

COASTAL PROTECTION AND RESTORATION AUTHORITY

# Southcentral Louisiana Flood Risk Reduction and Resilience Efforts

GLENN LEDET, JR AND BRIAN LEZINA

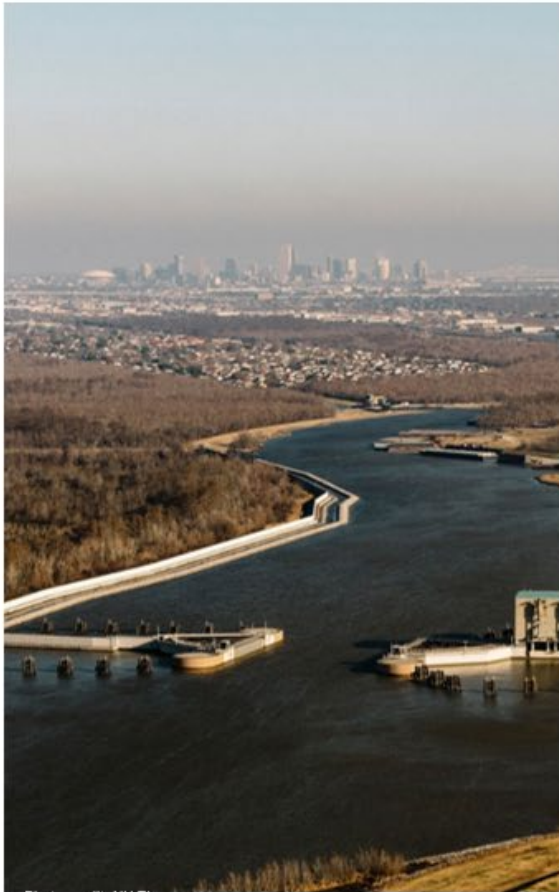
NOVEMBER 20, 2024





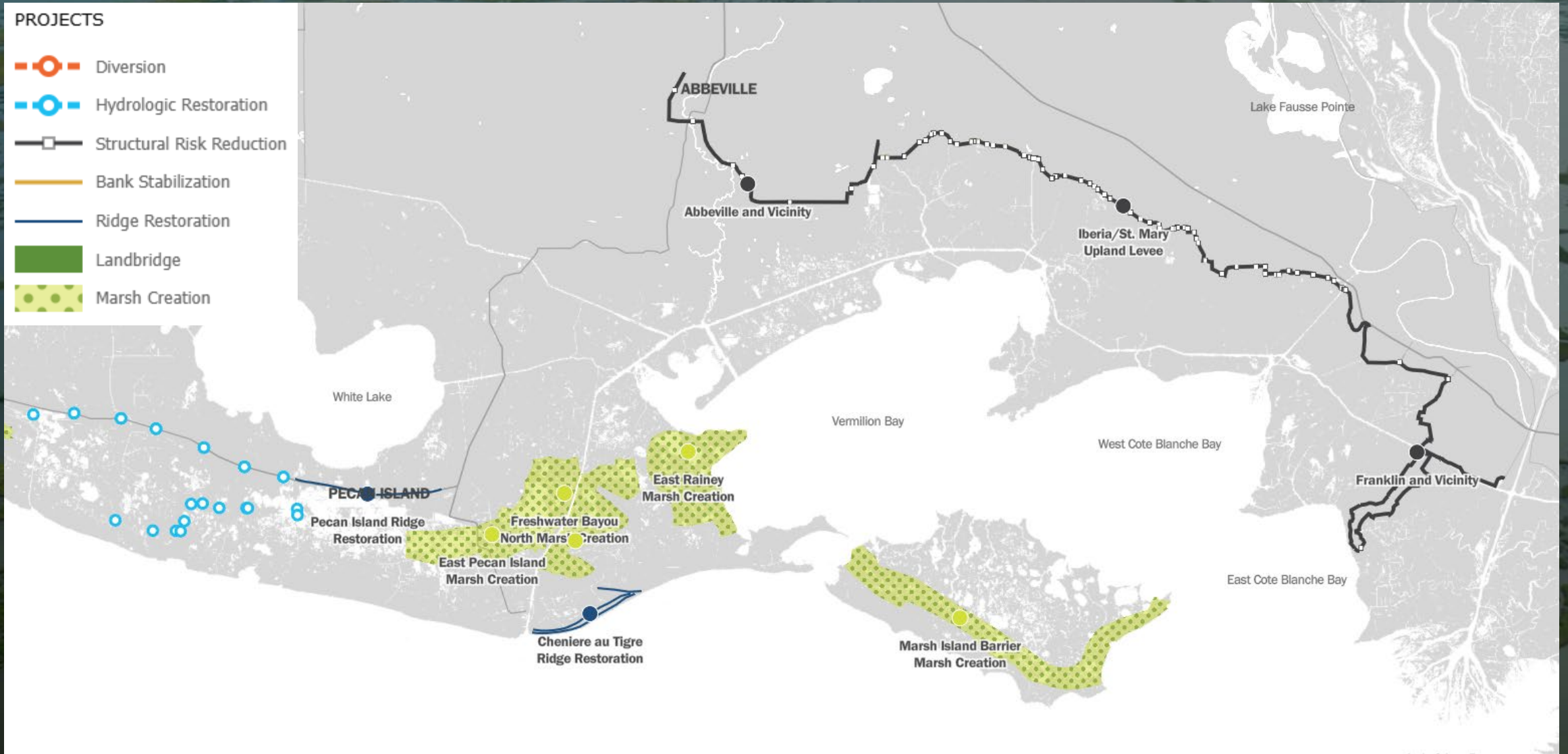
# Hurricane Protection & Flood Risk Reduction

