

An aerial photograph of a residential neighborhood that has been completely inundated with floodwater. The houses, trees, and streets are all submerged, with only the roofs and tops of trees visible above the water level. The sky is overcast and grey.

# Building Capacity for Effective Flood Risk Reduction Planning

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**Across the country, communities large and small face the devastating impact of flooding, yet each community's ability to recover and plan for the future is different.**



# A History of Living with Flood Risk

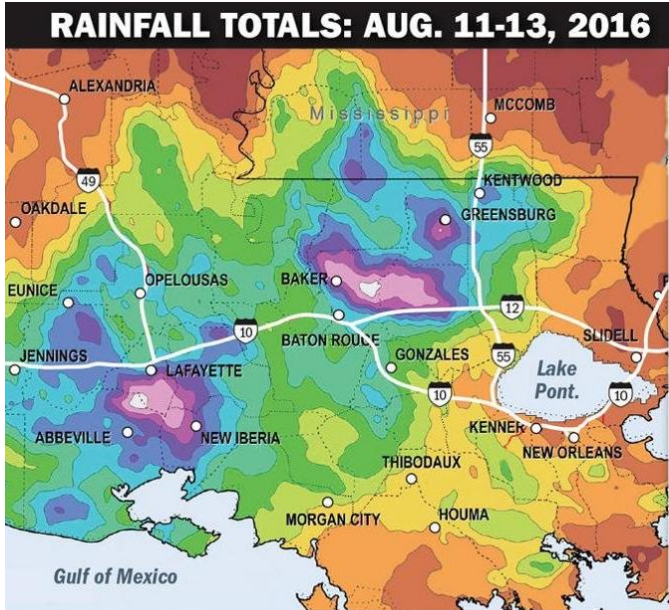


Hurricane Laura brought storm surge of 17ft to SW Louisiana (Houma Today, 8/27/2020)



Tidal flooding of LUMCON parking lot (Houma Today, 6/1/2019)

Rainfall totals from 2016 Baton Rouge Floods



National Weather Service



Opening the Bonne Carre Spillway (4/25/25)

# Creating a Vision for the Future

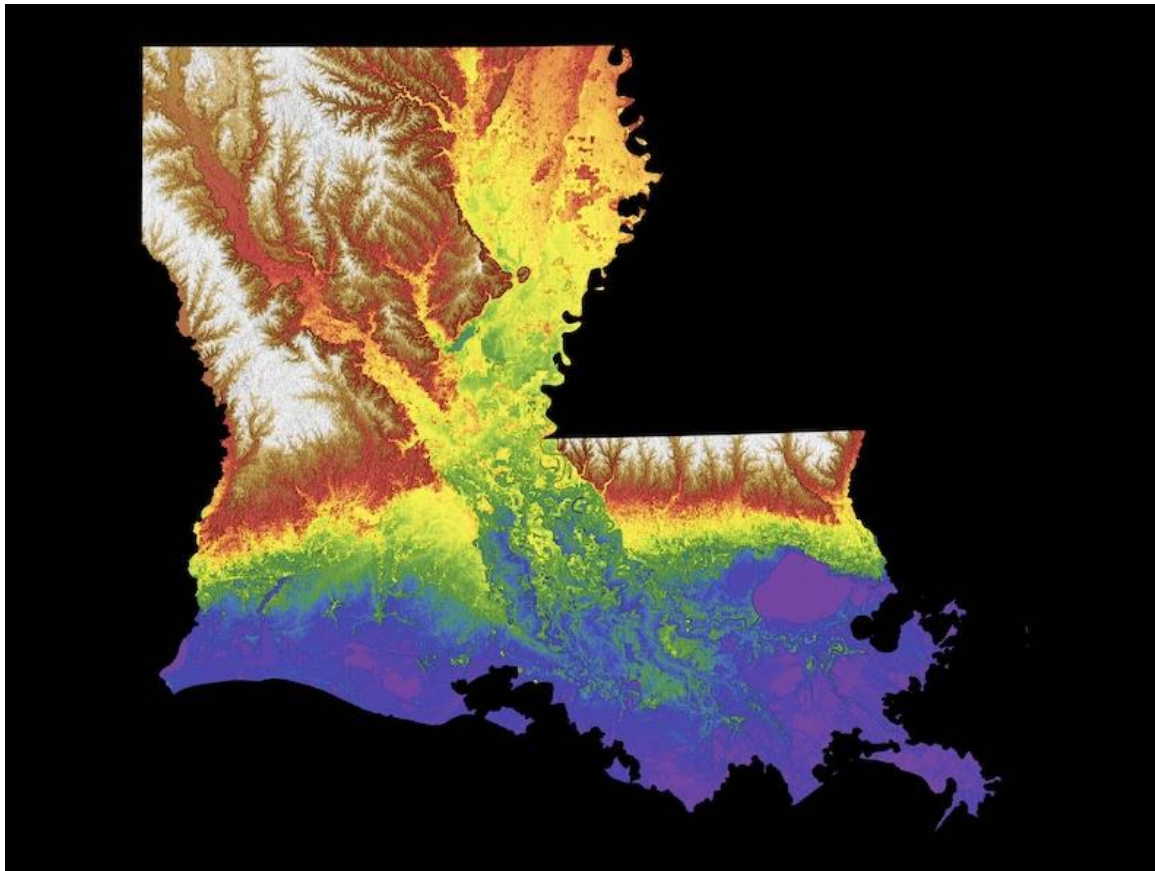
Regardless of size or capacity, communities benefit from a clearly stated vision and measurable goals.

