



Coastal Protection and  
Restoration Authority of Louisiana

# Coastal Protection and Restoration in Louisiana: Post Katrina/Rita Approach

Bren Haase,  
Coastal Protection and  
Restoration Authority



committed to our coast

# Coastal Protection and Restoration Authority

Single state entity with authority to articulate a clear statement of priorities to achieve comprehensive coastal protection for Louisiana.

Mandate is to develop, implement, and enforce a comprehensive coastal protection and restoration Master Plan.



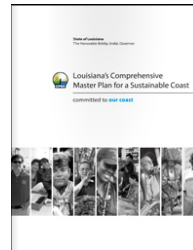
# The CPRA Board



- Governor's Advisory Commission on Coastal Protection, Restoration and Conservation
- State Senate Designee
- State House of Representative Designee

## 7 Representatives from Coastal Area

- Southeast Louisiana Flood Protection Authority – East
- Jefferson Parish
- Pontchartrain Levee District
- South Lafourche Levee District
- St. Mary Levee District
- Plaquemines Parish
- Representative West of the Atch. River

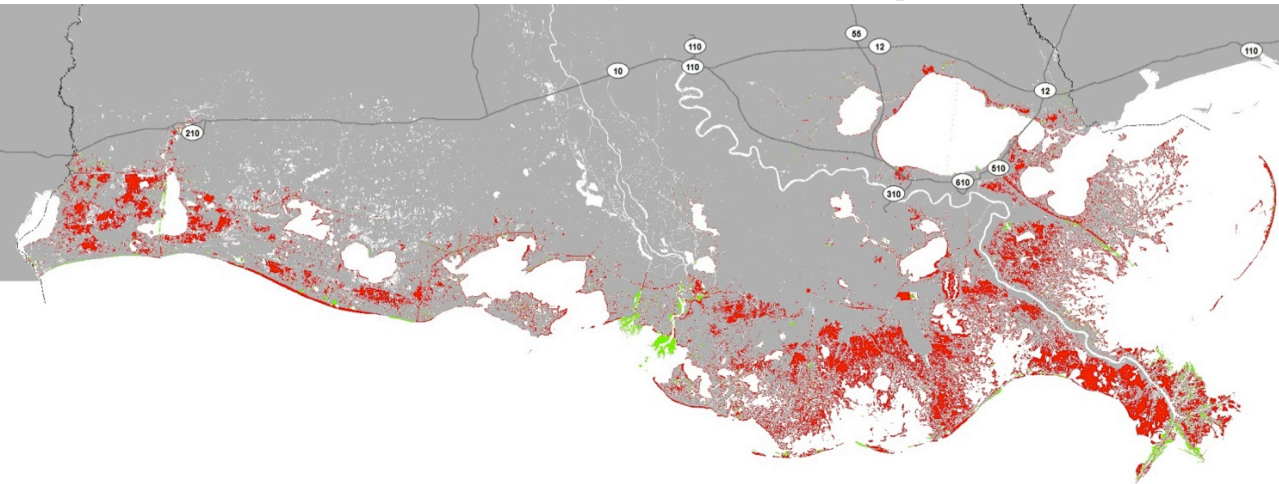


Levee Boards

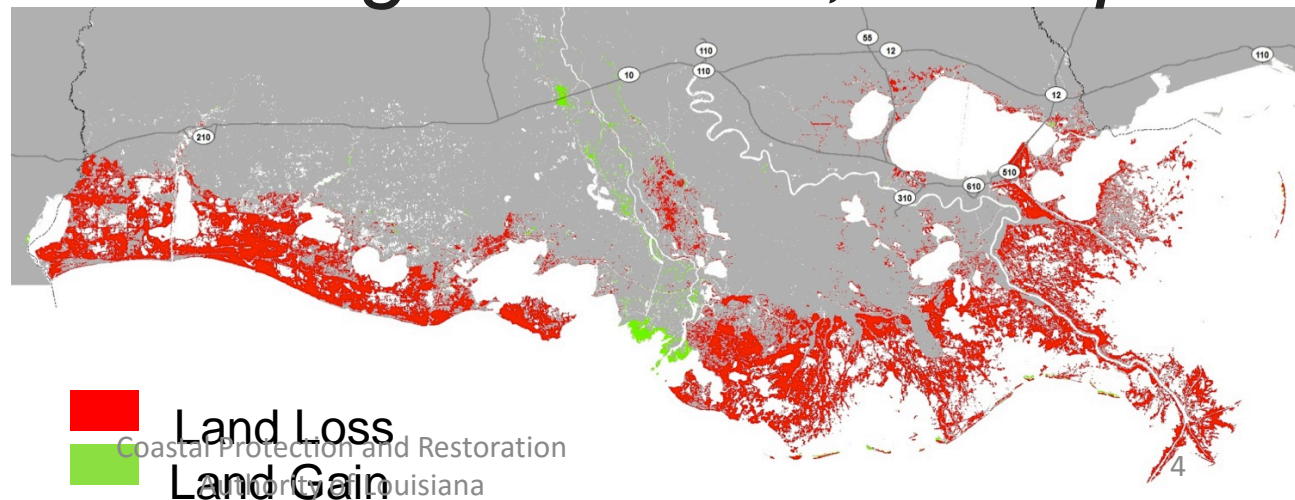


# Fundamental problem: land loss

*Since 1932 – 1900 sq. mi.*



*Through 2060 – 1,800 sq. mi.*

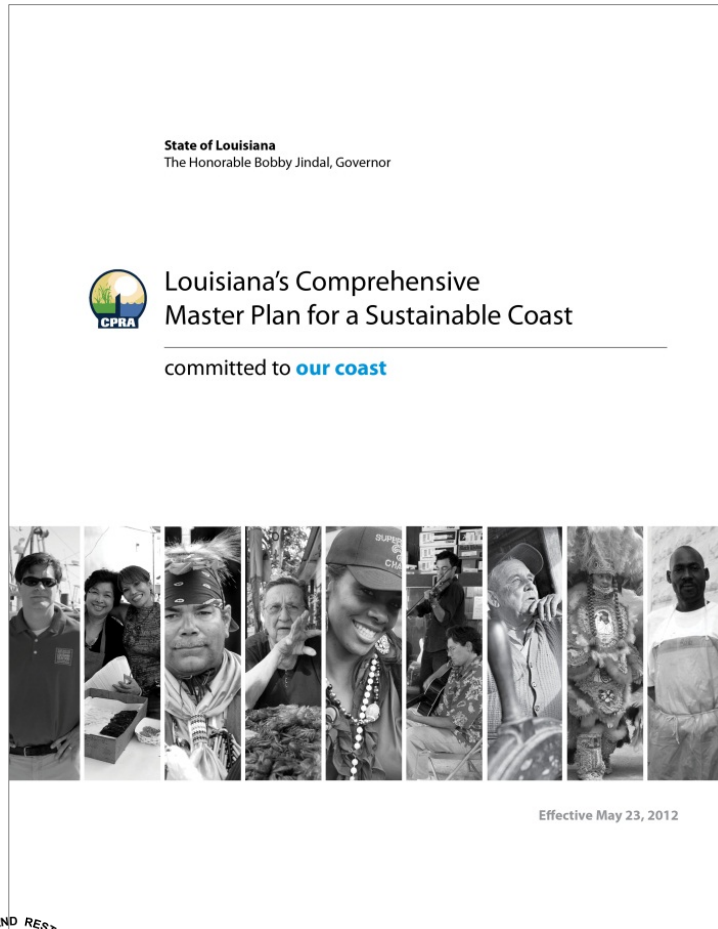


**Land Loss**  
Coastal Protection and Restoration  
**Land Gain**  
Authority of Louisiana

# Why does it matter?

- Energy Production
- Transportation
- Seafood and Wildlife Production
- Ecosystem Services
- Unique Culture and Heritage

# Coastal Master Plan



Guiding document of CPRA  
and our efforts to protect and  
restore the Louisiana coast.

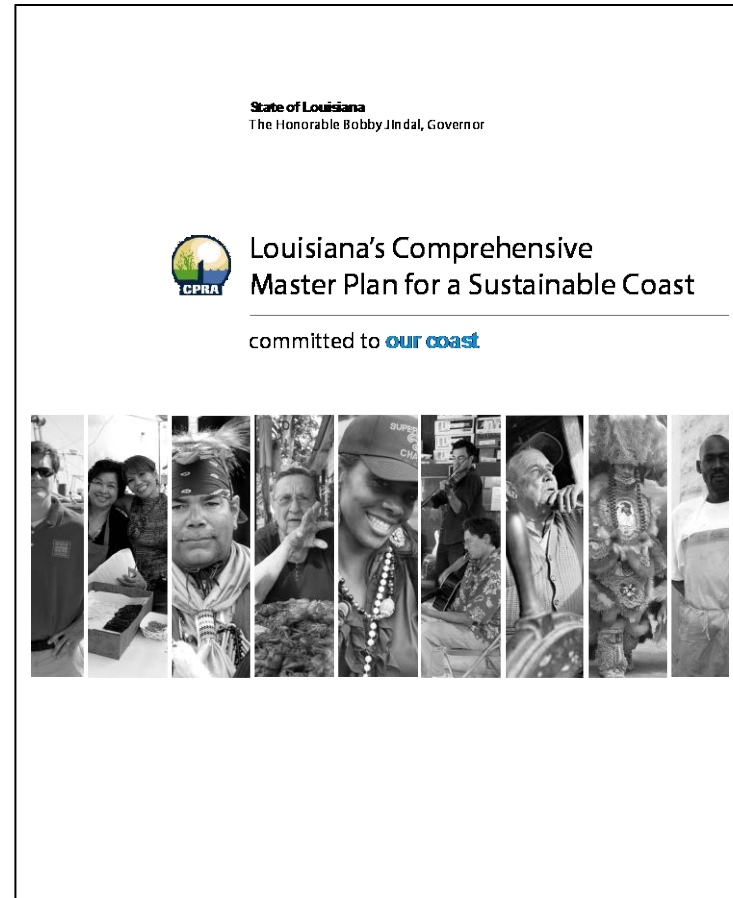
Revised every 5 years.