## Life-Saving Coastal Program



**Over 2 million people  
live within 50 miles of  
Louisiana's coast**

# 2023 CMP Integrated Approach

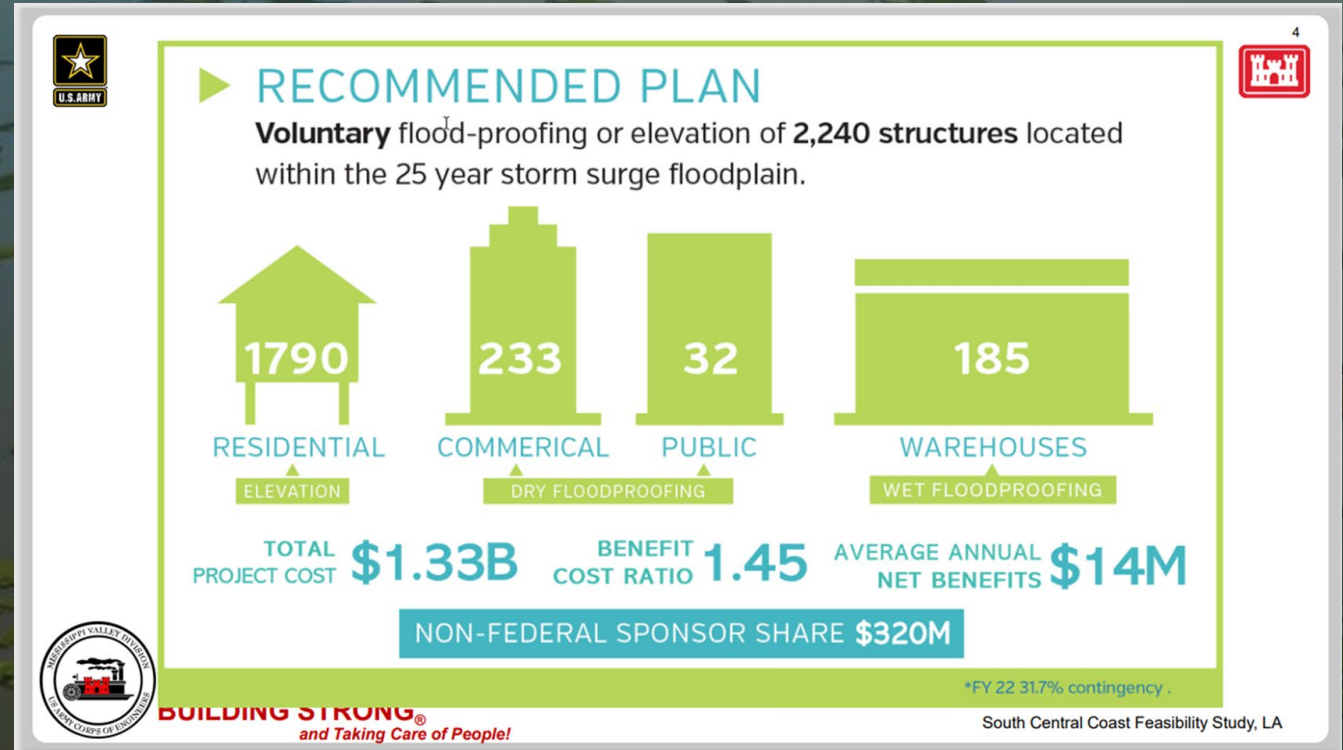
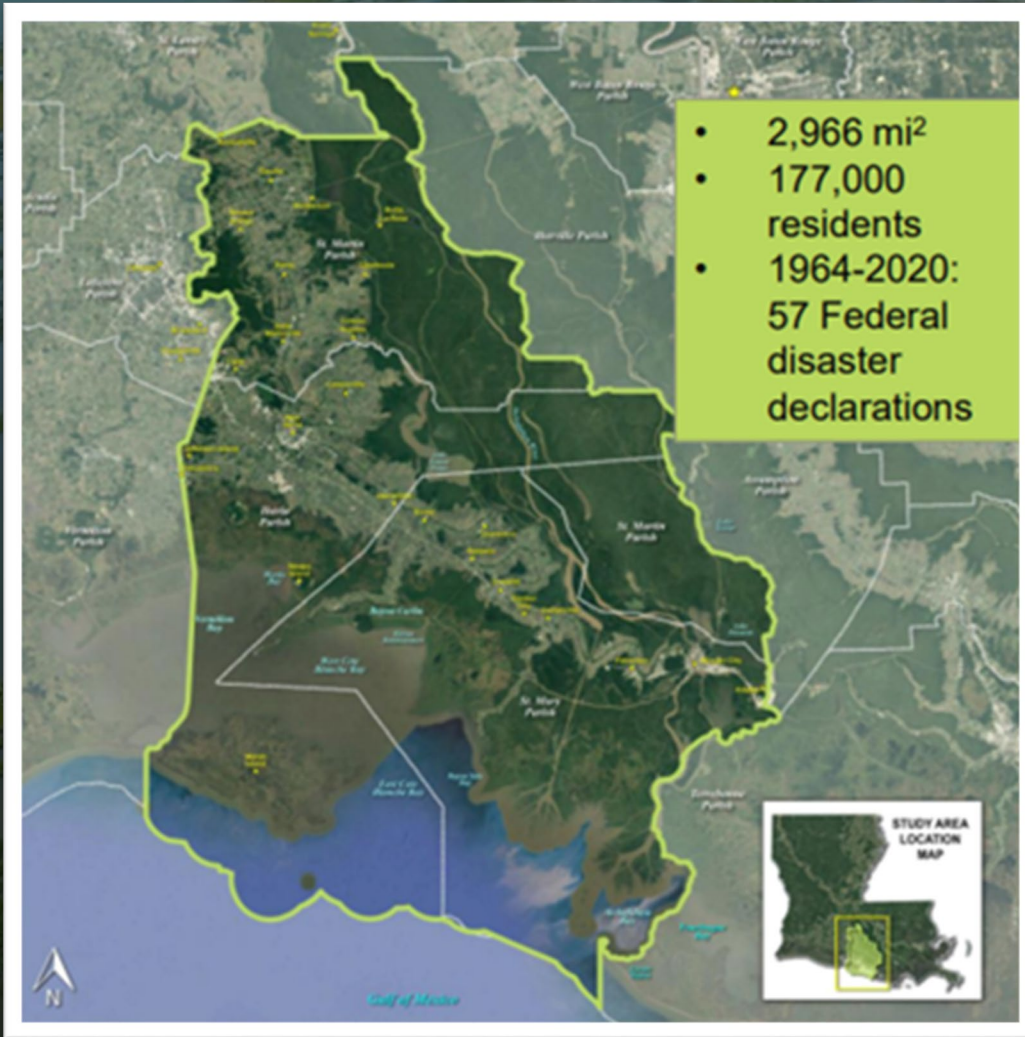




