

# Mississippi Coastal Improvements Program

## *“A Comprehensive Plan for Coastal Resilience”*

### Briefing for NCER

*August 4, 2011*



US Army Corps of Engineers  
**BUILDING STRONG**®

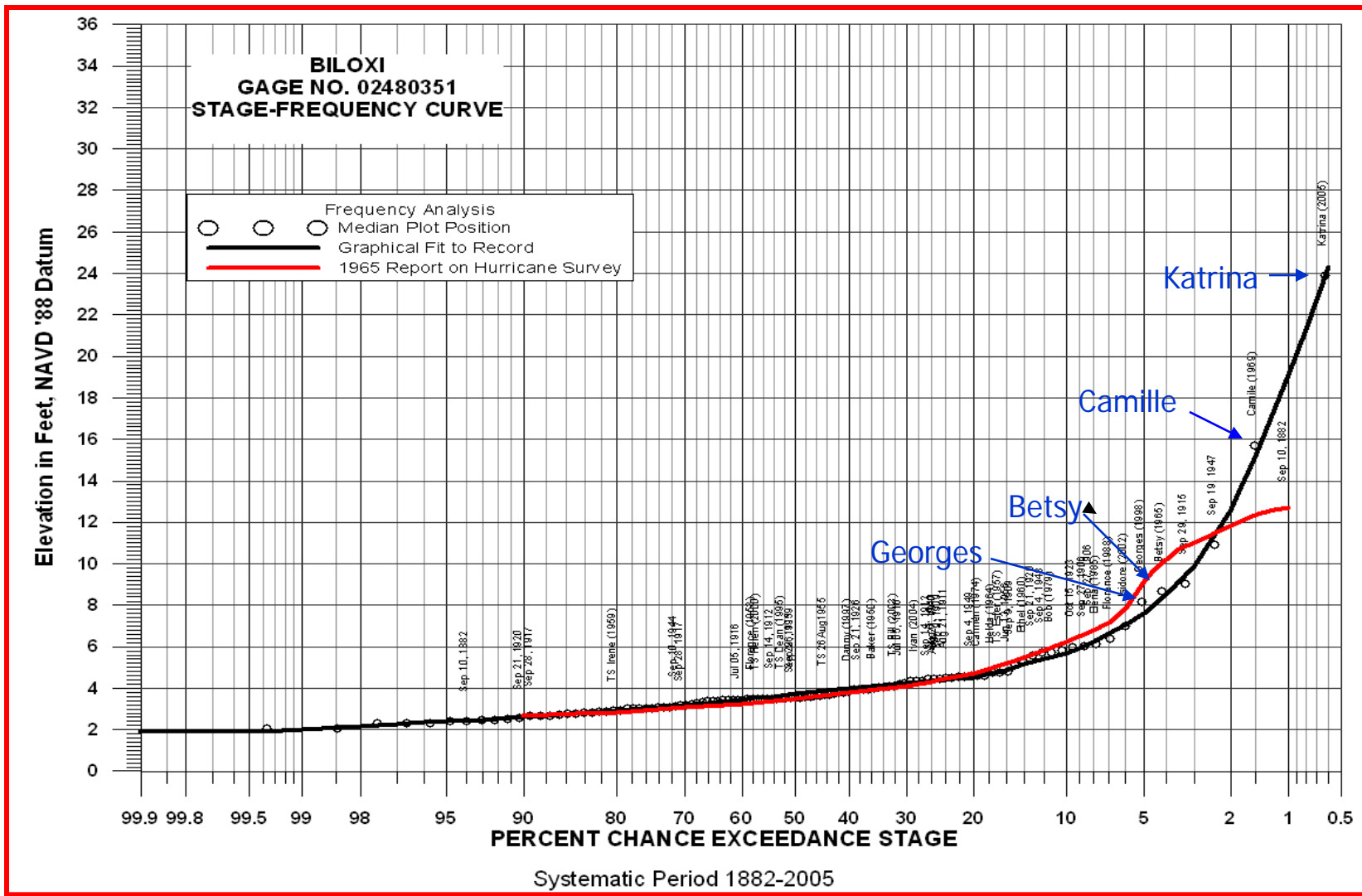


## Bottom Line Up Front

- Coastal Mississippi is **twice as likely to be impacted** by a moderate to severe hurricane than the coast of Texas or the Florida panhandle
- Two of the **most severe storms** to hit the southern United States, Camille – 1969 and Katrina – 2005, **made landfall in Hancock County**
- Congressional authorization requires a **comprehensive plan** across multiple Corps mission areas
- Recommended Plan facilitates a **resilient coast**
  - System-wide and integrated
  - Risk based plan formulation
  - Phased implementation
  - Implement critical issues first
  - Transition toward long term plan

