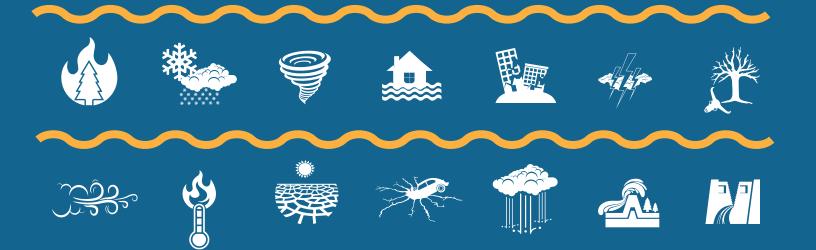
# Louisiana State Hazard Mitigation Plan Update 2024 HAZARDS

Extreme Heat Drought Wildfire Winter Storms High Wind Hailstorms Lightning Tornadoes Flooding Dam Failure Earthquake Sinkholes Expansive Soil



THIS DOCUMENT WAS PREPARED BY:

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# Introduction to Louisiana's Hazard Mitigation Planning Process



Chapter 1 provides a brief introduction to the State of Louisiana, discusses the importance of hazard mitigation planning, and explains how the State's strategy for mitigation planning has evolved since 2005. Further, Chapter 1 describes the 2024 planning process undertaken by the State, as prescribed by Section 3.1 of FEMA's State Mitigation Planning Policy Guide (2022). Additional information on the planning process, including documentation of meetings, can be found in the Appendix.

# **S1.** DOES THE PLAN INCLUDE A DESCRIPTION OF THE PROCESS USED TO DEVELOP THE PLAN? [44 CFR §§ 201.4(B) AND 201.4(C)(1)]

**S2.** DOES THE PLAN DESCRIBE HOW THE STATE COORDINATED WITH OTHER AGENCIES AND STAKEHOLDERS? [44 CFR §§ 201.4(B) AND 201.4(C)(1)]

# Location and Hazard Risk

With the coastline of the Gulf of Mexico as its southern border, along with the mouth

of the Mississippi River, the State of Louisiana is prone to both coastal storms and flooding. Additionally, the state's historic reliance on engineered flood protection measures such as levees, floodwalls, and forced drainage systems compound the state's vulnerability to flooding. Further, engineered flood protection measures increase rates of subsidence; subsidence, severe weather, lack of new alluvial sediments, and saltwater intrusion from navigation and extraction activities lead to further coastal erosion; and climate change is resulting in increased ocean temperatures and sea level rise across the coast. All these hazards result in more frequent extreme weather events and increased coastal land loss. Consequently, these hazards narrow the natural buffers between the Gulf of Mexico and inhabited land, resulting in less protection from high winds and storm surge, which are significant threats to the state.

Altogether, Louisiana is vulnerable to various natural hazards that are compounded by the impact of climate change and human activities, including engineered flood protection measures and natural resource extraction. Considering these challenges, the state continues its efforts to reduce impacts of hazards to which it is vulnerable. In 2003, the state began a comprehensive planning process to improve hazard mitigation, which resulted in the State of Louisiana Hazard Mitigation Strategy of 2005. The 2005 hurricane season highlighted Louisiana's vulnerability as Hurricanes Katrina and Rita caused overwhelming damage to human life and property. Following the 2005 hurricane season, Louisiana updated its Hazard Mitigation Plan, which was completed in 2008. The state continued to conduct required plan updates in 2011, 2014, and 2019.



# Hazard Mitigation

FEMA defines hazard mitigation as "any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards" (DHS-FEMA, 2022). Hazard mitigation planning can be an important tool for the State and local governments to build disaster resilience. Effective state hazard mitigation planning increases knowledge of hazards, supports stronger partnerships between the state and local communities, creates informed strategies to reduce risk, and improves mitigation capabilities - all with equitable outcomes in mind.

