's Office of Homeland Security and Emergency Preparedness ("GOHSEP") and the Federal Emergency Management Agency ("FEMA") for the purpose of reviewing and updating the Lincoln Parish Hazard Mitigation Plan; and,

WHEREAS, the Hazard Mitigation Plan will enable Lincoln Parish to better prepare for and reduce the effects of disasters; and,

WHEREAS, Lincoln Parish formed a Steering Committee consisting of state and local governments and agencies, local organizations, businesses and private citizens; and,

WHEREAS, this Steering Committee has prepared and reviewed the Lincoln Parish Hazard Mitigation Plan, update 2016, and updated it accordingly, now titled the "2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan" that will guide the Parish; and,

WHEREAS, the City desires to adopt the 2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE CITY OF RUSTON, LOUISIANA:

§1. The City formally adopts the 2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan.

§2. This Resolution shall become effective upon final adoption and signature of the Mayor.

This Resolution after having been read and considered on motion to adopt by Alderman John Denny, and seconded by Alderwoman Melanie Lewis, a record vote was taken and the following result was had:

YEA: ALDERWOMAN CAROLYN CAGE
ALDERWOMAN MELANIE LEWIS
ALDERWOMAN ANGELA MAYFIELD
ALDERMAN BRUCE SIEGMUND
ALDERMAN JOHN DENNY

NAY: NONE

ABSTAINED: NONE

ABSENT: NONE

The motion passed by unanimous vote.

WHEREUPON, the presiding officer declared the above Resolution duly adopted in full on this the 7th day of August, 2023.

ATTEST:


JULIE KEEN, CLERK


RONNY WALKER, MAYOR

Village of Simsboro

Mayor
Sybil Smalling-Foster
Clerk
Pamela Lashley



VILLAGE OF SIMSBORO

Aldermen
Doug Durrett
Jerry White
Hazel Tuminello

RESOLUTION 08-23

**RESOLUTION ADOPTING THE
LINCOLN PARISH HAZARD MITIGATION PLAN**

WHEREAS, Lincoln Parish is a recipient of a Hazard Mitigation Grant Program ("HMGP") funds from the Louisiana Governor's Office of Homeland Security and Emergency Preparedness ("GOHSEP") and the Federal Emergency Management Agency ("FEMA") for the purpose of reviewing and updating the Lincoln Parish Hazard Mitigation Plan and;

WHEREAS, the plan will enable Lincoln Parish to better prepare for and reduce the effects of disaster and;

WHEREAS, Lincoln Parish formed a Steering Committee consisting of state and local governments and agencies, local organizations, businesses, and private citizens and;

WHEREAS, this Lincoln Parish Steering Committee has prepared and reviewed the Lincoln Parish Hazard Mitigation Plan, updated 2016 and updated it accordingly, now titled (the "2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan") that will guide the Parish and;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE VILLAGE OF SIMSBORO, LOUISIANA, in Regular Session convened on the 7th day of August 2023, that it does hereby formally adopt the 2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan.

YEAS: 3
NAYS: 0
ABSENT: 0


Sybil Smalling-Foster Mayor


Pamela Lashley Clerk

Town of Vienna

Resolution No. 1 of 2023

RESOLUTION ADOPTING THE LINCOLN PARISH HAZARD MITIGATION PLAN

WHEREAS, LINCOLN PARISH is a grant recipient of Hazard Mitigation Grant Program (HMGP) funding through the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) and the Federal Emergency Management Agency (FEMA) for the purpose of reviewing and updating the Lincoln Parish Hazard Mitigation Plan and;

WHEREAS, the Plan will enable LINCOLN PARISH to better prepare for and reduce the effects of disasters and;

WHEREAS, LINCOLN PARISH formed a Steering Committee consisting of state and local governments and agencies, local organizations, businesses and private citizens and;

WHEREAS, this Lincoln Parish Steering Committee has prepared and reviewed the Lincoln Parish Hazard Mitigation Plan, update 2016 and updated it accordingly, now titled (the "2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan") that will guide the Parish and;

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF ALDERMEN OF THE VILLAGE OF VIENNA, LOUISIANA, in Regular Session convened on the 8th day of August, 2023, that it does hereby formally adopt the 2023 Lincoln Parish Multi-Jurisdictional Hazard Mitigation Plan.

BE IT FURTHER RESOLVED, that George Walter Carpenter, Jr., Mayor is hereby authorized and empowered to complete the requirements of said transference.

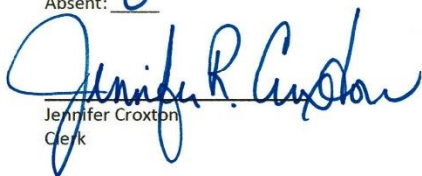
The above resolution was adopted the 8 day of August, 2023.

Motion by Billy Jack Talton, second by David Cargill, to adopt this resolution on this 8 day of August, 2023.

Yeas: 3

Nays: 0

Absent: 0


Jennifer Croxson
Clerk


George Walter Carpenter, Jr.
Mayor

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Appendix E: State Required Worksheets

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

Mitigation Planning Team

Lincoln Parish Hazard Mitigation Planning Committee			
Name	Title	Agency	Email
Kip Franklin	Director	Lincoln Parish OHSEP	kfranklin@lincolnparrish.org
Courtney Hall	Administrator	Lincoln Parish Police Jury	chall@lincolnparrish.org
Kevin Klepzig	Asst. Administrator	Lincoln Parish Police Jury	kklepzig@lincolnparrish.org
Jackson Matthews	GIS Manager	Lincoln Parish Police Jury	jmatthews@lincolnparrish.org
Bill Sanderson	Mayor	Village of Choudrant	BillSanderson@RustonLA.gov
Sybil Foster	Mayor	Village of Simsboro	mayor@simsboro.org
Mona Wilson	Mayor	Town of Dubach	townofdubach@att.net
Walter Carpenter	Mayor	Village of Vienna	villageofvienna@gmail.com
Reggie Skains	Mayor	Village of Downsview	reggieskains@bellsouth.net
Alvin Bradley	Mayor	City of Grambling	abradley@cityofgrambling.org
Aundrea Livingston	Lieutenant	Grambling Police Department	aundrealivin@yahoo.com
John Freeman	Administrator	City of Ruston Public Works	JohnFreeman@RustonLA.gov
Chris Womack	Fire Chief	City of Ruston Fire Department	ChrisWomack@RustonLA.gov
Steve Rogers	Ruston Police Chief	City of Ruston Police Department	SteveRogers@RustonLA.gov
Landon Hunt	Major	Lincoln Parish Sheriff's Office	lhunt@lpsheriff.org
Will Dearmon	President	Ruston/Lincoln Chamber of Commerce	wdearmon@rustonlincoln.org
Kevin Reynolds	Fire Chief	Lincoln Parish Fire District #1	kreynolds@lincolnparrish.org
Susan White	EM/Risk Management	Northern Louisiana Medical Center	susan.white@ahmgt.com
Sam Wallace	Admin & Facilities	Louisiana Tech University	wallace@latech.edu
Don Braswell	Environmental Mgr.	Louisiana Tech University	braswell@latech.edu
Ewing Collier	Consultant	Grambling State University	collier256306@bellsouth.net
James Payton	Construction Mgr.	Lincoln Parish School Board	jpayton@lincolnschools.org
Neal Brown	Director	Ouachita Parish OHSEP	anbrown@ohsep.net
Shannon Futch	Director	Union Parish OHSEP	sfutch@upohsep.net
Todd Smith	Region 8 Coordinator	GOHSEP	Todd.Smith@la.gov
Michael Sutton	Treasurer	Lincoln Parish Police Jury	msutton@lincolnparrish.org