# **Non-structural Flood Risk Reduction**



# Federal Efforts – South Central Coastal Non-structural FRR





# Structural Flood Risk Reduction



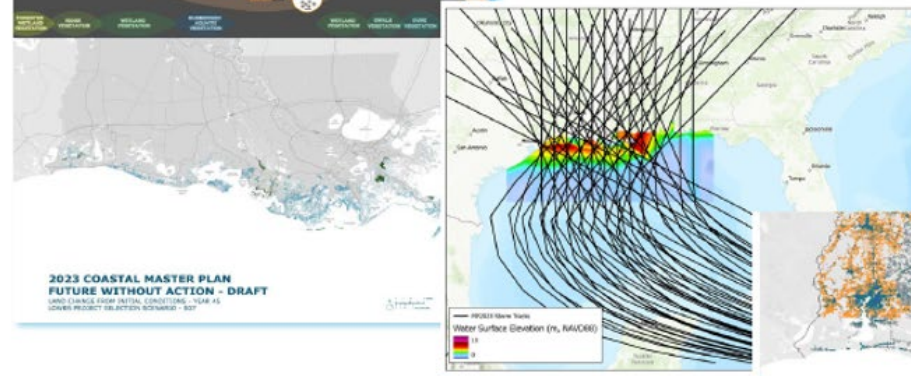
## LOUISIANA COASTAL MASTER PLAN

### PREDICTIVE MODELS

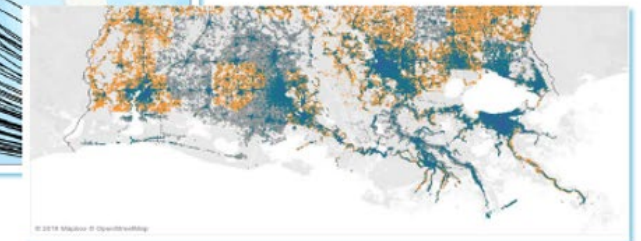
#### Landscape Model (ICM)



#### Surge and Wave Models



#### Risk Model






2023 COASTAL MASTER PLAN  
FUTURE WITHOUT ACTION - DRAFT  
LEVEE CHANGES FROM INITIAL CONDITIONS - YEAR 45  
LOWER PROJECT VELOCITY BOUNDARY - 100'