\$50Billion/50 Years



# 2012 Coastal Master Plan

- Built on world class science and engineering
- Evaluated hundreds of existing project concepts
- Incorporated extensive public input and review
- Resource constrained
  - **Funding**, water, sediment
- Identified investments that will pay off, not just for us, but for our children and grandchildren



# Master Plan Objectives



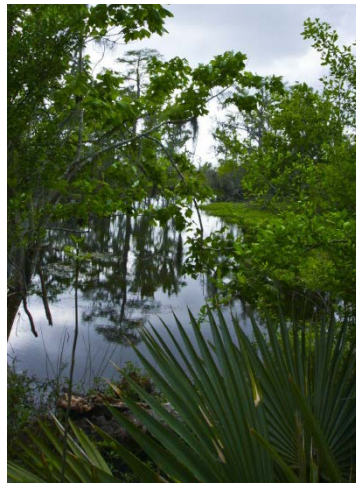
## Flood Protection

Reduce economic losses from storm-based flooding



## Natural Processes

Promote a sustainable ecosystem by harnessing the processes of the natural system



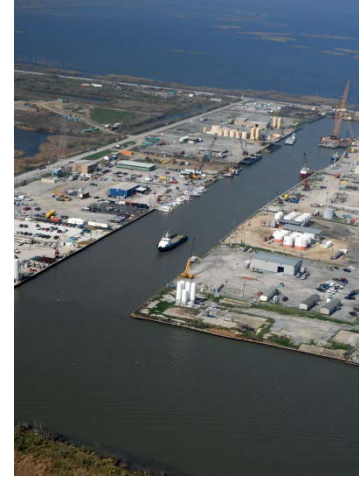
## Coastal Habitats

Provide habitats suitable to support an array of commercial and recreational activities coast wide



## Cultural Heritage

Sustain Louisiana's unique heritage and culture

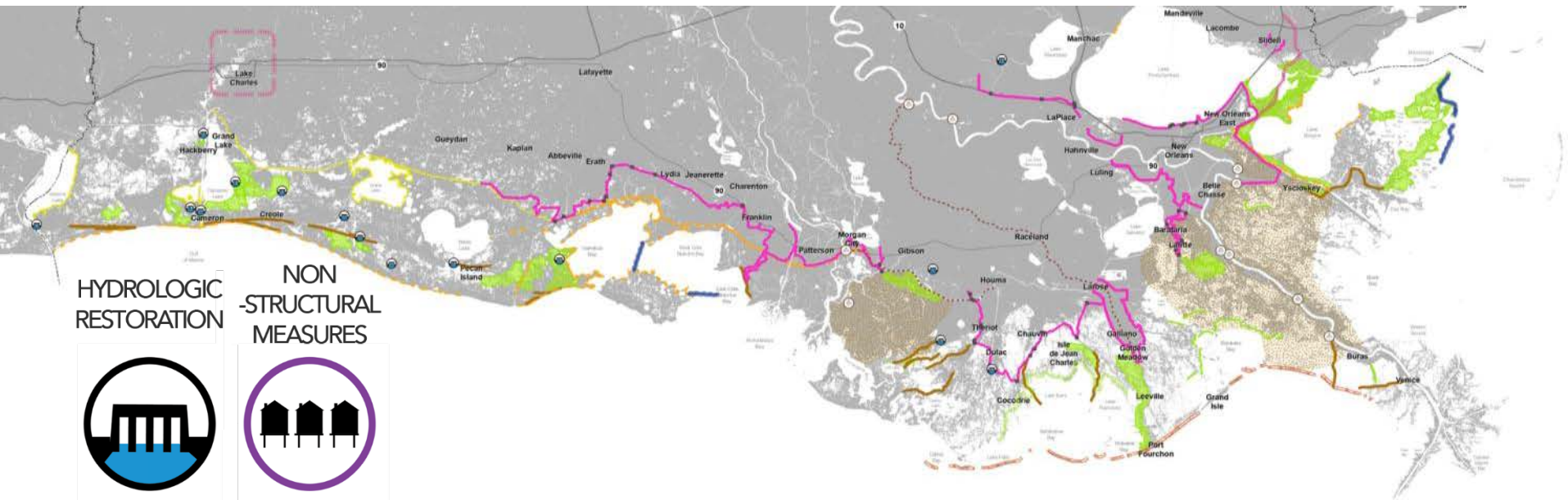


## Working Coast

Support regionally and nationally important businesses and industries



# LOUISIANA'S 2012 COMPREHENSIVE MASTER PLAN FOR A SUSTAINABLE COAST



HYDROLOGIC RESTORATION

NON-STRUCTURAL MEASURES



STRUCTURAL PROTECTION

BANK STABILIZATION

OYSTER BARRIER REEF

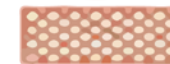
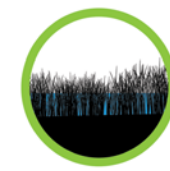
RIDGE RESTORATION