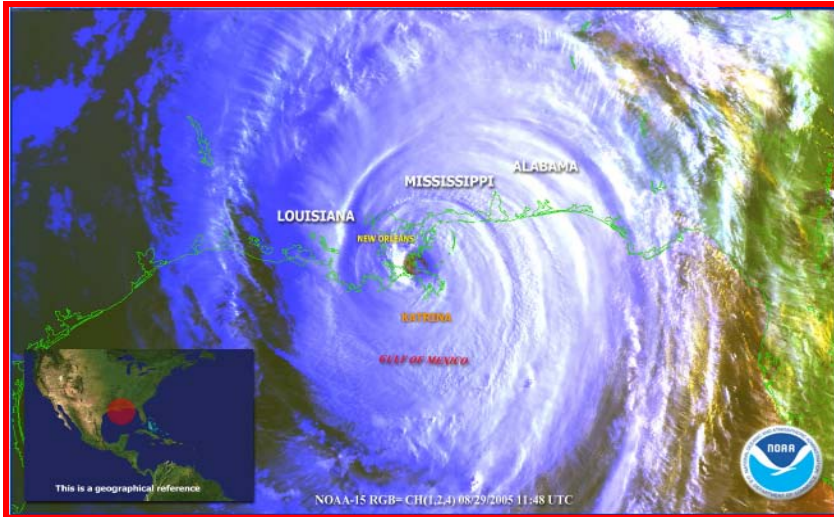


# US Army Corps of Engineers MOBILE DISTRICT





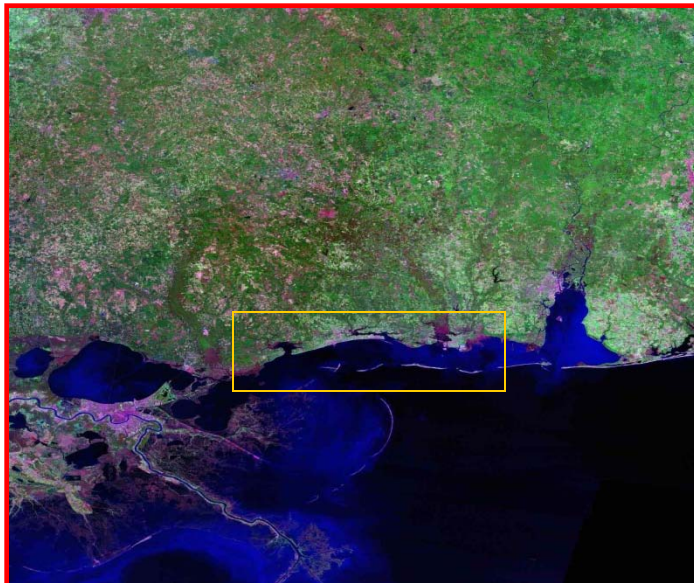
# US Army Corps of Engineers MOBILE DISTRICT



## Mississippi Coastal Improvements Program



- P.L. 109-148, 30 December 2005, provided \$10M GI, additional funding \$2M in FY2008 and \$2M in 2011
- Comprehensive Planning to Address
  - Hurricane and Storm Damage Reduction
  - Salt Water Intrusion
  - Shoreline Erosion
  - Fish and Wildlife Preservation
  - Other Water Related Resource Projects
- Cost Effective Projects in lieu of NED benefits
- No Incremental Benefit-Cost Analysis
- Report requirements
  - Interim Report within 6 months
  - Comprehensive Plan within 2 years
- Compatible with State Coastal Restoration Plan





