



2029 COASTAL MASTER PLAN
COMMITTED TO OUR COAST

MASTER PLAN COMMUNITY CONVERSATIONS

CENTRAL COAST

BRIAN LEZINA



APRIL 25, 2024

GENERAL OUTLINE

- Welcome + Introduction
- CPRA + The Master Plan
 - What is CPRA?
 - Our Work
 - Projects in the region
 - What is the Master Plan?
- Future Projections for a Changing Coast
 - Land change
 - Flood depths
 - Local and regional damage estimates



Established following the 2005 storm season, CPRA is the single state entity with authority to articulate a clear statement of priorities to achieve comprehensive coastal protection for Louisiana.

CPRA has a mandate to develop, implement, and enforce a comprehensive restoration and risk reduction coastal master plan. In 2023, the 4th update to the master plan was unanimously approved by the Louisiana Legislature.





OUR
HOMES



OUR
JOBS



OUR
CULTURE

2029 COASTAL MASTER PLAN PROCESS

A MULTI-STEP PROJECT PRIORITIZATION EFFORT

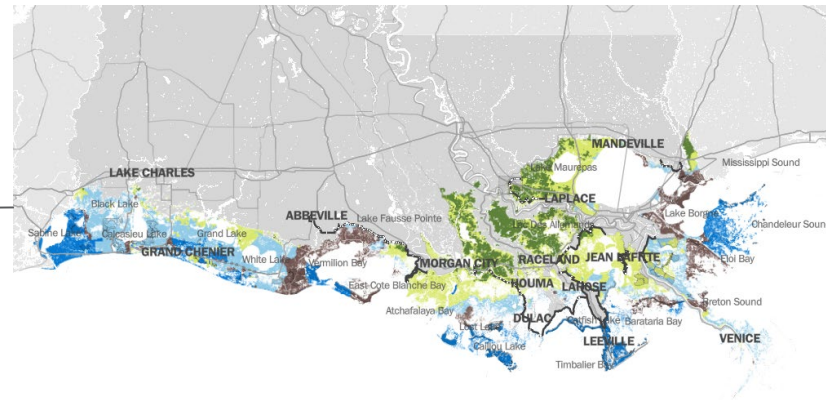
Identify Current & Future Coastal Challenges



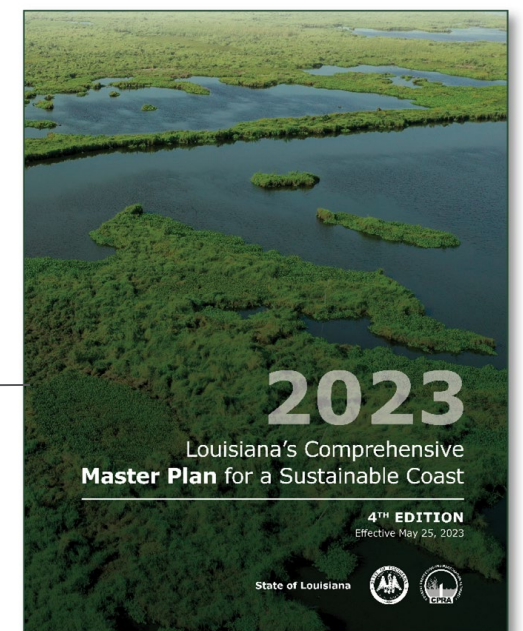
Develop Projects



Model, Refine & Select Projects



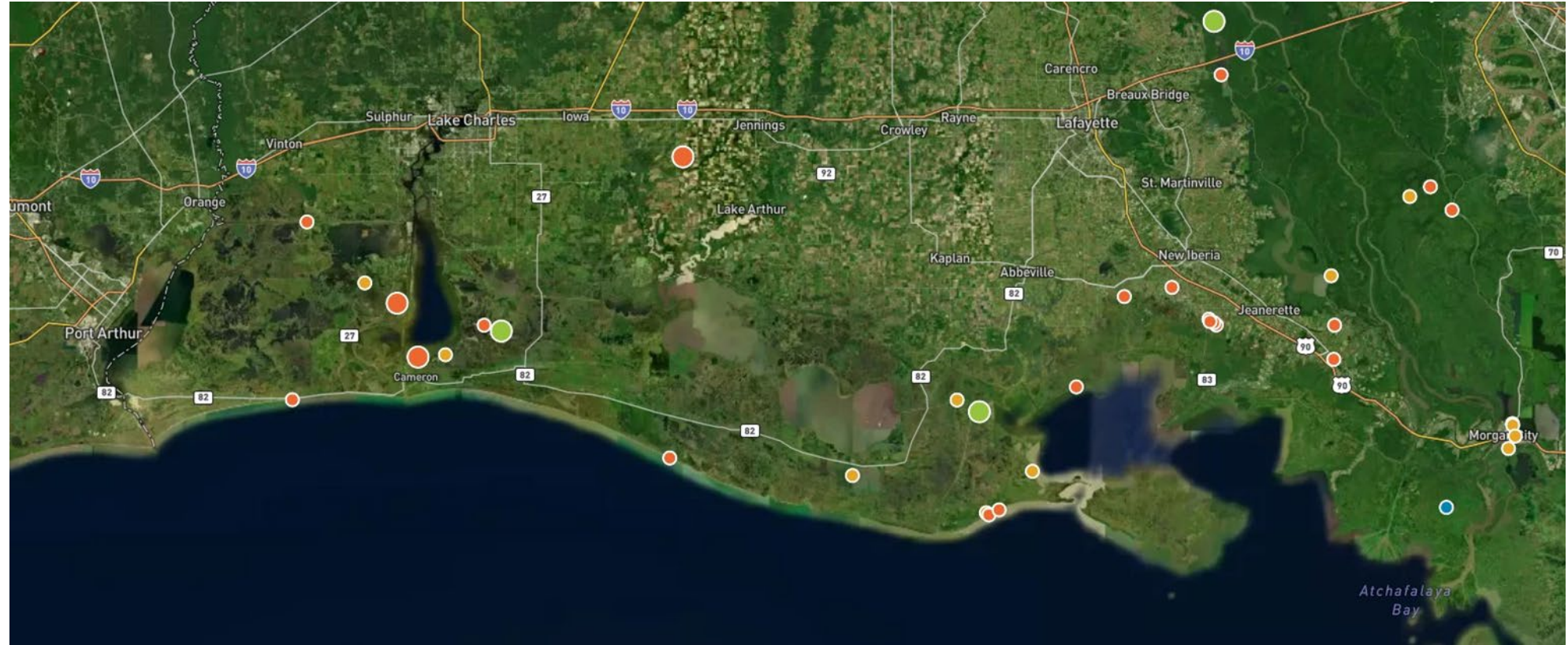
Draft Coastal Master Plan



OUR WORK

CPRA PROJECTS IN THE CHENIER PLAIN & CENTRAL COAST REGIONS (COMPLETED OR IN CONSTRUCTION/DESIGN)

- Total value of projects active in 2023-2024:
 - **\$482 million**
 - **+ \$3.39 billion** for Southwest Coastal nonstructural
- 31 Active Projects
 - In construction: 12
 - In engineering & design: 19



ACTIVE PROJECT TYPES INCLUDE:

Marsh creation

Ridges

Hydrologic restoration

Shoreline protection

Nonstructural

Flap gates

Boat launches

Education centers

Flood protection

Levee & drainage improvement

Lock & control

PROJECT TYPES

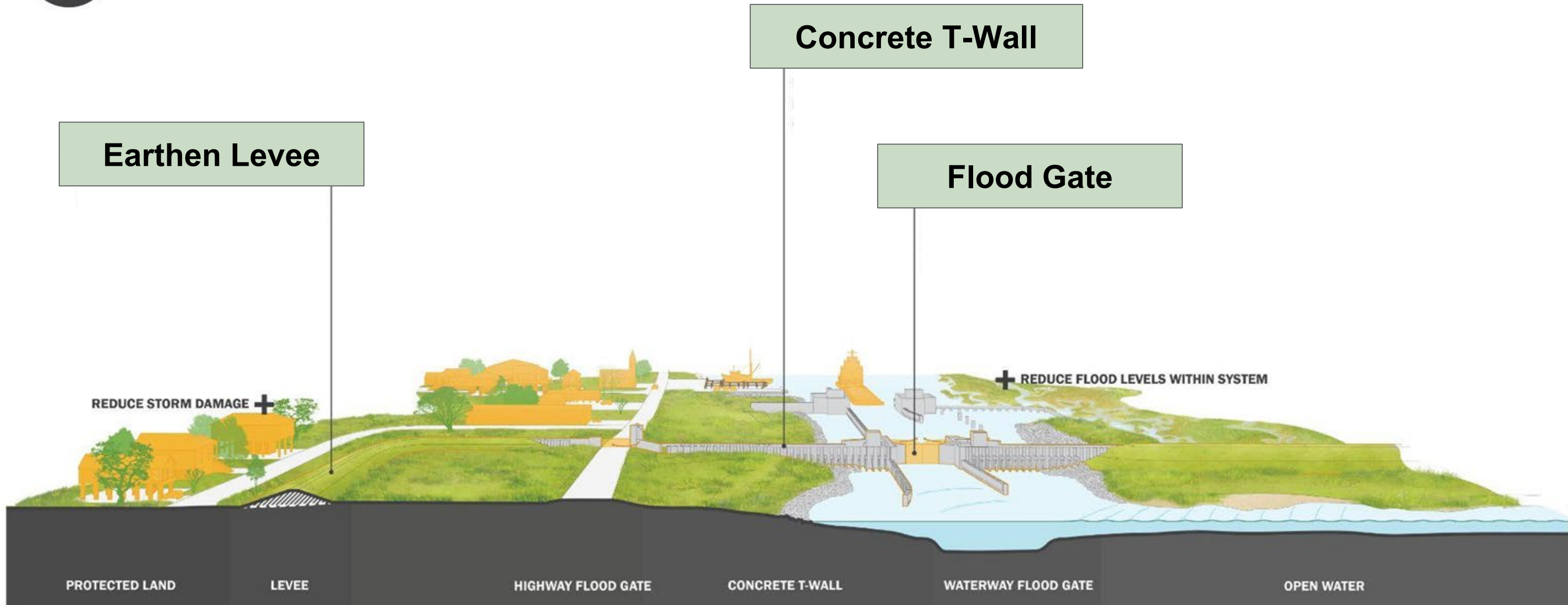
RISK REDUCTION



Structural Risk Reduction

Benefits:

