

# CPRA FLOOD RISK & RESILIENCE PROGRAM

## Community Conversations – February 2016



# Current Status of Nonstructural Programs

- **CPRA goals:**

- **Protection:** Use a combination of restoration, nonstructural, and targeted structural measures to provide increased flood protection for all communities.

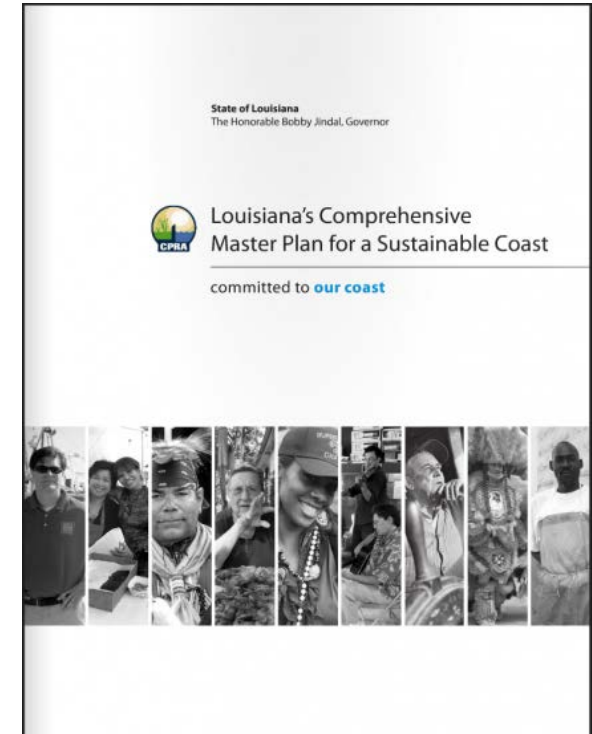
- **Office of Community Development/GOHSEP**

- Emergency response and mitigation (GOHSEP)
  - FEMA Pre-Disaster Mitigation/Flood Mitigation Assistance/Hazard Mitigation Grant Program
- Hazard recovery (OCD)
  - State Community Development Block Grant/Road Home Program



# Building on 2012 Coastal Master Plan

- **2012 Master Plan broad approach**
  - 2012 Master Plan recommended nonstructural projects in 42 of the 56 community areas analyzed. However, the plan did not outline a methodology for prioritizing or implementing nonstructural projects in coastal parishes.
- **2017 Master Plan refined approach**
  - Build on 2012 by conducting a refined coastal flood risk vulnerability analysis, defining nonstructural project areas, prioritizing projects, and developing a process for the implementation of projects



# Flood Risk & Resilience Program

## Goals and Objectives



**Goal:** to reduce coastal flood risk for homes, businesses, and community assets through the development and implementation of nonstructural projects and related policies

### **CPRA aims to do the following:**

1. Advance the recommendations in the 2012 Coastal Master Plan by providing a more specific strategy for implementing nonstructural projects in communities
2. Coordinate resources and expand citizens access to information and tools that can help guide individual and local community decisions to reduce flood risk



# Program Framework

- 1. Develop Data & Tools:** Develop integrated databases on flood risk, vulnerability, and socio-economic trends to determine the most effective mitigation measures.
- 2. Provide Information:** Increase public awareness of current and future flood risks and provide clear mapping and visualization tools for coastal communities.
- 3. Provide Options:** Maximize choices of mitigation measures and clearly communicate options to individuals and communities.
- 4. Create Platforms for Collaboration & Action:** Create networks of coastal stakeholders and diverse community participants to partner in program development and implement solutions.

# Technical Process:

## Developing the 2017 Coastal Master Plan



**Step 1:**  
Identify  
Candidate  
Projects



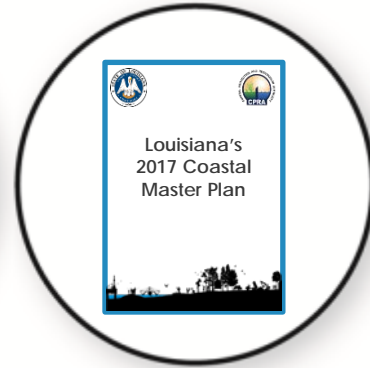
**Step 2:**  
Evaluate/  
Model  
Projects



