



# **City of New Orleans Hazard Mitigation Planning**

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**City of New Orleans**  
Community Presentation  
July 29, 2020

# Greetings

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**Austin Feldbaum**

Hazard Mitigation Office

City of New Orleans

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# Housekeeping Items

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- Please keep your line muted
- Chat feature allows for questions at anytime
- City of New Orleans (Austin) and Civix (Ryan) will be presenting
- Civix (Jennifer) will be hosting and managing the meeting
- A polling activity will take place at the end of the presentation

# Agenda

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- Meeting Goals and Objectives
- Overview of Hazard Mitigation Plan and Planning Process
- Project Timeline
- Hazard Identification and Risk Assessment Summary
- Polling Activity: Hazard Awareness
- Next Steps

# Meeting Goals and Objectives

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- Provide status update Hazard Mitigation Plan and planning process
- Present summary of Hazard Identification and Risk Assessment
- Receive community feedback on Hazard Identification, Risk Assessment, and Hazard Awareness

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# Hazard Mitigation Plan



# What is a Hazard Mitigation Plan?

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- Hazard mitigation planning is a way to understand risks and vulnerabilities associated with natural and manmade disasters.
- The planning process also identifies actions and long term-strategies that can reduce risks and potential impacts.
- Plans are a federal requirement under the Disaster Mitigation Act of 2000 with the goal of reducing the impact and cost of disasters.
- Hazard Mitigation Plans must be updated every 5 years.

# How is the Hazard Mitigation Plan Used?

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- The Hazard Mitigation Plan identifies mitigation measures that the City of New Orleans and its planning partners can put into place that may reduce the impact or severity of future hazard events.
- The plan is a requirement to access types of disaster assistance through FEMA's Hazard Mitigation Assistance Programs.
- Informs floodplain management planning under the Community Rating System (CRS) to improve CRS score and increase flood insurance discounts under the National Flood Insurance Program (NFIP).
- Plan is maintained through quarterly meetings of the Hazard Mitigation Committee, which is a subset of the Local Emergency Planning Committee.



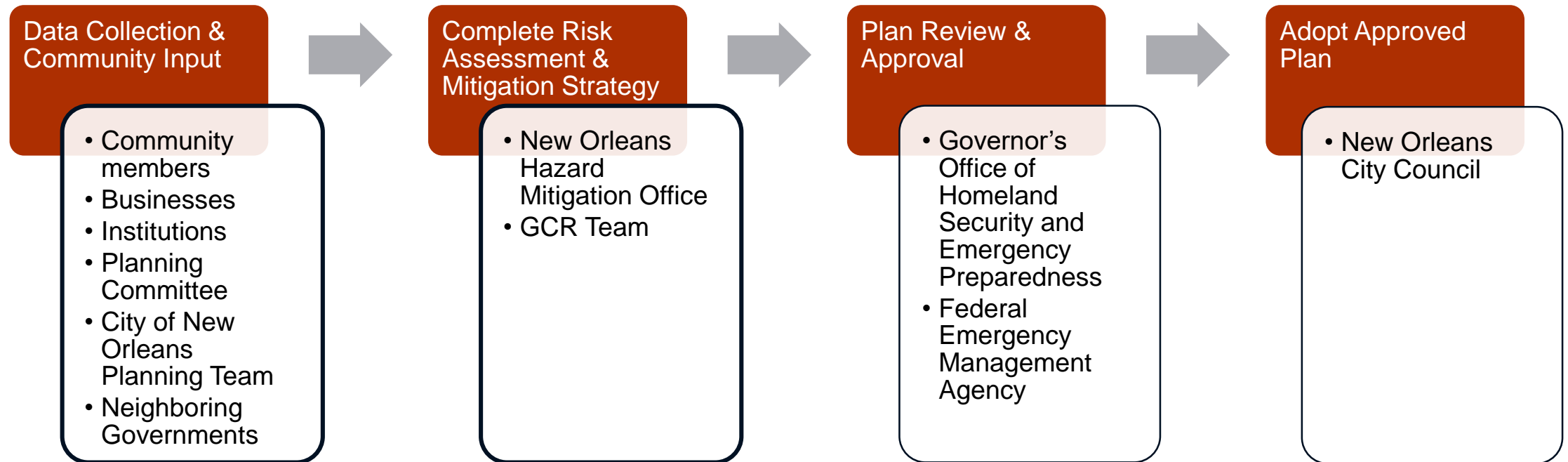
# Disaster Management Cycle

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# How is the Hazard Mitigation Plan Updated?

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# What's New?