SHORELINE PROTECTION

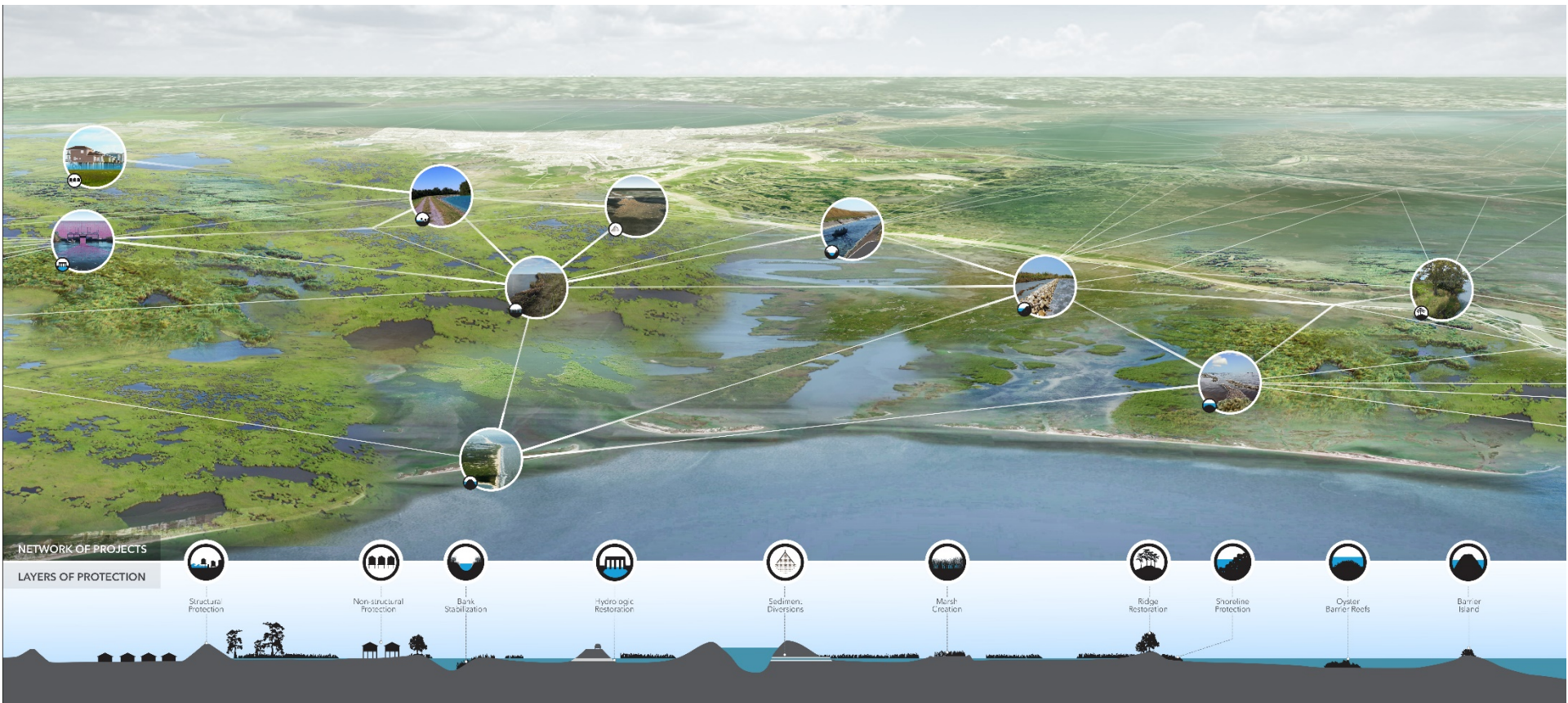
BARRIER ISLAND RESTORATION

MARSH CREATION

SEDIMENT DIVERSION

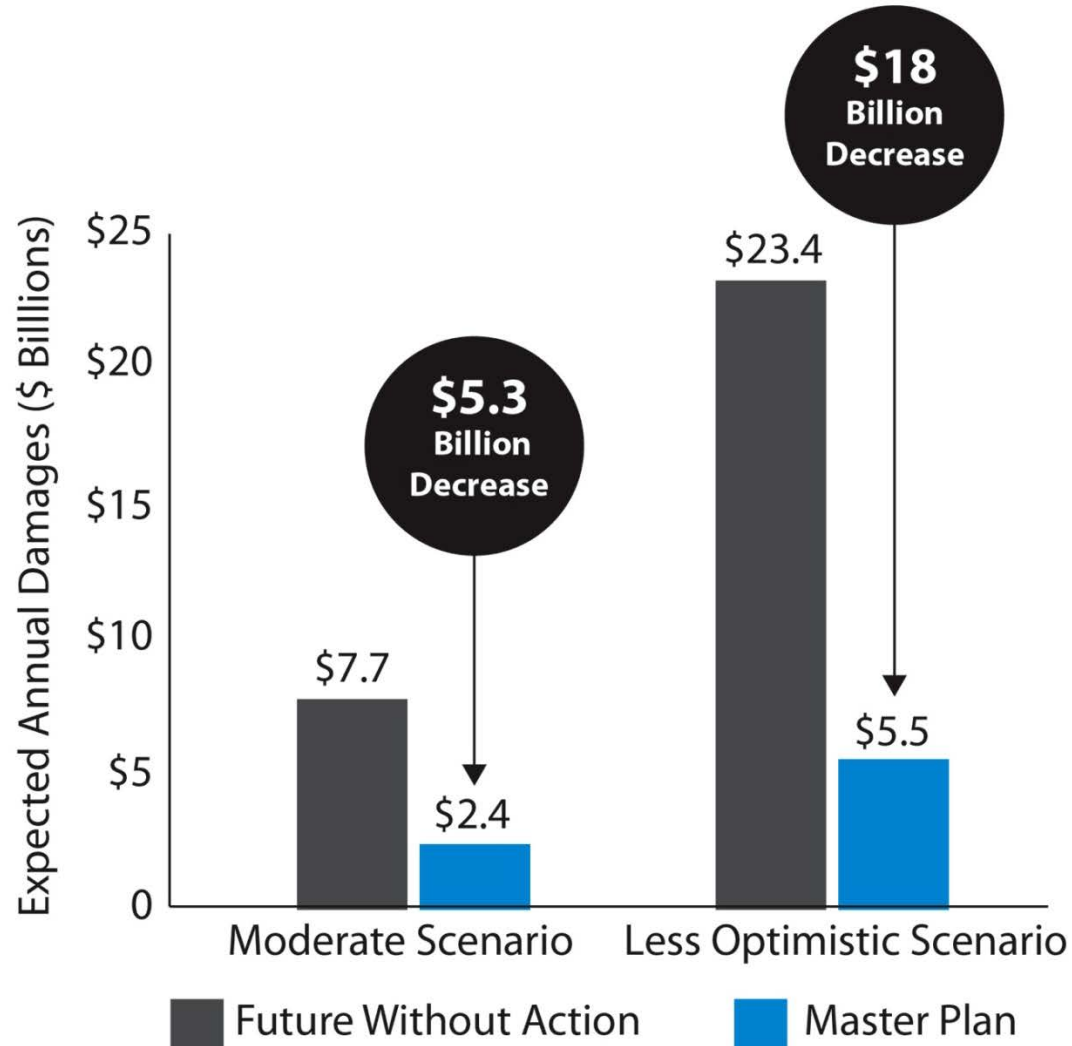


# Multiple Lines of Defense (Systems Approach)



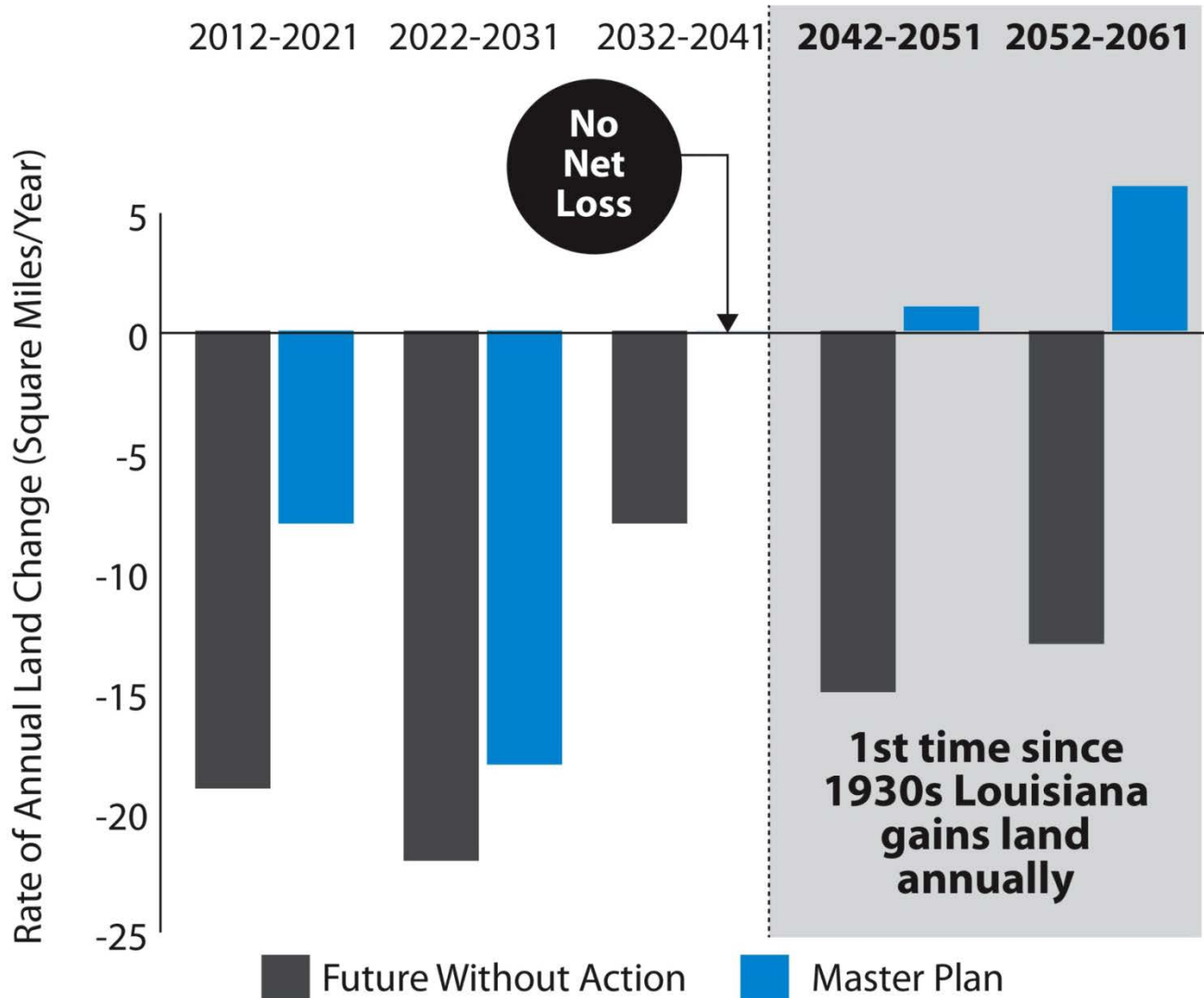
# What the Master Plan Delivers

## Potential Expected Annual Damages from Flooding at Year 50



# What the Master Plan Delivers

## Potential