© 2018 Mapbox © OpenStreetMap

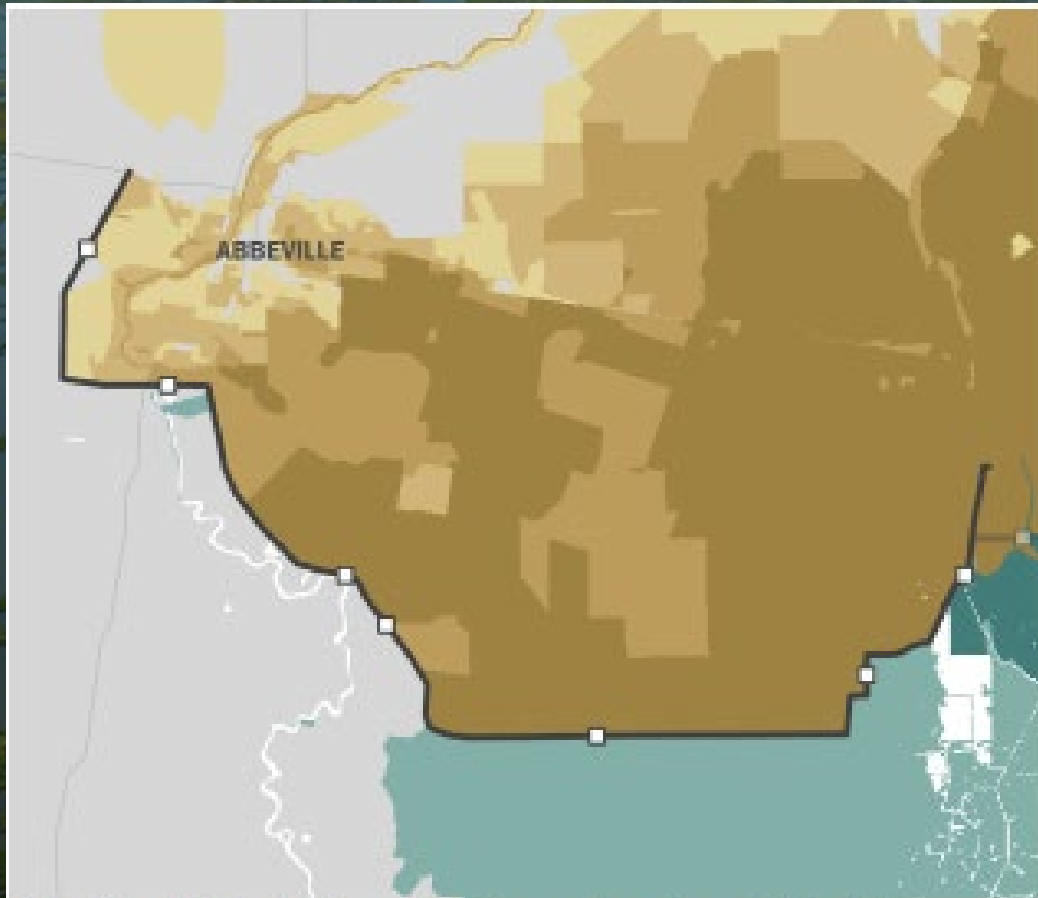
# Regional Benefits



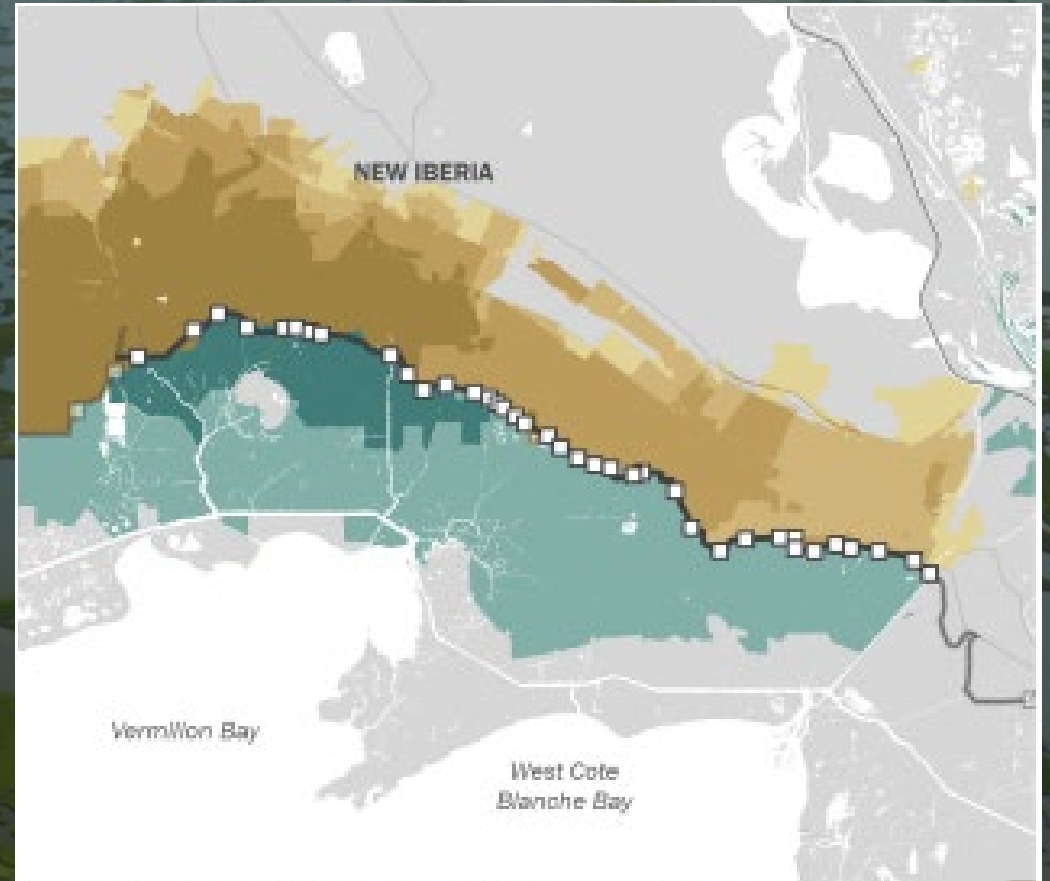
## CENTRAL COAST

 <p><b>ESTIMATED ANNUAL STRUCTURE DAMAGE PREVENTED</b> Due to Structural Risk Reduction and Restoration projects only.</p>	<b>920</b> LOWER SCENARIO	<b>1.5K</b> HIGHER SCENARIO	TOTAL STRUCTURE EQUIVALENTS
 <p><b>ESTIMATED ANNUAL DAMAGE \$ PREVENTED</b> Due to Structural Risk Reduction and Restoration projects only.</p>	<b>1.0B</b> LOWER SCENARIO	<b>1.6B</b> HIGHER SCENARIO	DOLLARS (\$)
 <p><b>AVOIDED LAND LOSS</b></p>	<b>46</b> LOWER SCENARIO	<b>2.2</b> HIGHER SCENARIO	SQUARE MILES