In addition to being an important tool in support of disaster resilience, the Disaster Mitigation Act of 2000 mandates that States have approved Standard State Mitigation Plans to receive non-emergency Stafford Act assistance and FEMA mitigation grants to include Hazard Mitigation Grant Program (HMGP), Public Assistance (PA), Pre-Disaster Mitigation Grant Program (PDM), Building Resilient Infrastructure and Communities (BRIC) and others. Requirements for the contents of the Mitigation Plan are found in the 44 CFR § 201.

The figure below demonstrates the process of developing a hazard mitigation plan per FEMA's State Mitigation Planning Policy Guide (2022). The steps include organization of the process and resources including the coordination of stakeholders; identification of the hazards and assessment of risks associated with those hazards; evaluation of the state's mitigation capabilities; development of the mitigation strategy to include goals and actions that reduce long term vulnerabilities; assessment of local planning coordination and capability building; establishment of methods to review the plan to make sure it is kept current, to evaluate for effectiveness, and to implement following adoption; and adoption of the planning document. Overall, this hazard mitigation planning process is important to the State of Louisiana as it supports efforts to proactively address the increasing risks posed by natural hazards and climate change.

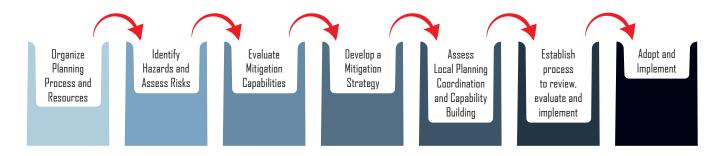


Figure 1 - State Hazard Mitigation Process



# General Planning Strategy

The Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), with support from the State Hazard Mitigation Planning Committee (SHMPC) first developed the **2005 State of Louisiana Hazard Mitigation Strategy**. The 2005 Strategy included four volumes:

State of Louisiana Hazard Mitigation Plan State of Louisiana Hazard Mitigation Plan Appendix State of Louisiana Hazard Mitigation Program, and the State of Louisiana Administrative Guidelines and Procedures

# Following Hurricanes Katrina and Rita in 2005, the Strategy was broadened to include other planning efforts including the:

State of Louisiana Emergency Operations Plan (July 2009), State of Louisiana GOHSEP Continuity of Operations Plan (2009), and the Regional and community-based long-term recovery plans (2005-2009).

# The 2011 Plan Update was organized much like the 2005 and 2008 Plans and included the following sections:

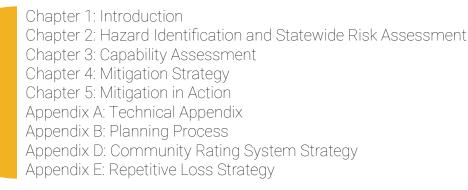
Section 1: Introduction
Section 2: Plan Adoption
Section 3: Planning Process
Section 4: Hazard Identification and Profiles
Section 5: Statewide Risk Assessment
Section 6: Risk Assessment for State-Owned Assets
Section 7: Capability Assessment
Section 8: Mitigation Action Plan
Section 9: Coordination with Local Mitigation Planning
Section 10: Plan Maintenance Process

After three revisions, Louisiana's 2011 Hazard Mitigation Plan Update reached nearly 1,700 pages. Considering this, the SHMPC voted to revise the Plan to make it more accessible and more efficient for use by the state and local governments. Consequently, the 2014 Plan Update was reorganized and included the following sections:

Section 1: Introduction
Section 2: Hazard Identification and Statewide Risk Assessment
Section 3: State Historical Properties Risk Assessment
Section 4: Capability Assessment
Section 5: Mitigation Strategy
Section 6: Mitigation in Action
Appendix: Planning Process, Plan Maintenance, Mapping Methodology, Plan Adoption, Endnotes

The 2019 Plan Update process continued the tradition of presenting the plan in the most effective and efficient way to enhance the usability of the plan's contents. To accomplish this, a decision was made to place certain details of the hazard identification, including maps showing historic and future hazard probabilities and locations of projected losses, in a new Technical Appendix. A complete loss estimate table for each hazard by parish was also provided in the Technical Appendix. In addition, the SHMPC agreed to add a Community Rating System Strategy and a Repetitive Loss Strategy; both were included in the Appendix.

