The Greater New Orleans Hurricane and Strom Damage Risk Reduction System (HSDRRS)

CPRA Board Meeting
August 20, 2025

COL Scotty Autin
Commander
US Army Corps of Engineers
New Orleans District

COL SCOTTY M. AUTIN

66TH DISTRICT ENGINEER AND COMMANDER
NEW ORLEANS DISTRICT

- Born in Houma, Louisiana.
- Bachelor of Science, U.S. Military Academy
- Masters of Arts, Columbia University
- Commissioned into the Corps of Engineers in 2002.
- Previous assignments:
  - US-NATO Integration Lead for JFC-Brunssum, Netherlands.
  - Commanded a Battalion in the 82nd Airborne Division.
  - Deployments to Iraq and Afghanistan.
  - USACE experience with Galveston and Los Angeles Districts, with deployments to Mosul Dam, Puerto Rico, and the Border Wall.
  - Deployed to Louisiana and Mississippi in response to Hurricane Katrina.

Houma-Terrebonne of the 1960's saw the results of many years of effort by community leaders. At the Houma Navigation Canal opening in 1962 were Chamber presidents A. Dupre Vaeth (first at left), Gibson Autin, Sr. (sixth from left) and John B. Gordon (third from right). M.L. Funderburk (holding ribbon at left) was chairman of the Terrebonne Deep Water Channel Committee.

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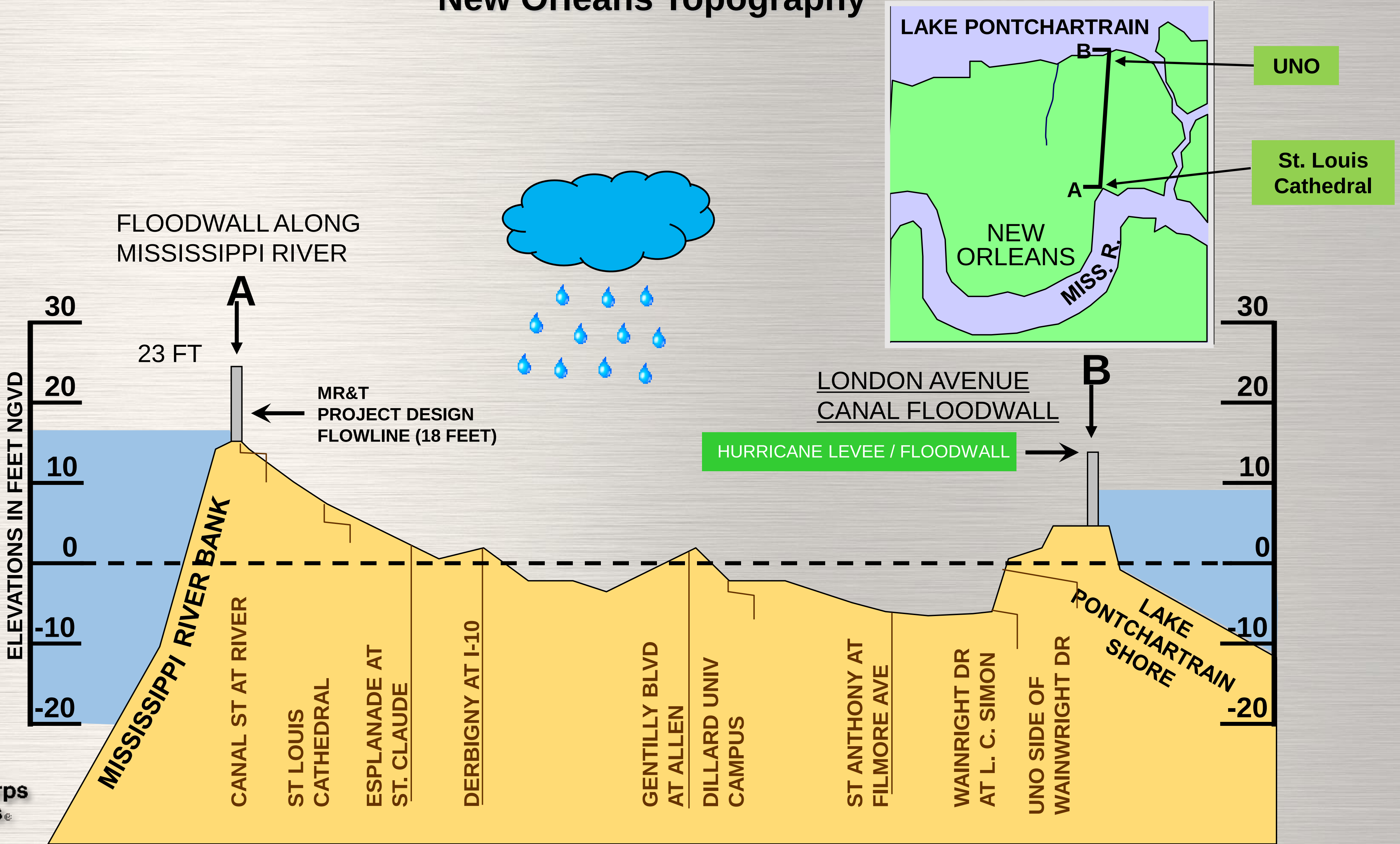
FOOD CIRCLE STORE

SUSCEPTIBLE TO THREE TYPES OF FLOODING

New Orleans Topography



U.S. ARMY ENGINEERS 250 YEARS 1775 2025 BUILDING STRONG

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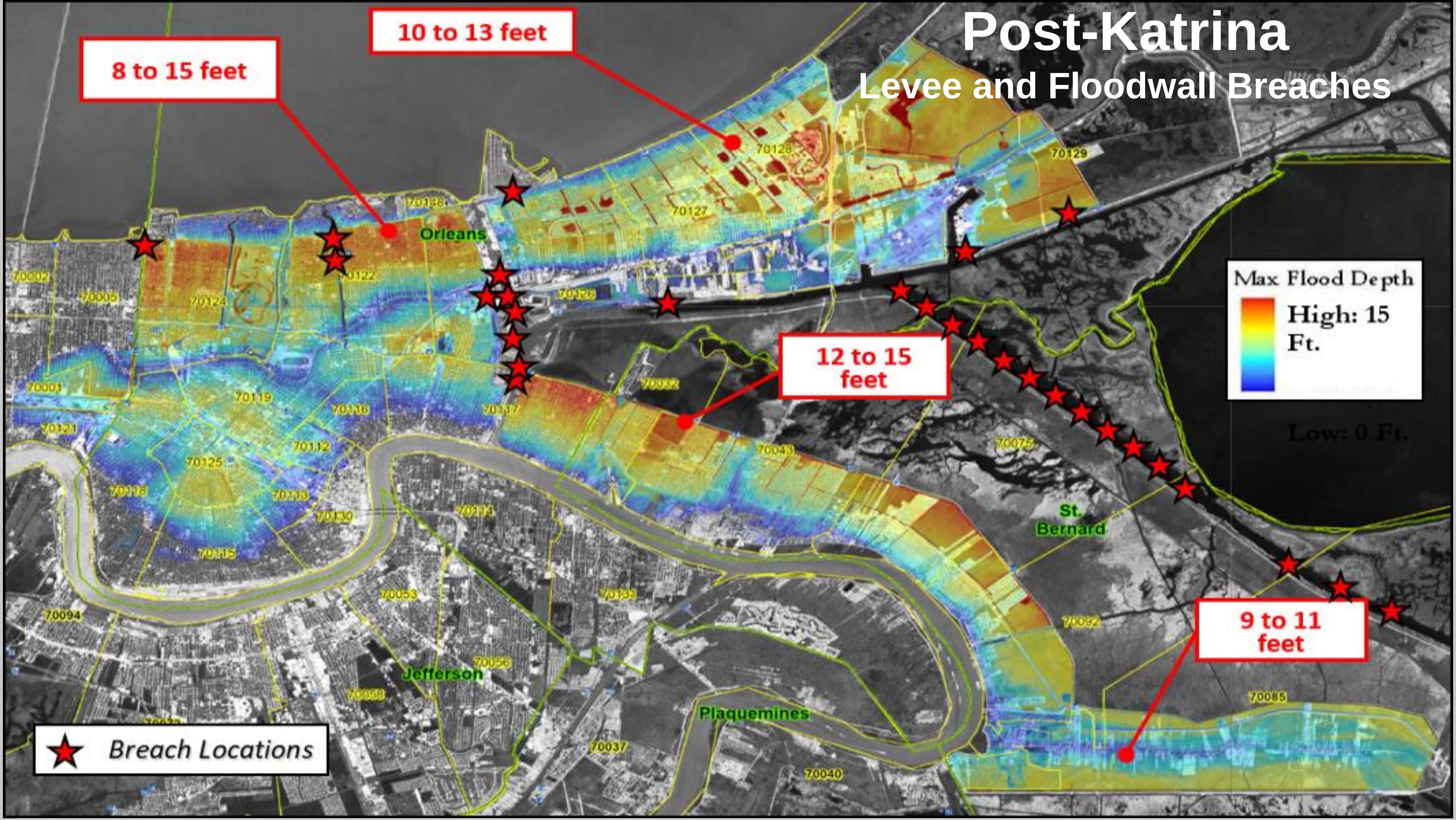
HURRICANE KATRINA
29 AUGUST 2005