- Reduce flood levels within system
- Reduce storm damage



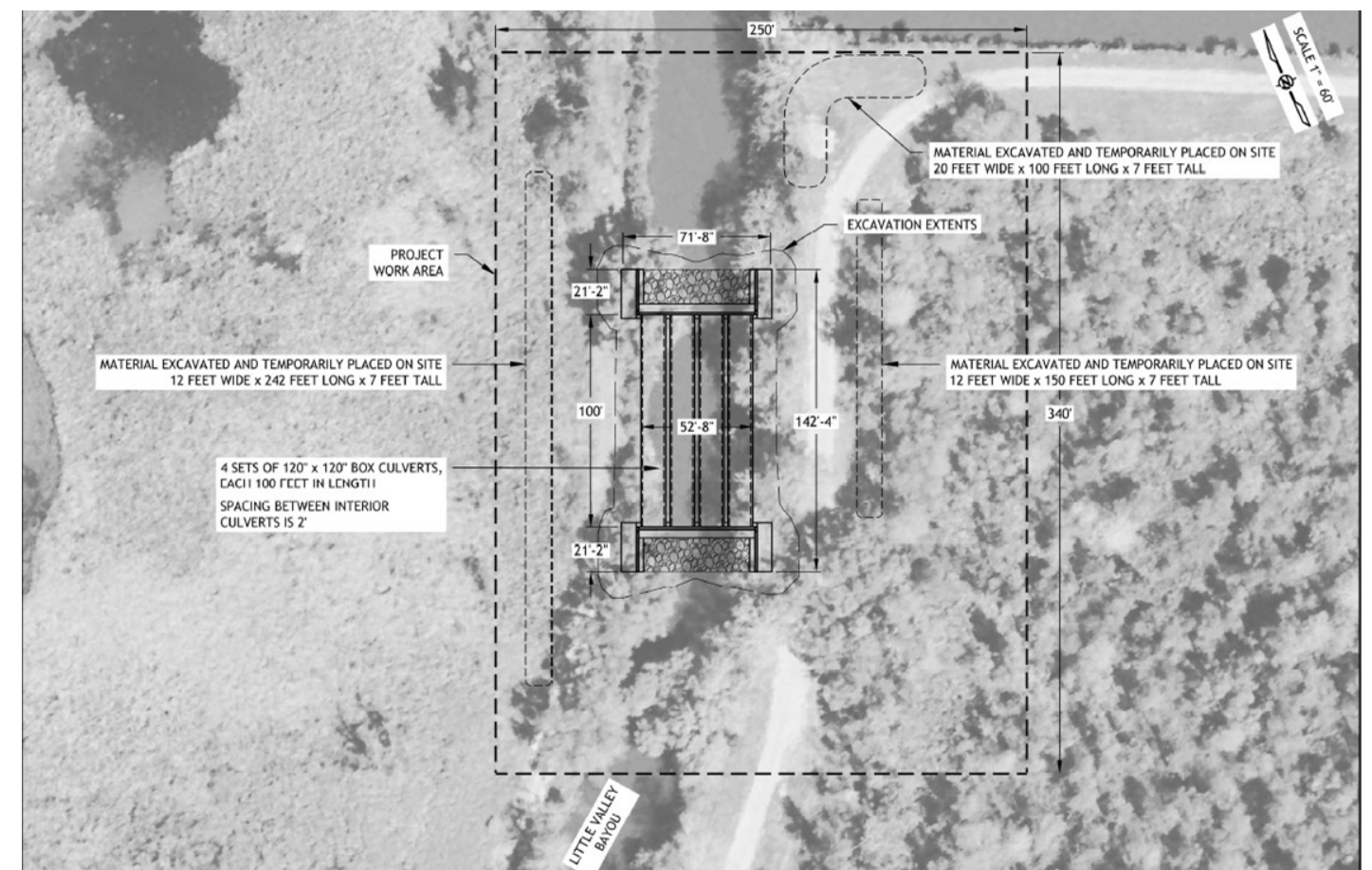
TECHE/VERMILION FLOOD PROTECTION PROJECTS, TV-92, TV-93, TV-94, TV-95

CENTRAL COAST

4 Planned Projects Underway ~\$22 M investment

[project lead is Iberia Parish]

- Little Valley Bayou Water Control Structure
 - Estimated Cost: \$6.3 M
 - Provides flood risk reduction to Iberia Parish
 - Status: Engineering & Design
- George Lancon Flood Protection
 - Estimated Cost: \$3.4 M
 - Provides flood risk reduction to Iberia Parish
 - Status: Engineering & Design
- Rutton Hill Rd Flood Protection
 - Estimated Cost: \$3.9 M
 - Provides flood risk reduction to Iberia Parish
 - Status: Engineering & Design
- Stumpy Bayou Flood Protection
 - Estimated Cost: \$8.4 M
 - Provides flood risk reduction to Iberia Parish
 - Status: Engineering & Design



Permit drawing of Little Valley Bayou water control structure

JEFFERSON CANAL FLAP GATE, TV-0086

CENTRAL COAST & CHENIER PLAIN

Estimated Cost: ~\$3.1 Million

- Iberia Parish Lead
- 3,960 acres of land benefitted
- Will increase rainfall runoff storage by mitigating upstream tidal influence
- Will reduce prolonged periods of high water

Status: Construction

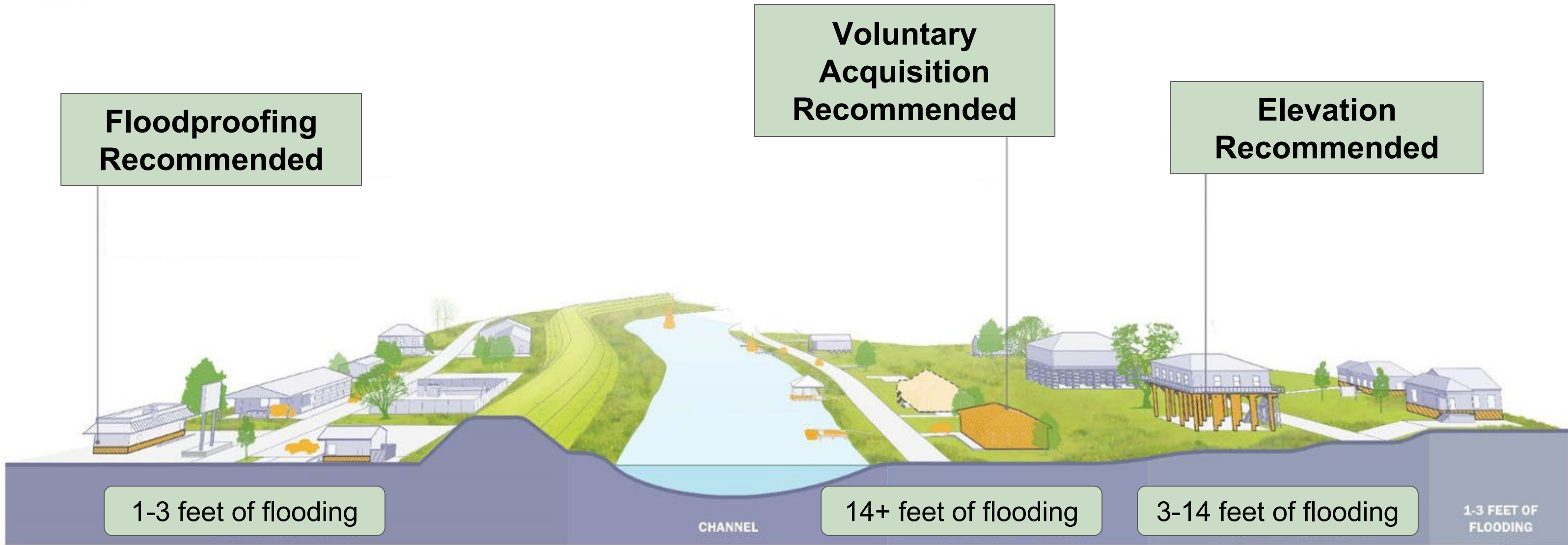


PROJECT TYPES

RISK REDUCTION



Nonstructural Risk Reduction



SOUTHWEST COASTAL LOUISIANA PROJECT, LA-0020

CENTRAL COAST & CHENIER PLAIN

Estimated Cost: \$3.3 Billion

- 3,961 total structures in Calcasieu, Cameron, and Vermilion Parishes
- Program is 100% voluntary
- No requirement to carry flood insurance after elevation
- No homeowner cost-share required