**Step 3:**  
Compare  
Projects &  
Develop  
Alternatives

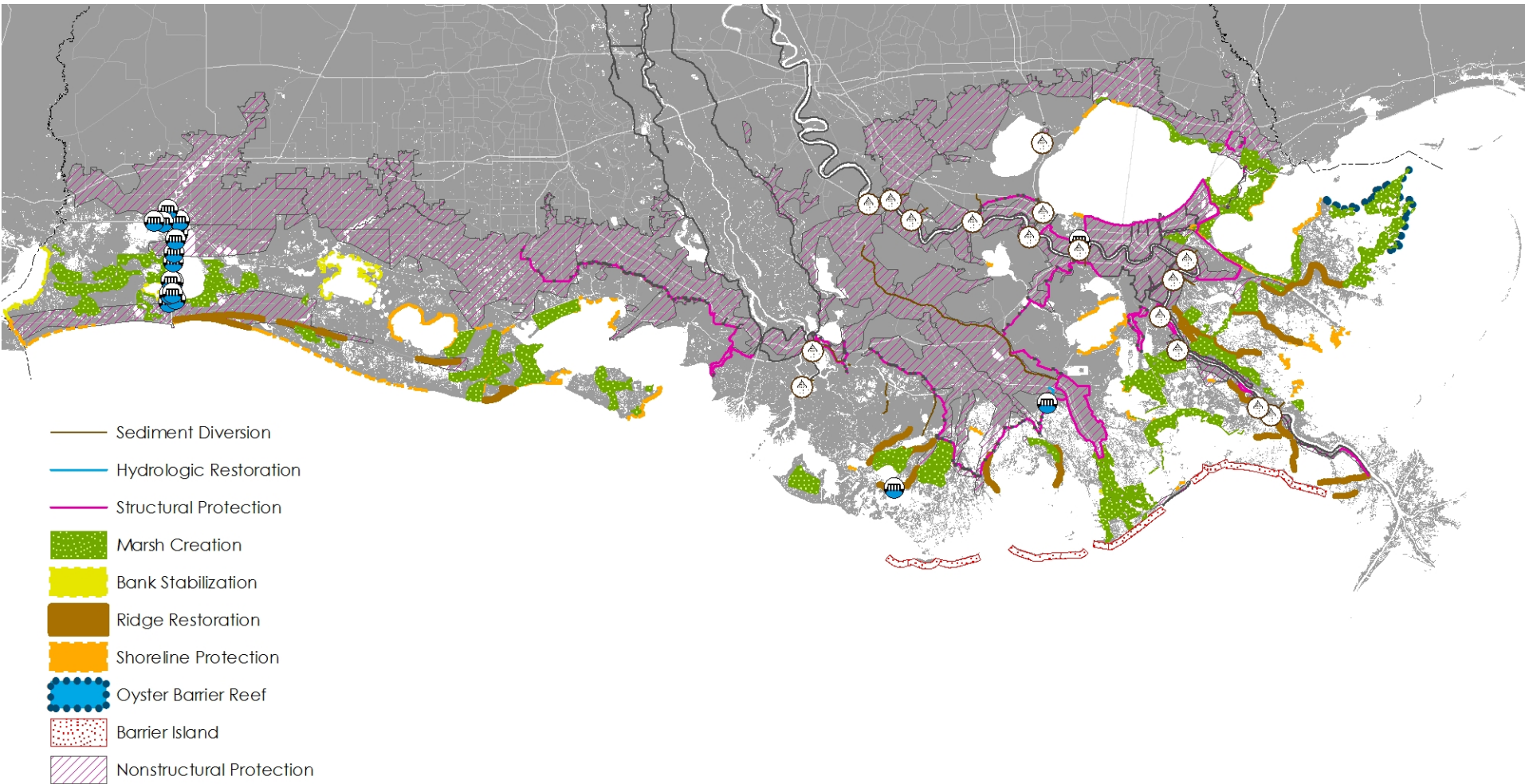


**Step 4:**  
Model &  
Compare  
Alternatives

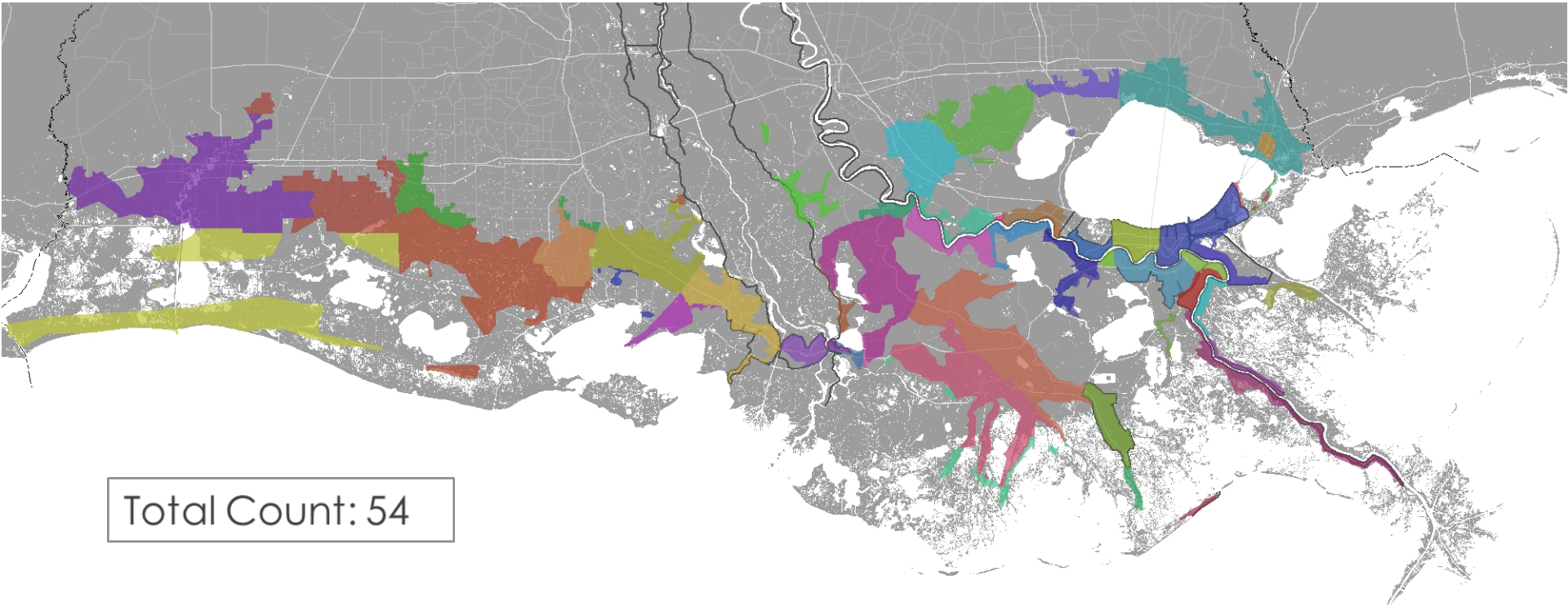


**Step 5:**  
Develop  
Draft & Final  
Plan

# 2017 Candidate Projects Being Analyzed



# 2017 Master Plan Nonstructural Project Areas

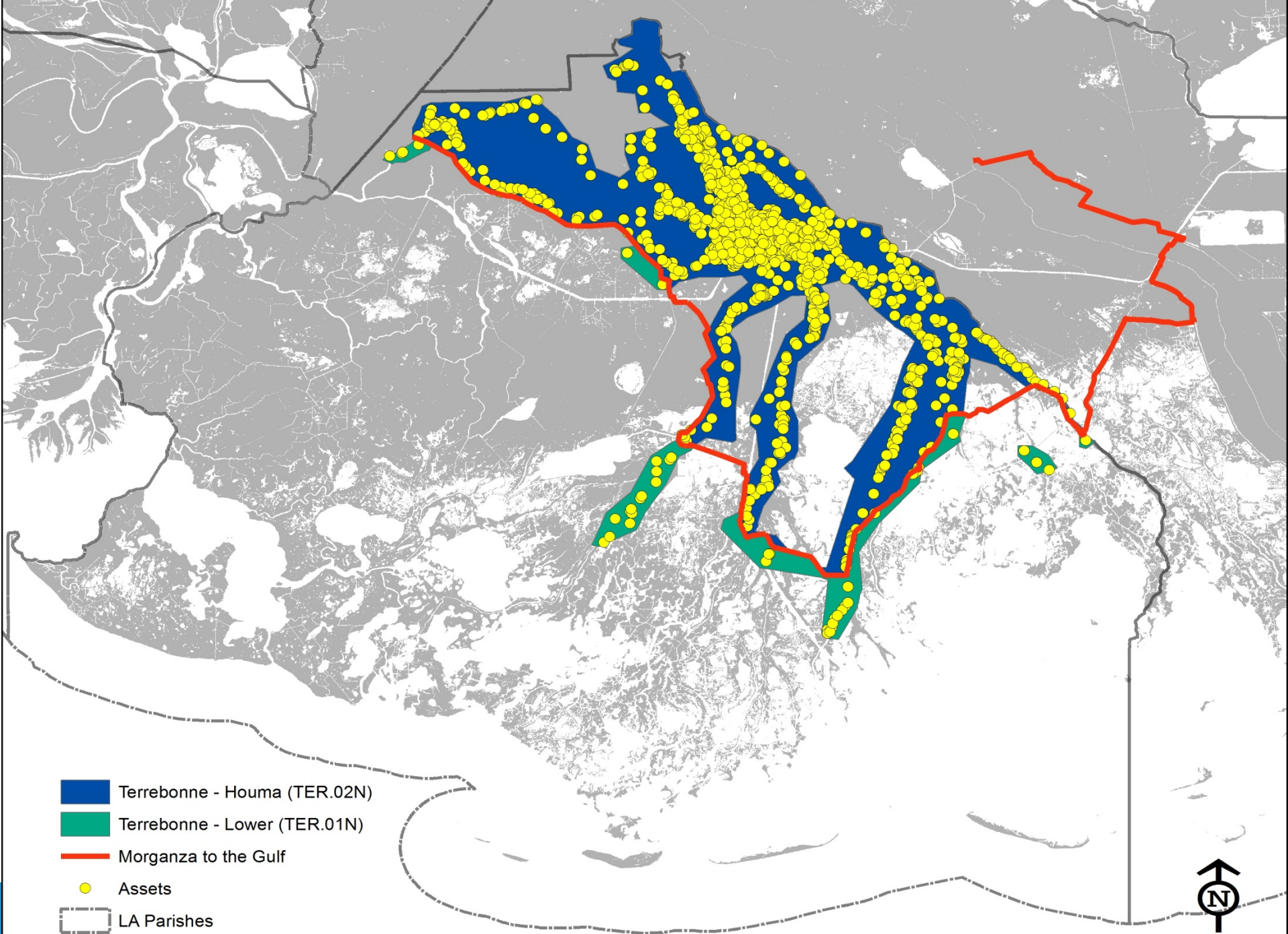