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- The 2020 Hazard Mitigation Plan will be multi-jurisdictional.
  - Identify shared resilience goals
  - Increase access to joint mitigation efforts and grant opportunities
  - Leverage resources to increase risk education and community outreach
- The City has received approval to make the plan web-based.
  - Increased ability for the public and stakeholders to engage and provide feedback as the plan evolves
  - Ability to integrate with Geographic Information Systems (GIS) and links to relevant information, documents, and resources

# City of New Orleans Planning Team

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- New Orleans Office of Homeland Security & Emergency Preparedness
- City Planning Commission
- Department of Health
- Office of Safety and Permits
- Department of Parks and Parkways
- New Orleans Property Management
- Office of Sustainable Infrastructure



CITY OF NEW ORLEANS



# Project Partners



# Project Support

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Accu-Environmental, LLC



City of New Orleans

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# Project Timeline



# Project Timeline

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# Mitigation Strategy

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- Long-term plan to reduce potential losses identified in the risk assessment.
  - Goals
  - Mitigation Action Plan
  - Prioritized Mitigation Actions
  - Implementation Strategy

# FEMA Mitigation Action Categories

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- Prevention
- Property Protection
- Natural Resource Protection
- Emergency Services
- Structural Projects
- Public Education and Awareness

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# Hazard Identification

# 2020 Natural Hazards

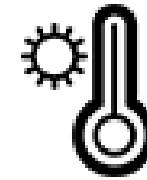
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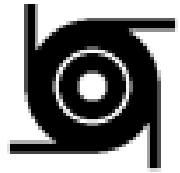
Flooding



Tornadoes



Extreme Heat



Tropical  
Cyclones



Subsidence



Severe  
Thunderstorm



Coastal  
Erosion

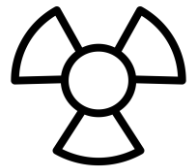


Winter Weather



# 2020 Man-Made Hazards

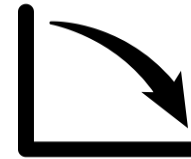
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Hazardous  
Materials



Infrastructure  
Failure



Economic Shock



Active Threats



Infectious  
Disease  
Outbreak



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# Key Hazard Profiles

# Hazard Profile Overview

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- Definition
- Measurement
- Geographic extent
- Previous occurrence
- Evaluation of future occurrence

# Flooding Definition

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- A flood is the overflow of water onto land that is usually not inundated.
- Can be caused by weather events, such as hurricanes, thunderstorms, storm surge, and winter storms.
- Can also be a result of infrastructure failures such as levees, floodwalls, and water main breaks.



# Flooding Definitions

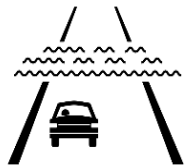
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Riverine flooding occurs along a river or smaller stream, including the Mississippi River.



Flash flooding occurs when locally intense precipitation inundates an area in a short amount of time, resulting in local streamflow 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.

# Flooding Definitions

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Backwater flooding occurs when water slowly rises from a normally unexpected direction where protection has not been provided.



Urban flooding is similar to flash flooding but is specific to urbanized areas. It takes place when stormwater drainage systems cannot keep pace with heavy precipitation, and water accumulates on the surface.



Coastal flooding occurs when normally dry coastal land is flooded by seawater but may be caused by direct inundation, overtopping of a natural or artificial barrier, or the breaching of a natural or artificial barrier.

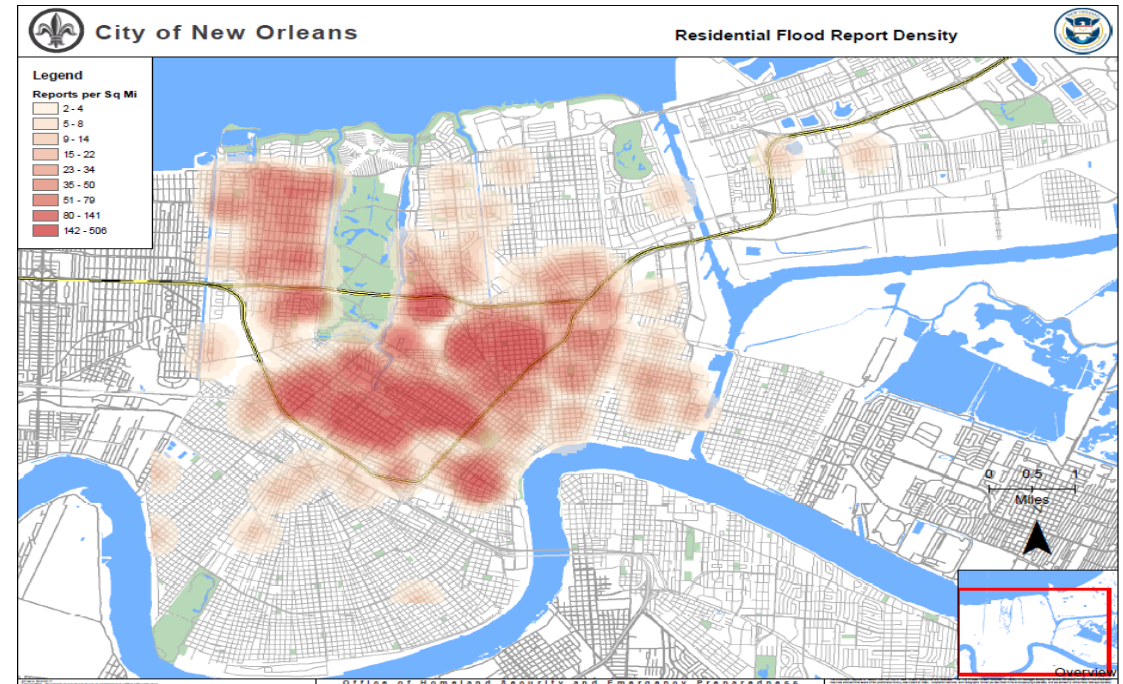
# Flooding Measurement and Geographic Extent