Capability Assessment

Unincorporated Lincoln Parish

Capability Assessment Worksheet - Unincorporated Lincoln Parish		
Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.		
Planning and Regulatory		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
Plans	Yes/No	Comments
Comprehensive / Master Plan	No	
Capital Improvements Plan	Yes	Roads and bridges
Economic Development Plan	No	
Local Emergency Operations Plan	Yes	Lincoln Parish EOP, 2021
Continuity of Operations Plan	Yes	Lincoln Parish EOP, 2021
Transportation Plan	Yes	DOTD
Stormwater Management Plan	Yes	LDEQ, permits; No parish-wide plan
Community Wildfire Protection Plan	Yes	LDEQ/LDAF
Other plans (redevelopment, recovery, coastal zone management)	N/A	
Building Code, Permitting and Inspections	Yes/No	Comments
Building Code	Yes	2021 IBC & IRC
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	LPFD, Class 5
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes/No	Comments
Zoning Ordinance	No	
Subdivision Ordinance	Yes	
Floodplain Ordinance	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	No	
Other	Yes	Drinking water protection 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	No	
Mitigation Planning Committee	Yes	Member, Parish HMPC
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	Parish OHSEP
Community Planner	No	
Civil Engineer	Yes	Contracted
GIS Coordinator	Yes	Parish GIS Manager
Grant Writer	No	
Other	No	
Technical	Yes/No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Alert FM
Hazard Data & Information	Yes	
Grant Writing	No	
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	Sewer only
Impact fees for new development	No	
Stormwater Utility Fee	No	
Community Development Block Grant (CDBG)	Yes	State Program
Other Funding Programs	No	

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

Village of Choudrant

Capability Assessment Worksheet - Choudrant		
Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.		
Planning and Regulatory		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
Plans	Yes/No	Comments
Comprehensive / Master Plan	Yes	
Capital Improvements Plan	Yes	
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes	Lincoln Parish EOP, 2021
Continuity of Operations Plan	Yes	Lincoln Parish EOP, 2021
Transportation Plan	No	
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	No	
Building Code, Permitting and Inspections	Yes/No	Comments
Building Code	Yes	2021 IBC & IRC
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	CVFD, Class 4
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes/No	Comments
Zoning Ordinance	Yes	
Subdivision Ordinance	Yes	
Floodplain Ordinance	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	Yes	
Other	No	

Administration and Technical		
Identify whether your community has the following administrative and technical capabilities. For smaller jurisdictions without local staff resources, if there are public resources at the next higher level government that can provide technical assistance, indicate so in your comments.		
Administration	Yes/No	Comments
Planning Commission	Yes	
Mitigation Planning Committee	Yes	Member, Parish HMPC
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	Parish OHSEP
Community Planner	Yes	
Civil Engineer	Yes	Contracted
GIS Coordinator	No	Parish GIS Manager
Grant Writer	Yes	
Other	No	
Technical	Yes/No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Alert FM
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	State Program
Other Funding Programs	No	

Education and Outreach		
Identify education and outreach programs and methods, already in place that could be used to implement mitigation activities and communicate hazard-related information.		
Program / Organization	Yes/No	Comments
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	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	School Board
Storm Ready certification	Yes	NWS
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	Yes	
Other	No	

Town of Dubach

Capability Assessment Worksheet - Dubach		
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	Yes	Lincoln Parish EOP, 2021
Continuity of Operations Plan	Yes	Lincoln Parish EOP, 2021
Transportation Plan	No	
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	No	
Building Code, Permitting and Inspections	Yes/No	Comments
Building Code	Yes	2021 IBC & IRC
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	LPFD, Class 5
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes/No	Comments
Zoning Ordinance	Yes	
Subdivision Ordinance	No	
Floodplain Ordinance	No	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	Yes	Parish GIS Office
Acquisition of land for open space and public recreation uses	Yes	
Other		

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

Financial

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

Funding Resource	Yes/No	Comments
Capital Improvements project funding	No	
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	State Program
Other Funding Programs	No	

Education and Outreach

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

Program / Organization	Yes/No	Comments
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	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	School Board
Storm Ready certification	Yes	NWS
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

City of Grambling

Capability Assessment Worksheet - Grambling		
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	Yes	
Local Emergency Operations Plan	Yes	Lincoln Parish EOP
Continuity of Operations Plan	Yes	Lincoln Parish EOP
Transportation Plan	No	
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)		
Building Code, Permitting and Inspections	Yes/No	Comments
Building Code	Yes	La.
Building Code Effectiveness Grading Schedule (BCEGS) Score		
Fire Department ISO/PIAL rating	Yes	GFD, Class
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes/No	Comments
Zoning Ordinance	Yes	
Subdivision Ordinance	Yes	
Floodplain Ordinance	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	Yes	
Other		

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		
Mitigation Planning Committee	Yes	Member, Parish MPC
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)		
Staff	Yes/No	Comments
Chief Building Official		
Floodplain Administrator	Yes	Relies on Parish
Emergency Manager	Yes	Parish OHSEP
Community Planner	Yes	
Civil Engineer	Yes	
GIS Coordinator		
Grant Writer	No	
Other		
Technical	Yes/No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Alert FM
Hazard Data & Information		
Grant Writing		
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	Yes	
Stormwater Utility Fee		
Community Development Block Grant (CDBG)	Yes	
Other Funding Programs		

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	Lincoln Prep School
Storm Ready certification	Yes	NWS
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other		

City of Ruston

Capability Assessment Worksheet - Ruston		
Local mitigation capabilities are existing authorities, polices and resources that reduce hazard impacts or that could be used to implement hazard mitigation activities. Please complete the tables and questions in the worksheet as completely as possible.		
Planning and Regulatory		
Please indicate which of the following plans and regulatory capabilities your jurisdiction has in place.		
Plans	Yes/No	Comments
Comprehensive / Master Plan	Yes	
Capital Improvements Plan	Yes	
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes	Lincoln Parish EOP, 2021
Continuity of Operations Plan	Yes	Lincoln Parish EOP, 2021
Transportation Plan	Yes	
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	2021 IBC & IRC
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	RFD, Class 2
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes/No	Comments
Zoning Ordinance	Yes	
Subdivision Ordinance	Yes	
Floodplain Ordinance	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	Yes	
Acquisition of land for open space and public recreation uses	Yes	
Other		

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	Member, Parish HMPC
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	Parish OHSEP
Community Planner	Yes	
Civil Engineer	Yes	
GIS Coordinator	Yes	
Grant Writer	Yes	
Other		
Technical	Yes/No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Outdoor Warning System, Alert FM & Code Red
Hazard Data & Information	No	
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	Yes	
Stormwater Utility Fee	No	
Community Development Block Grant (CDBG)	Yes	
Other Funding Programs		