Total Count: 54

## Project Areas divided by:

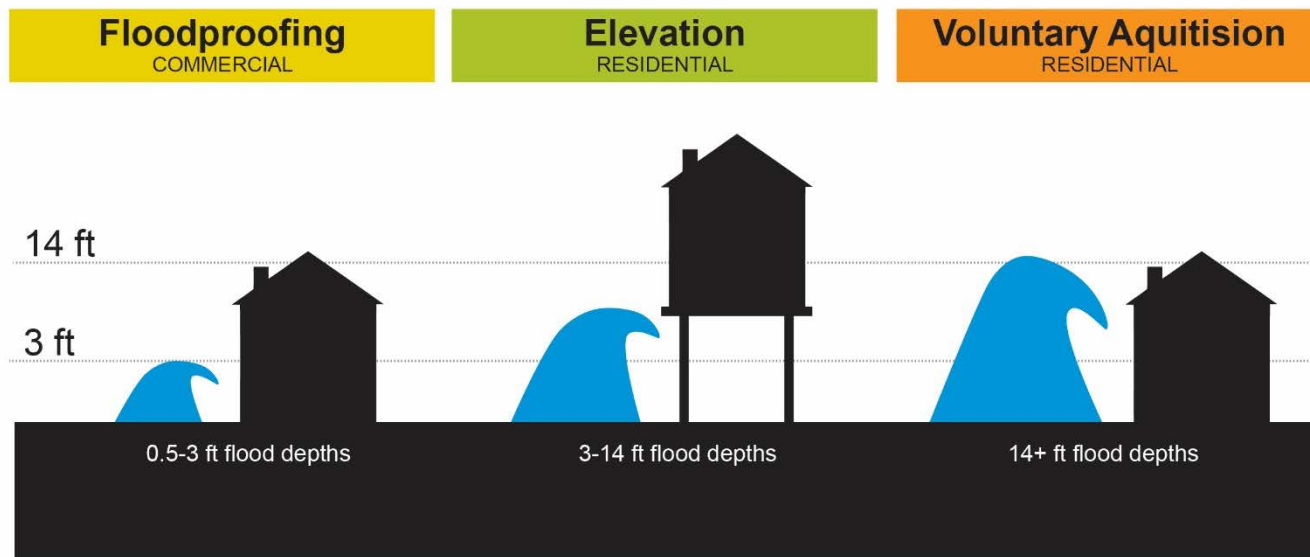
- Parish boundaries
- Existing or proposed levees





# 2017 Master Plan Nonstructural Mitigation Measures

- Commercial/Non-residential Floodproofing (0 – 3 ft)
- Residential Elevation (3 – 14 ft)
- Residential Voluntary Acquisition (> 14 ft)