Status: Construction



PROJECT TYPES

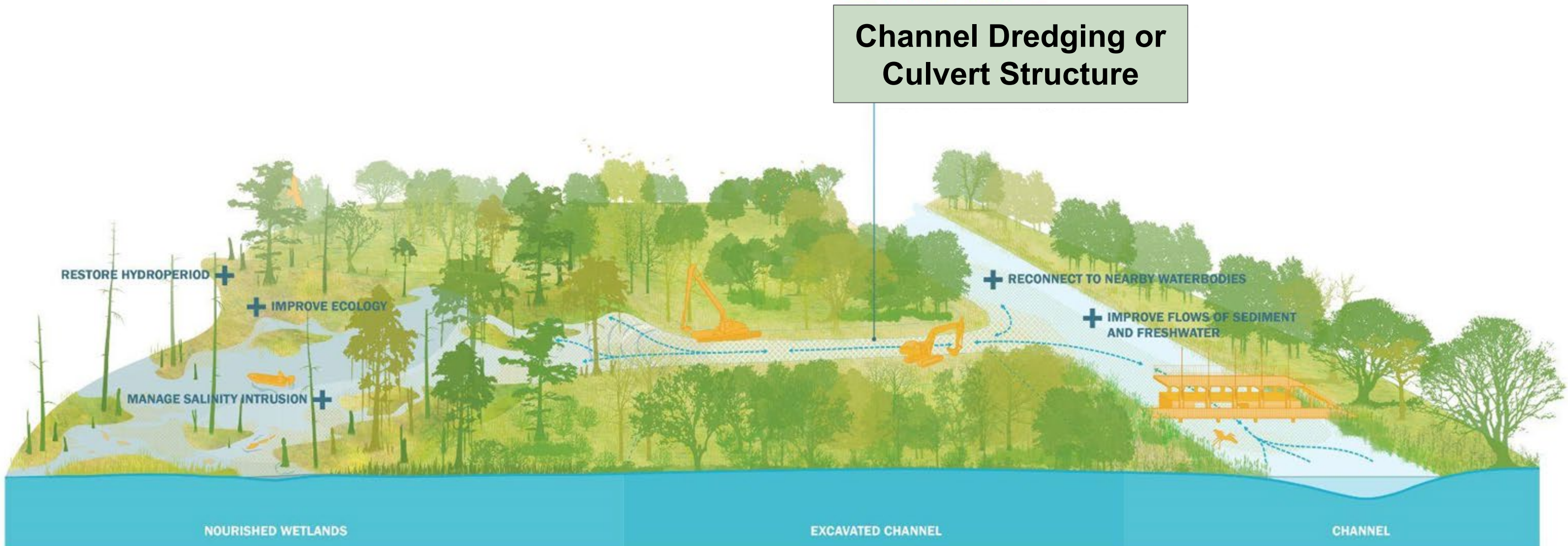
RESTORATION



Hydrologic Restoration

Benefits:

- Manage salinity intrusion
- Enable drainage
- Reconnect to nearby water bodies
- Improve flows of sediment and fresh water
- Improve ecology
- Restore hydroperiod



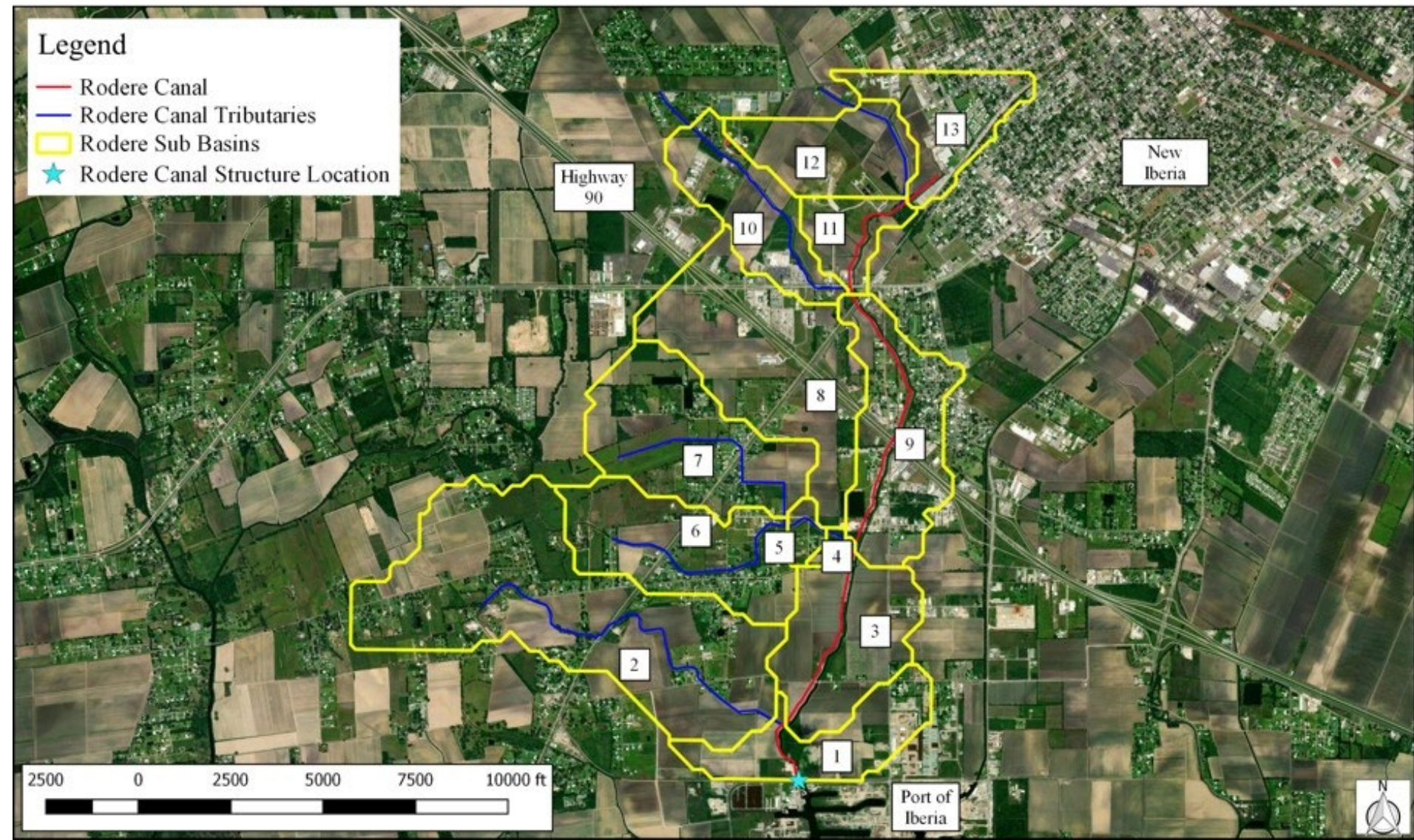
RODERE CANAL WATER CONTROL STRUCTURE, TV-0087

CENTRAL COAST & CHENIER PLAIN

Estimated Cost: ~\$2.3 Million

- Iberia Parish Lead
- 3,938 acres of land benefitted
- Will increase rainfall runoff storage by mitigating upstream tidal influence
- Will reduce prolonged periods of high water

Status: Pre-Construction



Roder Canal Water Control Structure Vicinity Map



PROJECT TYPES

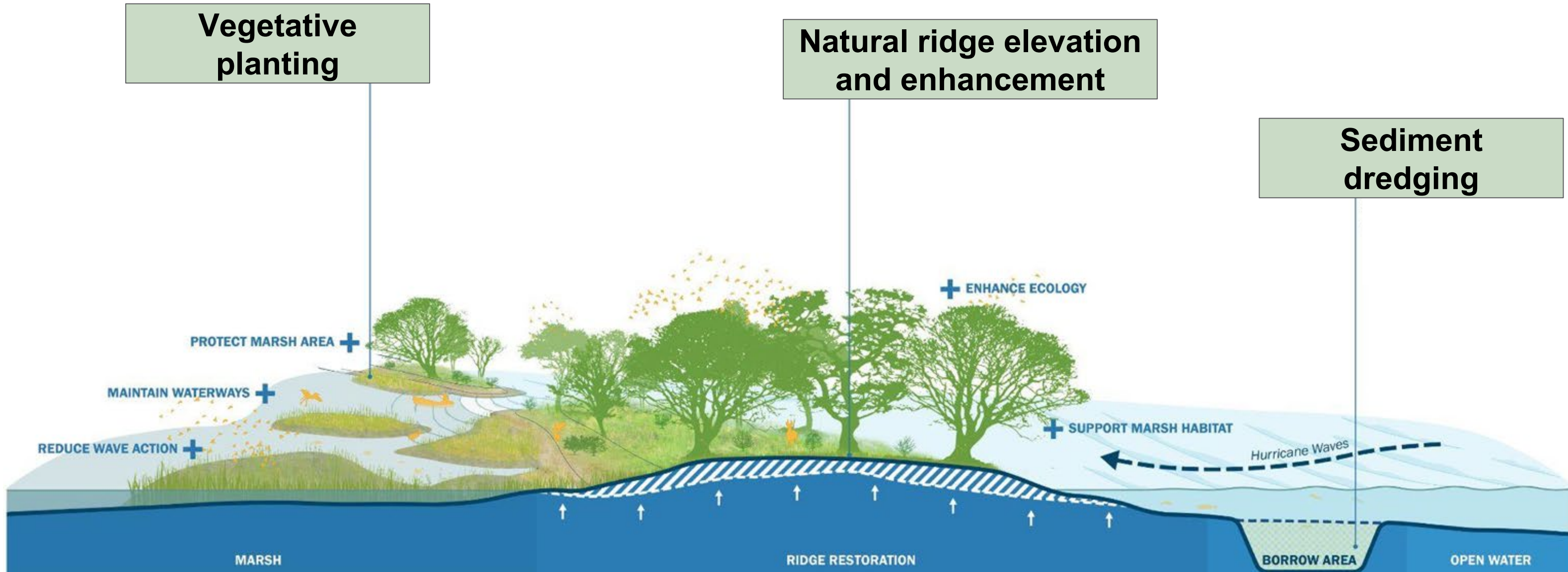
RESTORATION



Ridge Restoration

Benefits:

- Reduce wave action
- Maintain waterways
- Support marsh habitat
- Protect marsh area
- Enhance ecology