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	Lincoln Parish Schools
Storm Ready certification	Yes	NWS
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	Yes	
Other		

Village of Simsboro

Capability Assessment Worksheet - Simsboro		
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	Yes	Lincoln Parish EOP, 2021
Continuity of Operations Plan	Yes	Lincoln Parish EOP, 2021
Transportation Plan	No	
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	No	
Building Code, Permitting and Inspections		
Building Code	Yes	2021 IBC & IRC
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	LPFD, Class 5
Site plan review requirements	No	
Land Use Planning and Ordinances		
Zoning Ordinance	Yes	
Subdivision Ordinance	No	
Floodplain Ordinance	Yes	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	Yes	Parish GIS Office
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	No	
Mitigation Planning Committee	Yes	Member, Parish HMPC
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	No	
Staff		
Chief Building Official	No	
Floodplain Administrator	Yes	
Emergency Manager	Yes	Parish OHSEP
Community Planner	No	
Civil Engineer	Yes	Contracted
GIS Coordinator	Yes	Parish GIS Manager
Grant Writer	No	
Other	No	
Technical		
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Alert FM
Hazard Data & Information	No	
Grant Writing	No	
Hazus Analysis	No	
Other	No	

Financial		
Identify whether your jurisdiction has access to or is eligible to use the following funding resources for hazard mitigation.		
Funding Resource	Yes/No	Comments
Capital Improvements project funding	No	
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	State Program
Other Funding Programs	Yes	CWEF & LGAP

Education and Outreach		
Identify education and outreach programs and methods, already in place that could be used to implement mitigation activities and communicate hazard-related information.		
Program / Organization	Yes/No	Comments
Local citizen groups or non-profit organizations focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	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	Lincoln Parish Schools
Storm Ready certification	Yes	NWS
Firewise Communities certification	No	
Public/Private partnership initiatives addressing disaster-related issues	No	
Other	No	

Town of Vienna

Capability Assessment Worksheet - Vienna		
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	Yes	Lincoln Parish EOP, 2021
Continuity of Operations Plan	Yes	Lincoln Parish EOP, 2021
Transportation Plan	No	
Stormwater Management Plan	No	
Community Wildfire Protection Plan	No	
Other plans (redevelopment, recovery, coastal zone management)	No	
Building Code, Permitting and Inspections	Yes/No	Comments
Building Code	Yes	2021 IBC & IRC
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	
Fire Department ISO/PIAL rating	Yes	LPFD, Class 5
Site plan review requirements	Yes	
Land Use Planning and Ordinances	Yes/No	Comments
Zoning Ordinance	Yes	
Subdivision Ordinance	Yes	
Floodplain Ordinance	No	
Natural Hazard Specific Ordinance (stormwater, steep slope, wildfire)	No	
Flood Insurance Rate Maps	Yes	Parish GIS Office
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	
Mitigation Planning Committee	Yes	Member, Parish HMPC
Maintenance programs to reduce risk (tree trimming, clearing drainage systems)	No	
Staff	Yes/No	Comments
Chief Building Official	No	
Floodplain Administrator	No	
Emergency Manager	Yes	Parish OHSEP
Community Planner	No	
Civil Engineer	Yes	Contracted
GIS Coordinator	Yes	Parish GIS Manager
Grant Writer	No	
Other	No	
Technical	Yes/No	Comments
Warning Systems / Service (Reverse 911, outdoor warning signals)	Yes	Alert FM
Hazard Data & Information	No	
Grant Writing	No	
Hazus Analysis	No	
Other	No	

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

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

Building Inventory

Lincoln Parish and Jurisdiction Owned Building Information								
Unincorporated Lincoln Parish								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Lincoln Hall	Parish Event Center	149 Fairgrounds Rd	Dubach	32.609843	-92.588306	\$465,000	2022	Metal
Lincoln Parish Exhibition Center	Parish Event Center & Pet Shelter Facility	165 Fairgrounds Rd	Dubach	32.61146	-92.588527	\$2,249,294	2001	Metal
LPFD Office Headquarters	Parish Fire Station	4786 Hwy 167	Dubach	32.601064	-92.648616	\$823,815	2015	Metal
LPFD #1, Vienna Station	Parish Fire Station	4786 Hwy 167	Dubach	32.601064	-92.648616	\$617,259	1992	Metal
LPFD #2, Mt. Olive Station	Parish Fire Station	422 Garr Rd	Grambling	32.548291	-92.702531	\$208,200	1992	Metal
LPFD #3, Tech Farm Station	Parish Fire Station	2877 Tech Farm Rd	Ruston	32.497386	-92.656001	\$89,124	1992	Metal
LPFD #4, Maner Sisemore Station	Parish Fire Station	540 Sisemore Rd	Ruston	32.514144	-92.580934	\$381,300	1992	Metal
LPFD #5, Chandler Road Station	Parish Fire Station	985 Chandler Rd	Ruston	32.564568	-92.561453	\$208,200	1992	Metal
LPFD #6, Dubach Station	Parish Fire Station	118 Smith St	Dubach	32.701093	-92.65587	\$381,300	1992	Metal
LPFD #7, Hico Station	Parish Fire Station	747 Hwy 152	Dubach	32.740212	-92.711048	\$381,300	1992	Metal
LPFD #8, Corinth, Hood, McCurry Station	Parish Fire Station	4310 Hwy 545	Dubach	32.730215	-92.786412	\$89,124	1992	Metal
LPFD #9, Cross Roads Station	Parish Fire Station	13360 Hwy 146	Dubach	32.672261	-92.806983	\$89,124	1992	Metal
LPFD #10, Fellowship, Britt Station	Parish Fire Station	135 Britt Rd	Dubach	32.727662	-92.61512	\$89,124	1992	Metal
LPFD #11, Simsboro Station	Parish Fire Station	147 Second St	Simsboro	32.534361	-92.789446	\$491,991	1992	Metal
LPFD #12, Oak Grove Station	Parish Fire Station	1778 Hwy 147	Simsboro	32.501591	-92.871533	\$89,124	1992	Metal
LPFD #13, Madden Road, Carrol Station	Parish Fire Station	621 Madden Rd	Grambling	32.484197	-92.742119	\$89,124	1992	Metal
LPFD #14, Nobles School Station	Parish Fire Station	440 Nobles School Rd	Dubach	32.640037	-92.761702	\$296,500	1992	Metal
LPFD #15, Kings Gin Station	Parish Fire Station	110 Kings Gin Rd	Arcadia	32.591959	-92.867165	\$89,124	1992	Metal
LPFD #16, Sibley Station	Parish Fire Station	132 Hwy 821	Choudrant	32.57613	-92.469057	\$305,800	1992	Metal
LPFD #17, Tremont Station	Parish Fire Station	537 Pleasant Grove Road	Choudrant	32.513704	-92.467202	\$89,124	1992	Metal
LPFD #18, Downsview West Station	Parish Fire Station	132 Wild Wing Road	Downsville	32.641153	-92.432514	\$89,124	1992	Metal
LPFD #19, D'Arbonne, Brewster Station	Parish Fire Station	714 Anderson Rd	Ruston	32.670123	-92.505868	\$84,083	1992	Metal
LPFD #20, Mineral Springs Station	Parish Fire Station	4428 Hwy 822	Dubach	32.637872	-92.570065	\$208,200	1992	Metal
LPFD #21, Rolling Hills Station	Parish Fire Station	1360 Hwy 3072	Ruston	32.597855	-92.598779	\$292,963	2010	Metal
Lincoln Parish Fire Training Classroom	Parish Fire Training Center	415 Fire Training Rd	Dubach	32.610902	-92.599244	\$234,518	2000	Metal