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- Measured by depth, property damage, and threat to people.
  - Flooding occurs across New Orleans and throughout the region.
    - Flash and urban flooding
    - Coastal flooding

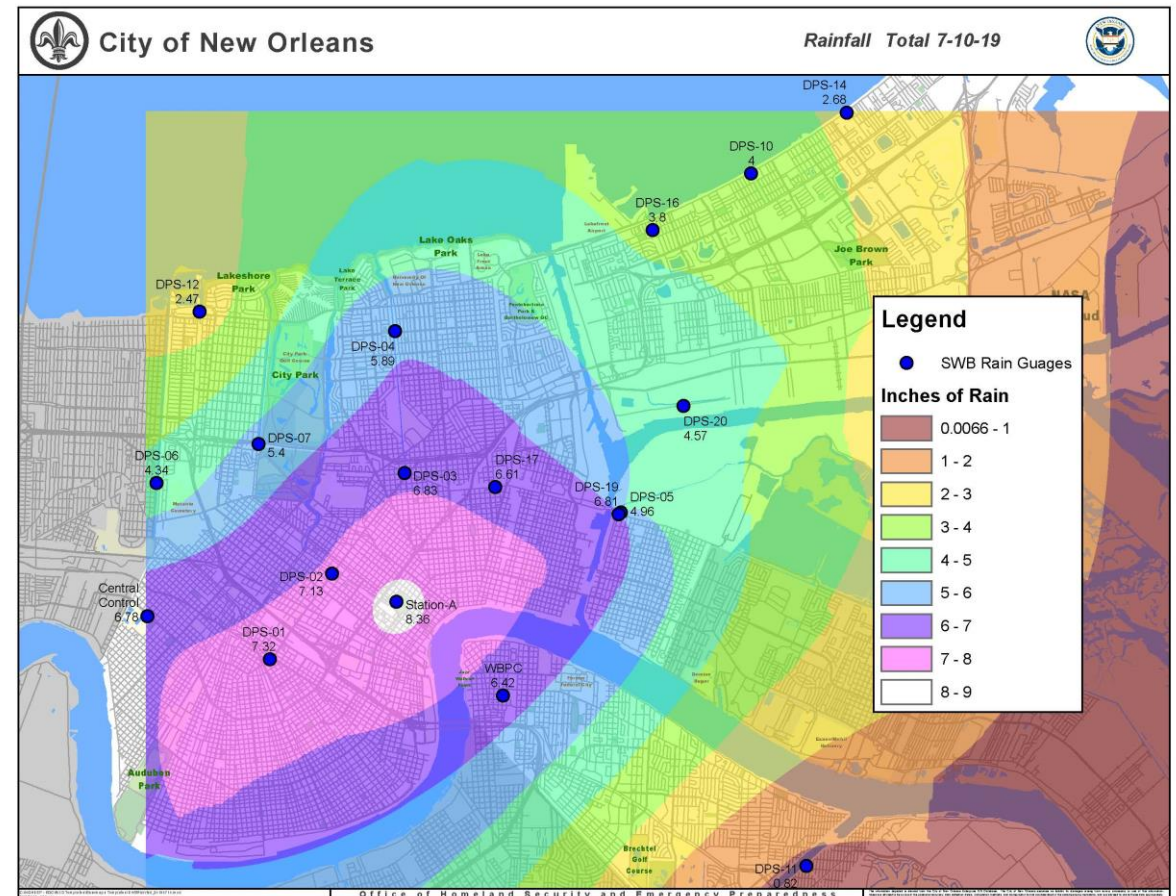
# Flooding Previous Occurrence

- August 5, 2017 Flash Flood Event
  - Thunderstorms
  - 4 to 9 inches of rain
  - 3 to 5 hours
  - 685 flood claims under NFIP
  - \$4.3 million paid out by FEMA