# Analysis of 2017 Master Plan Nonstructural Projects

- For each project area, we calculate:
  - Number of structures to be mitigated (floodproofed, elevated, acquired)
  - Cost of mitigation
  - Reduction in future damages from implementing the project
- Analyzing projects based on the following criteria:
  - Current flood depths (feet)
  - Future flood depths (Year 10, Year 25, Year 50)
  - Percent households that are low to moderate income (LMI %)
  - Cost-effectiveness of the project

# Key Features of the Program

- Comprehensive strategy to identify and prioritize nonstructural projects
- Program framework, policies, and guidance documents - including the parish application process
- Identification of potential funding sources for nonstructural projects
- Funding to local parishes to facilitate project implementation
- Expanded outreach efforts to engage citizens, parishes, and stakeholders



# Program Outreach and Feedback

- CPRA Board Flood Risk and Resilience Subcommittee
- Resiliency Technical Advisory Committee
- Parish Floodplain Managers Group
- Community Focus Group
- Flood Risk and Resilience Stakeholder Group
- Community Meetings



# Flood Risk & Resilience Program

## *Next Steps*

Summer 2016	Evaluate nonstructural projects and compare results with structural and restoration projects
Fall/Winter 2016	Develop Draft Plan/Draft Project List
January 2017	Draft Plan Released for Public Review
January 2017	Master Plan Public Meetings
April 2017	Submit Final Plan to Legislature

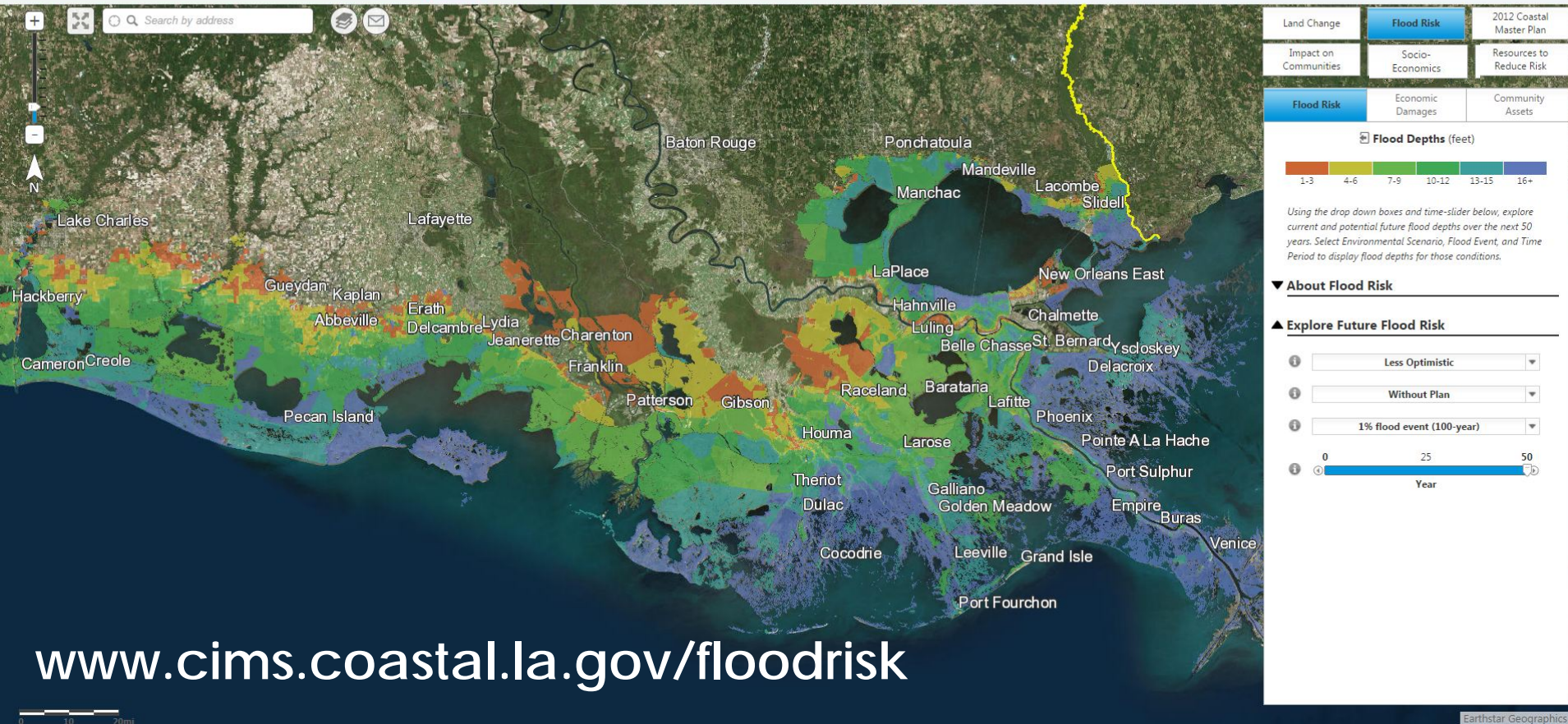
- **Appendix E – Flood Risk and Resilience Program Framework**
  - Attachment E1 – Flood Risk and Resilience Program Policy Recommendations
  - Attachment E2 – Parish Profiles
  - Attachment E3 – Nonstructural Modeling Results
  - Attachment E4 – Parish Applicant’s Handbook