# US Army Corps of Engineers MOBILE DISTRICT

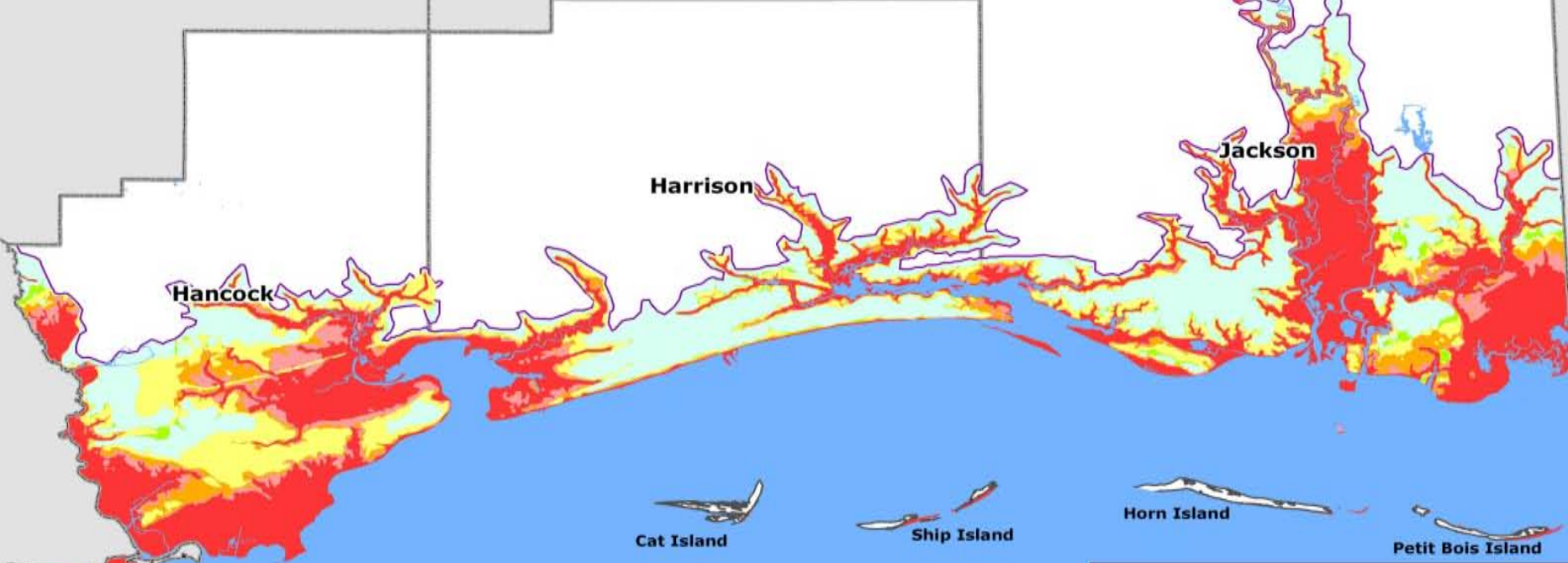


**LEGEND**

- High Risk Zone
- Moderate to High Risk Zone
- Moderate Risk Zone
- Moderate to Low Risk Zone
- Low Risk Zone
- Extremely Low Risk Zone
- Max Probable Intensity Surge