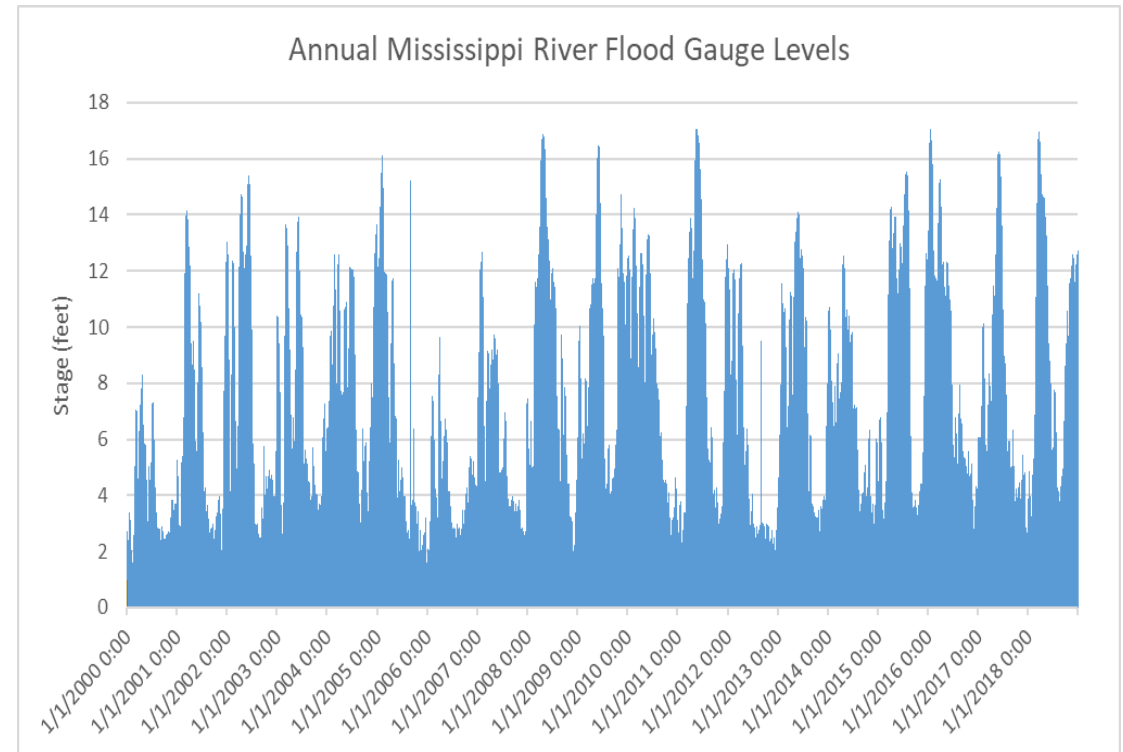
# Flooding Previous Occurrence

- July 10, 2019 Flash Flood Event
  - Tropical Storm Barry
  - 8 to 9 inches of rain
  - 3 hours
  - Nearly 600 flood insurance claims



# Flooding Previous Occurrence

- Mississippi River at New Orleans
  - Over 17 feet (flood stage) 20 days since 2000
  - 10 of which were in April 2020





# Flooding Previous Occurrence 🌊

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- Bonnet Carre Spillway
  - Opened 15 times starting in 1937
  - 6 times in the last 10 years
  - 2 times in 2019