# Flood Risk & Resilience Data Viewer

## Current & Future Flood Risk



Coastal Protection and  
Restoration Authority



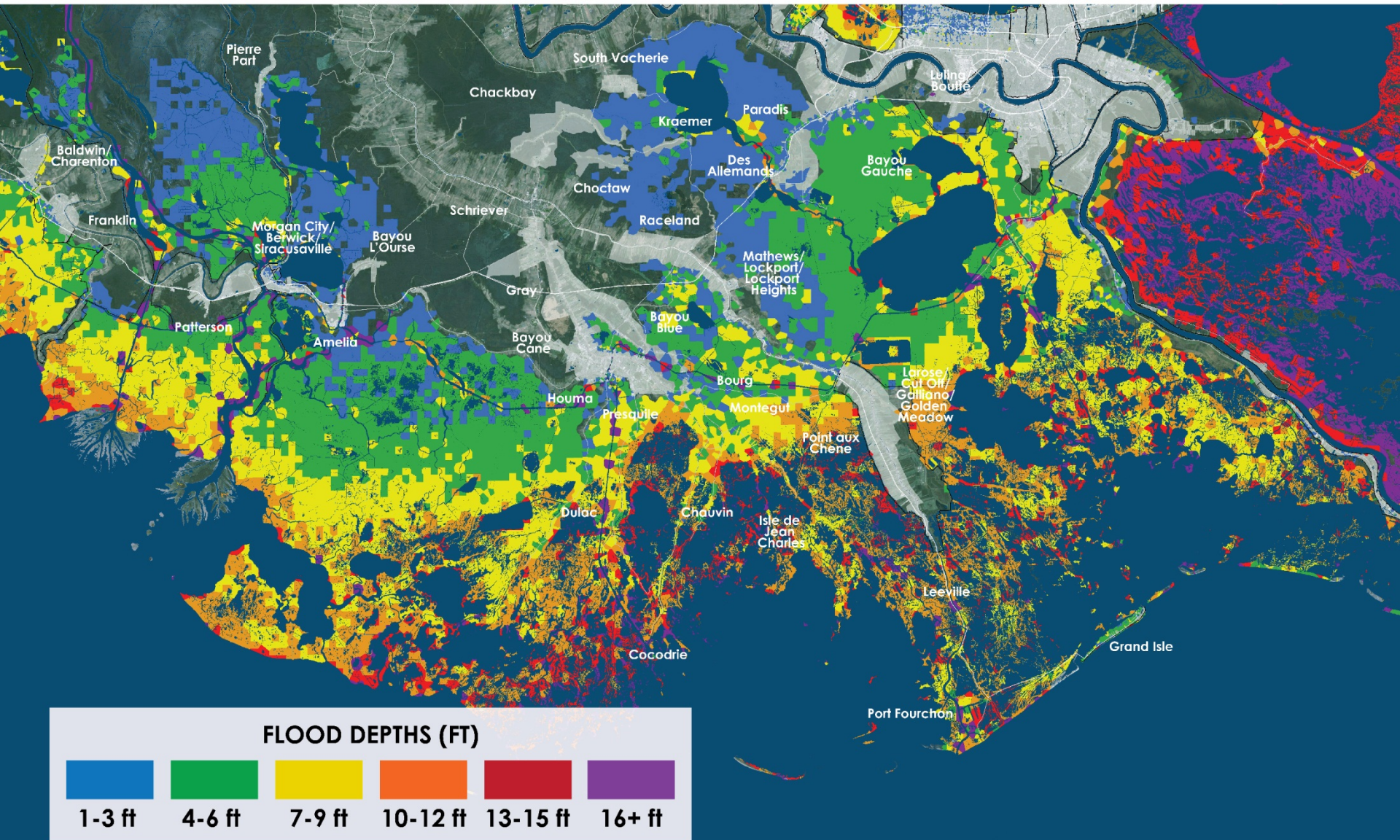
# Results of Mapping Exercise





# Houma & Bayou Region- Current Flood Risk

100-year storm event

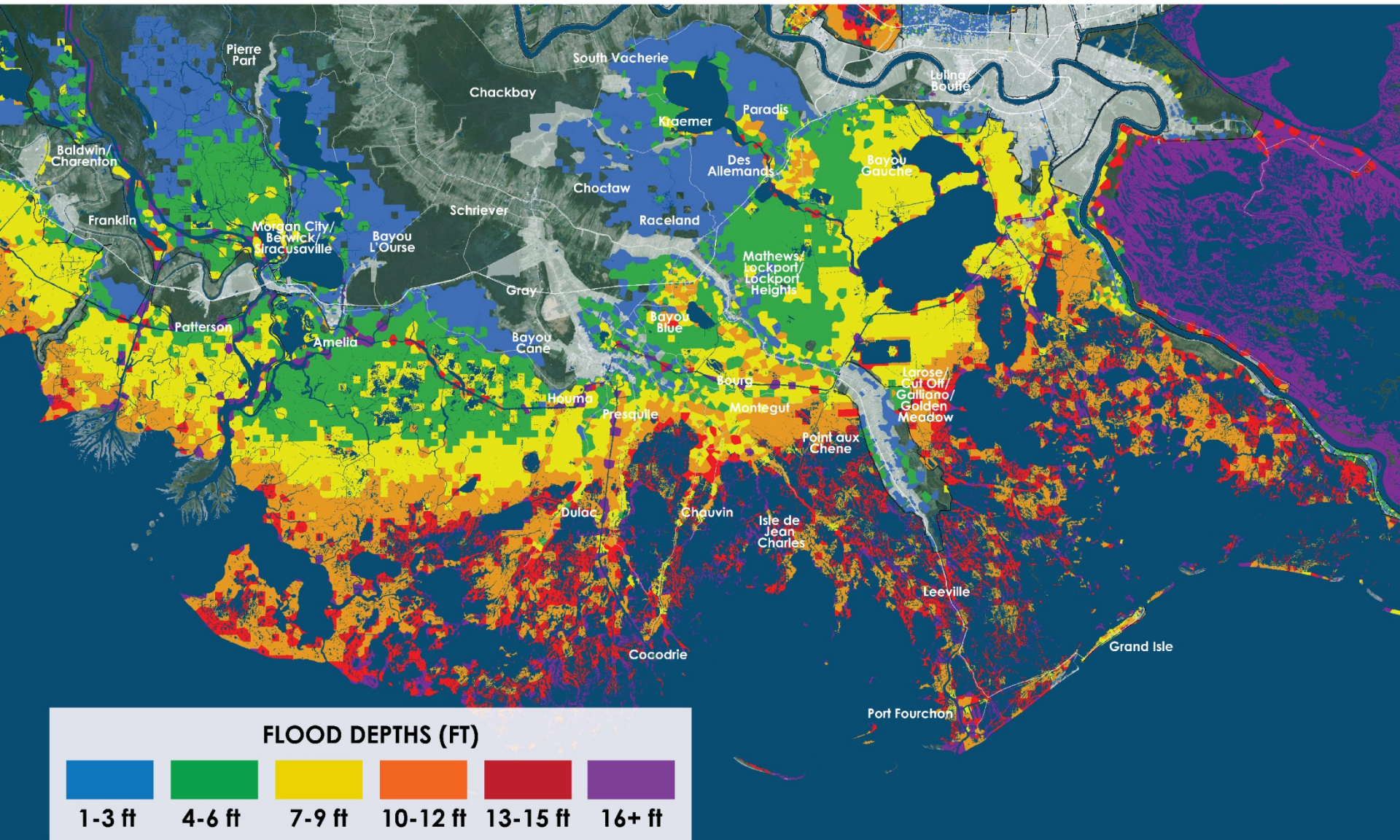