0 1.25 2.5 5 7.5 10  
Miles

X006\_03AUG07\_INUNDATION\_HPL\_11X17.mxd

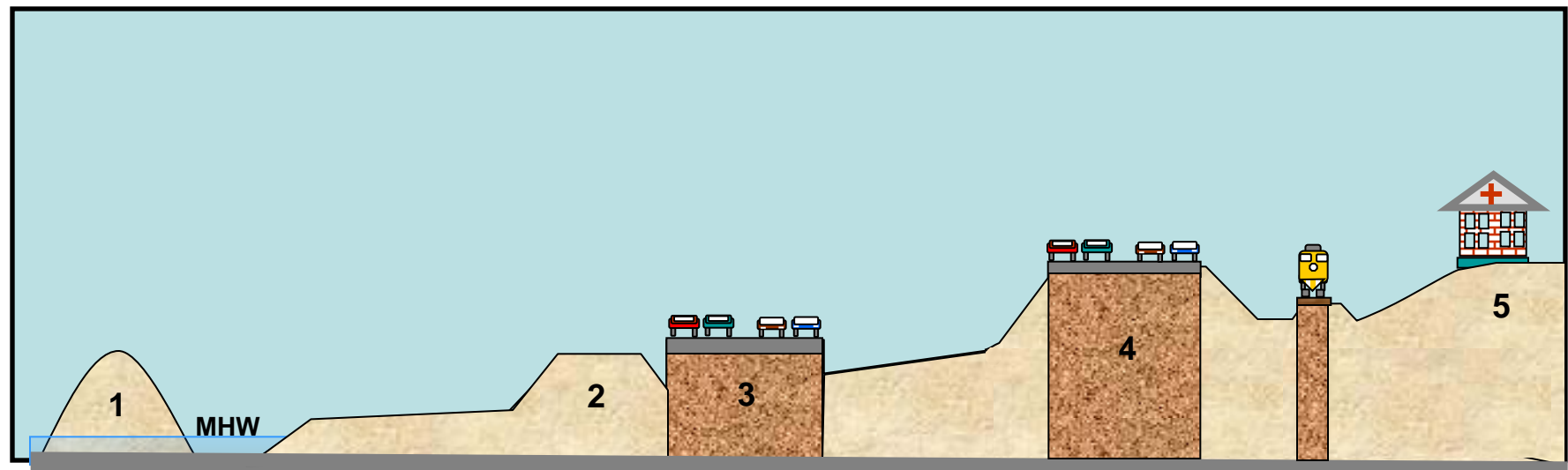


Mississippi Coastal Improvements Program

**RISK ZONES  
and Max Probable  
Intensity Surge (MPI)**



# Development of Lines of Defense Concept



1 - BARRIER ISLAND RESTORATION

2 - BEACH & DUNE NON-STRUCTURAL & ECOSYSTEM RESTORATION

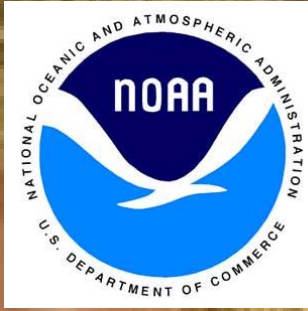
3 - SEAWALL, ELEVATED ROAD

4 - LANDWARD BARRIER NON-STRUCTURAL & ECOSYSTEM RESTORATION

5 - BEYOND THE MPI NON-STRUCTURAL & ECOSYSTEM RESTORATION EXISTING RAILWAY



collaboration  
is everything





## Interim Report

- FONSI signed 30 June 2006
- Chief's Report signed 30 Dec 2006
- PL 110-28 signed 25 May 2007 authorized and appropriated \$107.7 M for construction of 15 projects

## Summary Statistics

- Restore 35 miles of beach and dune systems
- Protect/enhance 3300 acres of coastal wetlands
- Restore 2 ½ miles of seawall systems
- Restore flood storage capacity and circulation in 11 miles of streams/canals
- Potential reduction in storm damage to over 41,000 structures
- Provide \$11 million in annual recreation benefits