Lincoln Parish Fire Training Tower	Parish Fire Training Center	415 Fire Training Rd	Dubach	32.610902	-92.599244	\$505,391	2000	Metal
Lincoln Parish Courthouse	Parish Government Building	100 W Texas Ave	Ruston	32.527146	-92.638825	\$5,998,388	1950	Concrete
Lincoln Parish Annex i	Parish Government Building	101 W Railroad Ave	Ruston	32.527544	-92.638525	\$1,223,697	1980	Concrete
Lincoln Parish Annex II	Parish Government Building	117 S Trenton St	Ruston	32.527719	-92.639152	\$68,504	1980	Concrete
Lincoln Parish Police Jury Complex I	Parish Government Building	307 N Homer St	Ruston	32.531376	-92.644109	\$2,669,346	1981	Concrete
Lincoln Parish Police Jury Complex II	Parish Government Building	105 W. Texas Ave	Ruston	32.526529	-92.638618	\$1,325,000	1985	Concrete
Lincoln Parish PJ/DC Record Storage	Parish Government Building	131 Road Camp Rd	Ruston	32.557874	-92.609263	\$47,245	1980	Metal
Lincoln Parish Health Unit	Parish Health Facility	405 E Georgia Ave	Ruston	32.531437	-92.633254	\$948,094	1975	Concrete
LPNET Office	Parish Law Enforcement	167 Haddox Rd	Ruston	32.562123	-92.603843	\$450,000	2017	Metal
Lincoln Parish Sheriffs Training Center	Parish Law Enforcement Training Facility	160 Old KOA Rd	Simsboro	32.551201	-92.788394	\$800,000	2022	Concrete
Lincoln Parish Public Safety Complex	Parish Law Enforcement/EOC	161 Road Camp Rd	Ruston	32.558792	-92.610442	\$7,794,000	2014	Metal
Lincoln Parish Library/Events Center	Parish Library/Events Center	910 N. Trenton St	Ruston	32.537328	-92.6383	\$7,197,731	2008	Concrete
Lincoln Parish Detention Center	Parish Prison/Correction Facility	170 Road Camp Rd	Ruston	32.560471	-92.609337	\$10,193,791	1981	Concrete
Lincoln Parish Public Works Department	Parish Public Works Facility	189 Arkansas Plant Rd	Dubach	32.609573	-92.59181	\$1,282,822	2008	Metal
Lincoln Parish Park	Parish Recreational Facility	199 Parish Park Rd	Ruston	32.588282	-92.605692	\$355,555	1985	Metal
Lincoln Parish Solid Waste Department	Parish Solid Waste Facility	463 Arkansas Plant Rd	Dubach	32.619113	-92.592753	\$746,383	1970	Metal
Village of Choudrant								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Choudrant Fire Station #1	Municipal Fire Station	2520 Hwy 80	Choudrant	32.530093	-92.516223	\$156,000	2000	Metal
Choudrant Fire Station #2	Municipal Fire Station	1976 Hwy 820	Choudrant	32.568307	-92.518722	\$1,008,000	2010	Unreinforced Masonry
Choudrant Village Hall	Municipal Government Building	3911 Elm St	Choudrant	32.52881	-92.513744	\$180,000	2007	Unreinforced Masonry
Public Safety Building	Municipal Police Station	2629 Hwy 80	Choudrant	32.530215	-92.52065	\$100,000	1972	Metal
Public Works Building	Municipal Public Works	North Depot Street	Choudrant	32.526513	-92.510798	\$30,000	2008	Metal

South Treatment Plant	Municipal Waste Water Treatment	121 Arena Rd (Pvt)	Choudrant	32.52804	-92.501221	\$800,000	1990	Concrete
North Treatment Plant	Municipal Waste Water Treatment	147 Spend Thrift Rd	Choudrant	32.565474	-92.504538	\$870,000	2003	Concrete
Pipes Road Water Well	Municipal Water System	290 Pipes Rd	Choudrant	32.537993	-92.520769	\$500,000	1985	Steel
Jones Street Water Well	Municipal Water System	228 Jones St	Choudrant	32.532914	-92.50822	\$560,000	1971	Steel
Jones Street Water Tank	Municipal Water System	228 Jones St	Choudrant	32.532914	-92.50822	\$660,000	1971	Steel
Squire Creek Water Well	Municipal Water System	112 Spend Thrift Rd	Choudrant	32.566854	-92.505333	\$750,000	2003	Steel
Squire Creek Water Tank	Municipal Water System	2007 Hwy 820	Choudrant	32.568398	-92.517288	\$1,000,000	2003	Steel
Choudrant High School	Public School	2555 Hwy 80	Choudrant	32.529209	-92.51733	\$16,929,582	1938	Unreinforced Masonry
Choudrant Elementary School	Public School	160 Walker Rd	Choudrant	32.52676	-92.498357	\$11,026,014	1978	Unreinforced Masonry
Town of Dubach								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Dubach Town Hall & DPD	Municipal Government Building	7839 Annie Lee St	Dubach	32.696717	-92.656267	\$240,000	1960	Unreinforced Masonry
Town Public Works	Municipal Public Works	7839 Annie Lee St	Dubach	32.696717	-92.656267	\$78,000	1975	Metal
North Sewer Treatment	Municipal Waste Water Treatment	137 Oak St.	Dubach	32.692886	-92.666005	\$863,500	1980	Concrete
South Sewer Treatment	Municipal Waste Water Treatment	Flowers Rd	Dubach	32.686707	-92.6583	\$935,000	1978	Concrete
Henry Road Water Well	Municipal Water System	869 Henry Rd	Dubach	32.714354	-92.66853	\$425,000	1978	Steel
Hi-Tech Elevated Water Tank	Municipal Water System	137 Hi-Tech Road	Dubach	32.712872	-92.663118	\$1,000,000	1978	Steel
School Water Well	Municipal Water System	215 Main St	Dubach	32.696957	-92.654467	\$550,000	1950	Steel
School Water Well Ground Tank	Municipal Water System	215 Main St	Dubach	32.696957	-92.654467	\$400,000	1992	Steel
School Water Well Elevated Tank	Municipal Water System	215 Main St	Dubach	32.696957	-92.654467	\$660,000	1992	Steel
Dubach School	Parish Public School	7710 Fellowship Rd	Dubach	32.696225	-92.65176	\$12,263,759	1968	Unreinforced Masonry
Council on Aging	Senior Citizen Center	177 Main St	Dubach	32.698498	-92.655207	\$165,000	1950	Unreinforced Masonry
Dubach Community Center	Town Community Center	106 Smith St.	Dubach	32.70108	-92.656244	\$250,000	1950	Unreinforced Masonry