# 2023 CMP Integrated Approach



Flood Depth Reduction with the master plan at Year 50



Flood Depth Reduction with the master plan at Year 50



## Abbeville and Vicinity



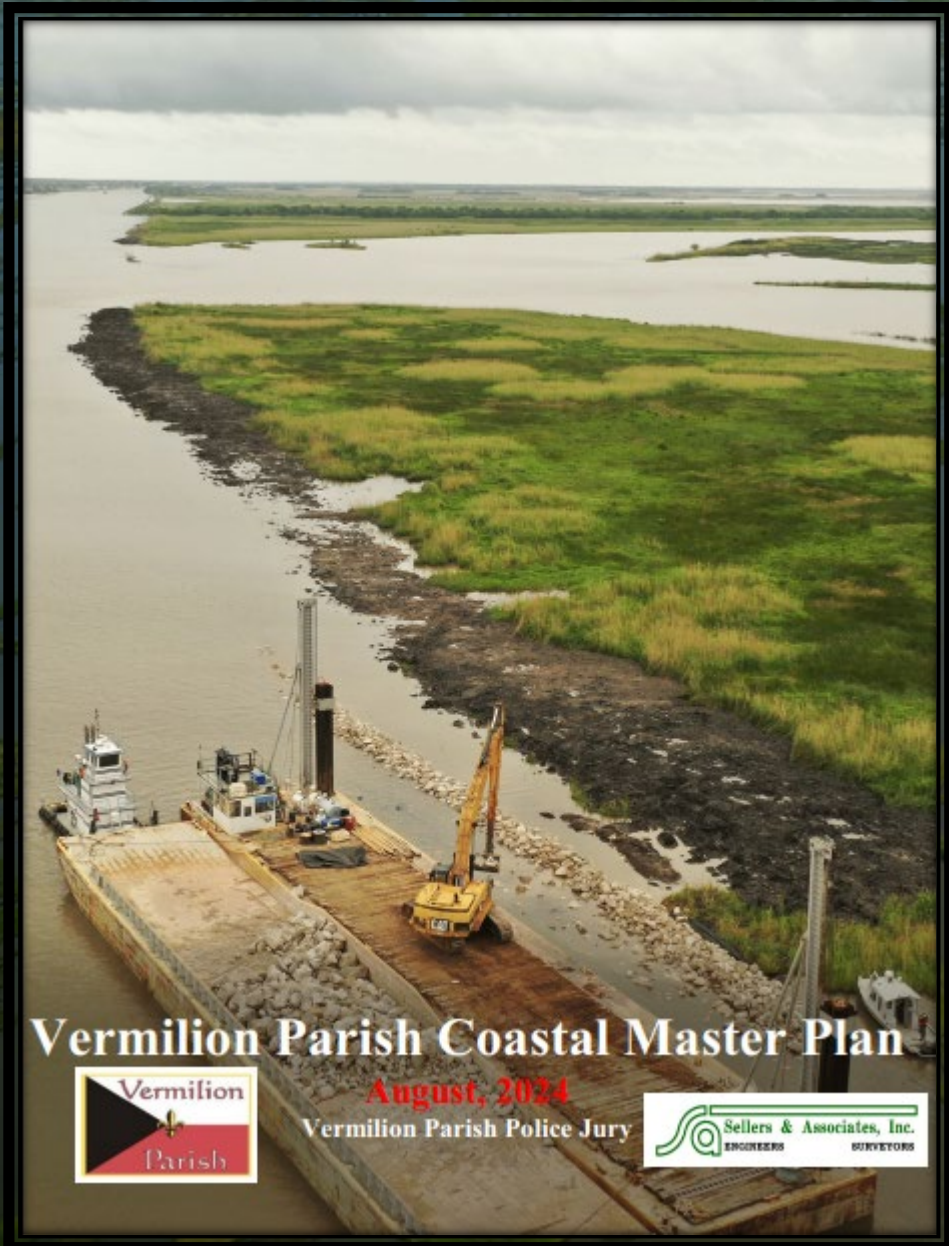
Structural Risk Reduction



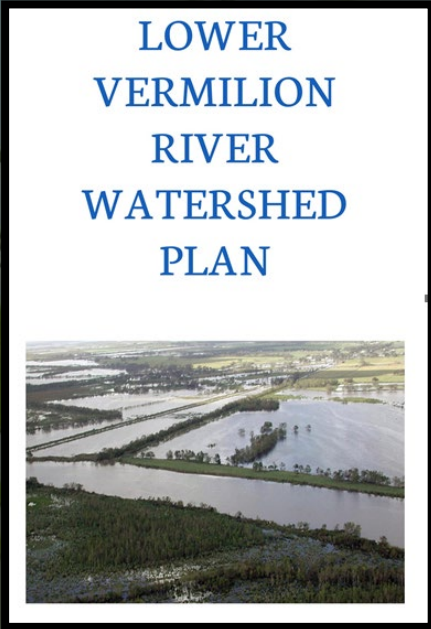
Central Coast



# Vermilion Parish – Structural Protection Planning



Vermilion Soil & Water Conservation District



Vermilion Parish Coastal Master Plan



August, 2024  
Vermilion Parish Police Jury



## Iberia/St. Mary Upland Levee

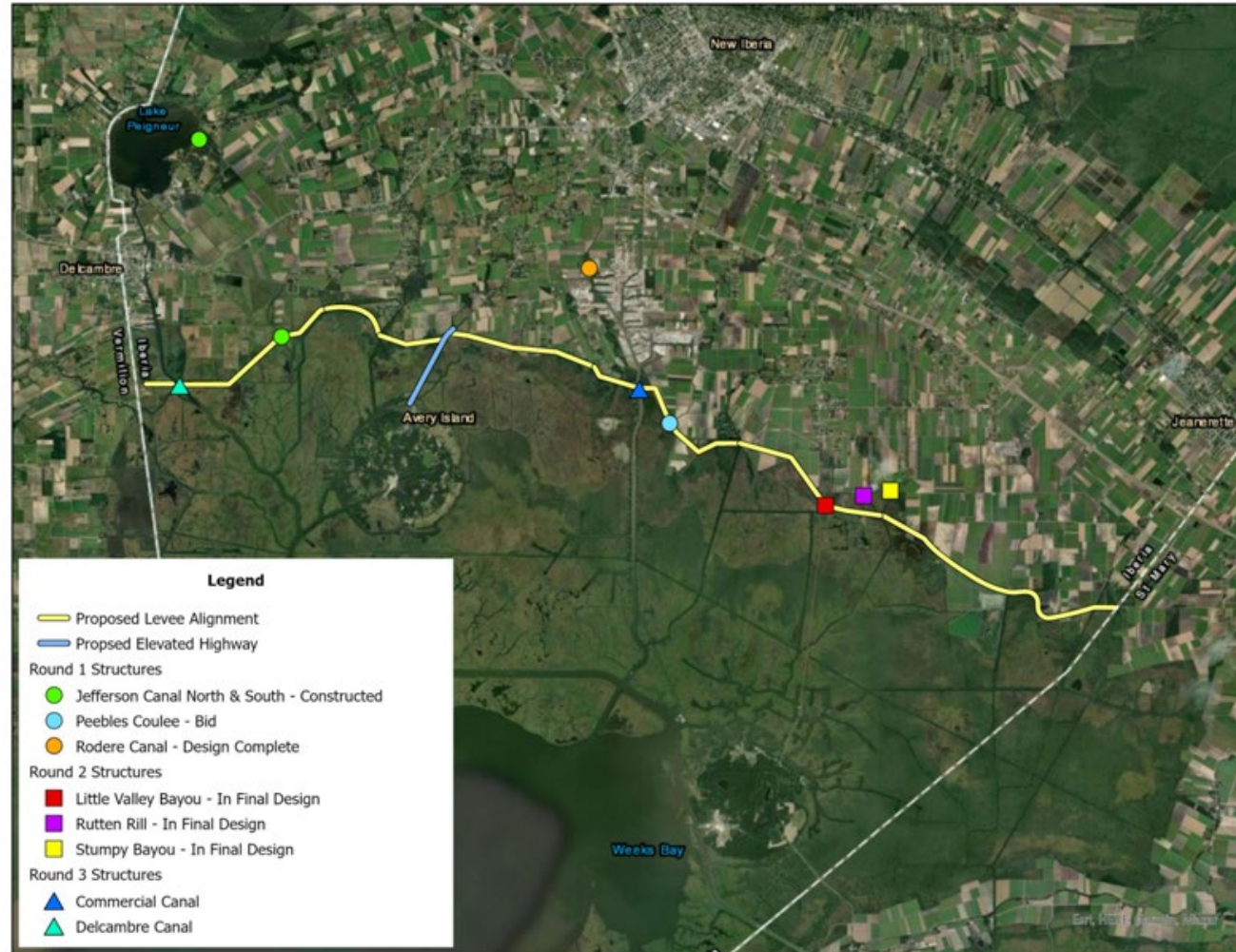
 Structural Risk Reduction  Central Coast



## Iberia Parish Flood Protection

Total Iberia Parish Funding: \$5.2M

Total CPRA Funding: \$24.5



## 2 Projects - Constructed (Water Control Structures)

- Jefferson Canal North (Completed June 2024)
- Jefferson Canal South (Completed September 2024)