This foundational work provides guidance throughout ongoing resilience work and should be a first step.



# One Size Does NOT Fit All

Communities are unique, and there are a variety of considerations when undertaking flood resilience planning



## Geography

- Terrain, elevation, proximity to rivers/coasts, and features impact on drainage.

## Climate

- Rainfall patterns, hurricane vulnerability, and localized weather.

## Population Density

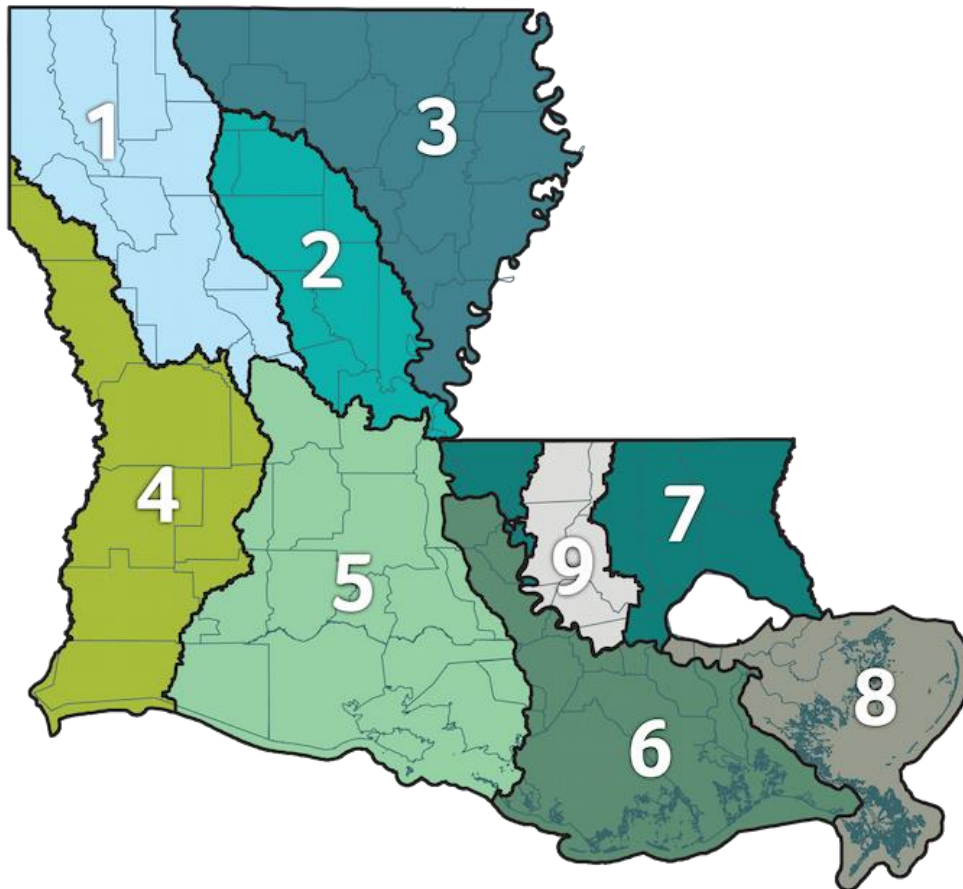
- Infrastructure strain, dispersed properties.

## Economy

- At-risk industries and available financial resources.

# One Size Does NOT Fit All

Communities are unique, and there are a variety of considerations when undertaking flood resilience planning



## Infrastructure

- Aging systems, upgrade needs, development.

## Capacity

- Staff expertise, technical capabilities, time.

## Social Factors

- Vulnerable populations, historical non-investment.

## Collaboration Potential

- Shared watersheds across jurisdictions, existing relationships and authorities.