PROJECT TYPES

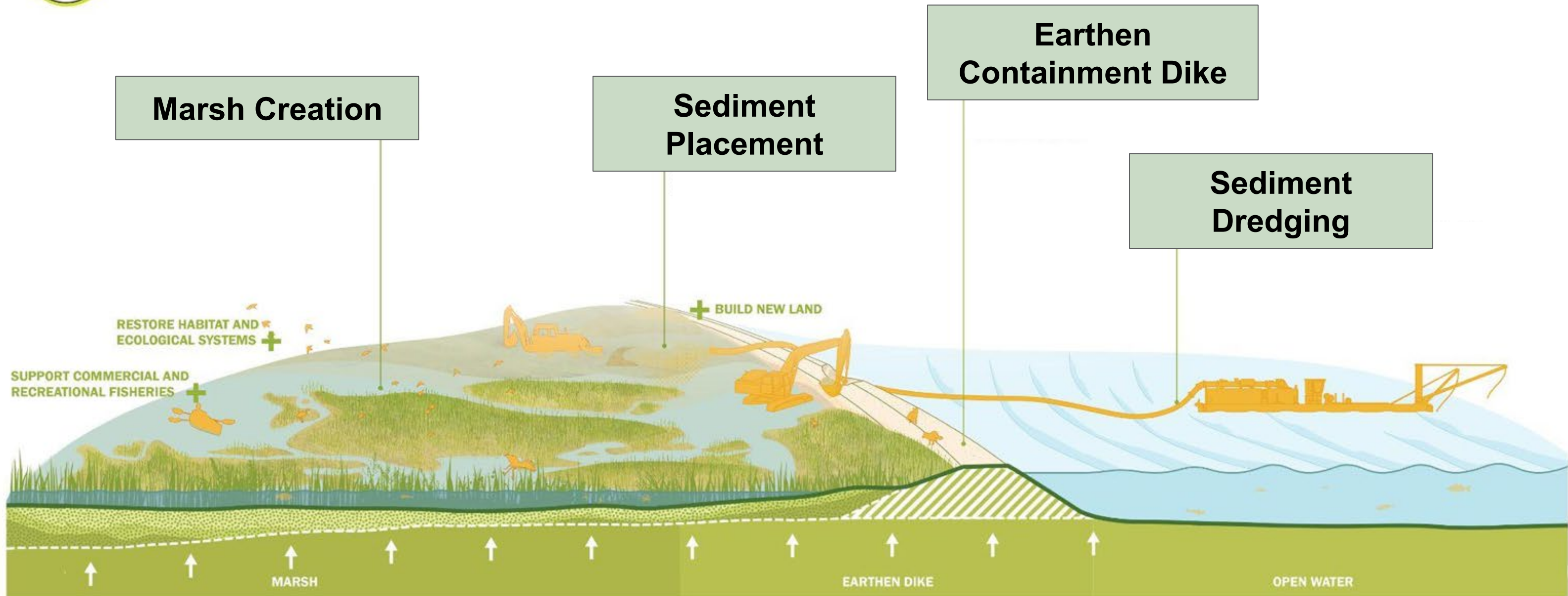
RESTORATION



Marsh Creation

Benefits:

- Restore habitat and ecological systems
- Support new fisheries
- Build new land
- Dampen tropical storm intensity



NORTH VERMILION BAY SHORELINE PROTECTION, TV-0077

CENTRAL COAST & CHENIER PLAIN

Estimated Cost: \$9.9 Million

- 43.6 acres benefitted
- 16,000 linear feet of rock and lightweight aggregate core breakwaters
- Gaps between breakwaters facilitate material and organism linkages

Status: Pre-Construction



EAST RAINEY MARSH CREATION, TV-0088

CENTRAL COAST & CHENIER PLAIN

Estimated Cost: \$137.0 Million

- 2,117 Acres of Land Benefitted
- Will place dredged Gulf of Mexico material in marsh south of Pecan Island in Vermilion Parish

Status: Engineering & Design



MASTER PLAN PROCESS

WHAT IS THE COASTAL MASTER PLAN?

SCIENCE-BASED, STAKEHOLDER INFORMED

- Prioritization effort
 - How can the state spend its money most cost-effectively over the next 50 years to reduce storm surge-based flood risk and restore and maintain coastal wetlands?
- Developed through a process that ensures adaptive management
 - Required by law to be updated every 6 years
- Built on world class science and engineering
- Advances a comprehensive and integrated approach to restoration and risk reduction
- Incorporates extensive public input and review
- Illustrates how people and communities will experience a changing coast to allow preparation and adaptation into the future.



2029 COASTAL MASTER PLAN PROCESS

A MULTI-STEP PROJECT PRIORITIZATION EFFORT

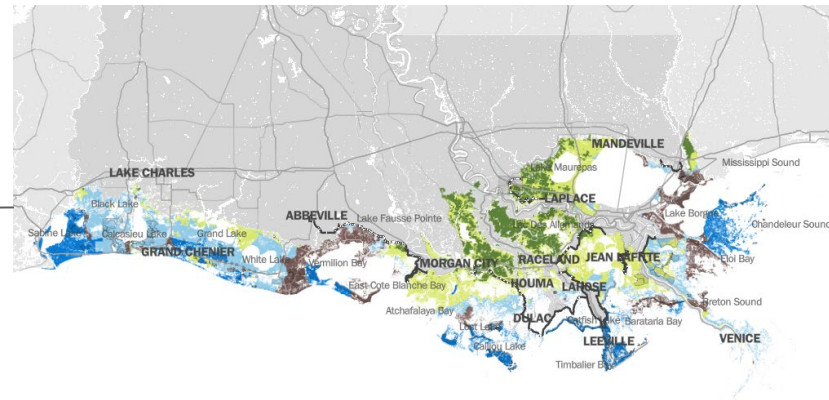
Identify Current & Future Coastal Challenges



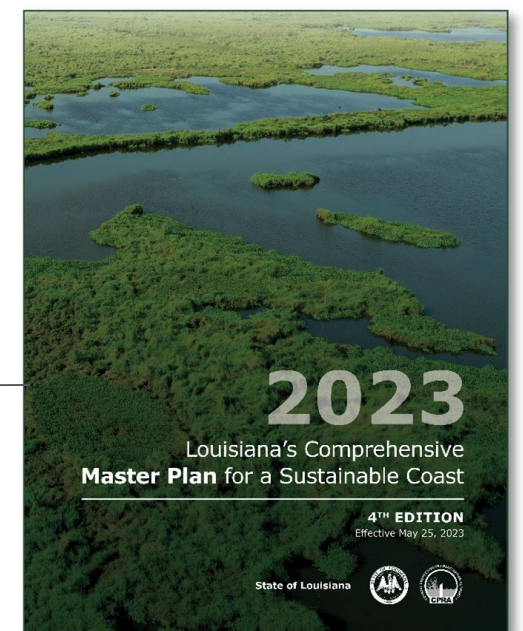
Develop Projects



Model, Refine & Select Projects



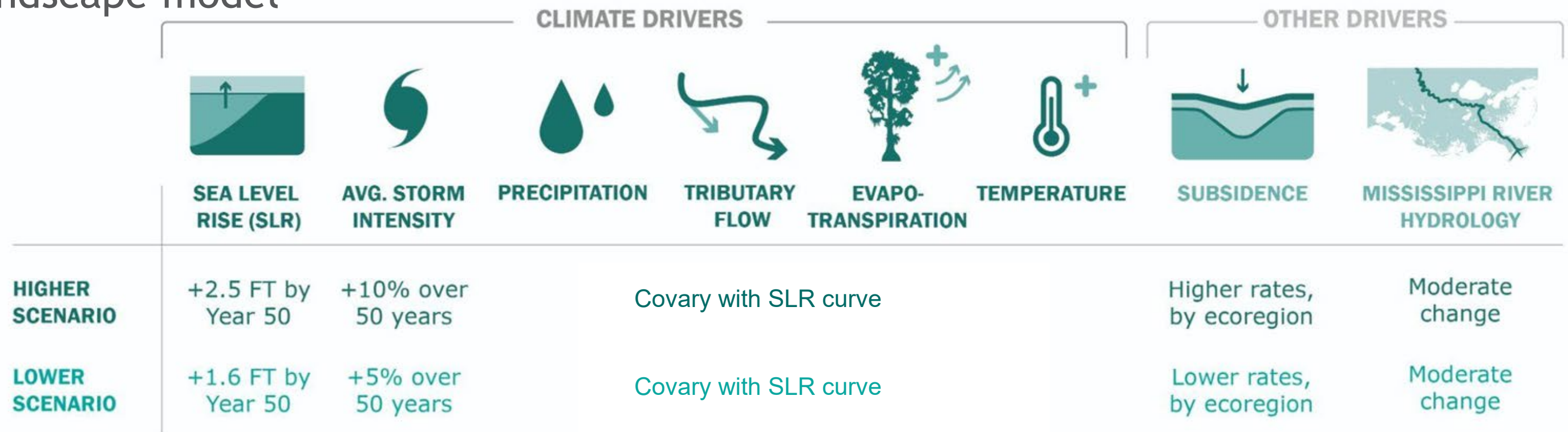
Draft Coastal Master Plan



**FUTURE PROJECTIONS
OF A
CHANGING COAST**

ENVIRONMENTAL SCENARIOS + FLOODING

- MP23 scenarios were developed by varying values for environmental drivers in the landscape model



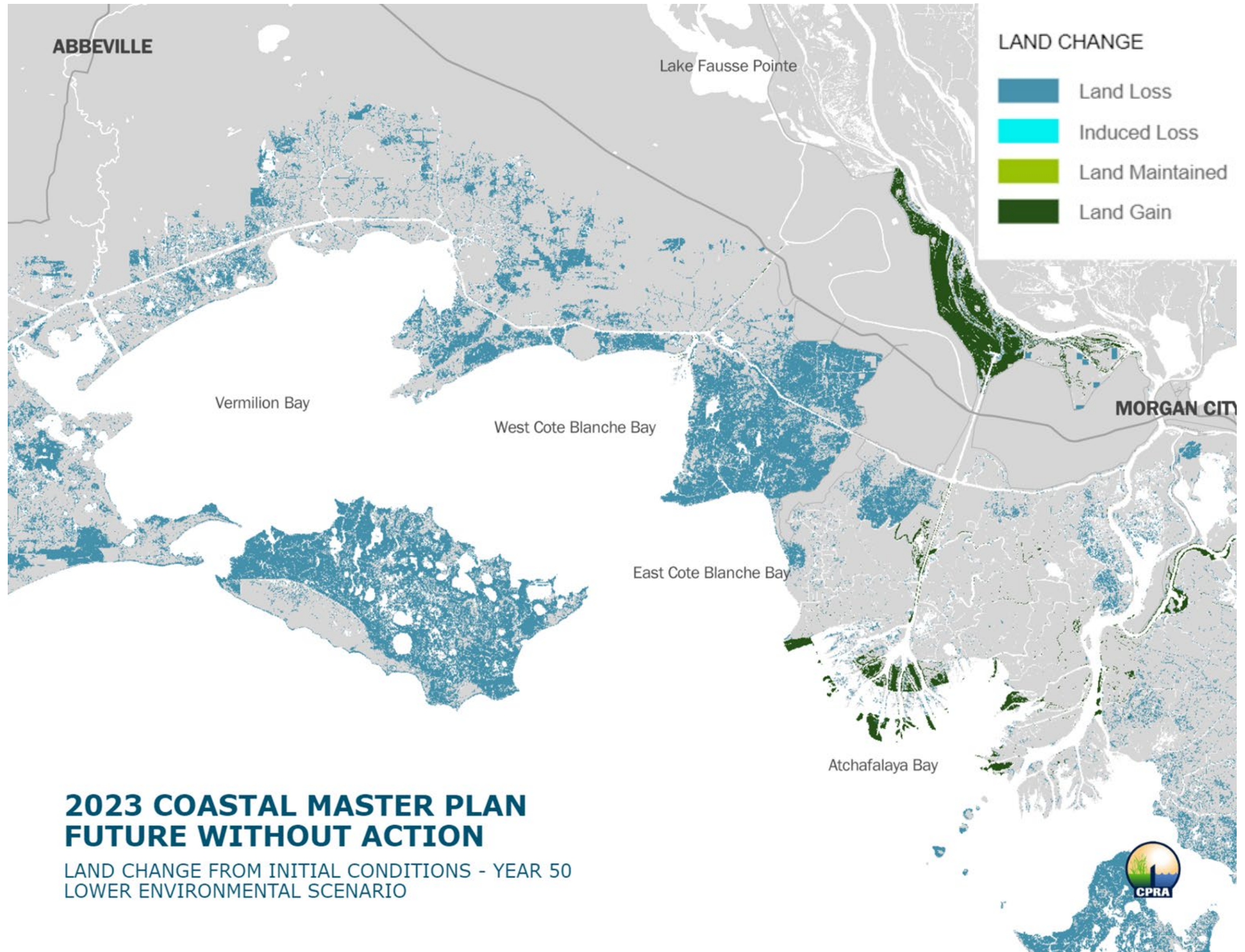
- Master Plan is tasked to respond to coastal land loss and threats from **storm surge-based** flooding - flooding generated by a hurricane or tropical storm