Jefferson Canal North



Jefferson Canal South

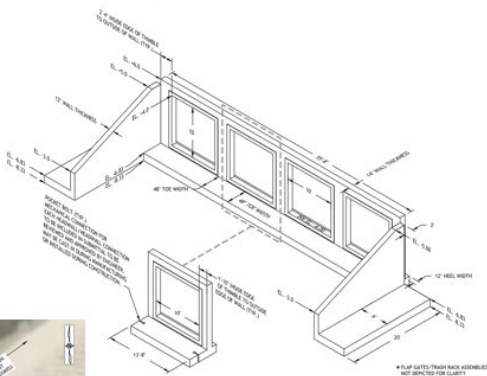


# Iberia Parish - Design



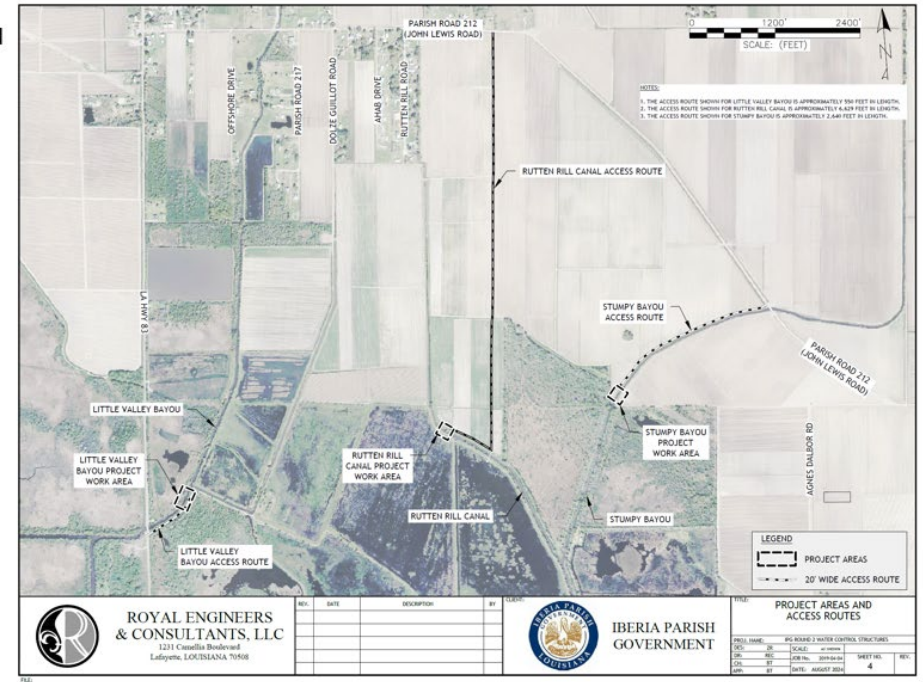
## 2 Projects - Design Complete (Water Control Structures)

- Peebles Coulee (Bid)
- Rodere Canal



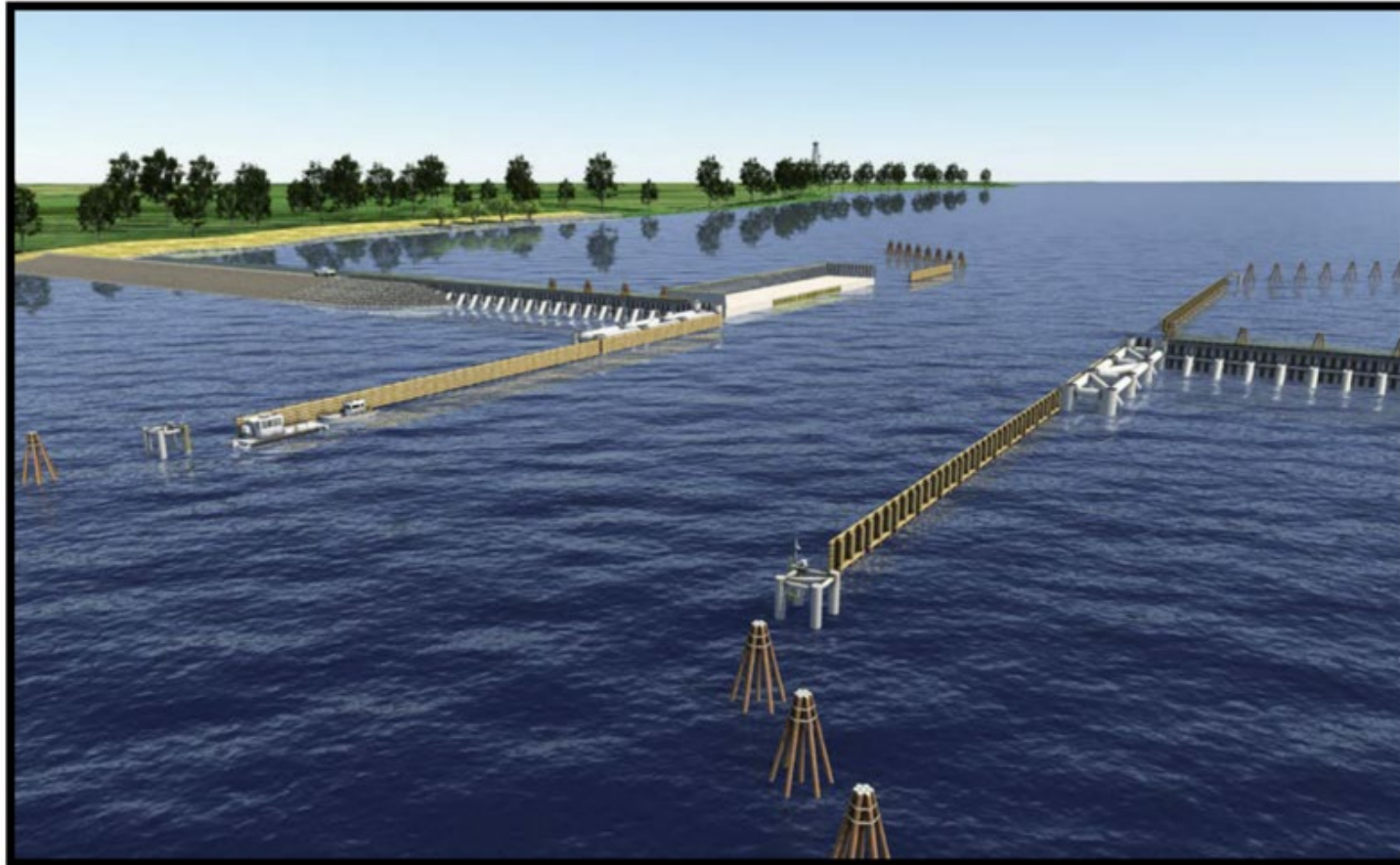
## 3 Projects - In Final Design (Water Control Structures)