DRABO Office	Town Re-Vitalization Office	116 E Hico St	Dubach	32.698866	-92.655948	\$200,000	1940	Unreinforced Masonry
City of Grambling								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Grambling Fire Department	Municipal Fire Station	562 Stadium Drive	Grambling	32.524241	-92.707901	\$863,000	2008	Metal
Grambling City Hall	Municipal Government Building	127 King Street	Grambling	32.524425	-92.707123	\$638,000	2007	Unreinforced Masonry
Grambling Police Department	Municipal Police Station	105 Park St	Grambling	32.530045	-92.71204	\$398,000	1960	Unreinforced Masonry
Grambling Public Works	Municipal Public Works	2045 Martin Luther King Jr Ave	Grambling	32.529997	-92.711761	\$156,000	1960	Wood
Waste Water Treatment Plant	Municipal Waste Water Treatment System	Hwy. 80	Grambling	32.509538	-92.719992	\$5,500,000	1960	Concrete
Maria Street Water Well	Municipal Water System	116 Maria Street	Grambling	32.512094	-92.709006	\$400,000	2014	Steel
College Ave. Water Well	Municipal Water System	West College Ave	Grambling	32.526283	-92.721227	\$500,000	1950	Steel
West Campus Elevated Tank	Municipal Water System	West Martin Luther King Dr	Grambling	32.53125	-92.740423	\$600,000	1950	Steel
City Hall Elevated Tank	Municipal Water System	127 King Street	Grambling	32.524209	-92.706824	\$660,000	2012	Steel
City of Ruston								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Ruston Fire Dept. Sta. 1	Municipal Fire/EMS Station	920 East Georgia Ave	Ruston	32.532768	-92.625098	\$1,700,000.00	1994	Metal
Ruston Fire Dept. Sta. 2	Municipal Fire/EMS Station	1010 West California Ave	Ruston	32.522119	-92.651298	\$150,000.00	1949	Unreinforced Masonry
Ruston Fire Dept. Sta. 3	Municipal Fire/EMS Station	2502 North Trenton St	Ruston	32.557316	-92.641755	\$400,000.00	1974	Unreinforced Masonry
Beneficial Use Building	Municipal Government Building	3300 Beacon Light Rd	Ruston	32.522871	-92.595455	\$150,000.00	2005	Metal
City of Ruston Airport Terminal	Municipal Government Building	125 Flightline Dr	Ruston	32.508885	-92.591139	\$800,000.00	1995	Unreinforced Masonry
City of Ruston Animal Control	Municipal Government Building	1901 McDonald Ave	Ruston	32.528292	-92.611543	\$50,000.00	1996	Metal
Greenwood Recreation Center	Municipal Government Building	1306 Cornell Ave	Ruston	32.517084	-92.620291	\$50,000.00	2003	Unreinforced Masonry
Municipal Office Building	Municipal Government Building	2505 South Vienna St	Ruston	32.500496	-92.635734	\$750,000.00	2014	Unreinforced Masonry

Old Federal Building, Ruston	Municipal Government Building	201 N. Vienna St	Ruston	32.529925	-92.638264	\$1,000,000.00	1909	Concrete
P & Z, Section 8 Office	Municipal Government Building	308 W Mississippi Ave	Ruston	32.530014	-92.641348	\$250,000.00	1975	Metal
Ruston City Hall/Civic Center	Municipal Government Building	401 North Trenton St	Ruston	32.532025	-92.63973	\$9,500,000.00	1975	Reinforced Masonry
Ruston Farmer's Market	Municipal Government Building	220 E Mississippi Ave	Ruston	32.529054	-92.635556	\$50,000.00	1997	Metal
Ruston Historic Fire Station	Municipal Government Building	200 E. Mississippi Ave	Ruston	32.529239	-92.636476	\$650,000.00	1926	Reinforced Masonry
Ruston Parks and Recreation	Municipal Government Building	605 James St	Ruston	32.534858	-92.648529	\$50,000.00	1986	Wood
Military Museum	Municipal Museum	201 Memorial Dr	Ruston	32.530573	-92.63321	\$150,000.00	1965	Wood
Ruston Police Department	Municipal Police Station	501 North Trenton St	Ruston	32.532818	-92.639365	\$1,250,000.00	2010	Unreinforced Masonry
Ruston Public Works Complex	Municipal Public Works Facilities	701 East Tennessee Ave	Ruston	32.497489	-92.628128	\$6,200,000.00	2009	Metal
Boys & Girls Club	Municipal Recreational Facility	300 Memorial Dr	Ruston	32.530371	-92.632145	\$750,000.00	1952	Unreinforced Masonry
Railroad Park Stage	Municipal Recreational Facility	101 West Park Ave	Ruston	32.528678	-92.638728	\$45,000.00	2015	Metal
Sports Complex Indoor	Municipal Recreational Facility	2103 Champions Way	Ruston	32.504965	-92.634015	\$12,000,000.00	2021	Concrete
Sports Complex Outdoor	Municipal Recreational Facility	1803 Champions Way	Ruston	32.508983	-92.633303	\$12,000,000.00	2019	Concrete
Electrical Sub-Station	Municipal Utilities Facility	3601 North Trenton St	Ruston	32.568362	-92.643422	\$4,000,000.00	2007	Steel
Electrical Sub-Station	Municipal Utilities Facility	701 East Tennessee Ave	Ruston	32.497192	-92.630172	\$4,000,000.00	2018	Steel
Electrical Sub-Station	Municipal Utilities Facility	600 Frazier Rd	Ruston	32.567193	-92.63037	\$2,000,000.00	1973	Steel
Electrical Sub-Station	Municipal Utilities Facility	712 West Kentucky Ave	Ruston	32.555802	-92.651469	\$2,000,000.00	2005	Steel
Electrical Sub-Station	Municipal Utilities Facility	Maple St	Ruston	32.530375	-92.665442	\$2,000,000.00	1972	Steel
Electrical Sub-Station	Municipal Utilities Facility	1801 McDonald Ave	Ruston	32.528091	-92.613238	\$2,000,000.00	2009	Steel
Steam/Power Plant	Municipal Utilities Facility	1801 McDonald Ave	Ruston	32.528091	-92.613238	\$2,000,000.00	1958	Unreinforced Masonry
Lift station 11 Alabama ICC RR	Municipal Waste Water Treatment Facility	1299 W. Alabama Ave	Ruston	32.315727	-92.391584	\$1,000,000.00	1975	Concrete
Lift station 16 A North Plant	Municipal Waste Water Treatment Facility	1717 Goodwin Rd	Ruston	32.325419	-92.375168	\$3,000,000.00	2008	Concrete