CENTRAL COAST REGION

PROJECTED FUTURE LAND CHANGE

Future Without Action, Year 50 -

Projected land change without Coastal Master Plan projects on the landscape

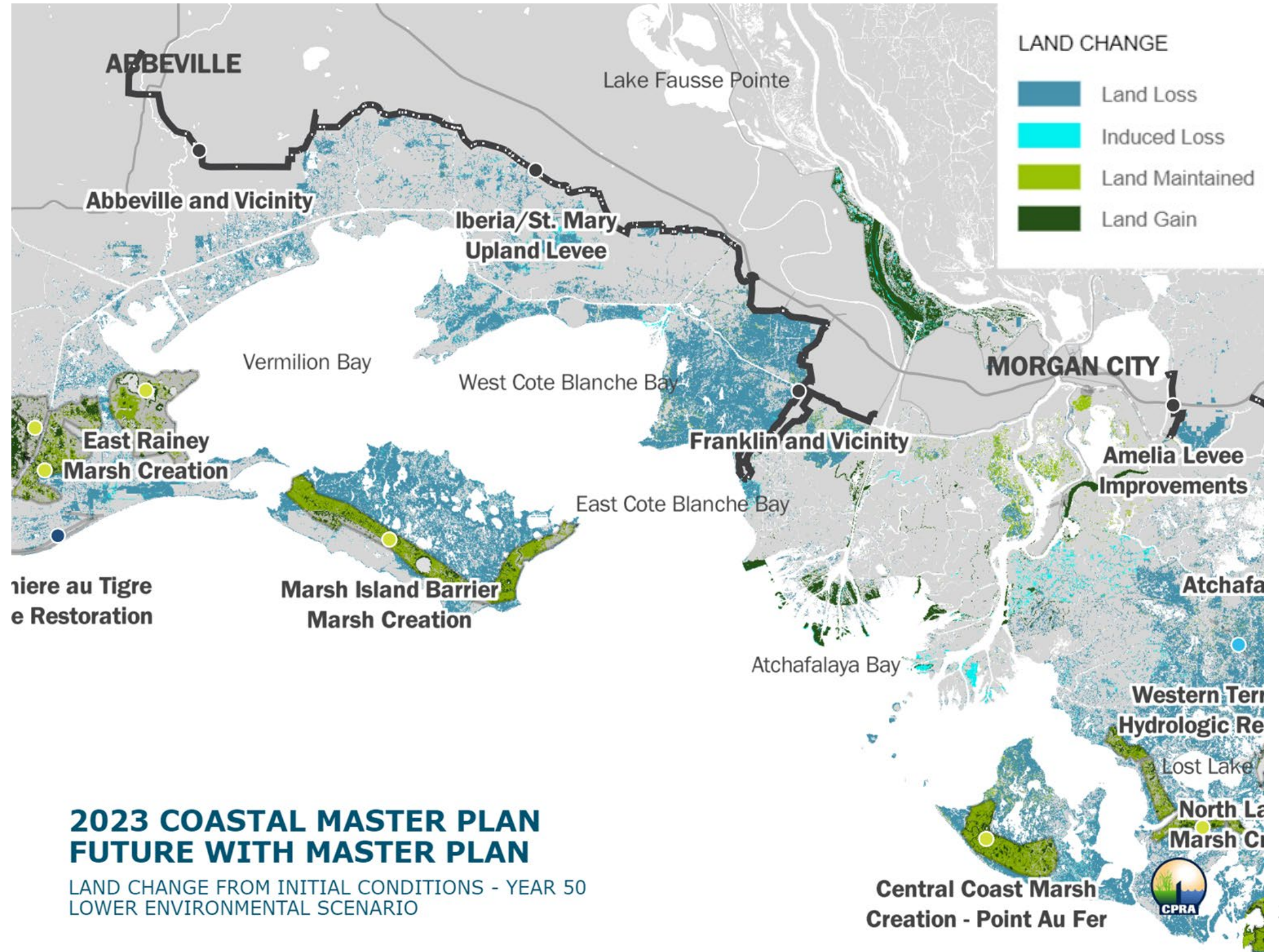


CENTRAL COAST REGION

PROJECTED FUTURE LAND CHANGE

Future With Action,
Year 50 -

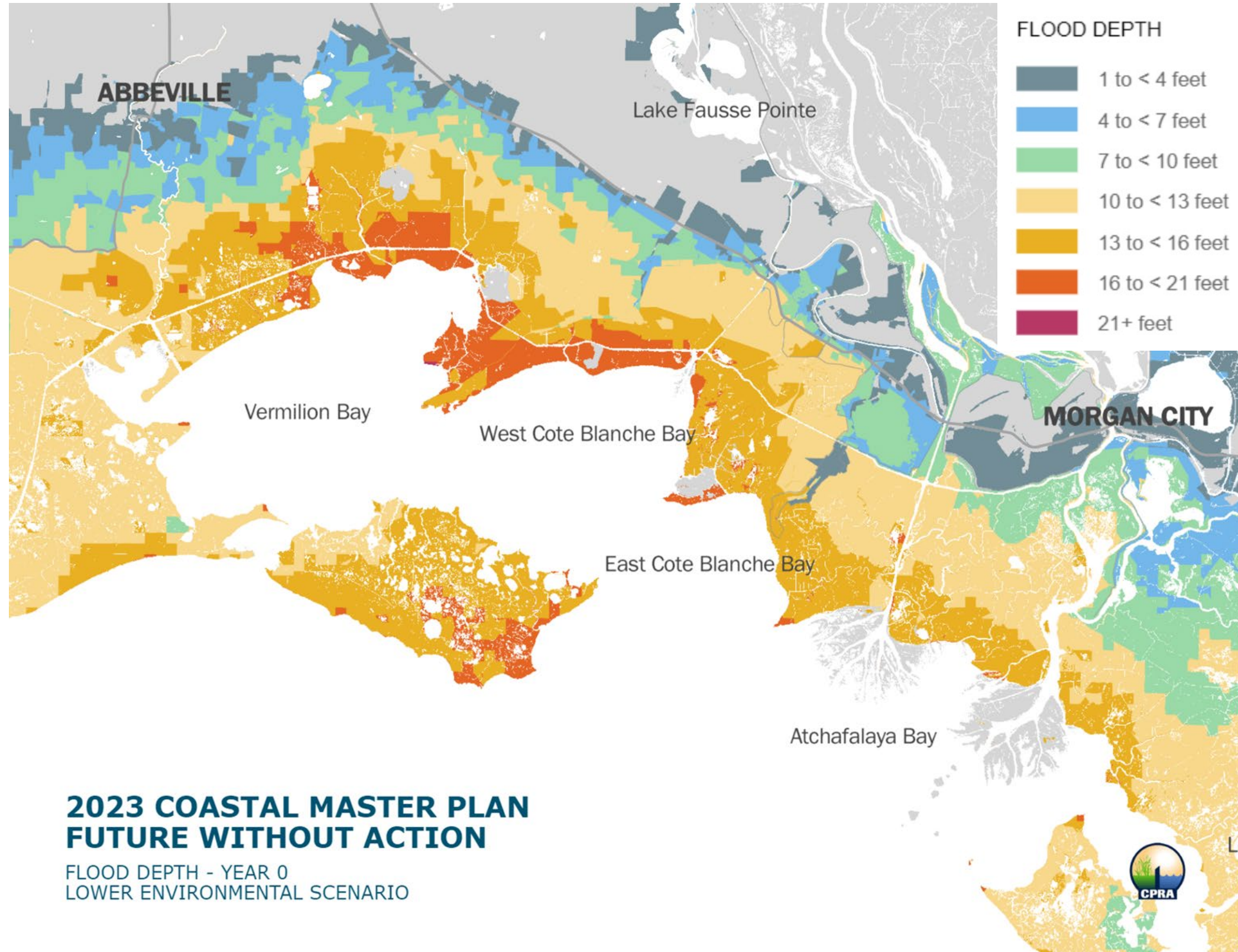
Projected land
change with Coastal
Master Plan projects
on the landscape