Post-Katrina
Levee and Floodwall Breaches
8 to 15 feet
10 to 13 feet
12 to 15
feet
9 to 11
feet
Max Flood Depth
High: 15
Ft.
Low: 0 Ft.
Breach Locations
Orleans
St.
Bernard
Jefferson
Plaquemines
70148
70128
70129
70127
70126
70122
70124
70002
70005
70001
70121
70119
70118
70117
70112
70125
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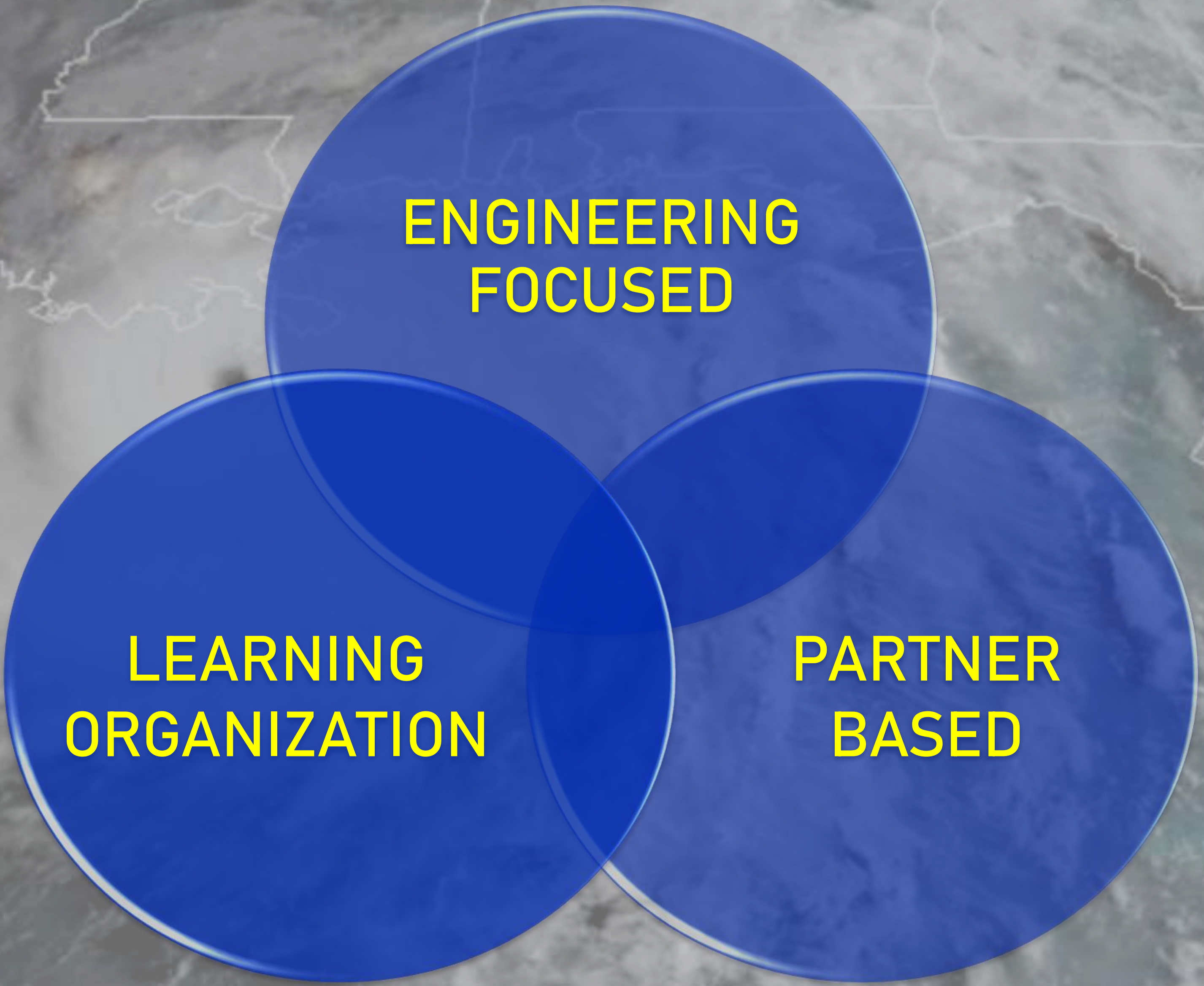
70032
70043
70075
70092
70053
70131
70094
70056
70058
70037
70040
70085


17TH STREET CANAL


INNER HARBOR NAVIGATIONAL CANAL


H&R BLOCK
FOOD CIRCLE STORE

USACE TENETS



HURRICANE & STORM DAMAGE RISK REDUCTION SYSTEM (HSDRRS) MISSION: PROVIDE 100-YEAR LEVEL OF RISK REDUCTION (LORR)

Challenges

- Mandate to **deliver $14.6B** construction program **within budget and on schedule**
- Form design criteria, program cost estimate, acquire funding
- Intense scrutiny / oversight
- New governances
- **Environmental compliance**
- **Deliver a comprehensive system**

Enablers

- Administration / Congressional commitment
- **Fully funded program**
- **NEPA Alternate Arrangements for Environmental Compliance**
- National / Regional Corps capabilities
- **Local partners and stakeholders**
- Full host of acquisition strategies
- Favorable bidding climate
- International Support

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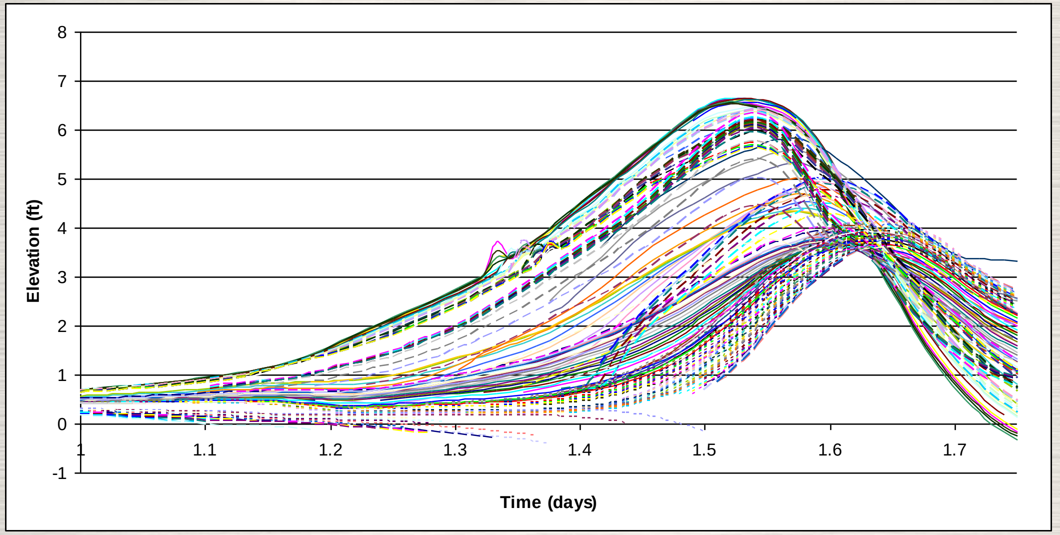
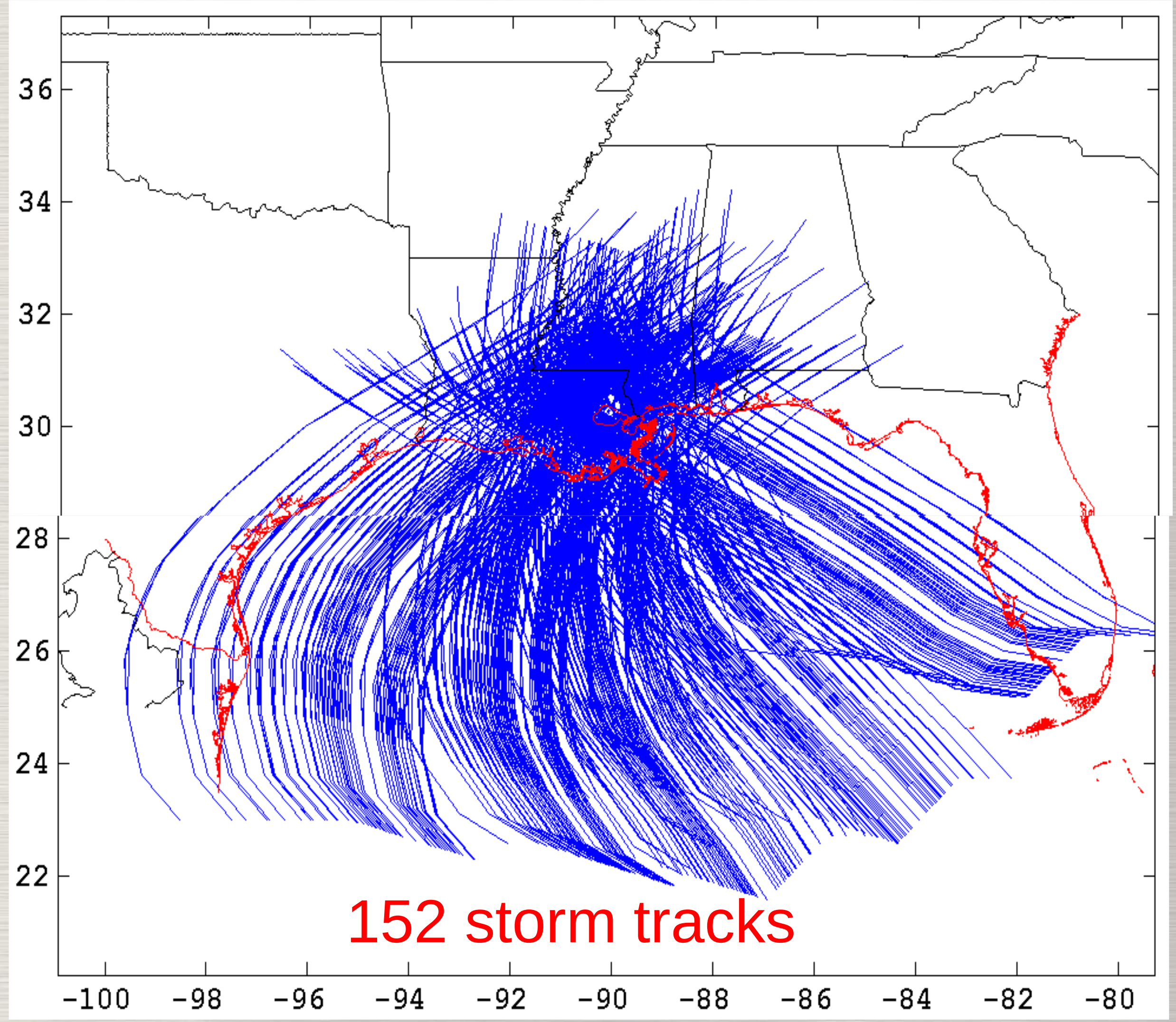
A TRUE SYSTEMS APPROACH