• The 2019 Plan Update included the following sections:



For the 2024 Plan Update, members of the SHMPC agreed that efficiency in the presentation of the plan data was still important to achieve local and regional cooperation in hazard mitigation efforts as well as consistency among hazard mitigation planning across the State. Thus, the plan organization resembles the 2019 plan but has some minor differences to account for changes set forth in FEMA's updated State Mitigation Planning Policy (2022) Thus, the 2024 Plan Update includes the following sections:

Chapter 1: Introduction Chapter 2: Hazard Identification and Statewide Risk Assessment Chapter 3: State Mitigation Capabilities Chapter 4: Mitigation Strategy Chapter 5: Mitigation in Action Chapter 6: Local Planning Coordination & Capability Building Appendix A: Technical Appendix
Appendix A: recentical Appendix Appendix B: Planning Process Documentation Appendix C: Plan Maintenance Appendix D: Community Rating System Strategy Appendix E: Repetitive Loss Strategy



# 2024 Planning Process

Similar to past planning processes, the Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP) was the lead state agency for developing the 2024 Plan Update; specific responsibility for project management was assigned to the State Hazard Mitigation Officer (SHMO). As such, the SHMO convened the State Hazard Mitigation Planning Committee (SHMPC) – an ad-hoc committee comprised of state and regional agencies, local parishes, private industry, and academia. The SHMPC was charged to direct the development of the plan, to function as a voice for the State of Louisiana, and to provide expertise and general feedback on plan elements on behalf of their constituents. The SHMPC included representatives from the following entities:

- » Acadiana Planning Commission
- » AECOM
- » Arcadis
- » Capital Region Planning Commission
- » City of New Orleans
- » Division of Administration, Office of Community Development, Disaster Recovery Unit (DOA-OCD-DRU)
- » Division of Administration, Office of Facility Planning & Control
- » Division of Administration, Office of Planning and Budget (DOA-OPB)
- » Division of Administration, Office of Risk Management (DOA-ORM)
- » Division of Historic Preservation, Department of Culture, Recreation & Tourism (DCRT)
- » Department of Agriculture and Forestry
- » Department of Corrections, Office of State Fire Marshall (OSFM)
- » Department of Environmental Quality (DEQ)
- » Department of Health (LDH)
- » Department of Transportation and Development (DOTD)
- » FEMA Region 6
- » Governor's Office of Coastal Activities
- » Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)
- » Henry Consulting
- » Iberville Parish
- » Jefferson Parish
- » Louisiana Department of Insurance (LDI)
- » Louisiana Hospital Association
- » Louisiana Office of Motor Vehicles
- » Louisiana Office of State Climatology
- » Louisiana Sea Grant College Program (LSG)
- » Louisiana State Uniform Construction Code Council
- » Louisiana State University
- » LSU AgCenter
- » New Orleans Regional Planning Commission (NORPC)
- » Northwest Louisiana Council of Governments
- » Port of South Louisiana
- » Smart Home America
- » South Central Planning and Development Commission (SCPDC)
- » Southwest Louisiana Regional Planning Commission
- » St. John the Baptist Parish
- » State Fire Marshal
- » The Water Institute of the Gulf
- » University of New Orleans (UNO)

The planning process began in May 2023 and the SHMPC met on four separate occasions to develop the 2024 Plan Update. The table below provides a summary of the meetings which provided opportunities for members of the SHMPC to provide



input to the plan. Each meeting focused on a different plan element and allowed for input by various stakeholders. Following Meeting #1, which was held at the State's Emergency Operations Center (EOC) in Baton Rouge, LA, members of the SHMPC requested that future meetings be held via Zoom to avoid travel time for many members and to increase participation.