CENTRAL COAST REGION

PROJECTED STORM SURGE-BASED FLOOD DEPTHS

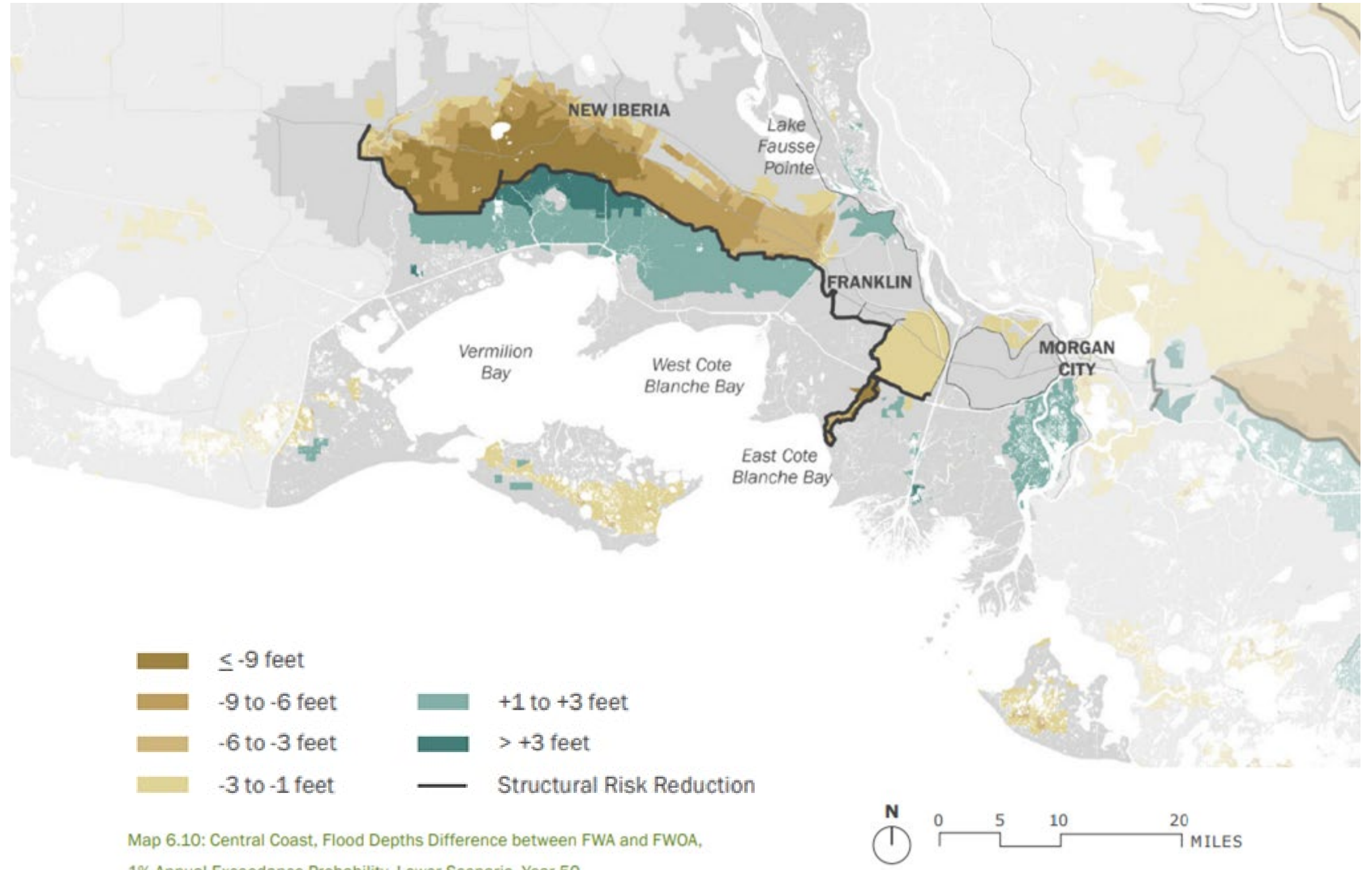
Flood depths projected with a 1% probability of occurrence (100-year flood) in Future Without Action



CENTRAL COAST REGION

PROJECTED FLOOD DEPTHS

100-Year flood depth difference between Future With Action and Future Without Action

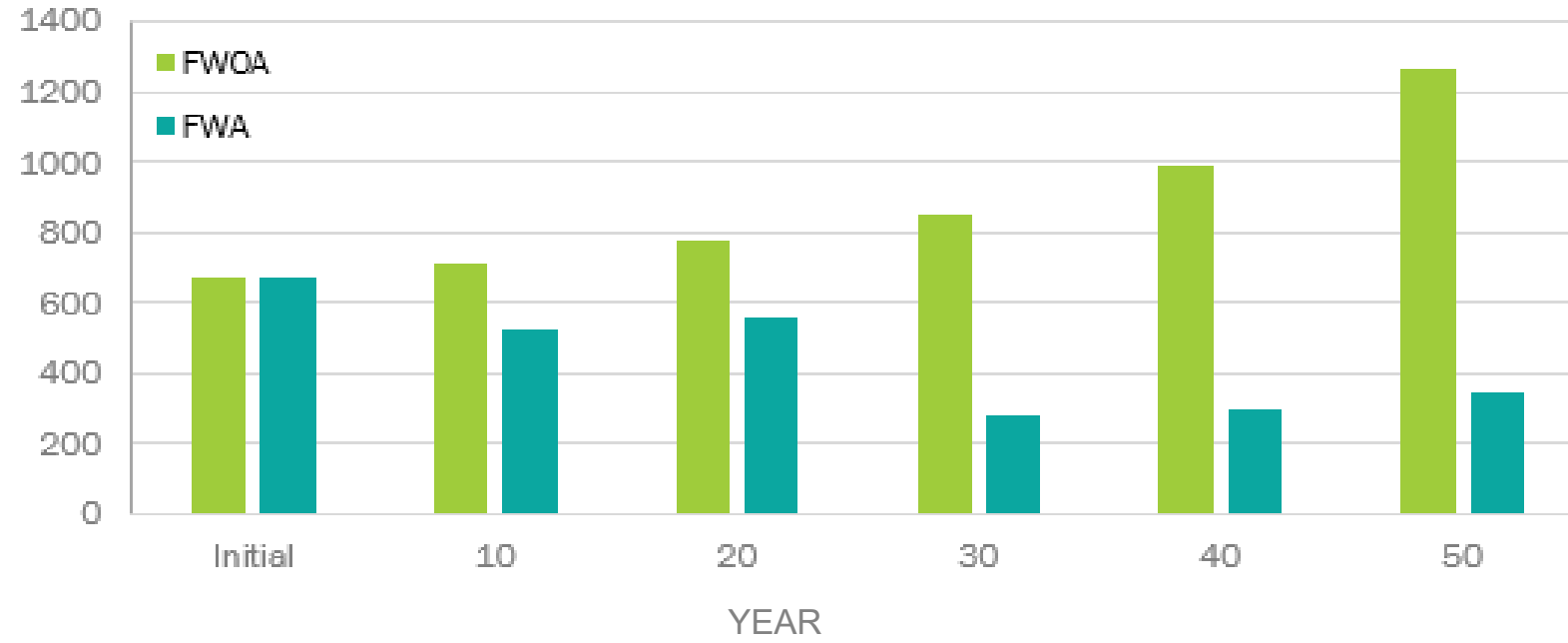


Map 6.10: Central Coast, Flood Depths Difference between FWA and FWOA, 1% Annual Exceedance Probability, Lower Scenario, Year 50.