SETTING THE STANDARD FOR STATE-OF-THE-ART MODELING



63,000 storm hydrographs



152 storm tracks

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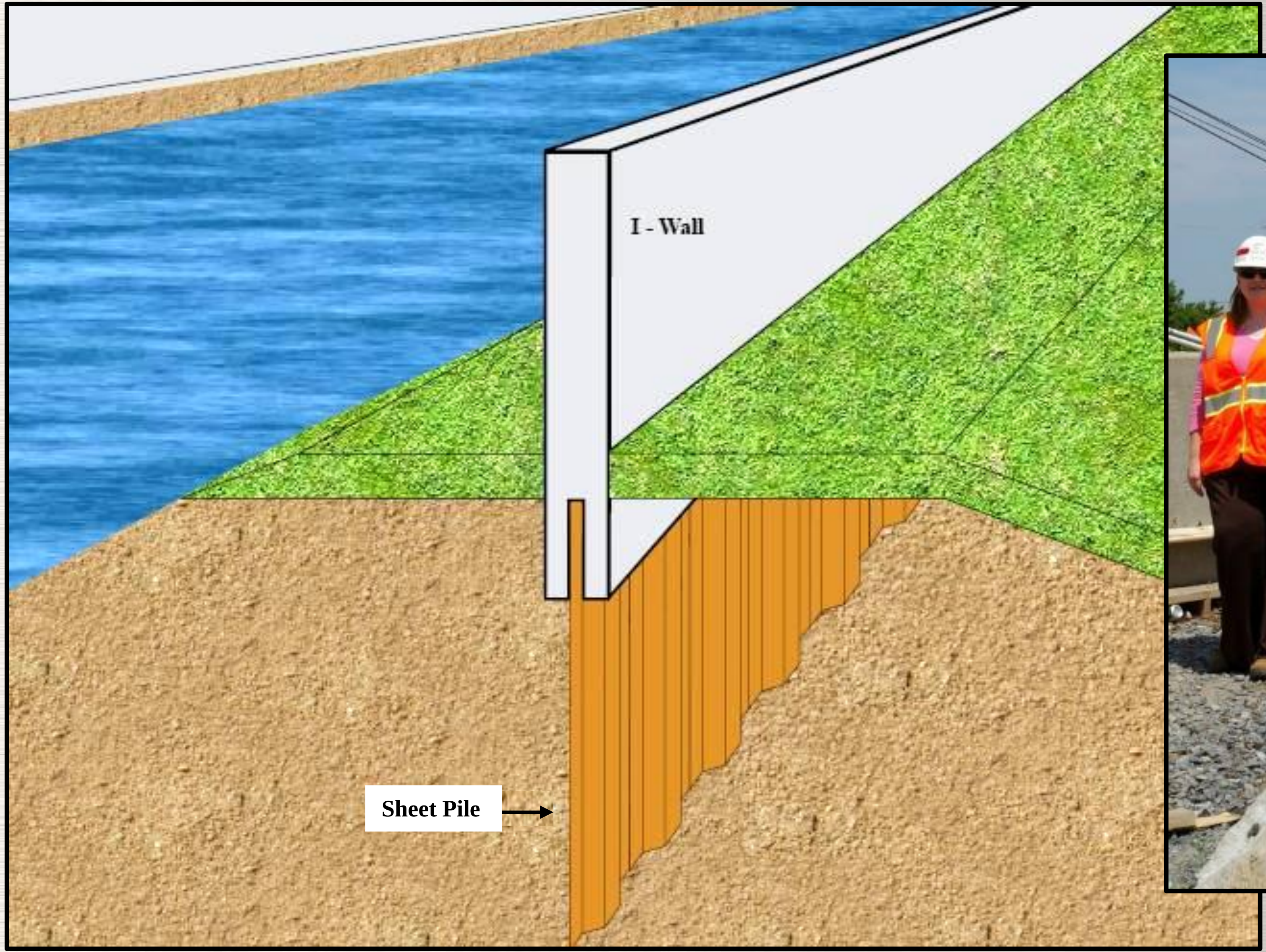
PRE-KATRINA FLOODWALLS