# Houma & Bayou Region- Future Flood Risk (Year 25)

100-year storm event

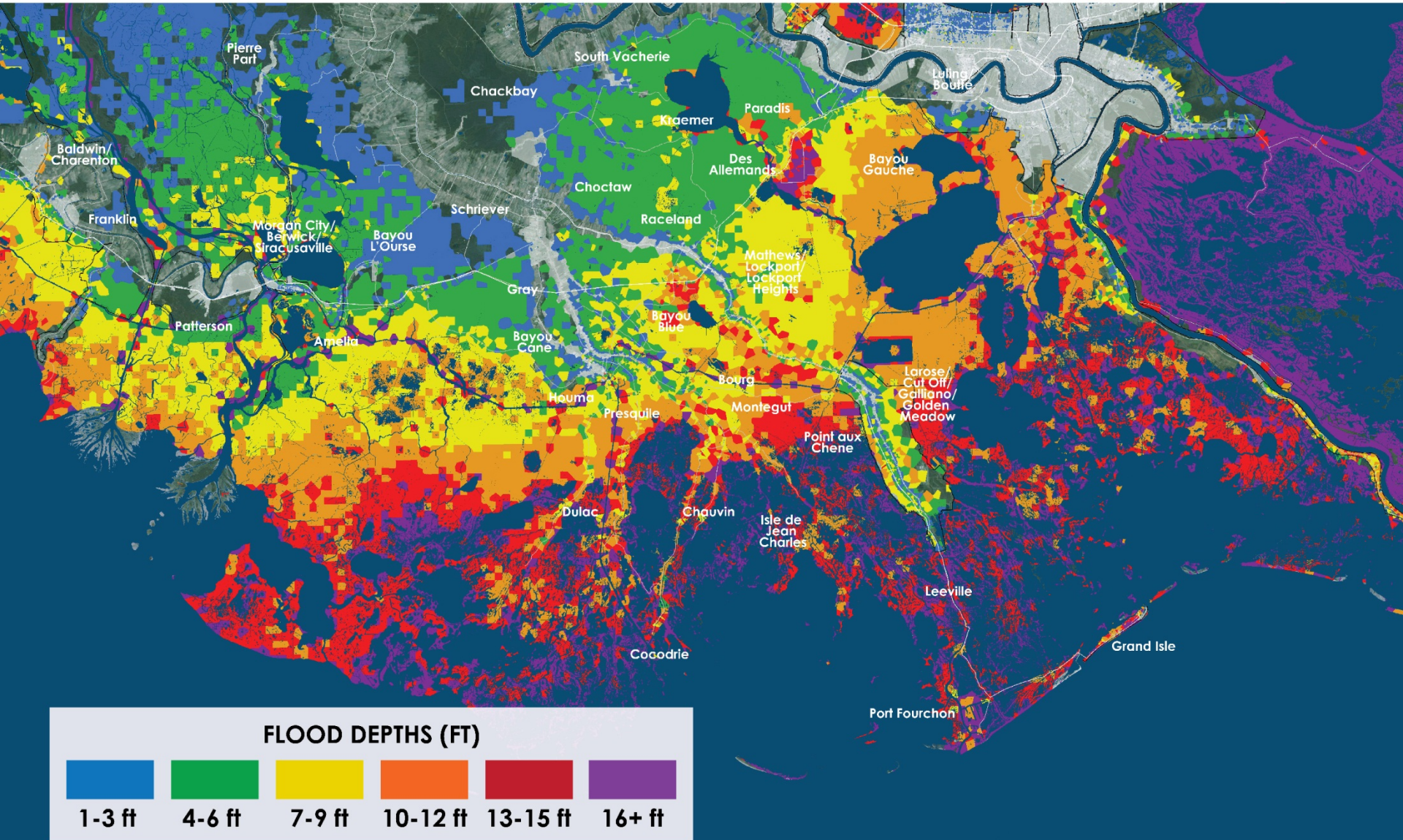






# Houma & Bayou Region- Future Flood Risk (Year 50)

100-year storm event

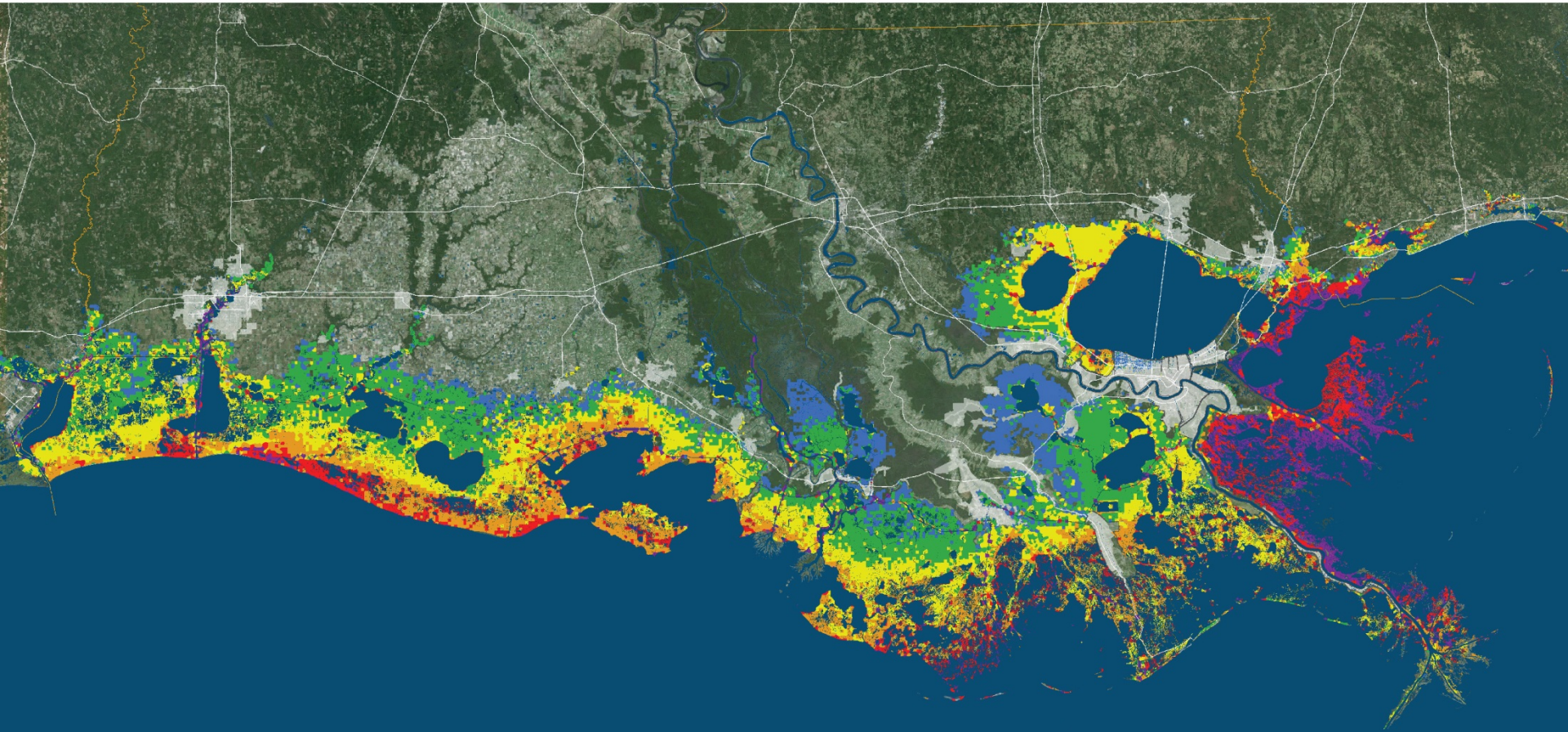






# Coastal Louisiana- Current Flood Risk

100-year storm event