Lift station 18 Hilton Pasture	Municipal Waste Water Treatment Facility	2023 W. Kentucky Ave	Ruston	32.305105	-92.395663	\$1,000,000.00	2005	Concrete
Lift station 23 Furman	Municipal Waste Water Treatment Facility	1507 Furman St	Ruston	32.304072	-92.404514	\$500,000.00	1991	Concrete
Lift station 26 Maple & Magnolia	Municipal Waste Water Treatment Facility	1200 S. Maple St	Ruston	32.312064	-92.395591	\$500,000.00	1980	Concrete
Lift station 10 Tennessee & PW	Municipal Waste Water Treatment Facility	691 Tennessee Ave	Ruston	32.295542	-92.375717	\$250,000.00	1995	Concrete
Lift station 12 Edwards	Municipal Waste Water Treatment Facility	1215 1/2 Edwards St	Ruston	32.328305	-92.392137	\$500,000.00	1984	Concrete
Lift station 13 Lee ST	Municipal Waste Water Treatment Facility	1299 Lee St	Ruston	32.322141	-92.385054	\$3,000,000.00	1977	Concrete
Lift station 15 A Prison Camp	Municipal Waste Water Treatment Facility	French Quarters Subdivision	Ruston	32.336326	-92.365903	\$1,000,000.00	2012	Concrete
Lift station 19 W. Kentucky	Municipal Waste Water Treatment Facility	799 W. Kentucky Ave	Ruston	32.332467	-92.394768	\$2,000,000.00	2005	Concrete
Lift station 2 A Cedar Creek	Municipal Waste Water Treatment Facility	2001 W. Alabama 14-1/2 A	Ruston	32.31514	-92.395261	\$500,000.00	2011	Concrete
Lift station 20 Llanfair	Municipal Waste Water Treatment Facility	198 Llanfair Dd	Ruston	32.336775	-92.383348	\$250,000.00	1976	Concrete
Lift station 21 Hundred Oaks	Municipal Waste Water Treatment Facility	206 Hundred Oaks	Ruston	32.333005	-92.381245	\$500,000.00	1978	Concrete
Lift station 26 A Ragan	Municipal Waste Water Treatment Facility	106 Ragan St	Ruston	32.315824	-92.394655	\$500,000.00	1974	Concrete
Lift station 28 Clay ST	Municipal Waste Water Treatment Facility	711 Clay St	Ruston	32.312242	-92.373647	\$150,000.00	1990	Concrete
Lift station 29 Normay	Municipal Waste Water Treatment Facility	1292 Normay Ray Dr	Ruston	32.324845	-92.39293	\$500,000.00	1997	Concrete
Lift station 3 Lewis ST	Municipal Waste Water Treatment Facility	1311 Lewis St	Ruston	32.300826	-92.382988	\$350,000.00	2011	Concrete

Lift station 30 Roosevelt DR	Municipal Waste Water Treatment Facility	2012 Roosevelt Dr	Ruston	32.30572	-92.395833	\$1,000,000.00	1980	Concrete
Lift station 32 South Plant	Municipal Waste Water Treatment Facility	1200 Bonita St	Ruston	32.515737	-92.64538	\$2,000,000.00	1972	Concrete
Lift station 39 W. Alabama	Municipal Waste Water Treatment Facility	2001 W. Alabama Ave	Ruston	32.321686	-92.402477	\$3,000,000.00	2002	Concrete
Lift station 40 Texas & TXI	Municipal Waste Water Treatment Facility	302 W. Texas	Ruston	32.314571	-92.383237	\$500,000.00	2011	Concrete
Lift station 4A Savannah Trace	Municipal Waste Water Treatment Facility	102 Savannah Trace	Ruston	32.345183	-92.386562	\$400,000.00	1999	Concrete
Lift station 5A Santiam	Municipal Waste Water Treatment Facility	299 Santiam Rd	Ruston	32.315103	-92.361128	\$350,000.00	1987	Concrete
Lift station 5N Frazier	Municipal Waste Water Treatment Facility	600 Frazier Rd	Ruston	32.340186	-92.375644	\$2,500,000.00	2003	Concrete
Lift station 7A Madera	Municipal Waste Water Treatment Facility	500 Madera St	Ruston	32.323957	-92.394073	\$1,000,000.00	1980	Concrete
Lift station 7B HWY 80 E	Municipal Waste Water Treatment Facility	2698 E. Georgia Ave	Ruston	32.322376	-92.362669	\$2,000,000.00	2013	Concrete
Lift station 9A Lilinda Drive	Municipal Waste Water Treatment Facility	200 Lilinda Dr	Ruston	32.301403	-92.382048	\$100,000.00	1980	Concrete
Lift station P1 Rusty Lane	Municipal Waste Water Treatment Facility	2300 Rusty Lane	Ruston	32.304357	-92.396114	\$500,000.00	1985	Concrete
Lift station P2 Dixie	Municipal Waste Water Treatment Facility	1904 Dixie St	Ruston	32.326973	-92.393707	\$500,000.00	1987	Concrete
Lift station West Tennessee Ave.	Municipal Waste Water Treatment Facility	West Tennessee Ave	Ruston	32.295828	-92.385955	\$1,000,000.00	2011	Concrete
North Treatment Plant	Municipal Waste Water Treatment Facility	1717 Goodwin Rd	Ruston	32.547749	-92.629027	\$25,000,000.00	2008	Concrete
Elevated Water Tank 2	Municipal Water Facility	2502 N. Trenton St	Ruston	32.557242	-92.641226	\$2,000,000.00	1959	Steel
Elevated Water Tank 3	Municipal Water Facility	1121 Jena St	Ruston	32.539364	-92.642242	\$2,000,000.00	1988	Steel

Elevated Water Tank 4	Municipal Water Facility	202 Memorial Dr	Ruston	32.530082	-92.63264	\$3,500,000.00	2009	Steel
Water Well 1	Municipal Water Facility	1100 W. California Ave	Ruston	32.522185	-92.651481	\$1,500,000.00	1953	Steel
Water Well 10	Municipal Water Facility	2915 W. Tennessee Ave	Ruston	32.496876	-92.642816	\$2,000,000.00	1978	Steel
Water Well 11, LTU	Municipal Water Facility	412 S. Homer St	Ruston	32.525842	-92.644419	\$1,500,000.00	1970	Steel
Water Well 12, LTU	Municipal Water Facility	1501 W. Alabama Ave	Ruston	32.529911	-92.656116	\$1,500,000.00	1964	Steel
Water Well 13, LTU	Municipal Water Facility	908 Hergot Ave	Ruston	32.525535	-92.649949	\$1,500,000.00	1967	Steel
Water Well 2	Municipal Water Facility	312 E. Mississippi Ave	Ruston	32.529066	-92.63452	\$1,500,000.00	1936	Steel
Water Well 4	Municipal Water Facility	606 Second Ave	Ruston	32.518742	-92.630273	\$1,500,000.00	1955	Steel
Water Well 5	Municipal Water Facility	1605 McDonald Ave	Ruston	32.527339	-92.614214	\$1,500,000.00	1958	Steel
Water Well 6	Municipal Water Facility	902 Cook St	Ruston	32.536956	-92.651268	\$1,500,000.00	1958	Steel
Water Well 7	Municipal Water Facility	2113 W. Barnett Springs Ave	Ruston	32.525602	-92.664794	\$1,500,000.00	1966	Steel
Water Well 8	Municipal Water Facility	2502 N. Trenton St	Ruston	32.557274	-92.640931	\$2,000,000.00	1973	Steel
Water Well 9	Municipal Water Facility	1402 W. Kentucky Ave	Ruston	32.555264	-92.655887	\$2,000,000.00	1974	Steel
Cypress Springs Elem. School	Public Education	1100 Saratoga St	Ruston	32.518364	-92.665932	\$14,520,233.00	1962	Unreinforced Masonry
Early Childhood Center	Public Education	801 East Mississippi Ave	Ruston	32.530079	-92.627274	\$6,858,657.00	2010	Unreinforced Masonry
Glen View Elementary School	Public Education	1601 Bittersweet Ave	Ruston	32.550098	-92.6595	\$12,862,700.00	1962	Unreinforced Masonry
Hillcrest Elementary School	Public Education	301 East Kentucky Ave	Ruston	32.555599	-92.637634	\$12,611,709.00	1962	Unreinforced Masonry
I.A. Lewis Middle School	Public Education	1000 Mithchell St	Ruston	32.515385	-92.651497	\$10,678,852.00	1962	Unreinforced Masonry
Lincoln Learning Center	Public Education	1435 Mayberry St	Ruston	32.5126	-92.6483	\$7,833,612.00	1955	Unreinforced Masonry
Lincoln Parish School Board	Public Education	410 South Farmerville St	Ruston	32.524536	-92.631668	\$5,641,500.00	1966	Unreinforced Masonry
Ruston Elementary School	Public Education	200 North Bernard St	Ruston	32.530201	-92.622101	\$11,049,008.00	1955	Unreinforced Masonry
Ruston High School	Public Education	900 Bearcat Dr	Ruston	32.535	-92.650009	\$64,642,273.00	1939	Reinforced Masonry