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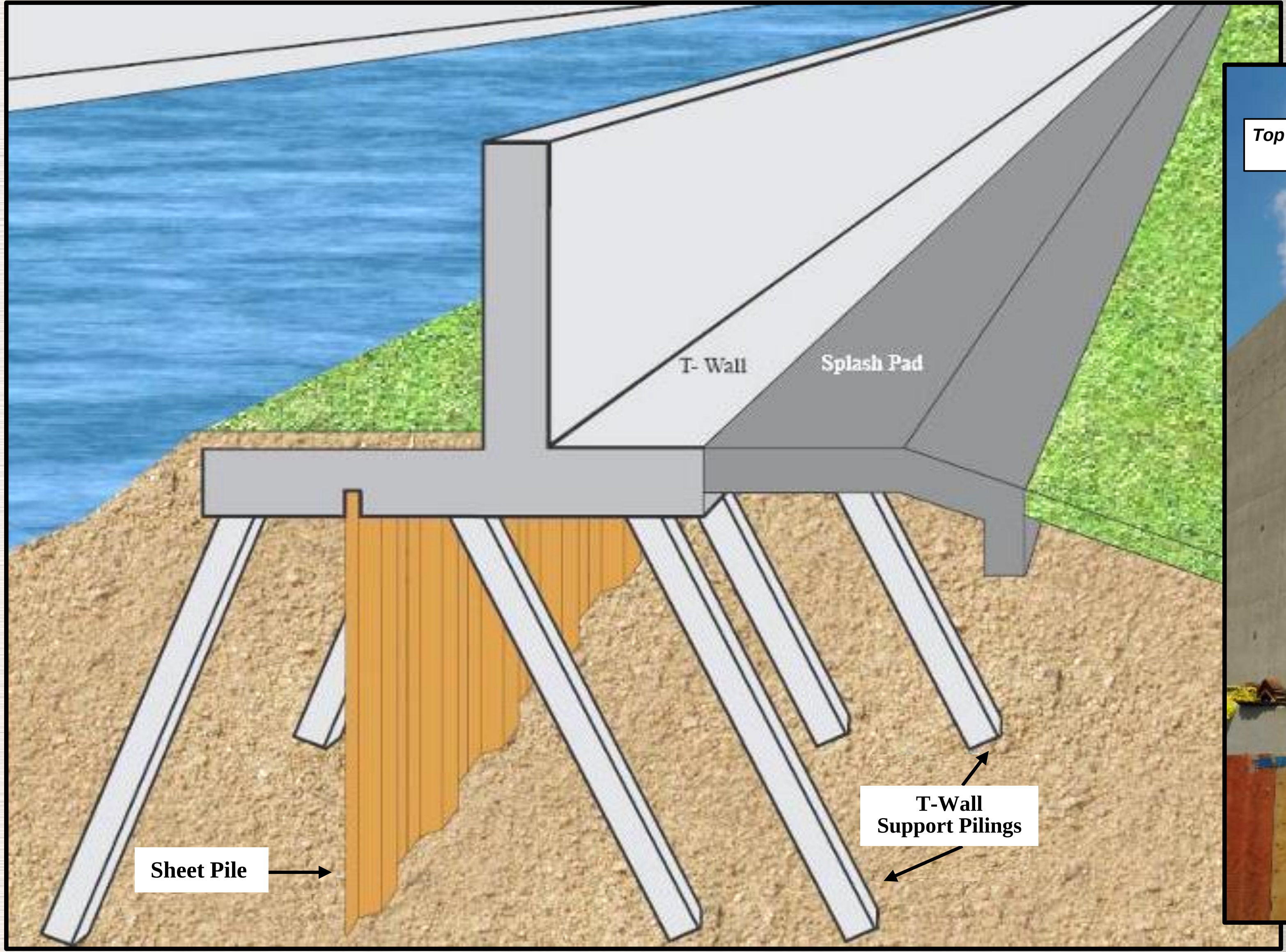
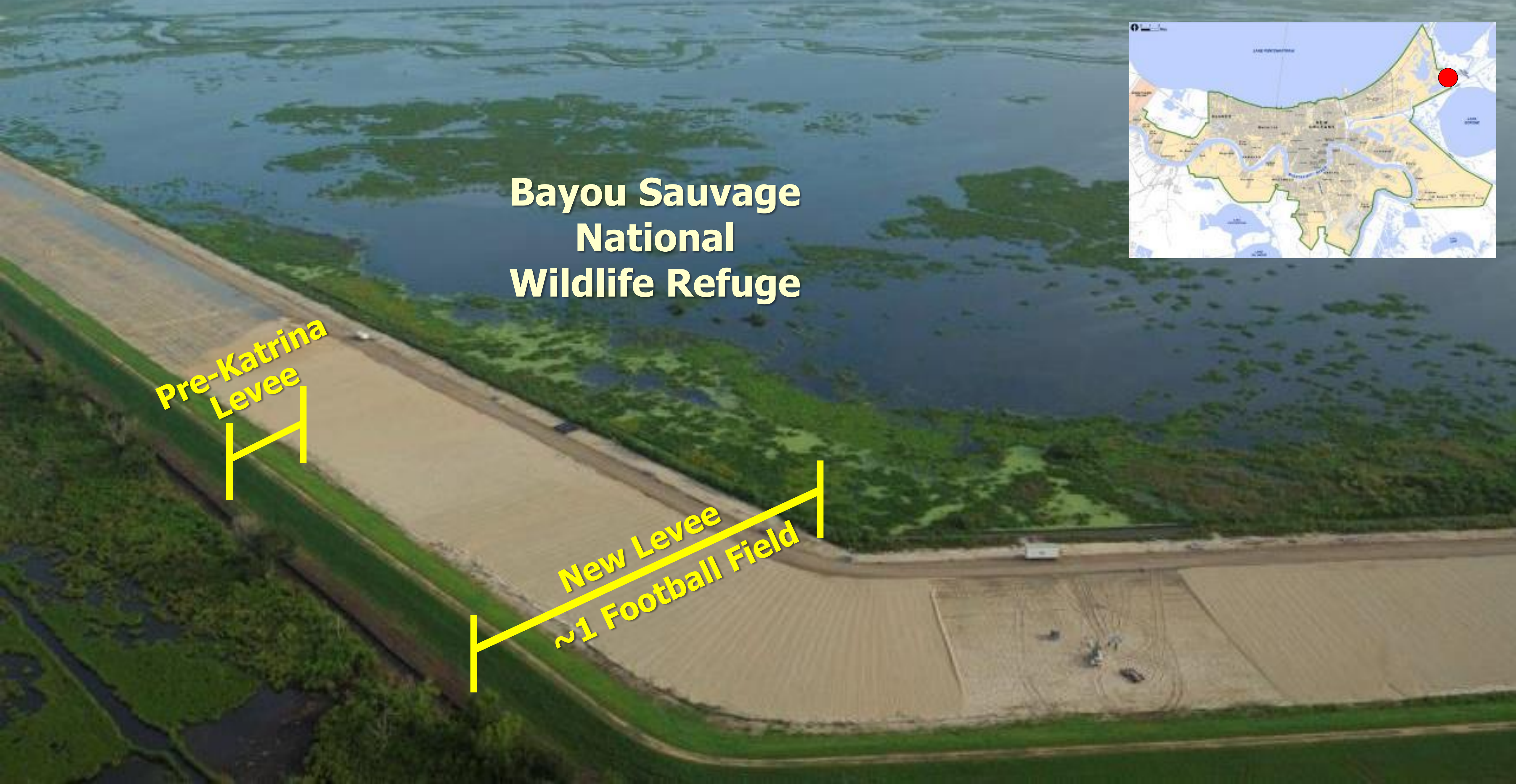
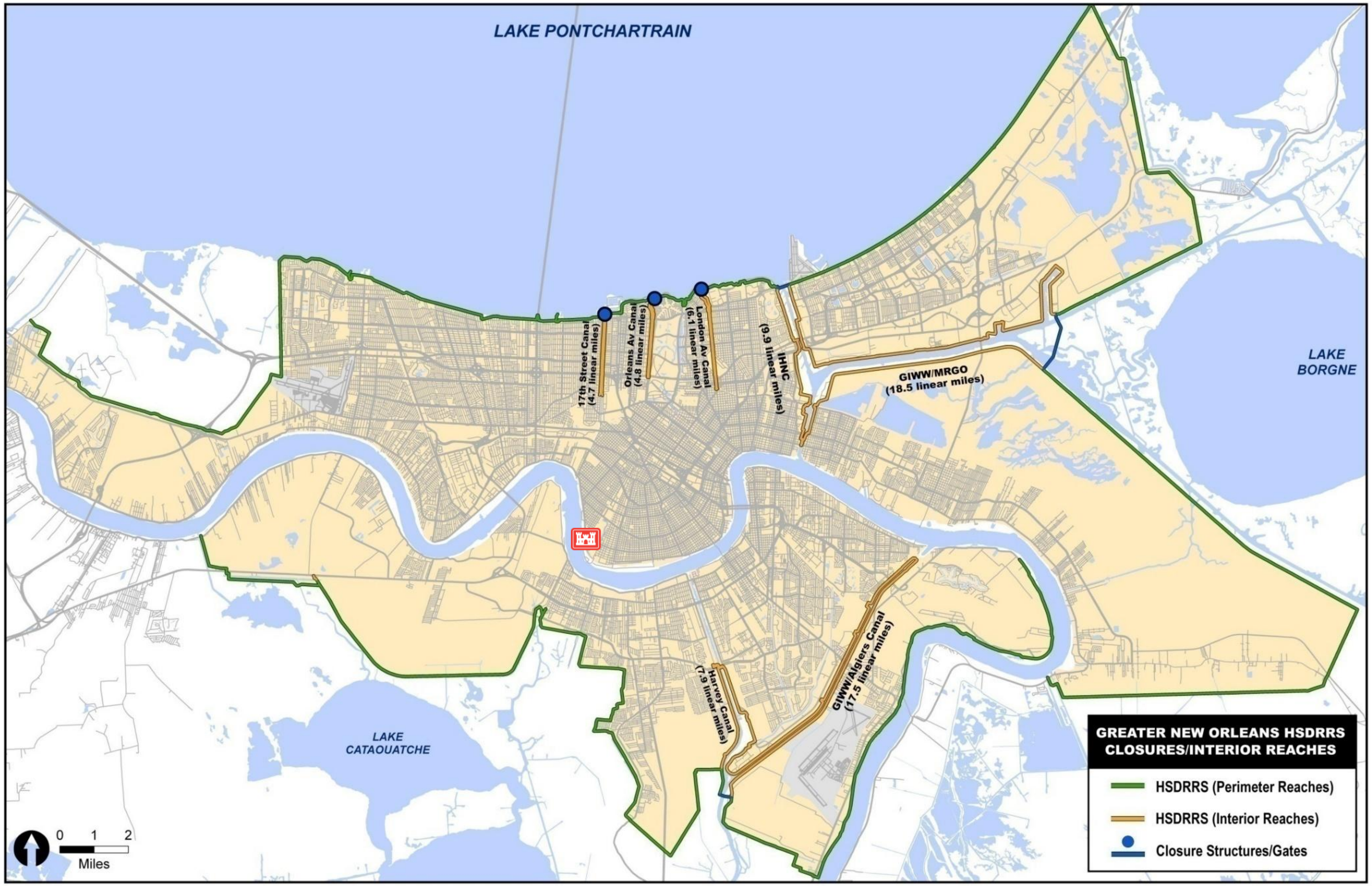
DESIGN IMPROVEMENTS: FLOODWALLS



DESIGN IMPROVEMENTS: LEVEES



THE NEW STANDARD IN STORM RISK REDUCTION
A STRONGER SYSTEM THAN EVER BEFORE



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PERMANENT CANAL CLOSURES & PUMPS

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17 STREET CANAL PUMPS AND CLOSURE

ORLEANS AVENUE PUMPS AND CLOSURE

LONDON AVENUE PUMPS AND CLOSURE

THE NEW STANDARD IN STORM RISK REDUCTION
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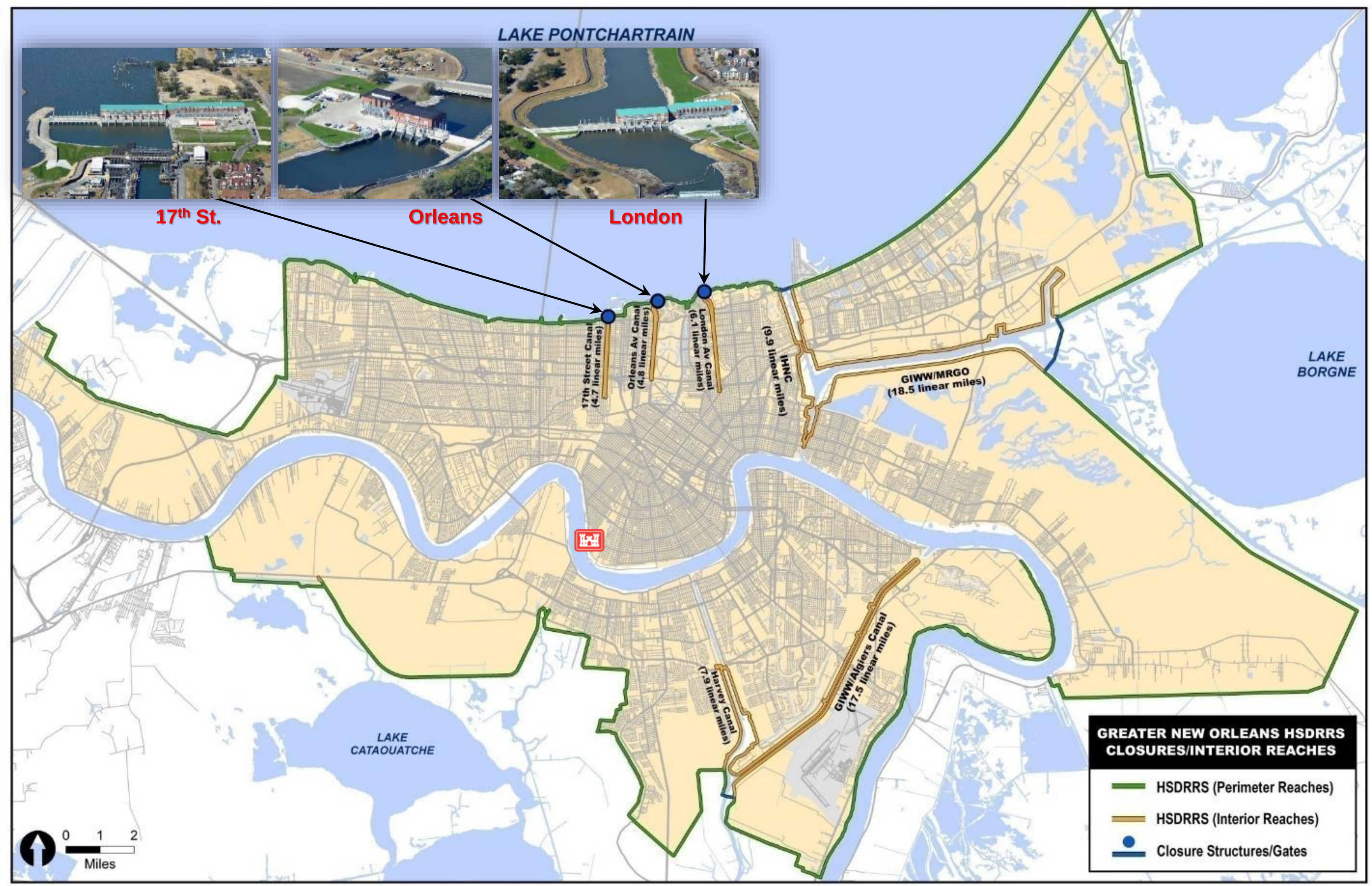