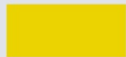
FLOOD DEPTHS (FT)



1-3 ft



4-6 ft



7-9 ft



10-12 ft



13-15 ft



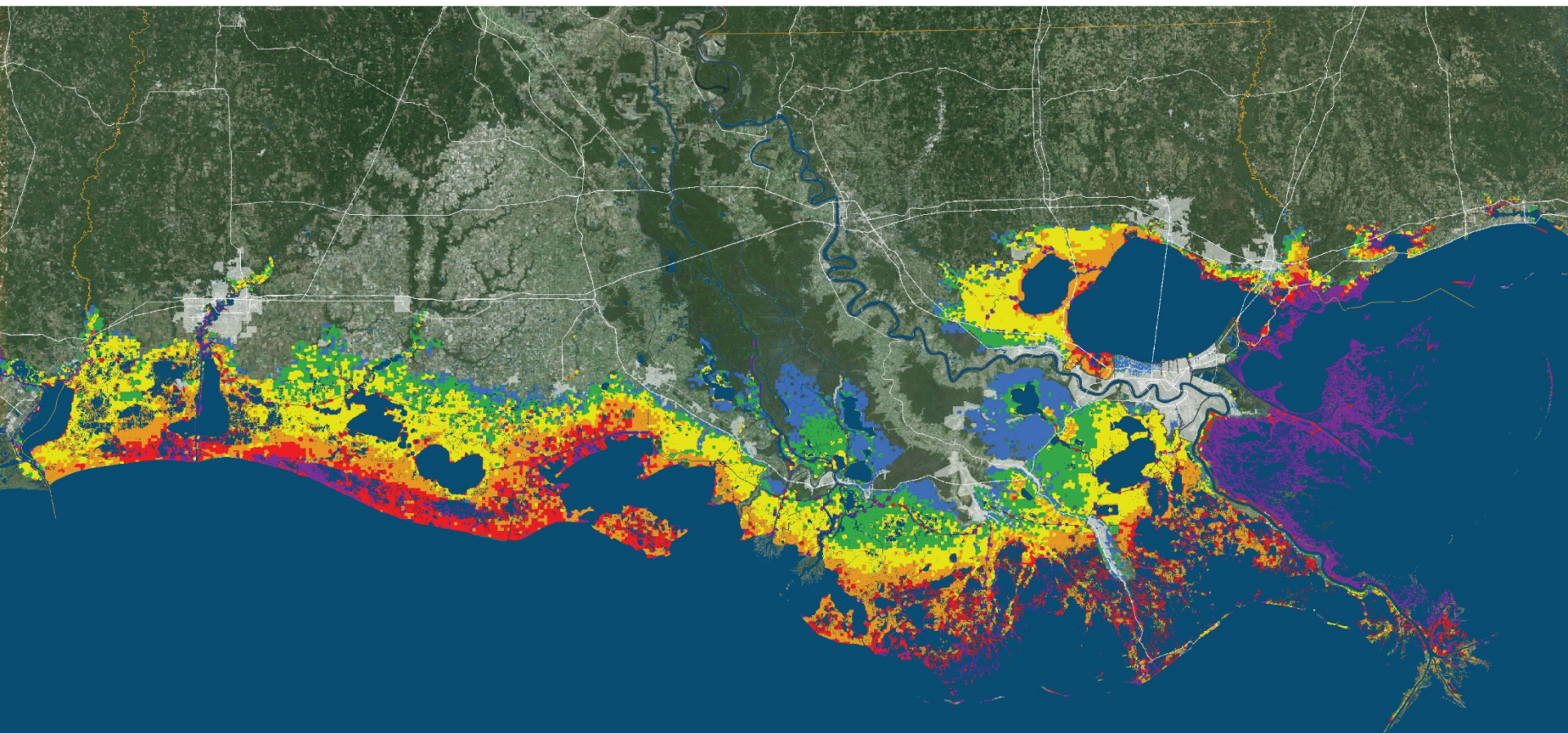
16+ ft





# Coastal Louisiana- Future Flood Risk (Year 25)

100-year storm event



FLOOD DEPTHS (FT)