Ruston Junior High School	Public Education	481 Tarbutton Rd	Ruston	32.543301	-92.675697	\$26,626,710.00	1985	Unreinforced Masonry
School Board Bus Barn	Public Education	2948 Woodward Ave	Ruston	32.542606	-92.674431	\$1,170,676.00	2008	Reinforced Masonry
School Board Maintenance	Public Education	1428 Arlington St	Ruston	32.513599	-92.647797	\$2,474,462.00	1997	Reinforced Masonry
Village of Simsboro								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Simsboro Town Hall	Municipal Government Building	2742 Martha Street	Simsboro	32.535009	-92.788603	\$240,000	1969	Wood
Simsboro Police Department	Municipal Police Station	2717 Martha Street	Simsboro	32.534181	-92.788986	\$20,000	1930	Reinforced Masonry
Maintenance Barn	Municipal Public Works	2719 Martha Street	Simsboro	32.534226	-92.789041	\$20,000	1972	Metal
Simsboro Sewer Plant	Municipal Waste Water Treatment	311 Best Rd.	Simsboro	32.517939	-92.78971	\$1,200,000	2005	Concrete
Simsboro Water Well #5	Municipal Water System	577 Braswell Lane	Simsboro	32.536484	-92.787302	\$550,000	2000	Steel
Simsboro Water Tank	Municipal Water System	577 Braswell Lane	Simsboro	32.536484	-92.787302	\$660,000	2000	Steel
Simsboro Water Well #2	Municipal Water System - School Well	192 Tiger Drive	Simsboro	32.535184	-92.78599	\$500,000	1969	Steel
Simsboro School	Public School	114 Tiger Drive	Simsboro	32.534076	-92.786487	\$19,041,516	1949	Reinforced Masonry
Town of Vienna								
Name of Building	Purpose of Building	Address	City	Latitude	Longitude	Assessed Value	Date Built	Construction Type
Vienna Town Hall	Municipal Government Building	5168 Hwy 167	Vienna	32.587399	-92.648399	\$103,000	1955	Wood

Vulnerable Populations

Vulnerable Populations Worksheet					
Lincoln Parish					
All Hospitals (Private or Public)	Street	City	Zip Code	Latitude	Longitude
Serenity Springs Specialty Hospital	1495 Frazier Rd	Ruston	71270	32.576986	-92.602111
Northern Louisiana Medical Center	401 East Vaughn Avenue	Ruston	71270		
Ruston Surgical Center	1118 South Farmerville Street	Ruston	71270		
Ruston Regional Specialty Hospital	1401 Ezell Street	Ruston	71270		
Nursing Homes (Private or Public)	Street	City	Zip Code	Latitude	Longitude
Ruston Nursing & Rehabilitation Center	3720 Hwy 80	Ruston	71270	32.533926	-92.567712
Alpine Guest Care Center	2401 N. Service Road East	Ruston	71270		
Arbor & Terrace Assisted Living	4518 Hwy. 80 East	Ruston	71270		
Russ House Assisted Living	165 Jefferson Avenue	Ruston	71270		
Princeton Place Nursing Home	1405 White Street	Ruston	71270		
Pecan Villa Assisted Living	611 South Bonner Street	Ruston	71270		
Mobile Home Parks	Street	City	Zip Code	Latitude	Longitude
Whispering Pines Mobile Home Park	109 Sullivan Ln(Pvt)	Choudrant	71227	32.536711	-92.508085
Spillers #1 Mobile Home Park	129 Hilltop Dr (Pvt)	Choudrant	71227	32.53529	-92.513192
Spillers #2 Mobile Home Park	2480 Hwy 80	Choudrant	71227	32.529957	-92.514612
Southern Residential Mobile Home Park	120 Aswell St	Choudrant	71227	32.529601	-92.505492
Hastings Mobile Home Park	131 Hastings Ln (Pvt)	Dubach	71235		
Smith Mobile Home Park	Main Street	Dubach	71235		
James Crawley Mobile Home Park	2506 Martin Luther King Jr Ave	Grambling	71245	32.530375	-92.730872
Jackson Mobile Home Park	141 Bennett Rd	Grambling	71245	32.531228	-92.729044
Lars Gray Mobile Home Park	137 Penn St	Grambling	71245	32.51125	-92.715529
Blankenship Mobile Home Park	116 Young St	Grambling	71245	32.507281	-92.711807
Milton Candler Mobile Home Park	133 Sandbed Rd	Grambling	71245	32.544723	-92.708805
Gardner Clark Mobile Home Park	128 Sandbed Rd	Grambling	71245	32.544051	-92.709163
Twin Oaks Mobile Home Park	173 Twin Oaks Ln (Pvt)	Ruston	71270	32.566372	-92.564441
Wilson Mobile Home Park	890 Rough Edge Rd	Ruston	71270	32.552698	-92.596801
Town & Country Mobile Home Park	696 Burgessville Rd	Ruston	71270	32.560275	-92.602198
Shady Pines Mobile Home Park	964 Burgessville Road	Ruston	71270	32.552751	-92.604461
Village Green Mobile Home Park	102 -148 Village Green Rd (Pvt)	Ruston	71270	32.569676	-92.602733
The Edge Mobile Home Park	137 Rough Edge Rd	Ruston	71270	32.533762	-92.575227
Green Acres Mobile Home Park	203 Water Tank Rd	Ruston	71270	32.506511	-92.607718
Shady Lane Mobile Home Park	1423 McAllister St	Ruston	71270	32.512099	-92.625943
Shepherd Creek Mobile Home Park	Shepherd Creek Road	Ruston	71270	32.504186	-92.669176
Peachland Village Mobile Home Park	7003 Hwy 80	Ruston	71270	32.505675	-92.691666
Lynch Mobile Home Park	181 Kathryn Ln (Pvt)	Ruston	71270	32.505652	-92.695625