Annual Rates of Land Change Over the Next 50 Years

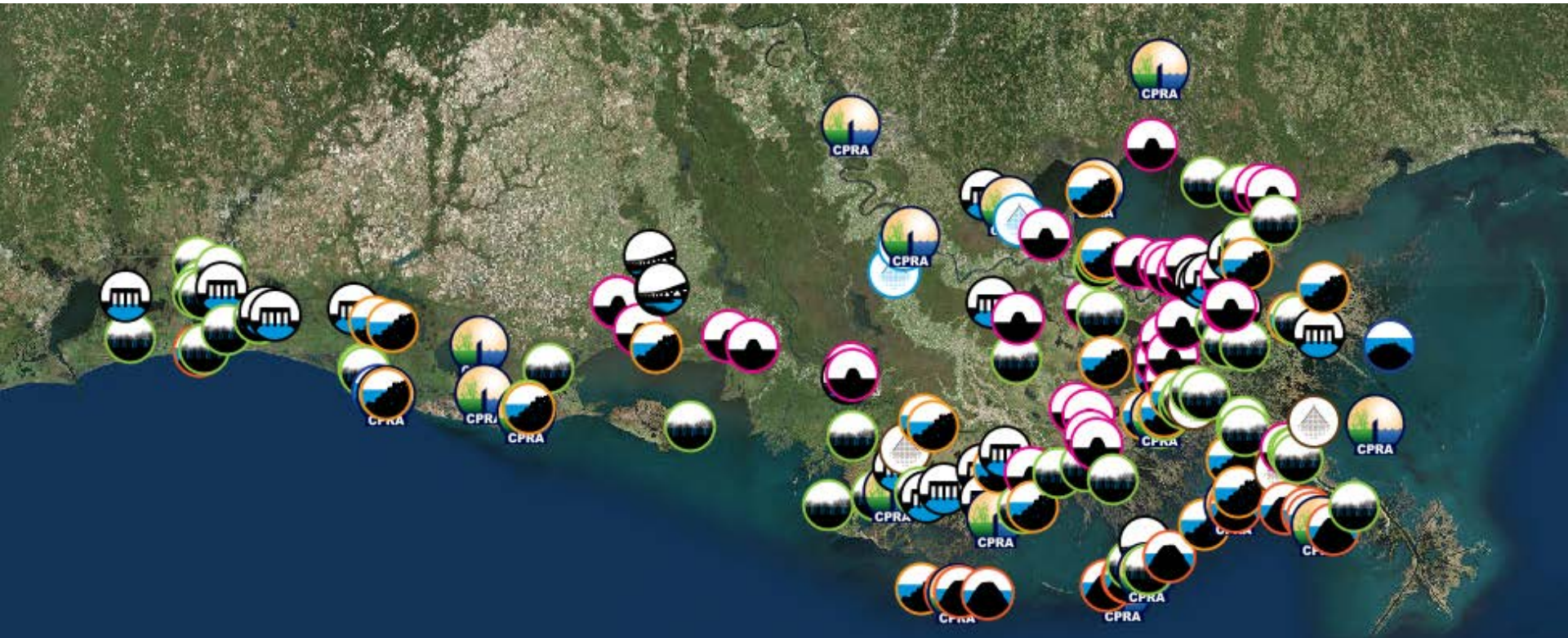




“However beautiful the strategy,  
you should occasionally look at the  
results.” - Winston Churchill