These meetings were facilitated by GOHSEP and its consultants from LSU AgCenter, LSU, and UNO-CHART. Information to be discussed was shared, via email and the use of

Meeting Number	Date / Place	Plan Element Focus
1	May 23, 2023; Baton Rouge, LA	Kick-off / Planning Process
2	July 7, 2023; via Zoom	Hazard Profiles
3	August 30, 2023; via Zoom	Risk Assessment
4	October 10, 2023; via Zoom	Mitigation Strategy / Goals and Actions

a Google shared folder, with members of the SHMPC before and after meetings. Overall, committee members had opportunities to provide meaningful contributions to the plan through open discussions at meetings, two digital surveys (one that focused on goals and actions, the other focused on capacity), phone calls and emails with GOHSEP and its consultants.

GOHSEP coordinated all planning activities throughout the planning process. GOHSEP directly supervised the consultants and facilitated the participation of the SHMPC members. GOHSEP also provided important oversight and quality control to ensure that the plan and the associated process met federal requirements. At the end of the process, GOHSEP provided a formal recommendation for the Governor's Authorized Representative to adopt the Plan Update.

FEMA, through its Region VI office in Denton, Texas, is responsible for reviewing the plan for compliance with DMA 2000 and the CFR. Representatives of FEMA Region VI also helped facilitate completion of this plan through on-going review of the plan as it was developed and updated.

GOHSEP's consultants from LSU AgCenter, LSU, and UNO-CHART supported the 2024 Plan Update in the following ways:

Assembled information for inclusion in the plan Edited previous editions of the plan Wrote new material as necessary Provided technical support to profile the hazards and perform the statewide risk assessment Created materials for the meetings Developed the surveys Made presentations at the SHMPC meetings Provided support for outreach

### Plan Integration

The CFR requires that states describe how their mitigation planning process is integrated with other ongoing state planning efforts, as well as FEMA mitigation programs and initiatives. Through the SHMPC, the State was able to coordinate with agencies and other stakeholders that are responsible for emergency management, economic development, land use and development, housing, health and social services, infrastructure, and natural and cultural resources.

Further, integration and coordination are achieved through the participation of state agency representatives on the SHMPC who administer three programs: floodplain management under the National Flood Insurance Program (NFIP), coastal protection and restoration under the provisions of Act 8 of the First Extraordinary Session of 2005, and the State Uniform Construction Code. Furthermore, to achieve Emergency Management Accreditation Program (EMAP) compliance, GOHSEP staff that participated in the SHMPC submitted suggested changes for the Plan Update in late 2007. These changes have been brought forward through the current 2024 Update. There are also several initiatives that have fostered further coordination and integration of the SHMPC which was developed to address the roles and responsibilities of state and non- governmental (NGO) partners in responding to all threats and hazards, but especially those outlined in the State Hazard Mitigation Plan. Coordination efforts among these efforts range from seeking consistency in the way hazards are identified, to identifying opportunities to integrate mitigation practices in response and recovery operations.

Another program is the GOHSEP Continuity of Operations Plan (COOP), which was updated in 2017. The COOP was incorporated into the overall State of Louisiana Hazard Mitigation Strategy to specifically acknowledge that key provisions of that plan were part of the overall approach to reducing risk and the impacts of hazards. GOHSEP considered providing for redundancy of critical systems, equipment, flow of information, operations, and materials consistent with the overall goals and objectives of the plan. GOHSEP also provides leadership for state and local mitigation planning efforts and administers and oversees FEMA-related hazard mitigation grant programs (HMGPs) for the state that are related to hazard mitigation, emergency management, and disaster relief. Based on this role, GOHSEP can integrate mitigation planning and project information with the FEMA grant application process for the following: Hazard Mitigation Grant Program (HMGP), Public Assistance (PA), Pre-Disaster Mitigation Grant Program (PDM), Building Resilient Infrastructure and Communities (BRIC) and others.