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& IHNC SURGE BARRIER

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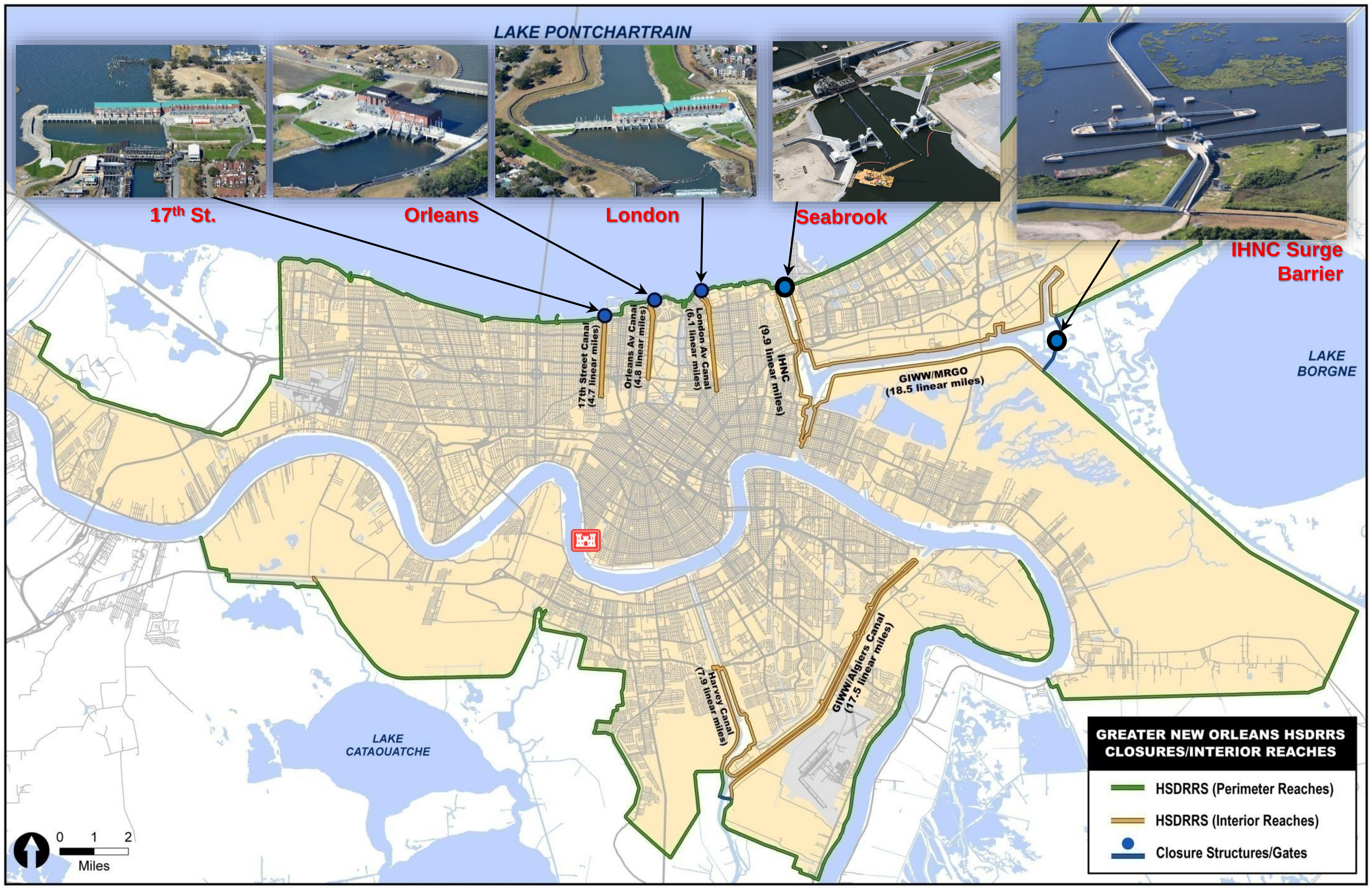

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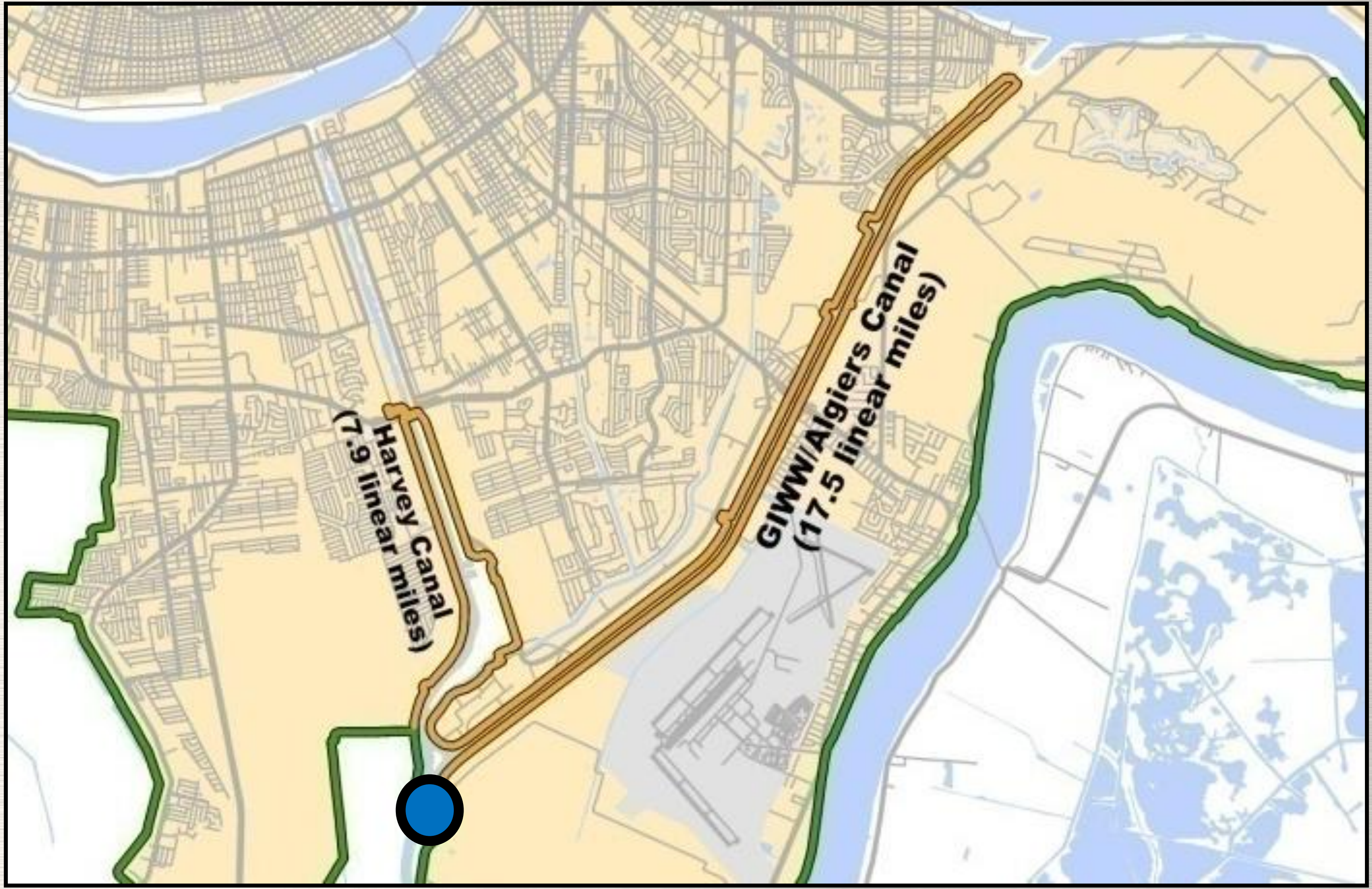
WEST CLOSURE COMPLEX