- Little Valley Bayou
- Rutten Rill
- Stumpy Bayou



## 2 Projects - Beginning Design (Barge Gates and Pumping Stations)

- Commercial Canal
- Delcambre Canal



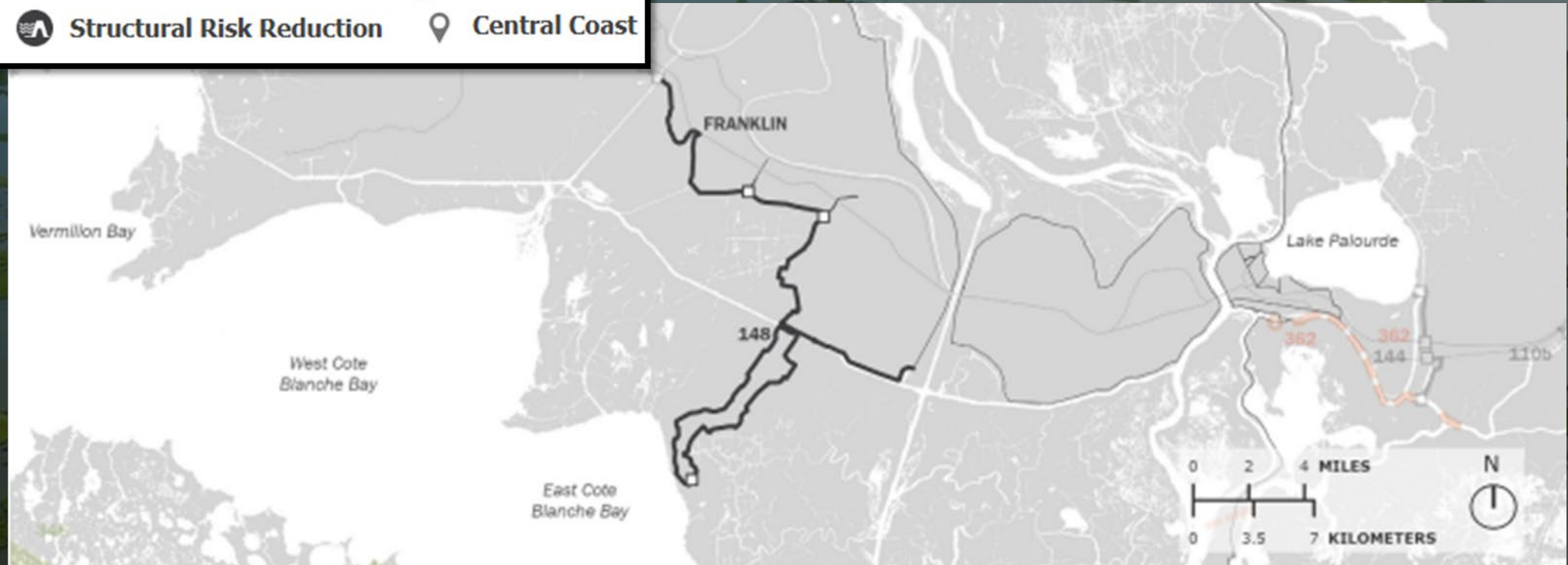
## Franklin and Vicinity

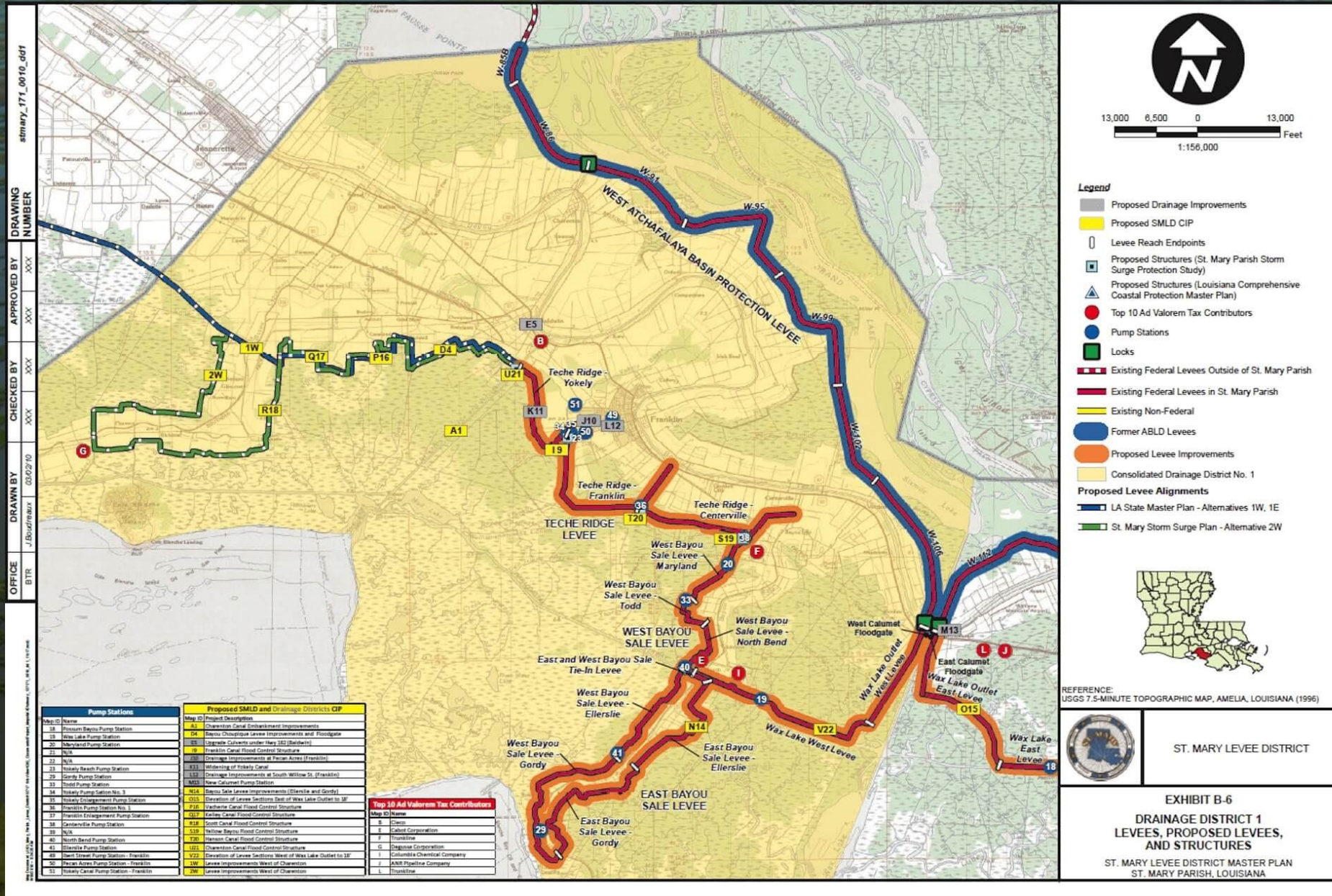


Structural Risk Reduction



Central Coast







# Shoreline Protection and Resilience

# Southwest Coastal – Ecosystem Restoration

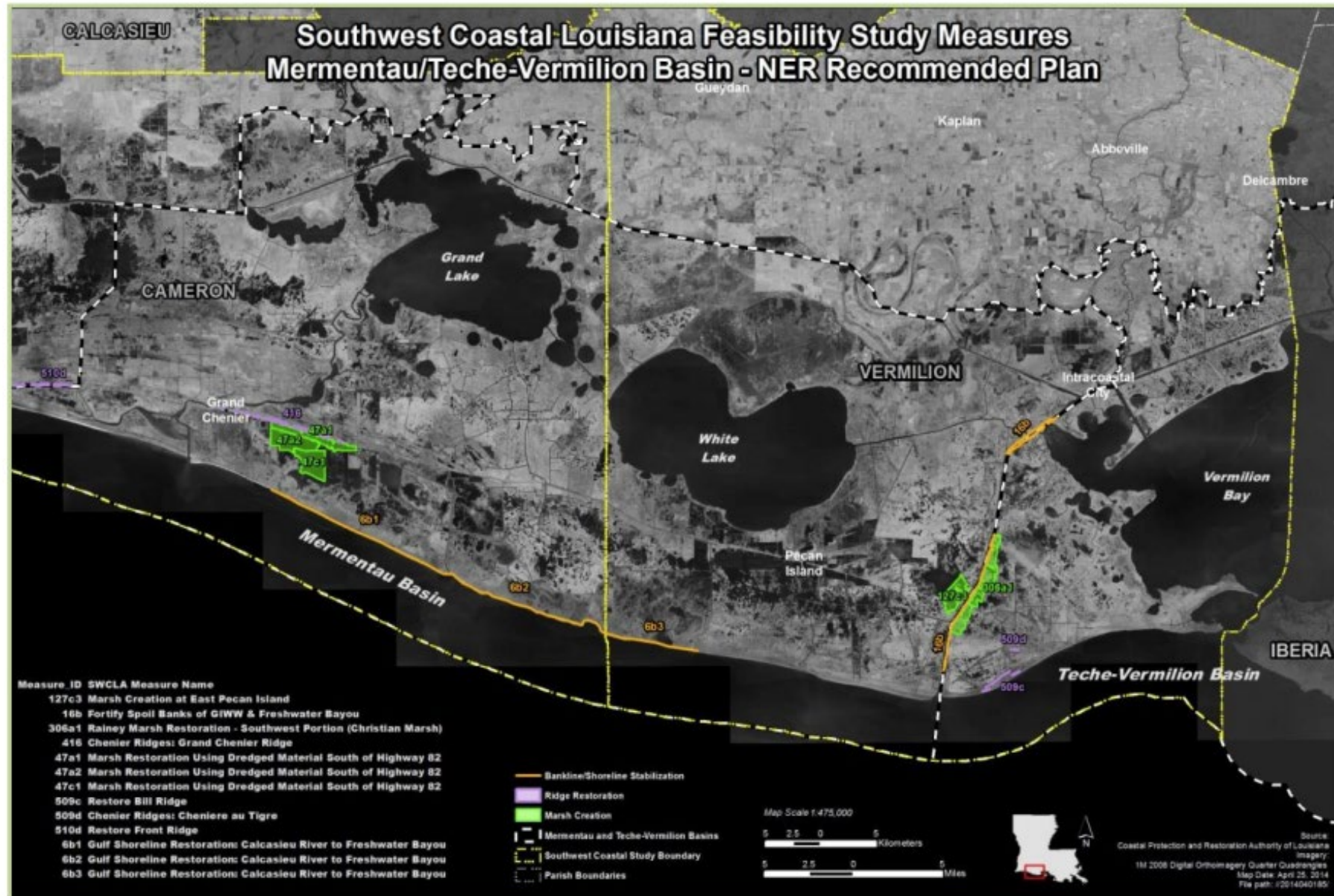


Figure 4-3b: NER RP features (Mermentau/Teche-Vermilion Basin).



## Gulf Shoreline Protection

Continuing efforts to the west

Currently in survey and updated design

Will be creditable against the State's required cost-share

Represents the first federal expense on the NER plan components

**Currently a \$30M federal investment, and growing...**

## TV-100 State Wildlife Refuge



### Project Scope

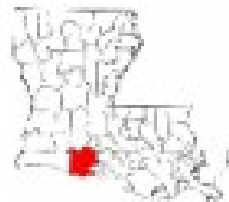
- Shoreline Protection
- Earthen Terraces
- Marsh Creation

### Project Funding

- State Surplus Funds
- Design Phase

### Project Status

- Currently collecting survey data to establish construction and access corridors



State Wildlife Refuge Marsh Creation and Shoreline Protection Project  
Vermilion Parish, LA



#### Legend

- Marsh Creation Alternatives
- Shoreline Protection Alternative
- Earthen Terrace Alternatives

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