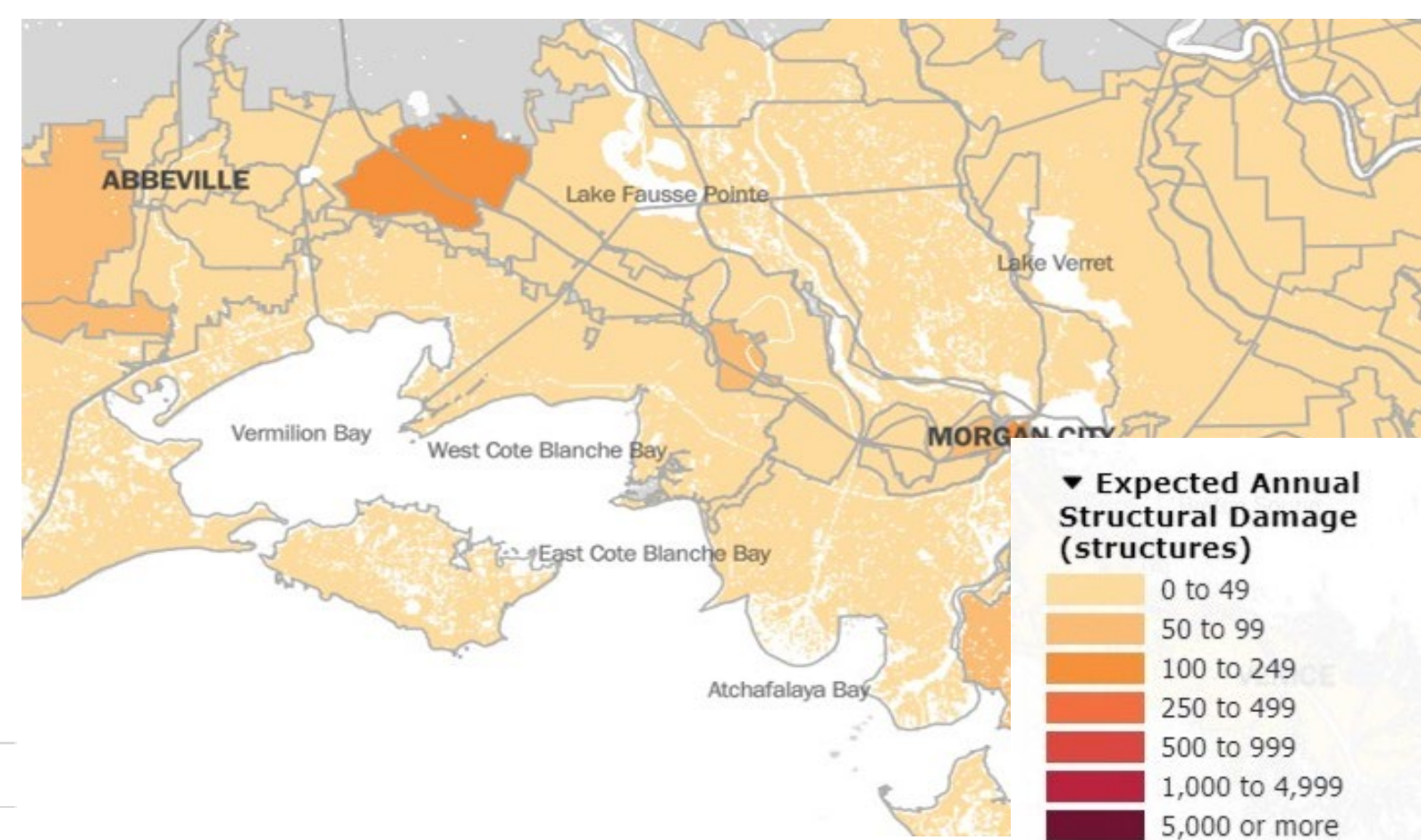
CENTRAL COAST REGION

PROJECTED FUTURE DAMAGES FROM TROPICAL EVENTS

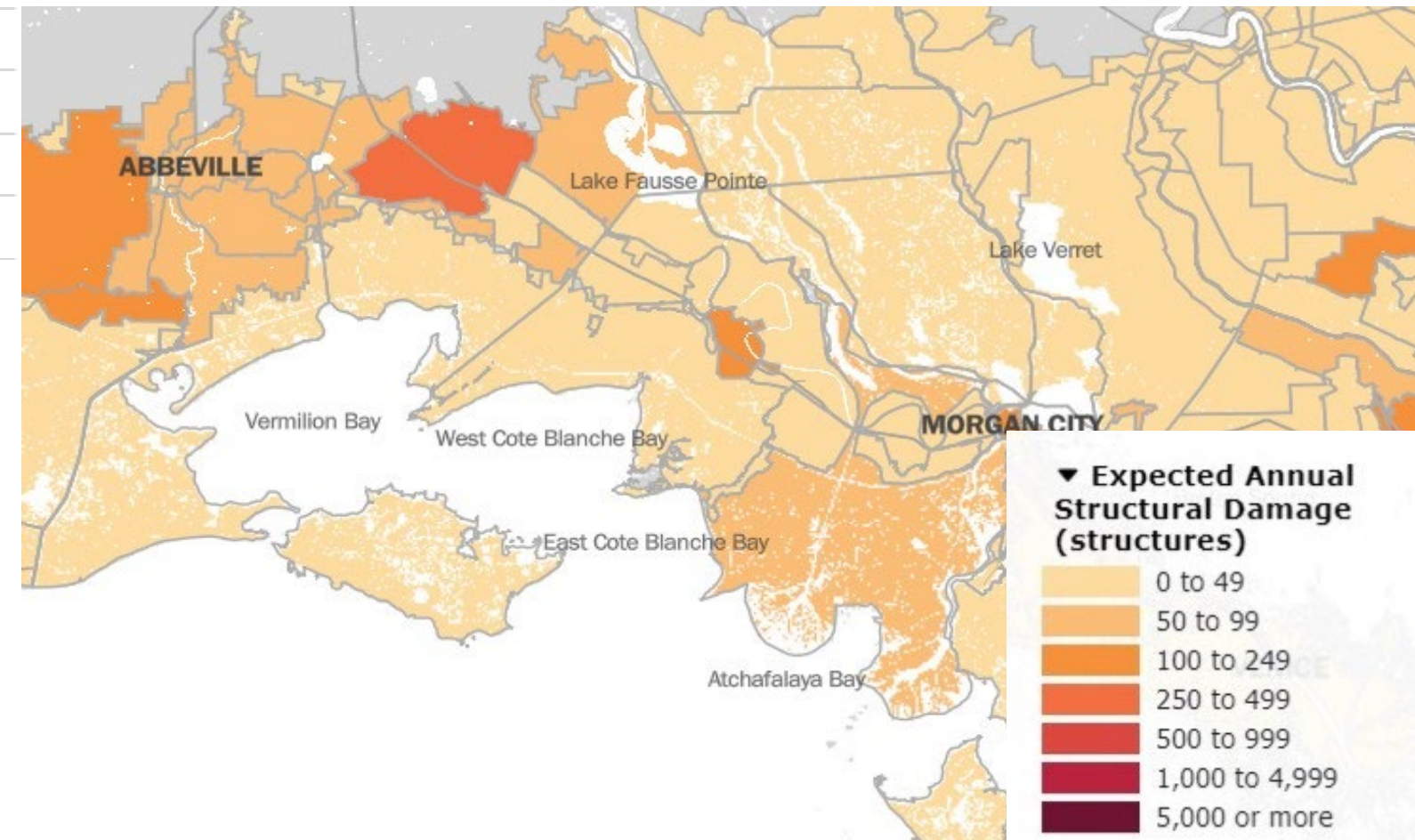
Expected Annual Damage, Structural Equivalents: Lower Scenario



*Note: Areas showing damage are based on existing structures as of that year; later years may have fewer structures remaining on the landscape, which is reflected in the magnitude of damages.



Damages of Structures (EASD) - FWOA, Lower Scenario, Year 0



Damages of Structures (EASD) - FWOA, Lower Scenario, Year 50

EXPERIENCING COASTAL CHANGE

DELCAMBRE HIGH TIDE FLOODING - EAST MAIN STREET AND SOUTH PRESIDENT

FUTURE WITHOUT ACTION, CENTRAL COAST

- Currently floods less than 5% of days
- Future Without Action:
 - In 25 years, projected to flood ~26% of days
 - In 50 years, projected to flood ~93% of days

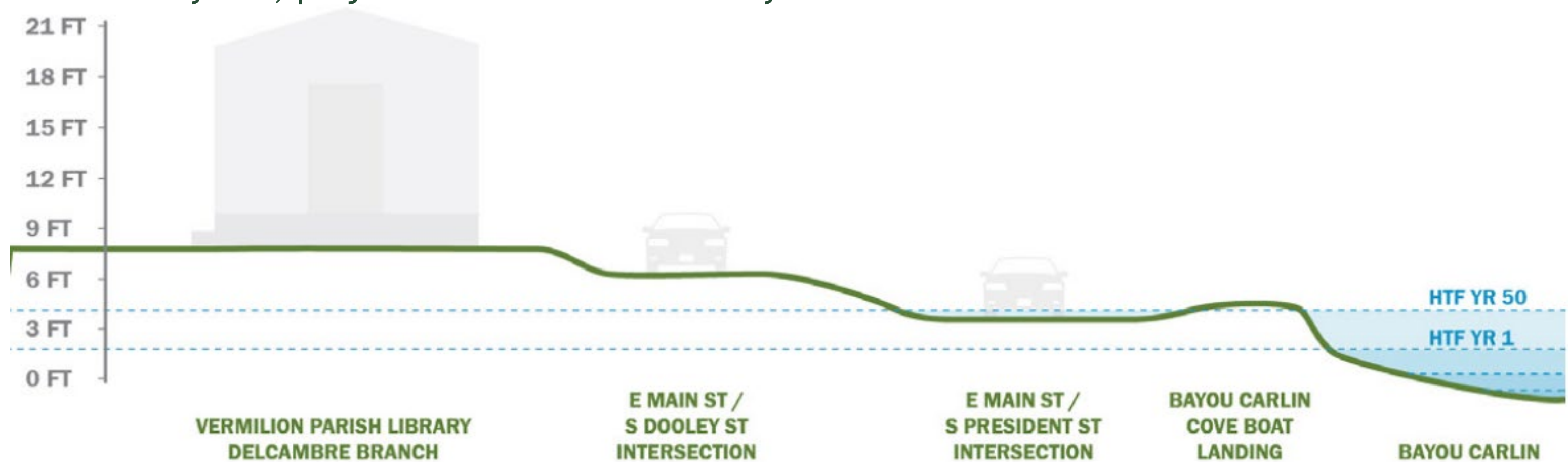


Figure 6.8: Representative HTF Elevations for Delcambre at Year 1 and 50 in the Lower Scenario.