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WEST CLOSURE COMPLEX

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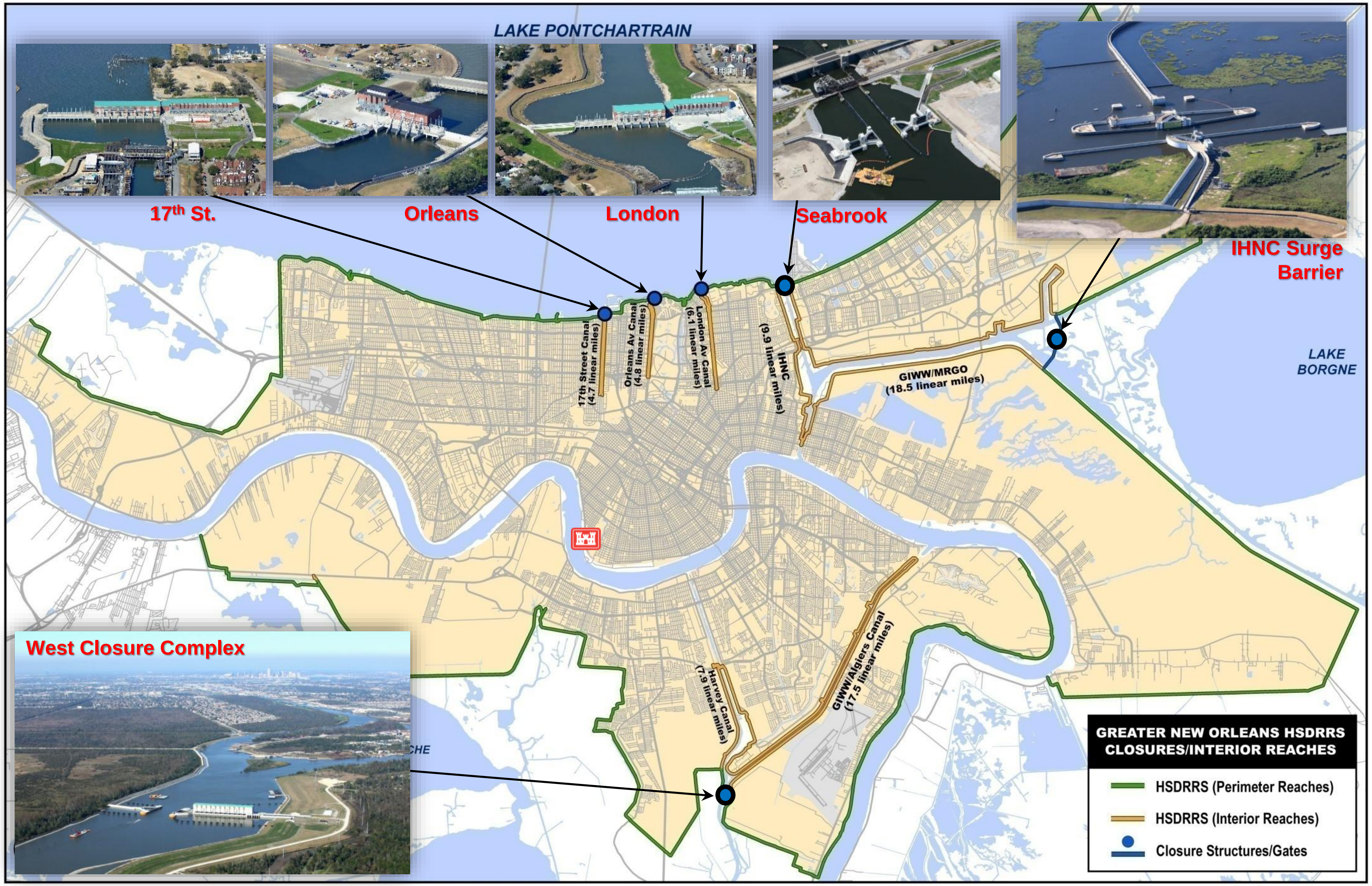
A STRONGER SYSTEM THAN EVER BEFORE



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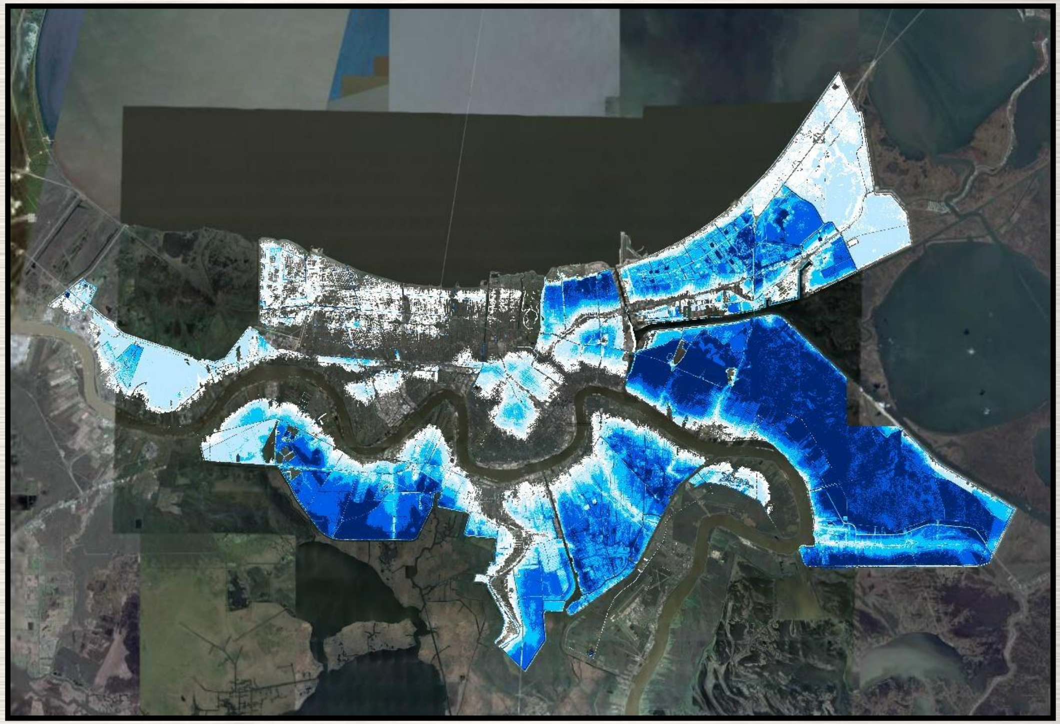
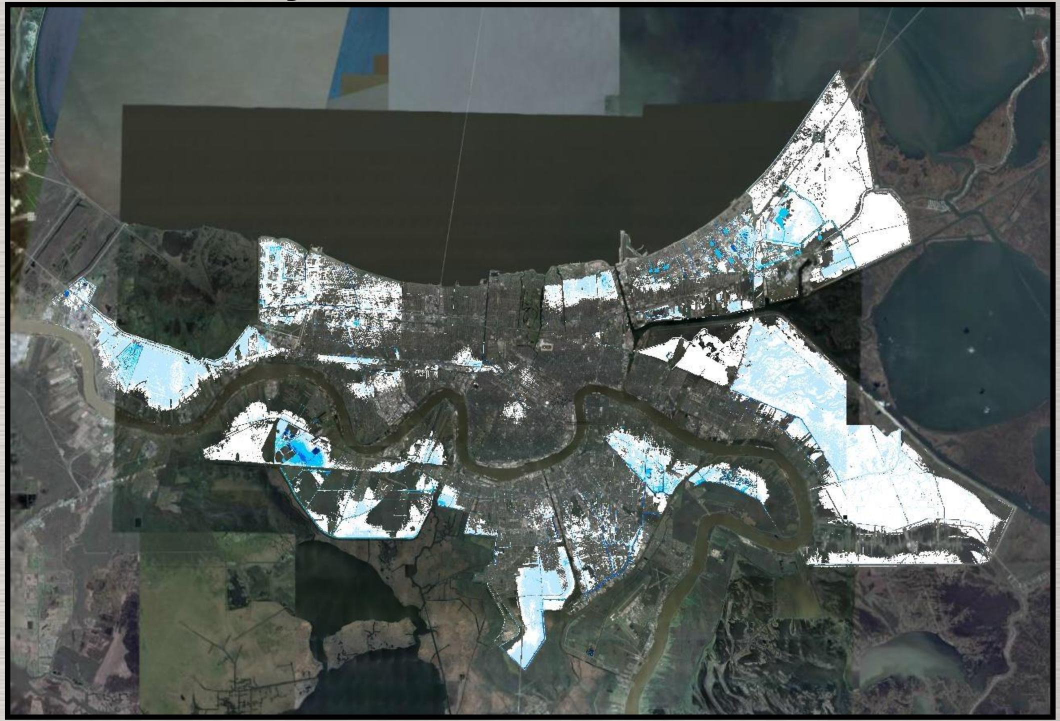
RISK REDUCTION PROVIDED BY HSDRRS

2007



Potential for significant flooding, in excess of 8 feet, throughout the project area

With 100-year Level of Risk Reduction



Potential for some flooding, primarily limited to less than 2 feet, in the project area