Courtesy of WWNO

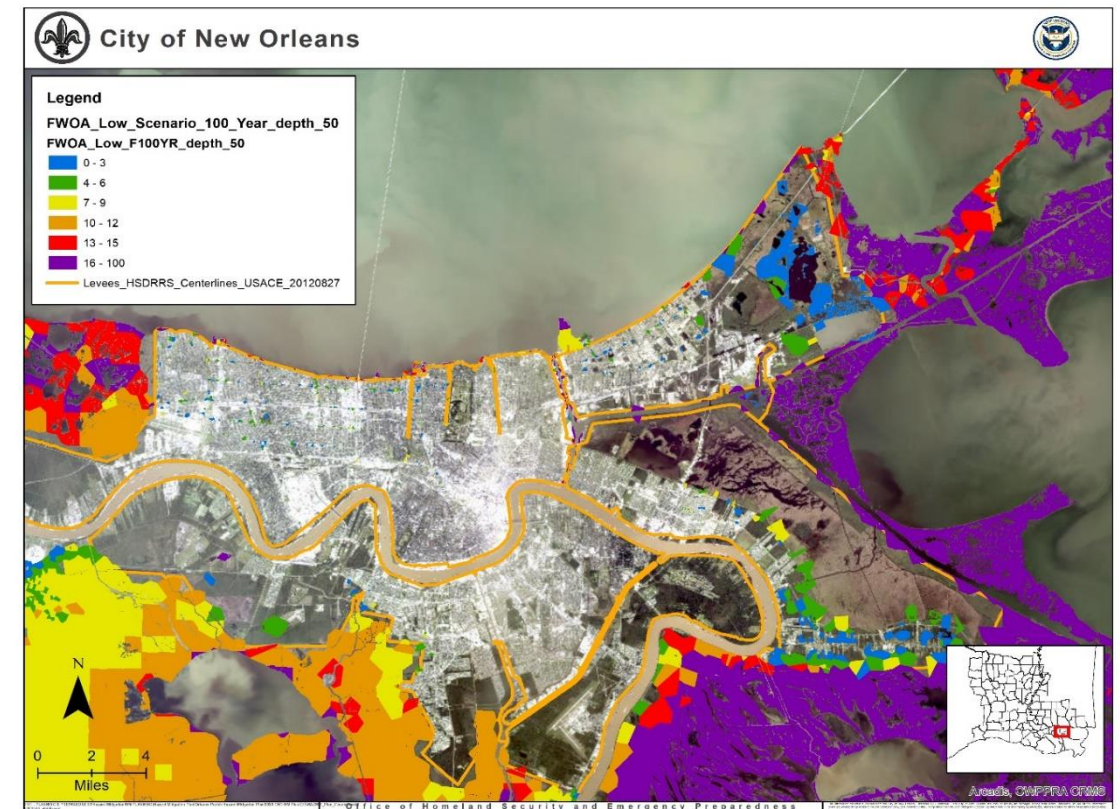
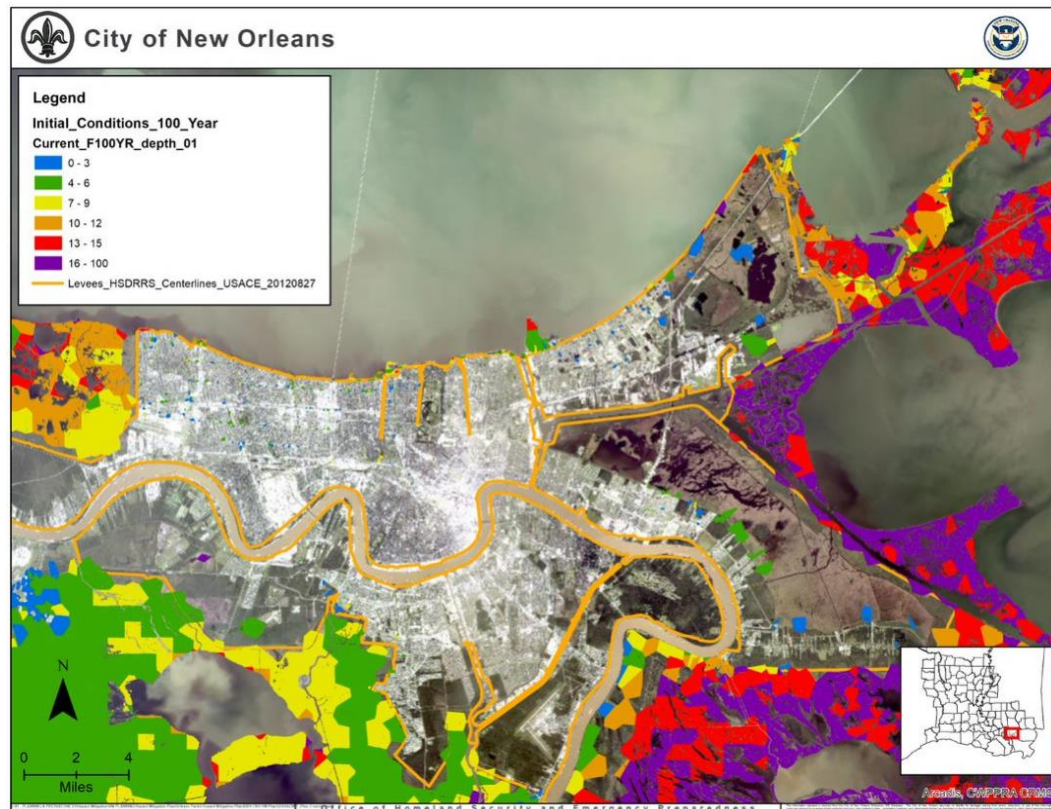
# Flooding Future Occurrence

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- Flooding is anticipated to be an ongoing and increasing hazard
  - Subsidence
  - Sea-level rise
  - Heavy rain and hurricane activity
  - Building and land use decisions