Bay St. Louis - South Beach Blvd - BEFORE



Bay St. Louis - South Beach Blvd - AFTER

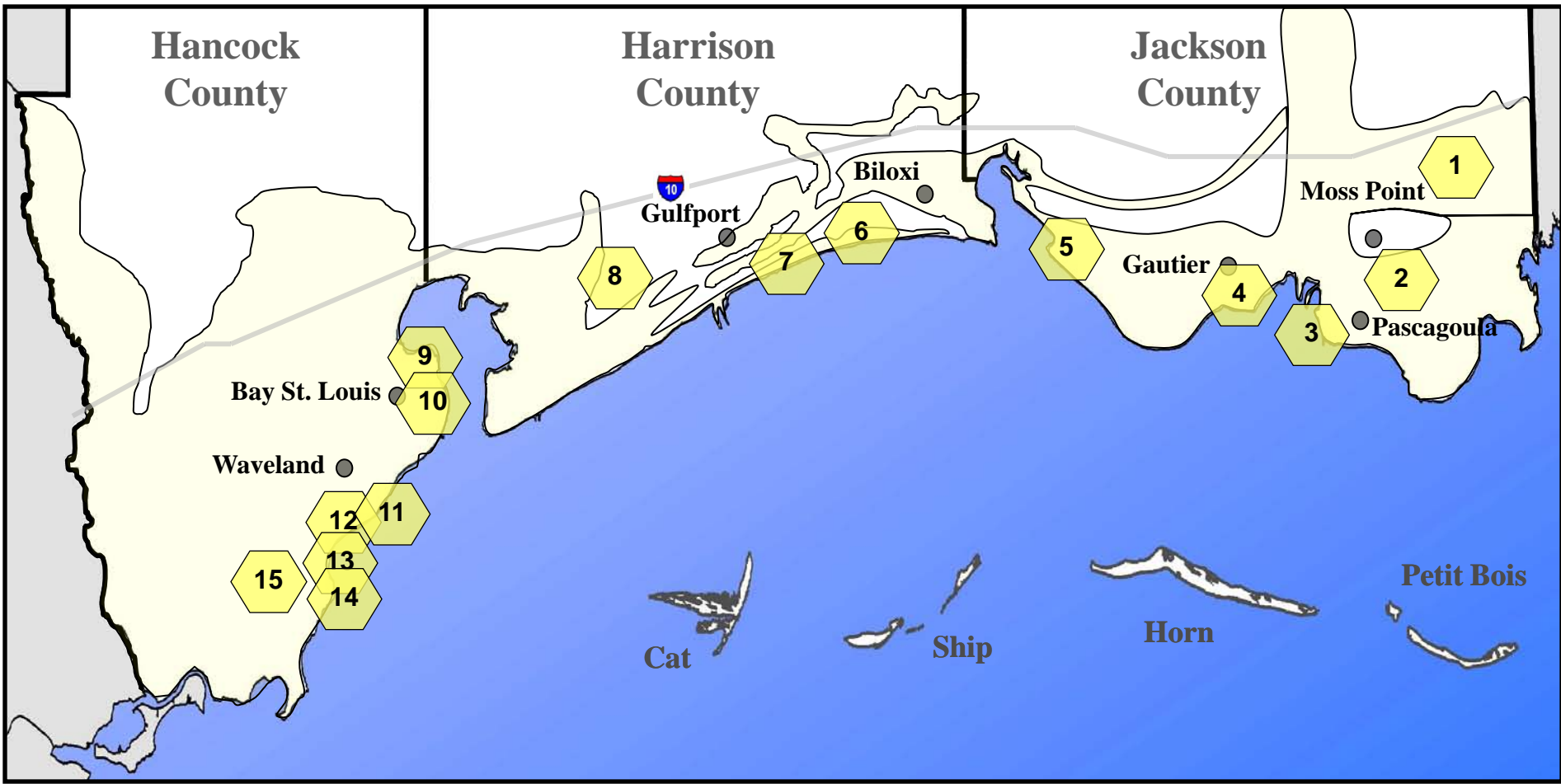






- ✓ Hurricane / Storm
- ✓ Salt Water Intrusion
- ✓ Shoreline Erosion
- ✓ Fish & Wildlife