Feet of Flooding
>8
6 - 8
4 - 6
2 - 4
0 - 2

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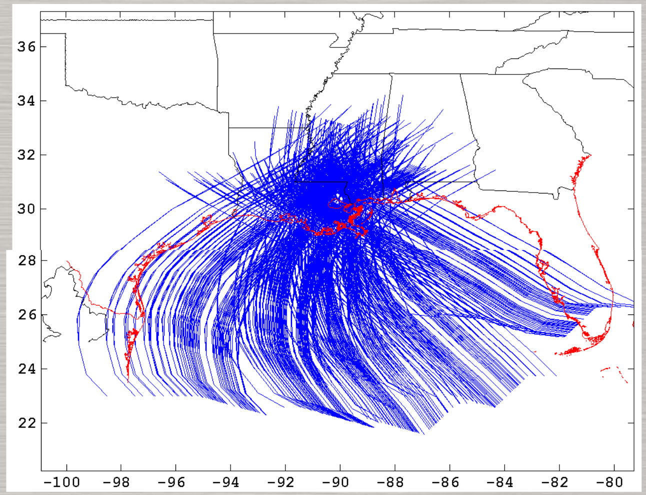
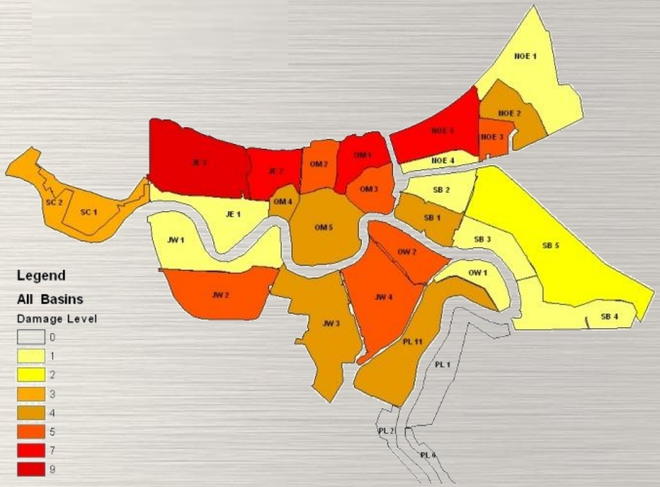
250 YEARS
1775 2025
BUILDING STRONG

USACE'S LESSONS LEARNED

- ***Comprehensive systems approach***
- ***Risk-informed decision making***
- ***Communication of risk to the public***
- ***Professional and technical expertise***
- ***Greater alignment with partners***





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250 YEARS
1775 2025
BUILDING STRONG

PROJECT DELIVERY IS A TEAM SPORT…

SOUTHEAST LOUISIANA FLOOD PROTECTION AUTHORITY - WEST
WEST JEFFERSON LEVEE DISTRICT | ALGIERS LEVEE DISTRICT

FLOOD PROTECTION AUTHORITY EAST
YOUR FLOOD DEFENSE SYSTEM

COASTAL PROTECTION AND RESTORATION AUTHORITY
CPRA

DOTD
LOUISIANA DEPARTMENT OF TRANSPORTATION & DEVELOPMENT

UNITED STATES COAST GUARD 1790

NOAA
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE

SEWERAGE & WATER BOARD
CRESCENT BOX
WATER METER
FORD METER BOX CO. WABASH, IND.
NEW ORLEANS, LA.

LOUISIANA NATIONAL GUARD
ALWAYS READY ALWAYS THERE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

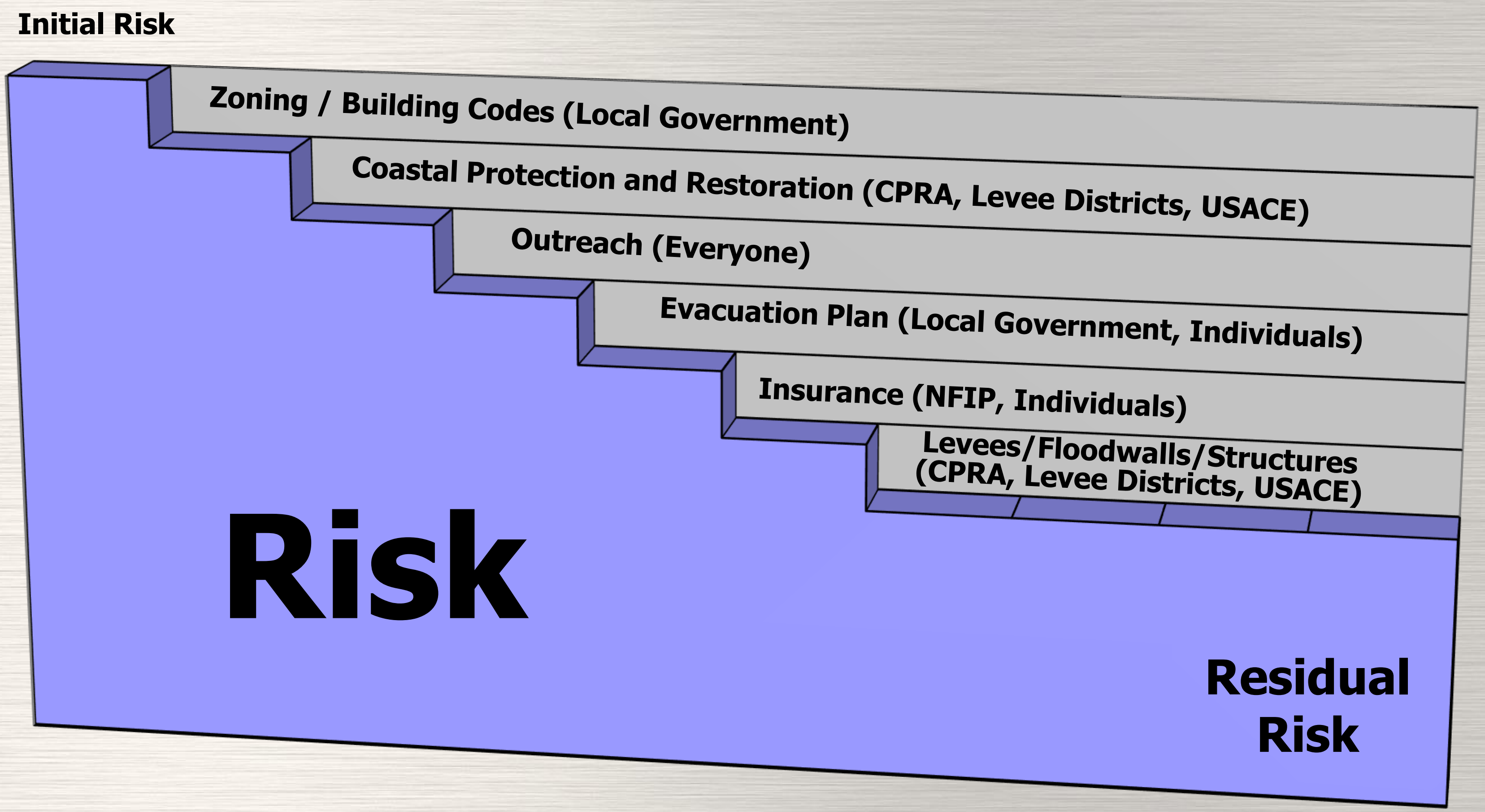
NATIONAL WEATHER SERVICE
National Hurricane Center