1-3 ft



4-6 ft



7-9 ft



10-12 ft



13-15 ft



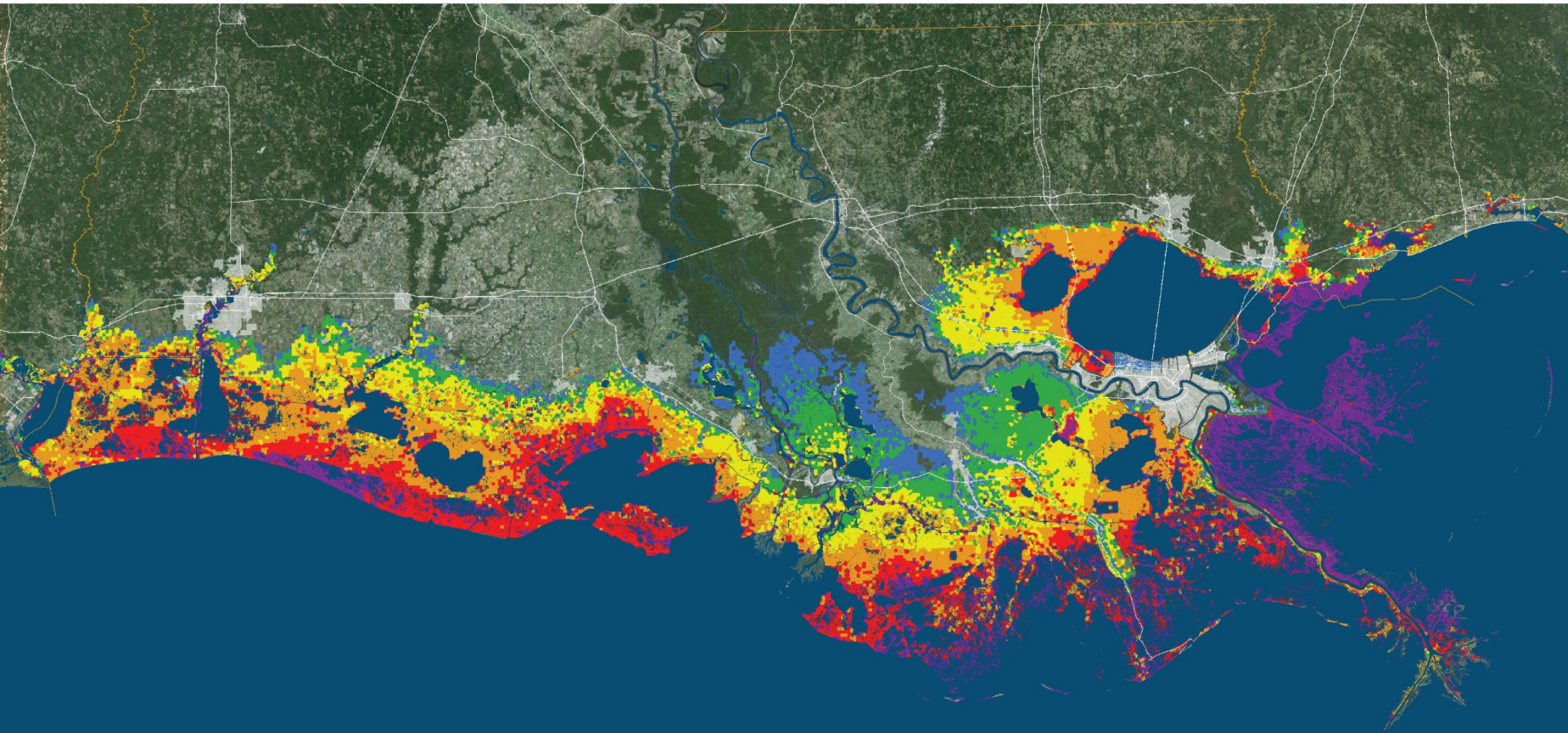
16+ ft





# Coastal Louisiana- Future Flood Risk (Year 50)

100-year storm event



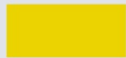
FLOOD DEPTHS (FT)



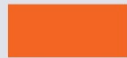
1-3 ft



4-6 ft



7-9 ft



10-12 ft



13-15 ft



16+ ft





# Facilitated Discussion

# Join Us!

## A Community Conversation about flood risk & resilience

- CPRA Flood Risk Data Viewer
- Flood Risk and Resilience Program
- Interactive vulnerability mapping
- Local officials/floodplain managers
- Resources to reduce risk



**Feb 16**

**Lafitte**

Lafitte Multi-  
Purpose Center

**Feb 17**

**Houma**

Terrebonne Parish  
Public Library

**Feb 23**

**Lake Charles**

SEED Center

**Feb 24**

**Mandeville**

Castine Center

**4:30-5:30 p.m. Open House**

**5:30-6:30 p.m. Presentation & Discussion**

# 2017 Master Plan Timeline

## Technical Analysis

Jan. 2014 –  
Dec. 2016

## Outreach and Engagement

**Fall 2016** Regional  
Community Meetings

**January 2017**  
Master Plan Public  
Meetings

**Jan. 2017-Mar 2017**  
Public Comment  
Period

## Coastal Master Plan

**January 2017**  
Draft Plan for  
Public Review

**April 2017**  
Plan Submitted to  
Legislature

# How can YOU get involved?

- Visit our website:  
[coastal.la.gov](http://coastal.la.gov)
  - Overview and technical information
- Request a presentation or meeting:  
[masterplan@la.gov](mailto:masterplan@la.gov)
- Attend public and community meetings





THANK YOU

[coastal.la.gov](http://coastal.la.gov)

Email us: [masterplan@la.gov](mailto:masterplan@la.gov)