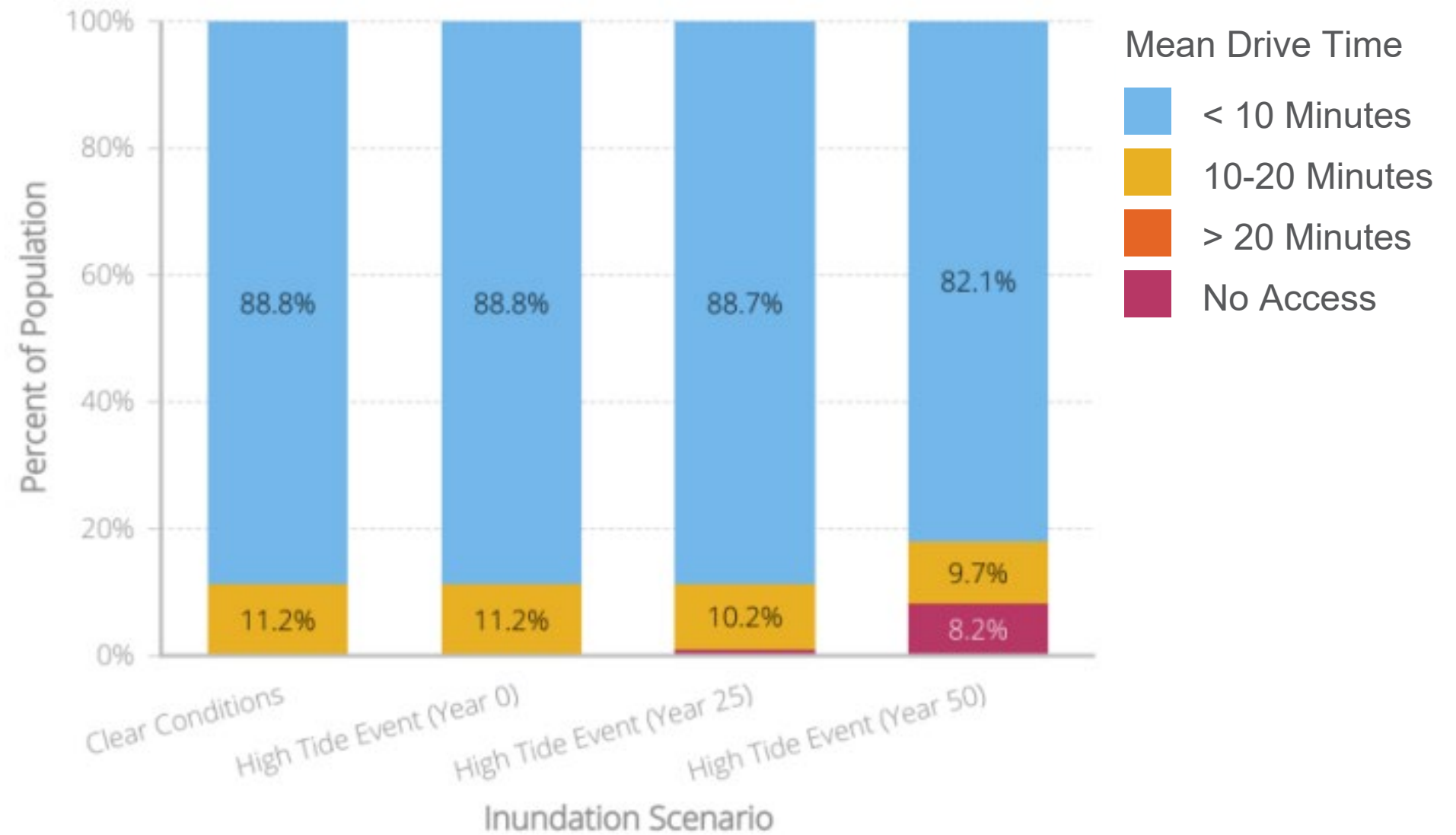
DELCAMBRE HIGH TIDE FLOODING

FUTURE WITHOUT ACTION, CENTRAL COAST

Drive time access to nearest Louisiana Emergency Response Network Tier 1 hospital by population

Access to Nearest LERN Tier 1 Hospital

Delcambre, Louisiana



Data Source: Louisiana Department of Health

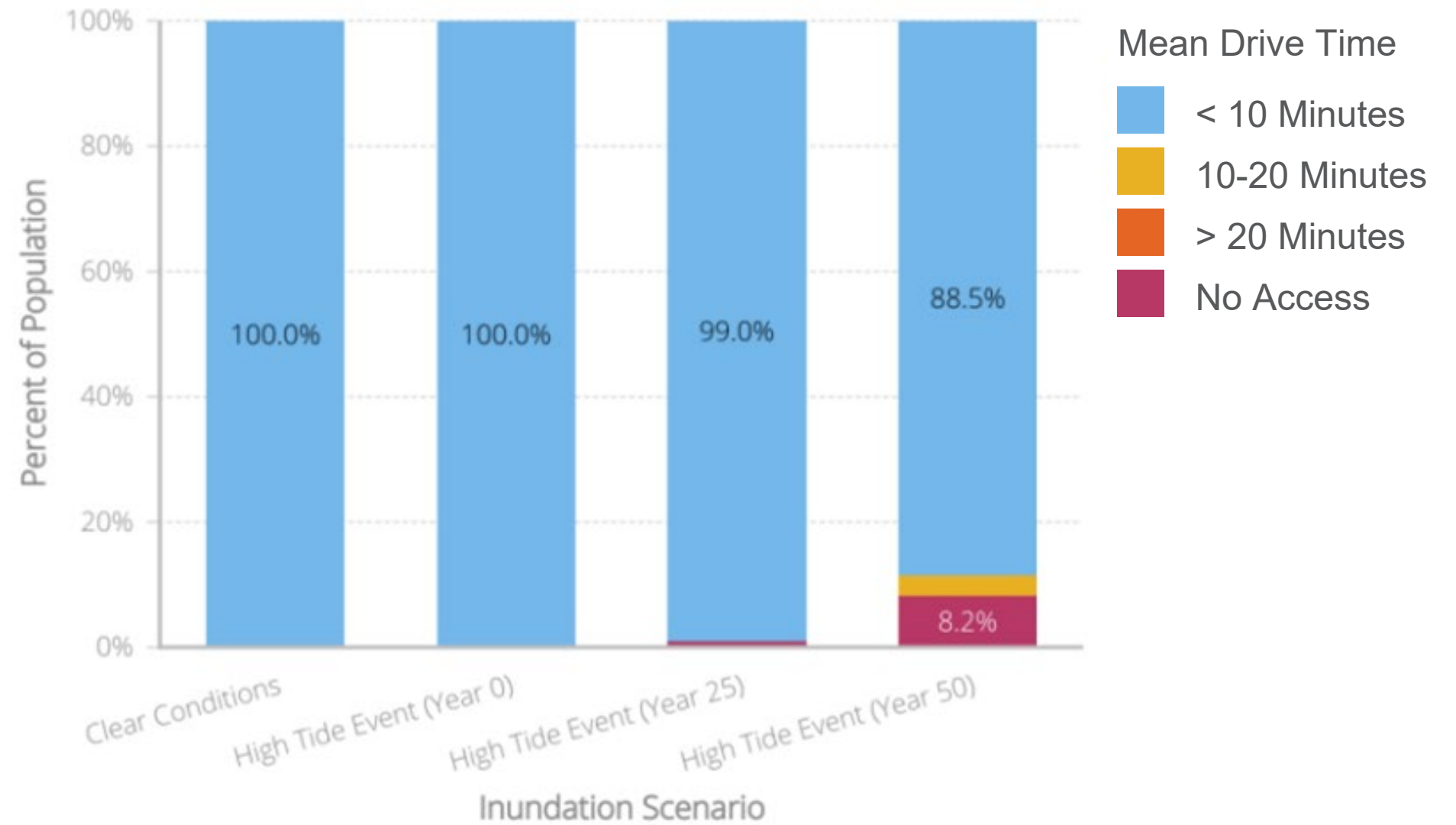
DELCAMBRE HIGH TIDE FLOODING

FUTURE WITHOUT ACTION, CENTRAL COAST

Drive time access to nearest grocery store by population

Access to Nearest Grocery Store

Delcambre, Louisiana



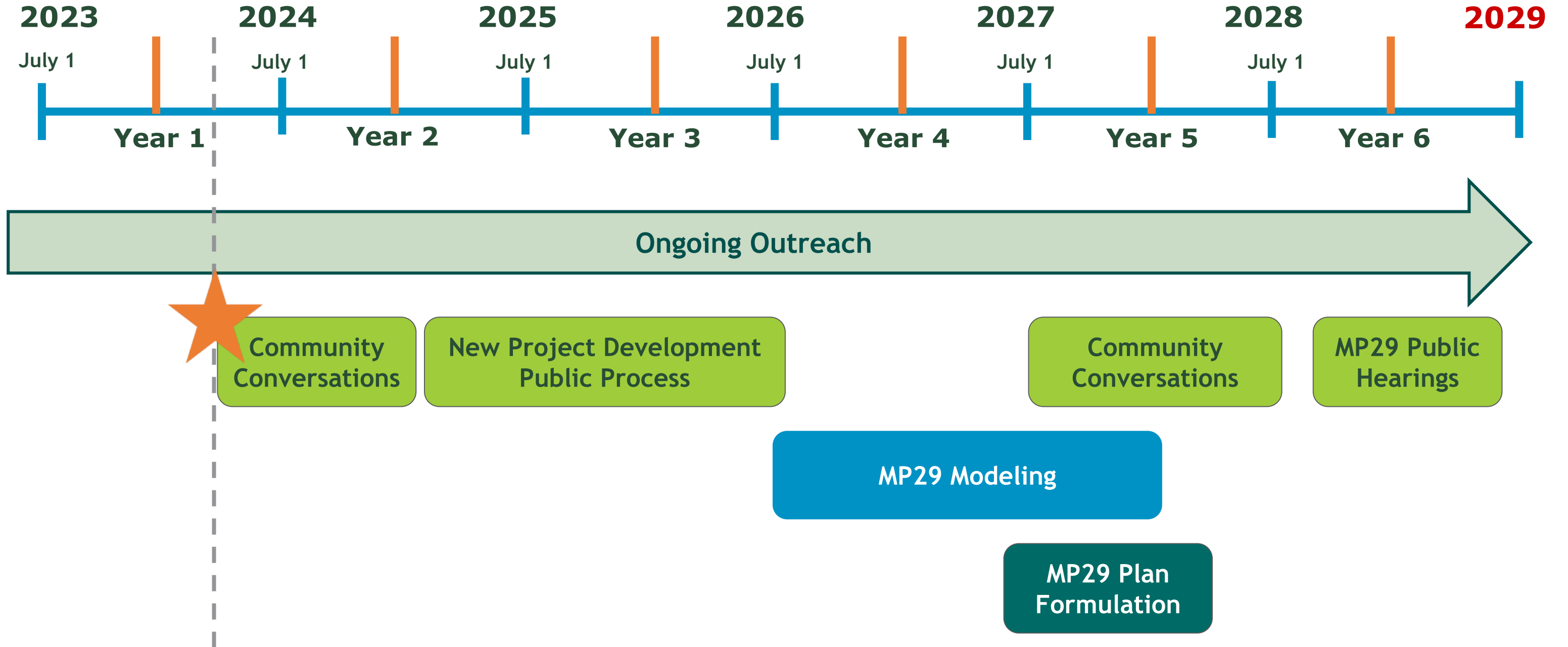
Data Source: ESRI Community Analyst

STAY INVOLVED

masterplan@la.gov

2029 COASTAL MASTER PLAN TIMELINE

DEVELOPING THE MASTER PLAN FRAMEWORK



UPCOMING COMMUNITY CONVERSATIONS

- Next MP29 Community Conversations roadshow in early 2025
- Focus on New Project Development + the public solicitation process
- Plan to do small group discussions and workshop projects concepts on maps to address community members' concerns and goals



DISCUSSION

masterplan@la.gov

SMALL GROUP TABLE DISCUSSION

- What are the most important coastal issues for you and your community, now and into the future?
- What sorts of environmental changes and resulting challenges have you seen in your community over the years?

Identify Current & Future Coastal Challenges



THANK YOU!

masterplan@la.gov
~~masterplan@la.gov~~