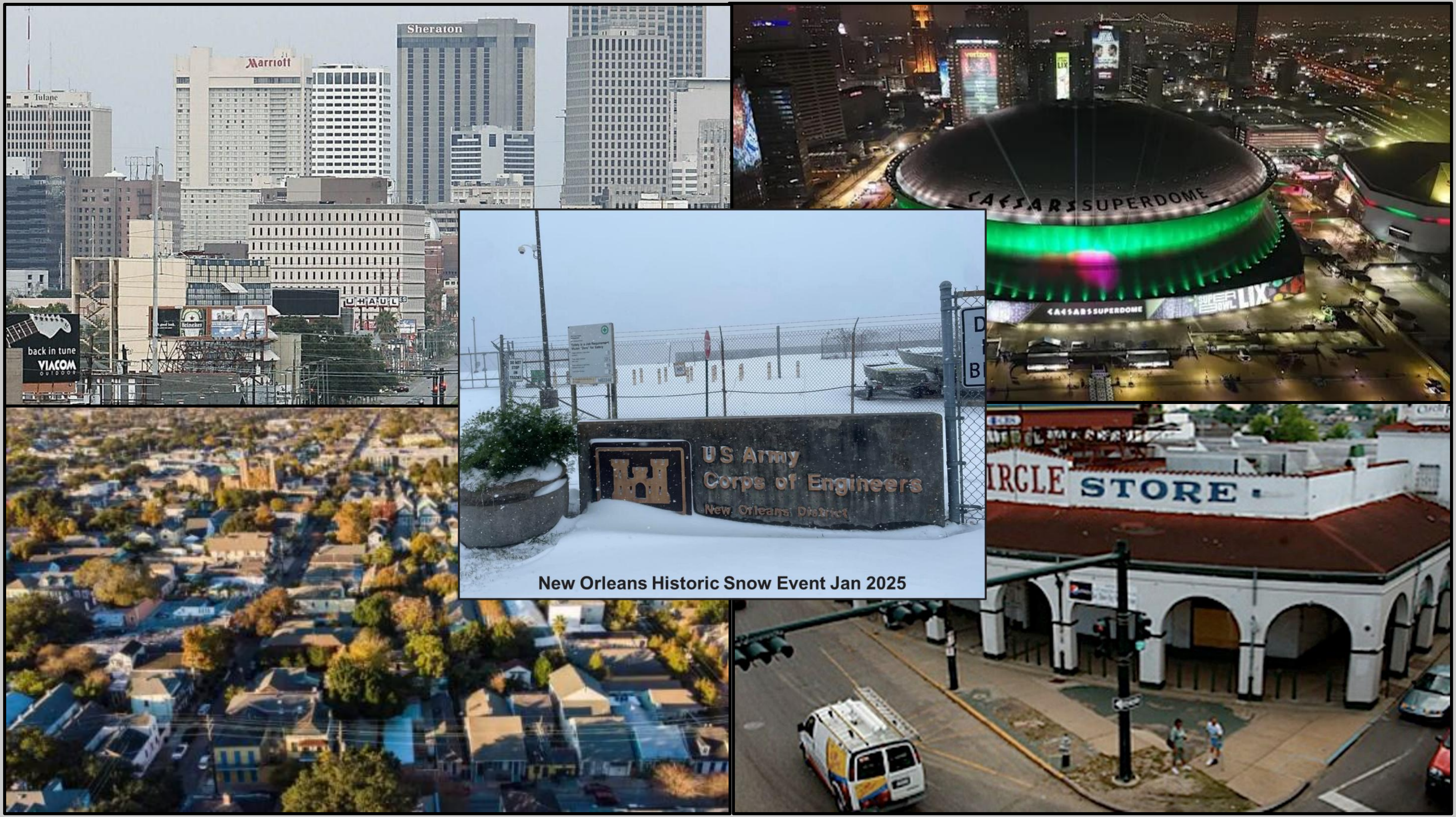
U.S. ARMY NORTH
FIFTH ARMY

U.S. FISH & WILDLIFE SERVICE
DEPARTMENT OF THE INTERIOR

GOVERNOR'S OFFICE OF HOMELAND SECURITY & EMERGENCY PREPAREDNESS
STATE OF LOUISIANA
UNION • JUSTICE • CONFIDENCE

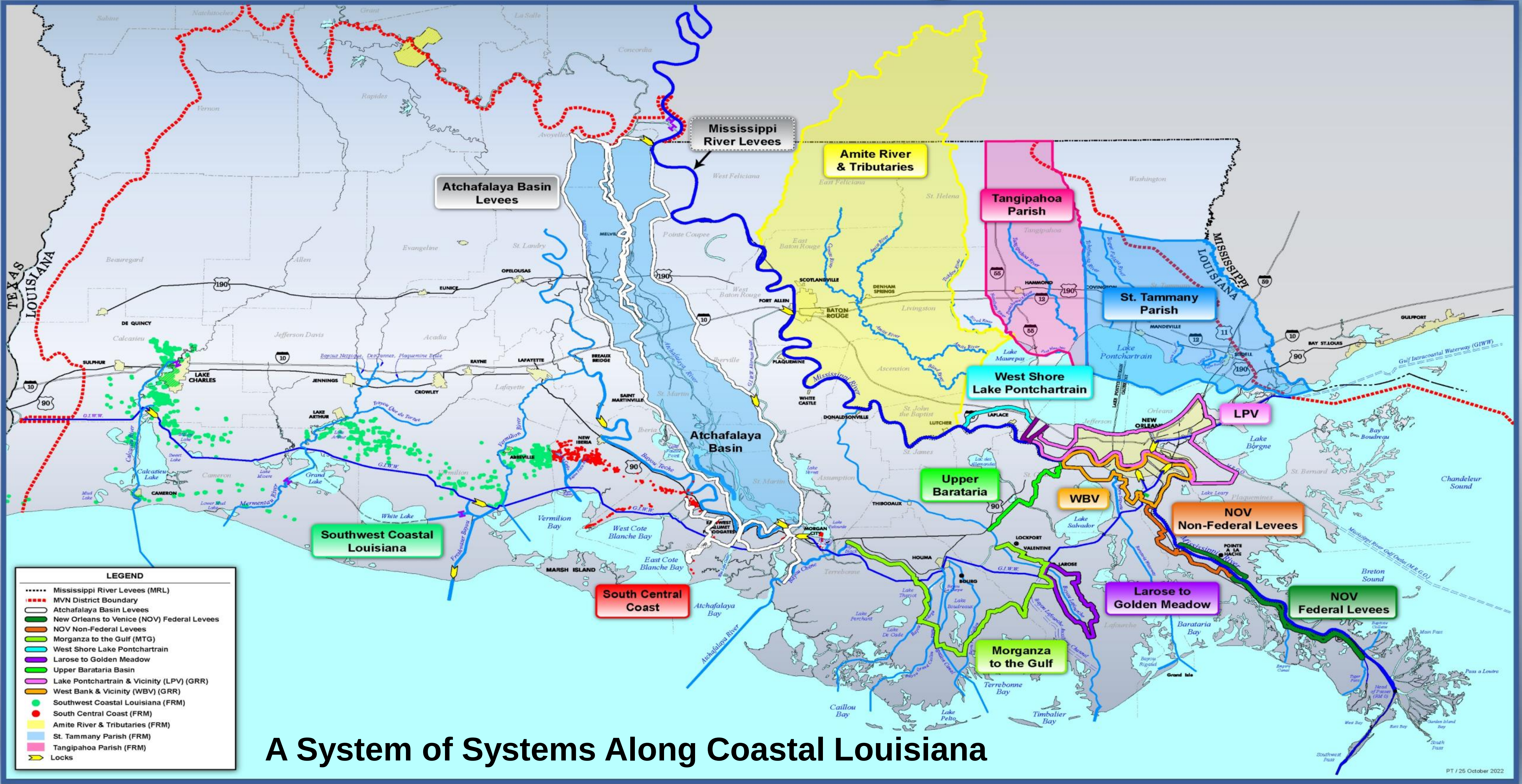
SO IS BUYING DOWN THE RISK





New Orleans Historic Snow Event Jan 2025

New Orleans District Projects & Studies



A System of Systems Along Coastal Louisiana

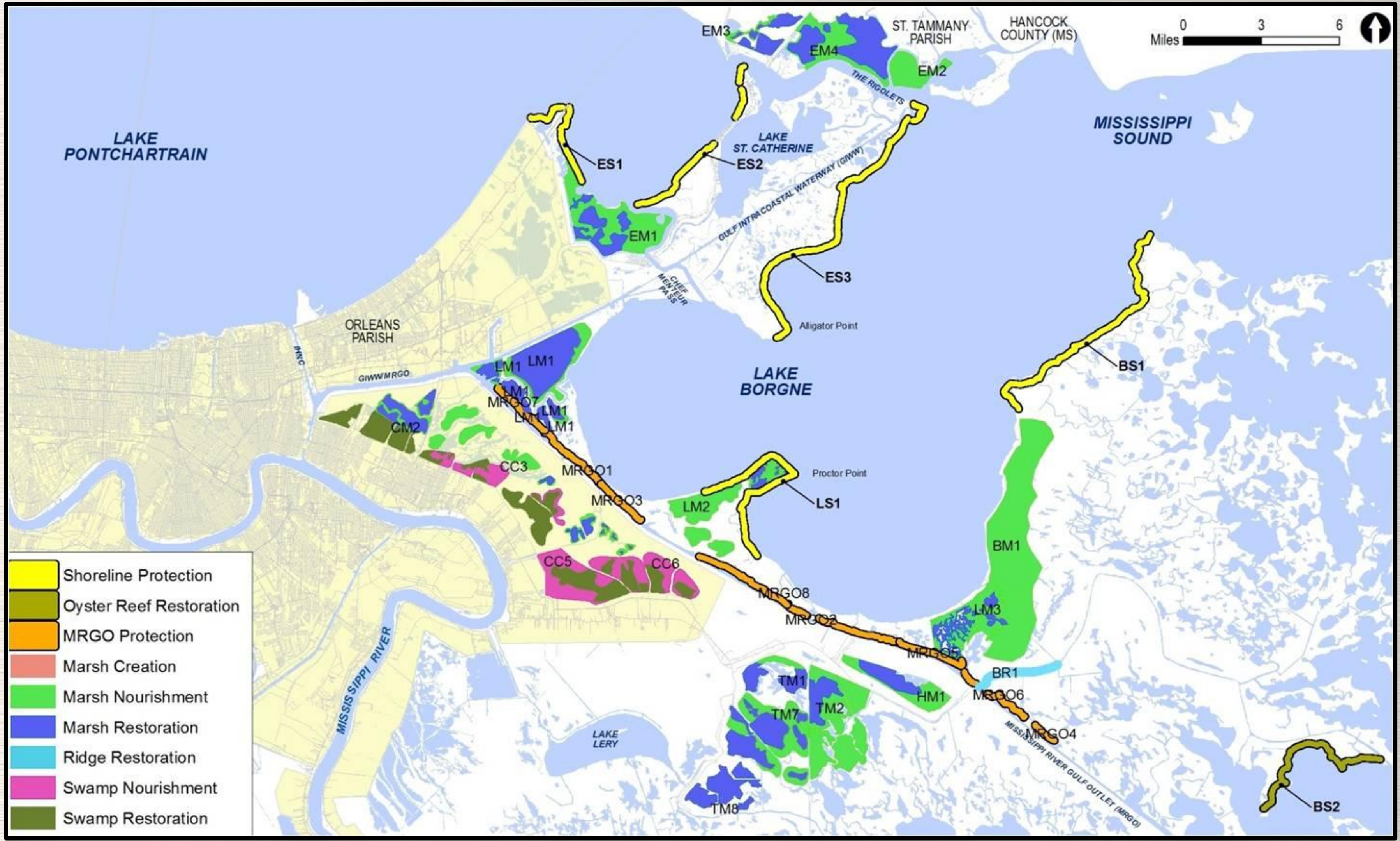
WEST SHORE LAKE PONTCHARTRAIN



MORGANZA TO THE GULF, LEVEE REACH A

SOUTHWEST COASTAL

MISSISSIPPI RIVER GULF OUTLET DESIGN AGREEMENT



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