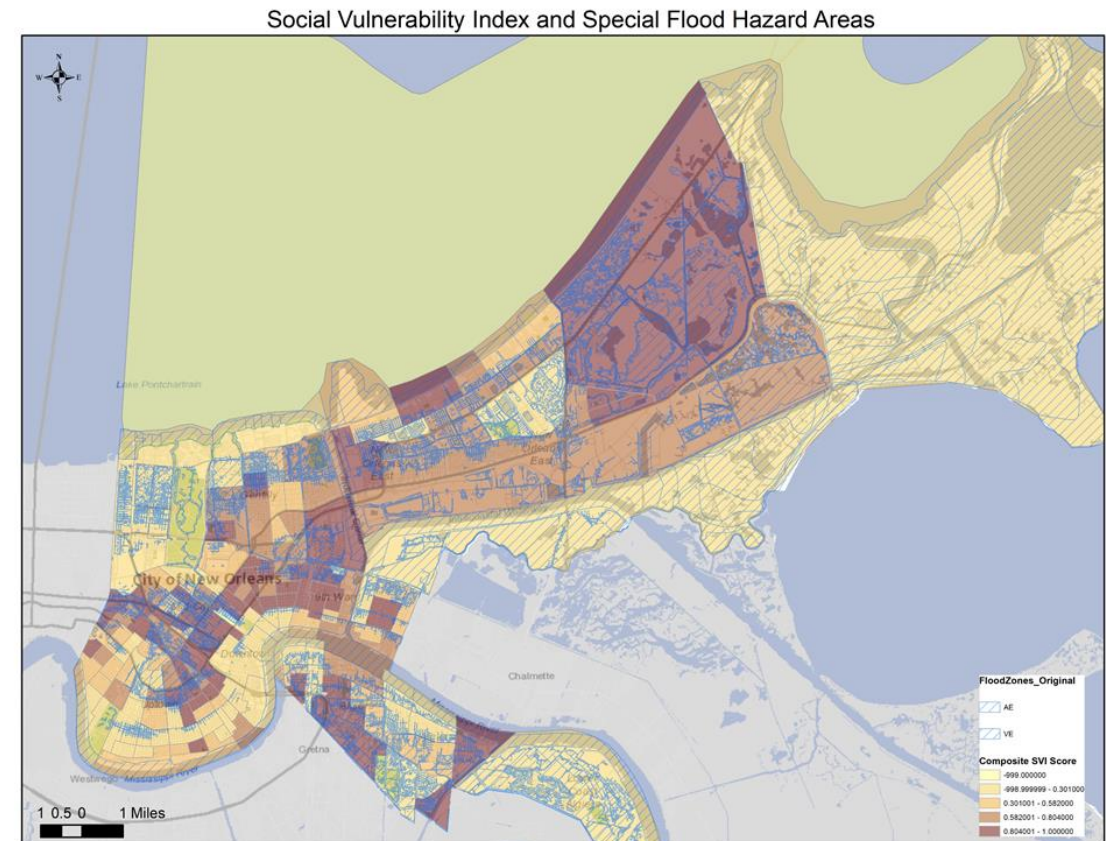


# Flooding Future Occurrence



# Flooding & Vulnerable Populations

- Neighborhoods at Risk
  - New Orleans East
  - Gentilly Lakefront
  - Algiers



# Coastal Erosion Definition

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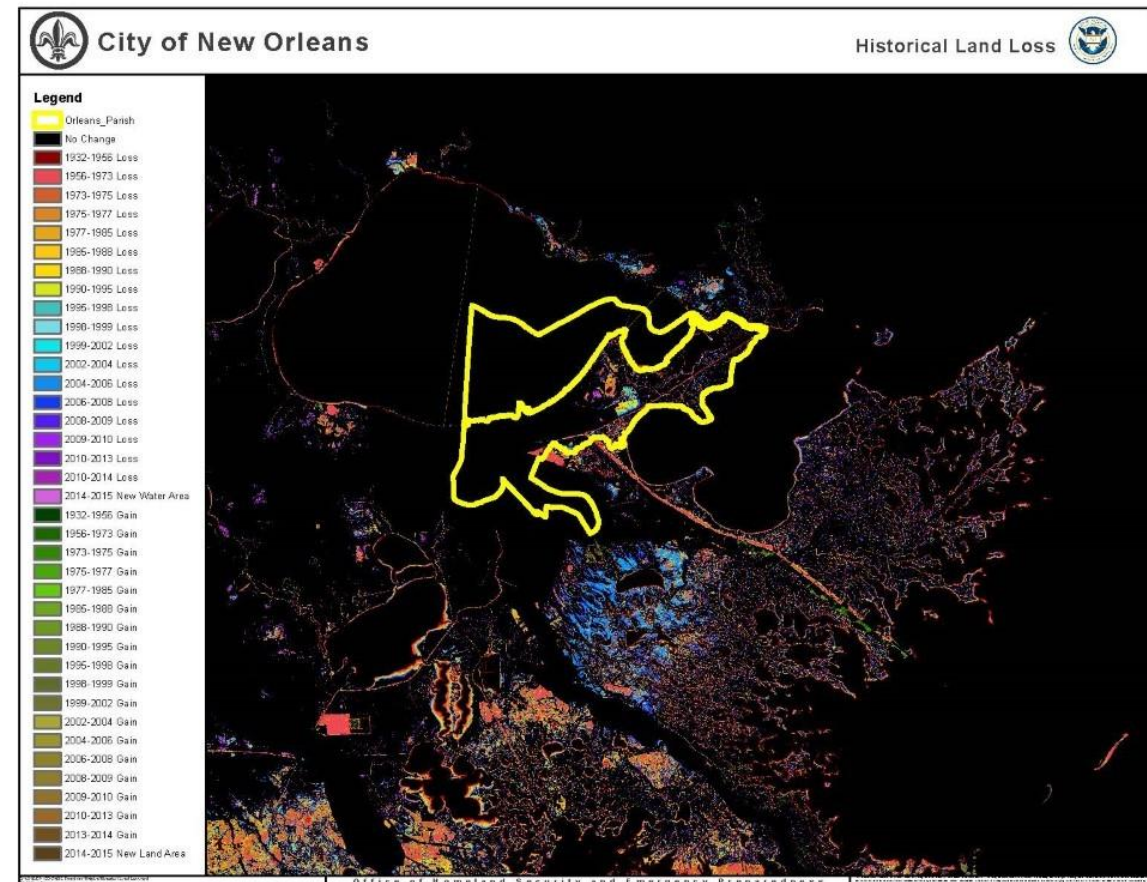
- Wearing away of land or the removal of beach or dune sediment by:
  - Wave action
  - Tidal currents
  - Wave currents
  - Drainage
- Coastal erosion impacts the Louisiana Gulf Coast, including barrier islands and wetlands.
- It is ongoing, accelerated by strong storms and hurricanes, and shipping and oil industry canals have contributed to erosion.