## Interim Report Elements





# US Army Corps of Engineers MOBILE DISTRICT





# US Army Corps of Engineers MOBILE DISTRICT





# US Army Corps of Engineers MOBILE DISTRICT





# US Army Corps of Engineers MOBILE DISTRICT





# US Army Corps of Engineers MOBILE DISTRICT



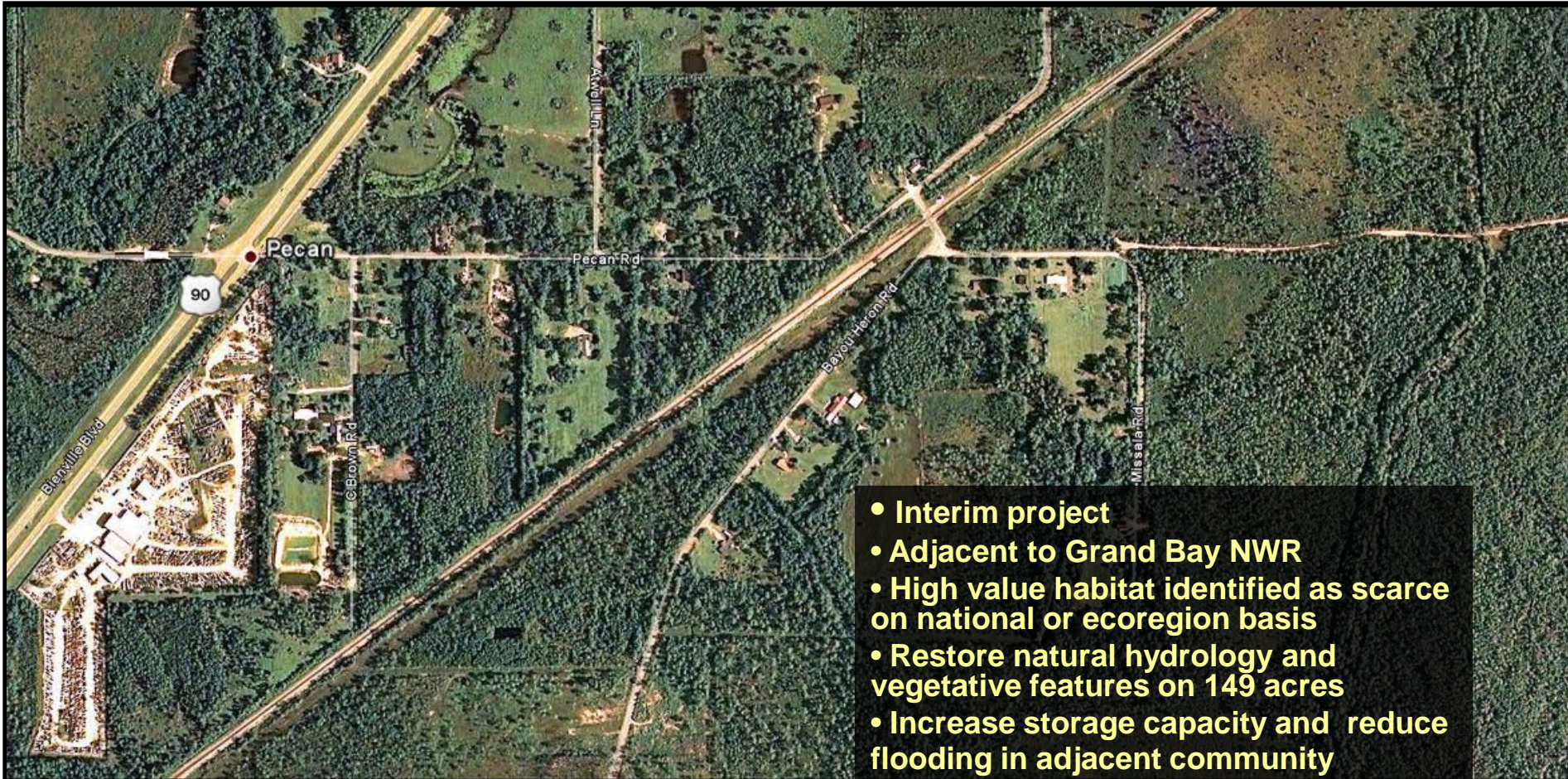
BUILDING STRONG<sup>SM</sup>



- Hurricane / Storm
- Salt Water Intrusion
- Shoreline Erosion
- Fish & Wildlife

## 7 Franklin Creek Ecosystem Restoration

( \$1,860,000 )



- Interim project
- Adjacent to Grand Bay NWR
- High value habitat identified as scarce on national or ecoregion basis
- Restore natural hydrology and vegetative features on 149 acres
- Increase storage capacity and reduce flooding in adjacent community



# US Army Corps of Engineers MOBILE DISTRICT



[www.ms Cip.usace.army.mil](http://www.ms Cip.usace.army.mil)







- Real Estate Acquisition Challenges after the storm:
- Divorce: FEMA cottage on-site-wife occupied/ husband in home.
- Relocations prior to offers due to storm.
- Last Resort Housing.
- Off-setting benefits
- Constructive Occupancy