# Rural vs Urban Considerations



# Coastal vs Inland Considerations



**So, how can we build capacity?**  
**Start with YES.**

# Leverage Lived Experience and Past Flood Events

## Getting Starting

- Conduct community surveys or use publicly available disaster reports
- Use basic spreadsheet tools to track and analyze local flood impacts
- Use community storytelling or oral histories to document flood impacts

## Building Further

- Use detailed flood loss databases, GIS tools, and economic modeling
- Hire consultants to perform in-depth economic impact assessments
- Analyze insurance claims data to identify high-risk areas



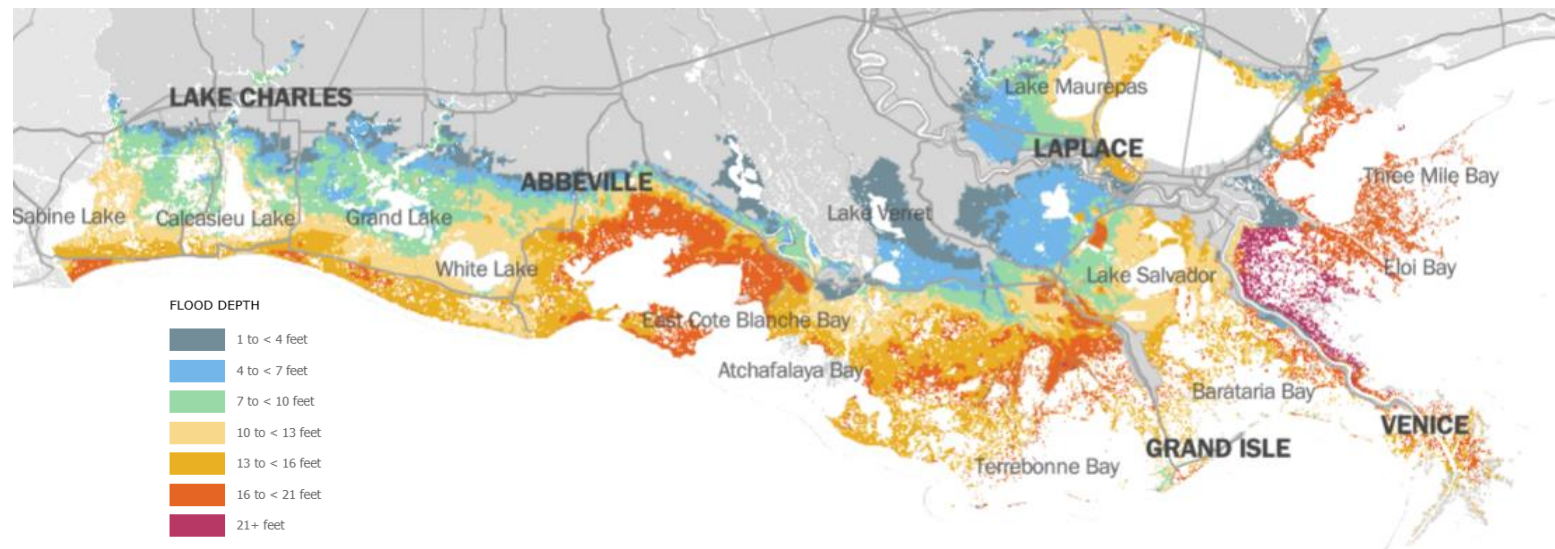
# Estimate Future Flooding to Support Planning

## Getting Starting

- Use simplified flood maps and regional forecasts from public sources
- Attend free training or webinars on flood risks and climate adaptation planning
- Use scenario planning workshops to explore future flood conditions

## Building Further

- Integrate climate projections and hydrologic models into planning
- Develop custom flood modeling tools with technical partners
- Incorporate flood risk into zoning and building codes



# Collaborate to Understand Risk and Enhance Capacity

## Getting Starting

- Host community mapping events to gather local knowledge
- Join regional coalitions or partner with universities and nonprofits
- Use free online platforms to share flood risk information

## Building Further

- Develop shared flood risk dashboards with regional partners
- Lead multi-agency working groups and host data-sharing platforms
- Develop a centralized resilience hub or data portal



# Employ Strategic Decision-Making

## Getting Starting

- Brainstorm options with community members and compare using simple pros/cons lists
- Create a simple phased plan with short-, medium-, and long-term goals
- Use free online templates or toolkits to guide action planning and prioritization

## Building Further

- Use multi-criteria decision analysis and cost-benefit modeling
- Develop adaptive investment pathways using dynamic modeling and performance tracking
- Contract consultants to conduct feasibility studies and stakeholder engagement for complex strategies



# Key Take Aways

## Start with Understanding Flood Risks

- Assessing local vulnerabilities is critical for effective resilience planning.

## Tailor Your Approach to Local Needs

- Communities should 'right-size' their flood planning to reflect unique regional challenges.

## Vision and Goal-Setting as a Foundation

- Clear goals and a shared vision are essential for success.

## Build Capacity Over Time

- Start small with achievable steps and leverage available resources and partnerships.

## Differentiated Implementation

- Use flexible approaches tailored to your community's starting point, balancing short-term actions and long-term investments.

## Commit to Adaptation

- As flood risks evolve, so must your plans. Continual learning and adaptation are vital to success.

**Thank you**  
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