# Coastal Erosion Measurement and Geographic Extent

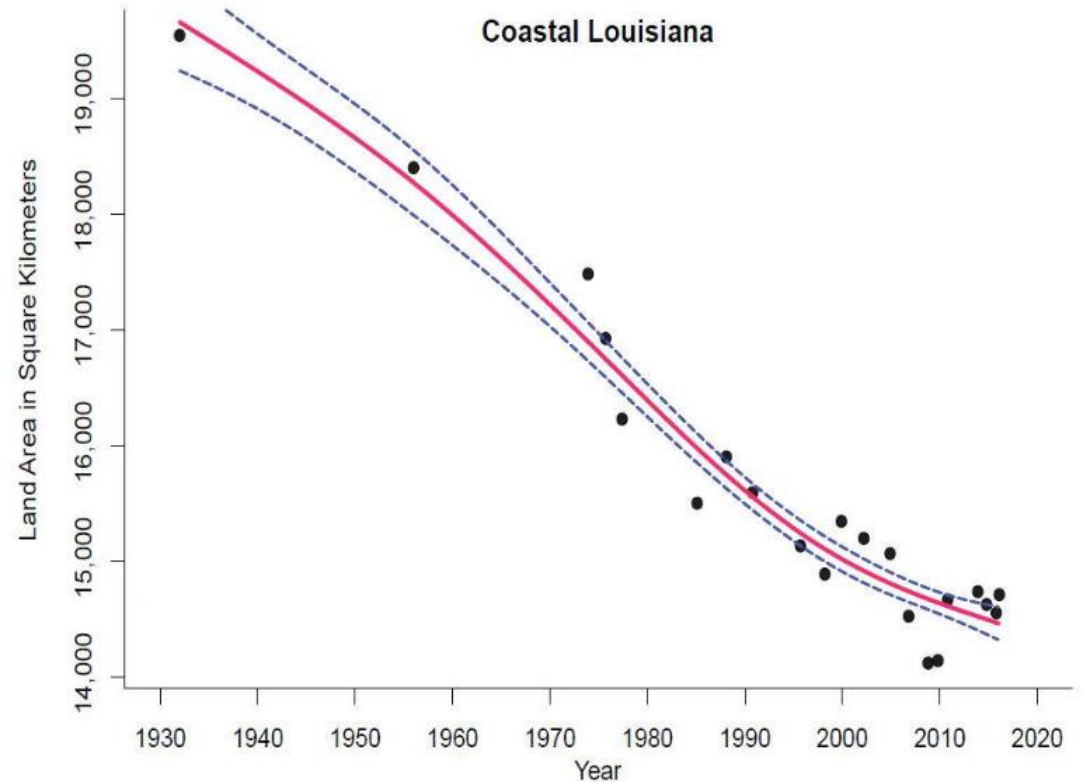


- Measured by loss of land
- Impacting all of Coastal Louisiana, including areas outside the levee system in New Orleans



# Coastal Erosion Previous Occurrence

- Governor John Bel Edwards declared a state of emergency for Louisiana due to the effects of coastal land loss in 2017
- USGS estimates that LA has lost 1,900 sq mi of coast since 1932



# Coastal Erosion Future Occurrence



- 2017 CPRA models demonstrate projected land loss in New Orleans East over the next 10 years without action
- Vulnerable to storm surge and flooding events



# Infectious Disease Outbreak Definition

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- An infectious disease is a viral, bacterial, parasitic, or fungal disorder that can be transmitted between people.
- An outbreak is an increased number of cases of a particular disease and can include epidemics and pandemics.