# Accomplishments (Since 2007)

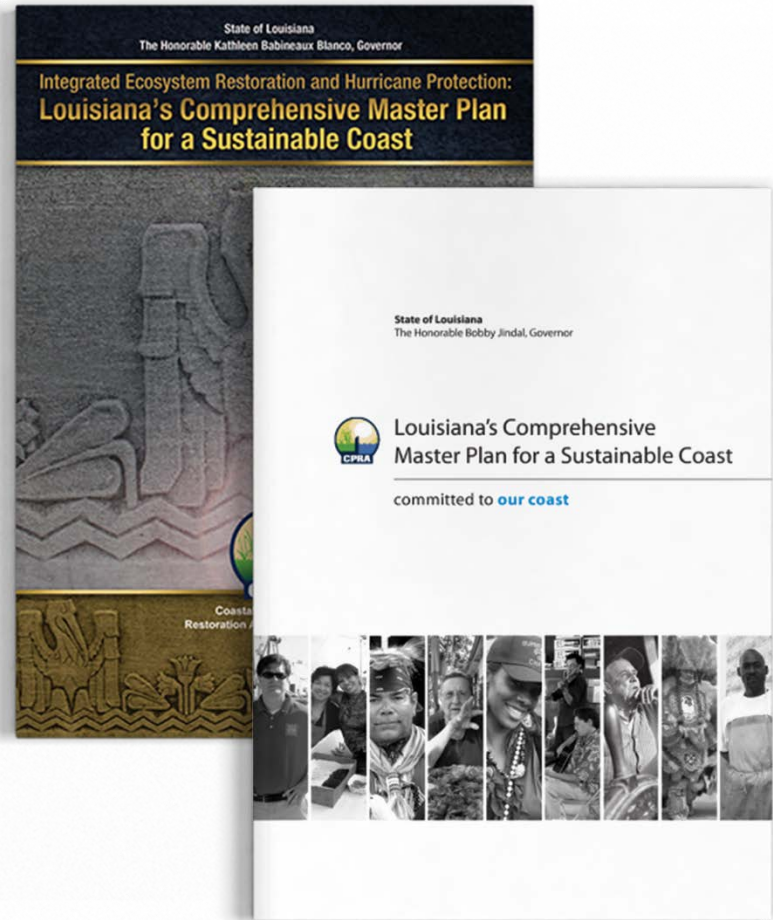
- \$18B secured for protection and restoration projects
- 30,637 acres of land benefited
- 274 miles of levee improvement
- 52 miles of barrier islands and berms constructed or under construction
- 112.3 million cubic yards of fill utilized
- 20 parishes with constructed projects



# 2017 UPDATE

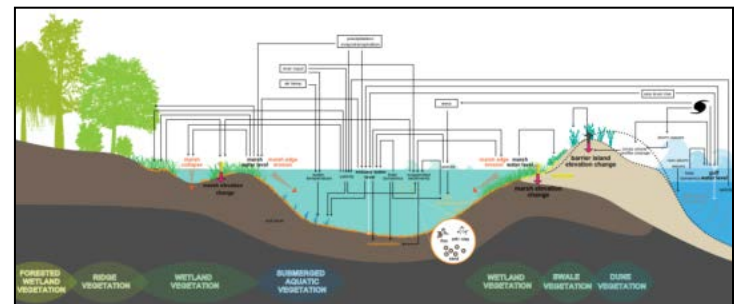
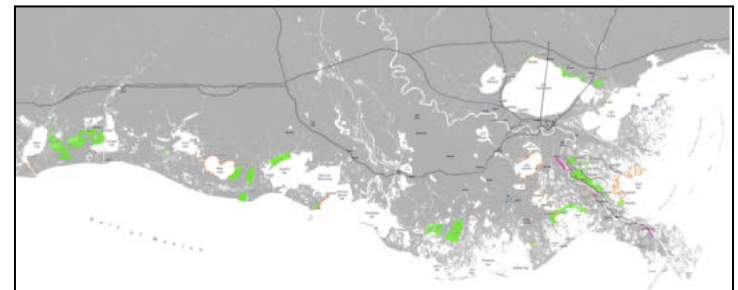
## SO WHY ANOTHER PLAN?