Richardson Mobile Home Park	120 Kathryn Ln (Pvt)	Ruston	71270	32.506955	-92.696282
Westwood Hills Mobile Home Park	3300 Fletcher Ln	Ruston	71270	32.526793	-92.679567
Pine Ridge Mobile Home Park	294 Tarbutton Rd	Ruston	71270	32.549695	-92.681039
Tall Timbers Mobile Home Park	1343 Frazier Rd	Ruston	71270	32.57469	-92.608268
Oakwood Mobile Home Park	1361 Frazier Rd	Ruston	71270	32.575177	-92.607746
Romie Ridge Mobile Home Park	135 Romie Ridge Ln (Pvt)	Dubach	71235	32.63837	-92.573563
Hilly Junction Mobile Home Park	3175 Hwy 167	Dubach	71235	32.655022	-92.64952
Goose Creek Mobile Home Park	1596 McCullin Rd		71235	32.628164	-92.776847
Smart Mobile Home Park	11346 Hwy 80	Simsboro	71275	32.541772	-92.864793
Calvin Barnard Mobile Home Park	250 Jackson Rd	Simsboro	71275	32.497666	-92.778747
Antley Mobile Home Park	217 Gahagan Rd		71275	32.51808	-92.756211
Country Roads Mobile Home Park	505 Hwy 3005	Grambling	71245	32.503774	-92.73144
Charity Place Mobile Home Park	373 Belton Rd	Grambling	71245	32.492214	-92.734164
Minniefield Mobile Home Park	421 Heard Rd	Grambling	71245	32.495581	-92.707864
Burks Mobile Home Park	203 Nathan Loop	Grambling	71245	32.549472	-92.709324
Belinda Mobile Home Park	210 Garr Road	Grambling	71245	32.552416	-92.696434
Clarence Kennedy Mobile Home Park	353 Dunn Rd	Grambling	71245	32.541854	-92.702545
Oak Hill Mobile Home Park	269 Dunn Rd	Grambling	71245	32.54377	-92.699096
Robert Evans Mobile Home Park	4399 Hwy 818	Ruston	71270	32.464256	-92.687988
Green Leaf Mobile Home Park	4587 Hwy 80	Ruston	71270	32.534009	-92.602907
Blueberry Hills Mobile Home Park	601 Franke Dr	Ruston	71270	32.524095	-92.613691
The Village at Choudrant Creek	199 Chandler Rd	Ruston	71270	32.538179	-92.554833
Sandy Lane Mobile Home Park	9824 Hwy 80	Simsboro	71275	32.534395	-92.801856
Mays Mobile Home Park	681 Braswell Ln	Simsboro	71275	32.536871	-92.791736
Penix Mobile Home Park	661 Braswell Ln	Simsboro	71275	32.537048	-92.790661
Barnes Mobile Home Park	297 Rose St	Simsboro	71275	32.529616	-92.785232
Chip & Joes Mobile Home Park	9167 Hwy 80	Simsboro	71275	32.528278	-92.776628
Shady Oaks Mobile Home Park	9156 Hwy 80	Simsboro	71275	32.528881	-92.775197
Quail Ridge Mobile Home Park	Terral Lane	Dubach	71235	32.591542	-92.645825
Holtzclaw Mobile Home Park	Hwy. 3072	Ruston	71270	32.59095	-92.645864
Leisure Living Mobile Home Park	Beacon Light Road	Ruston	71270		
Liners Mobile Home Park	Hwy. 80 East	Ruston	71270		
Suburban Mobile Home Park	Atkins Road	Ruston	71270		
Lakeview Mobile Home Park	Atkins Road	Ruston	71270		
Highland Mobile Home Park	Highland Street	Ruston	71270		
Cedar Creek Mobile Home Park	West Alabama Avenue	Ruston	71270		
Penn Oaks Mobile Home Park	West California Avenue	Ruston	71270		
Hays Mobile Home Park	Riser Road	Ruston	71270		

National Flood Insurance Program (NFIP)

National Flood Insurance Program (NFIP)							
	Lincoln Parish	Choudrant	Dubach	Grambling	Ruston	Simsboro	Vienna
Insurance Summary							
How many NFIP policies are in the community? What is the total premium and coverage?	# of Policies: 25; Total Premiums: \$17,338; Total Coverage: \$7,374,000	# of Policies: 0; Total Premiums: \$0; Total Coverage: \$0	Dubach does not participate in the NFIP program	# of Policies: 4; Total Premiums: \$2,757; Total Coverage: \$1,219,000	# of Policies: 74; Total Premiums: \$43,495; Total Coverage: \$20,369,000	# of Policies: 1; Total Premiums: \$432; Total Coverage: \$350,000	Vienna does not participate in the NFIP program
How many claims have been paid in the community? What is the total amount of paid claims? How many of the claims were for substantial damage?	# of paid claims: 1; Total amount of paid claims: \$3,283; Substantial Damage: 0	# of paid claims: 0; Total amount of paid claims: \$0; Substantial Damage: 0		# of paid claims: 2; Total amount of paid claims: \$115,406; Substantial Damage: 0	# of paid claims: 20; Total amount of paid claims: \$128,069; Substantial Damage: 1	# of paid claims: 0; Total amount of paid claims: \$0; Substantial Damage: 0	
How many structures are exposed to flood risk with in the community?							
Describe any areas of flood risk with limited NFIP policy coverage.							
Staff Resources							
Is the Community FPA or NFIP Coordinator certified?			Dubach does not participate in the NFIP program				Vienna does not participate in the NFIP program
Is flood plain management an auxiliary function?							
Provide an explanation of NFIP administration services (e.g., permit review, GIS, education or outreach, inspections, engineering capability)							
What are the barriers to running an effective NFIP program in the community, if any?							
Compliance History							

Is the community in good standing with the NFIP?	Yes	Yes	Dubach does not participate in the NFIP program	Yes	Yes	Yes	Vienna does not participate in the NFIP program
Are there any outstanding compliance issues(i.e., current violations)?	No	No		No	No	No	
When was the most recent Community Assistance Visit (CAV) or Community Assistance Contact(CAC)?	CAV: 10/22/2015; CAC: 10/22/2015	CAC: 6/14/2011		CAC:6/14/2011	CAV: 7/20/2015; CAC: 7/27/2022	CAC: 6/14/2011	
Is a CAV or CAC scheduled or needed? If so when?	No	No		No	No	No	
Regulation							
When did the community enter the NFIP?	E = 8/09/1990; R = 3/01/1991	R = 3/17/2010	Dubach does not participate in the NFIP program	E = 1/18/2008; R = 4/02/2009	E = 2/19/1975; R = 6/15/1981	E = 10/18/2007; R = 4/02/2009	Vienna does not participate in the NFIP program
Are the FIRMs digital or paper?	Digital	Digital		Digital	Digital	Digital	
When did the communities adopt the FIRM's	4/2/2009	4/2/2009		4/2/2009	4/2/2009	4/2/2009	
Do floodplain development regulations meet or exceed FEMA or State minimum requirements? If so, in what ways?	Meets	Meets		Meets	Meets	Meets	
Community Rating System (CRS)							
Does the community participate in CRS?	No	No	Dubach does not participate in the NFIP program	No	Yes	No	Vienna does not participate in the NFIP program
What is the community's CRS Class Ranking?	N/A	N/A		N/A	8	N/A	
Does the plan include CRS planning requirements?							