# Infectious Disease Outbreak Measurement and Geographic Extent

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- Epidemic
  - Increased number of cases than what is normally expected
  - Often sudden
- Outbreak
  - More limited geographic area than epidemic
- Pandemic
  - Global outbreak of a disease
  - Result of a new virus without pre-existing immunity



# Infectious Disease Outbreak Measurement and Geographic Extent

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- Require more public health and medical resources
  - Infection control
  - Contact tracing
  - Quarantine
  - Isolation
  - Prophylaxis
  - Social distancing

# Infectious Disease Outbreak Previous Occurrence

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- Cholera – 1830's and 1870's
- Yellow Fever – 1847 and 1852
- Spanish Flu - 1918
- Norovirus – September 2005

# Infectious Disease Outbreak Current and Future Occurrence

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- COVID 19\*
  - 9,898 presumptive positive coronavirus cases
  - 552 deaths
- Influenza
  - Seasonal outbreaks annually

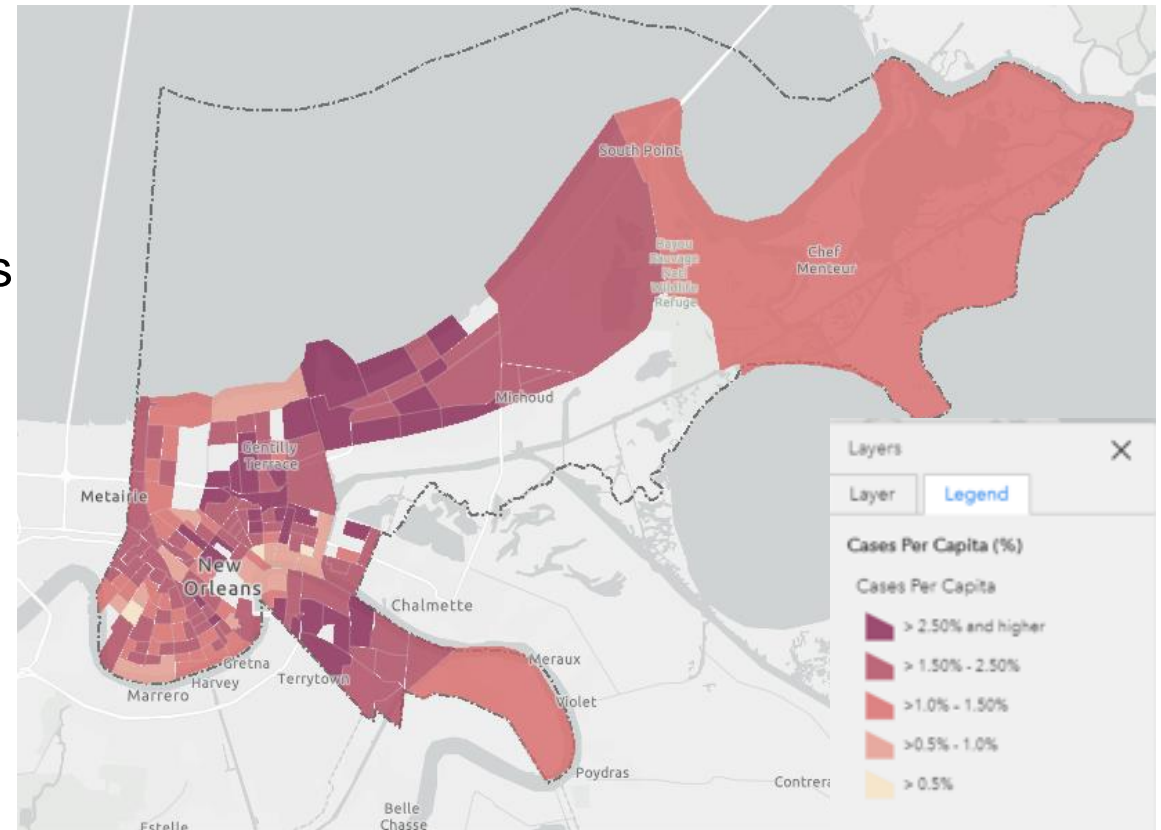
\*July 26, 2020

# Infectious Disease Outbreak Current and Future Occurrence



- Disproportionate Impacts\*
  - Race
    - 75% of deaths are Black residents
  - Neighborhoods
    - New Orleans East
    - Gentilly
    - Algiers

\*July 26, 2020



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# Polling Activity



# Hazard Awareness

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- Do you think most residents are well informed about the hazards affecting New Orleans?
- Are there additional ways the City and its partners can inform residents about their risk?
- Is there additional information on hazards that you would like to see included in the hazard profiles?

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# Upcoming Events & Additional Resources

# Upcoming Events

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- Public Meeting #3 – Fall 2020



# Additional Resources

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- Hazard Mitigation Plan Website
  - <https://ready.nola.gov/hazard-mitigation/home/>
- Risk Reduction Survey
  - <https://ready.nola.gov/hazard-mitigation/survey/>
  - SURVEY to 504-608-3230
- Stay Connected
  - Email Updates: [https://public.govdelivery.com/accounts/LANOLA/subscriber/new?topic\\_id=LANOLA\\_394](https://public.govdelivery.com/accounts/LANOLA/subscriber/new?topic_id=LANOLA_394)
  - Text HAZARDPLAN to 468-311
- Submit Questions and Comments about the Hazard Mitigation Plan to, [hazardmitigation@nola.gov](mailto:hazardmitigation@nola.gov)

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# Polling Activity Results & Questions



# THANK YOU

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**City of New Orleans**  
Hazard Mitigation Planning, Community Presentation  
July 29, 2020