- It's required by law to be updated every five years
- Allows the state to respond to changes on the ground and public input as well as innovations in science, engineering, and policy
- Advances a comprehensive and integrated approach to protecting and restoring the communities of Coastal Louisiana



# WHAT WILL BE DIFFERENT ABOUT THE 2017 COASTAL MASTER PLAN?

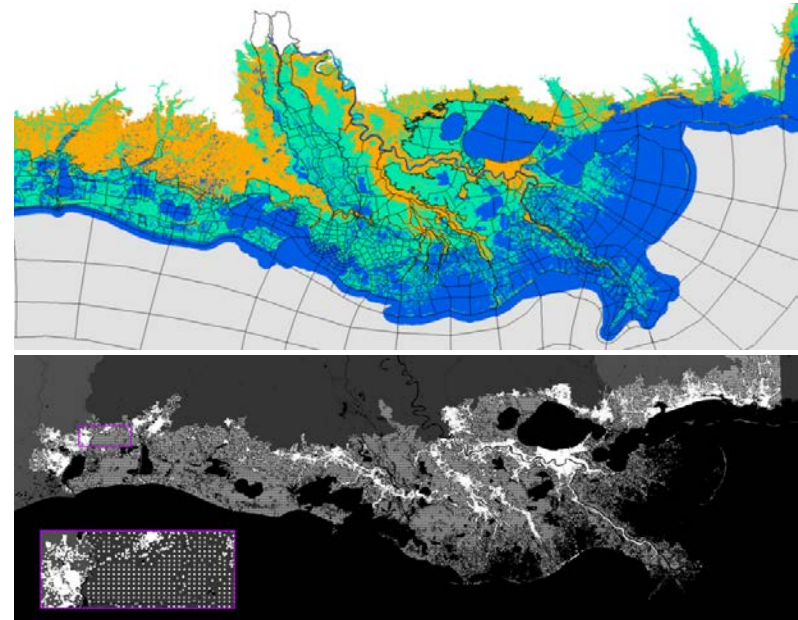
- Improved science and technical analysis
- Incorporating new ideas and information
- Focus on flood risk reduction and resilience
- Emphasis on communities





# IMPROVED SCIENCE AND TECHNICAL ANALYSIS

- Major Improvements
  - Integrated Compartment Model
  - Spatial resolution/extent
  - Incorporation of additional landscape and ecosystem processes
  - Enhanced fish/shellfish modeling
- Primary Model Components
  - Landscape
  - Ecosystem
  - Risk reduction



# INCORPORATING NEW IDEAS AND INFORMATION

- 2012 Coastal Master Plan considered projects that were previously proposed and included in prior planning efforts
- In order to capture new project ideas, CPRA created the New Project Development Program
- The Program encouraged individuals and organizations to submit new projects for consideration
  - 150 projects submitted
- Projects that met required criteria are being evaluated for the 2017 Coastal Master Plan

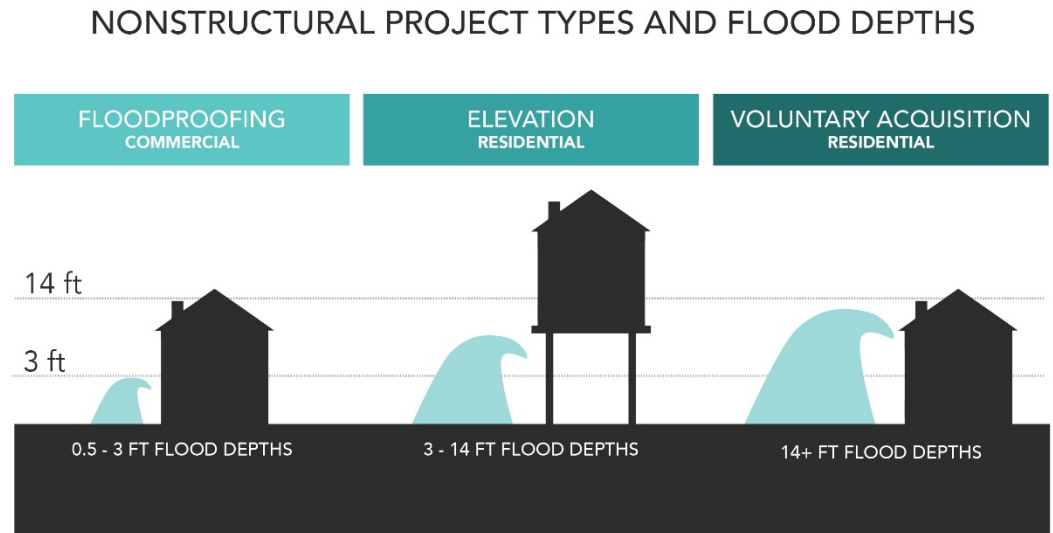


# FOCUS ON FLOOD RISK REDUCTION AND RESILIENCE

- CPRA is developing a framework to implement both nonstructural projects and programmatic measures to provide a comprehensive approach to flood risk reduction for homes, businesses, and community assets.

- Program Framework

1. Develop Data and Tools
2. Provide Information
3. Provide Options
4. Create Platforms for Collaboration and Action



# EMPHASIS ON COMMUNITIES

- Reviewing long-term shifts in population
- Understanding the impacts of coastal land loss and flood risk on communities and resources
- Developing metrics to understand social vulnerability, flood protection of historic properties, and how best to support and maintain our traditional fishing, agricultural, and oil and gas communities





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