Cat 3 Storm Surge (Ike plus 15% wind speed)

Landfall San Luis Pass

25 Feet in Houston Ship Channel

Smaller Than Irma and Maria

Does Not Include Climate Change
Human Risk

BAYFRONT COMMUNITY & WORKFORCE HOUSING

EXAMPLE ASSESSMENT OF TANK FLOTATION FAILURE PROBABILITY:

- 0.00 - 0.01
- 0.02 - 0.05
- 0.06 - 0.10
- 0.11 - 0.20
- 0.21 - 0.25
- 0.26 - 0.50
- 0.51 - 1.00

urban areas
Galveston Bay Park Plan
Elements of the Galveston Bay Park Plan

1. Houston-Galveston industrial complex & West-side Protection to 25 Feet
2. Texas City Levee Raised to 25 Feet
3. Backside Levee around Galveston
4. Elevated FM 3005 and Highway 87 for Evacuation
5. Sand Nourishment for Beach
6. Possible Extension of Galveston Levee to Pelican Island
Galveston Bay Park Plan

• **Sponsors** – SSPEED Center, Others?
Galveston Bay Park Plan

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- **Level of Protection** – 17 feet at City of Galveston, 25 feet at west side shoreline and Houston Ship Channel, exceeds current 100 year level of protection on west side by 10 feet
WHY GALVESTON BAY PARK?

Year Round Benefits

Widening is necessary for safety and efficiency
TECHNOLOGY

LEVERAGE EXISTING TECHNOLOGIES

Storm surge barrier in Delft, Netherlands

Seabrook Gate, New Orleans, LA
Gates At Galveston Bay Park
GALVESTON BAY PARK
BELONGS TO THE PEOPLE
Shared Cost Opportunities

- Highway Funds – Raising FM 3005 & SH 87
- Houston Ship Channel Maintenance Funds
- Potential Channel Widening
- Potential Land Leases for Recreational Use
Oyster Reef Mitigation/Expansion

Potential Oyster Expansion Area

- CURRENT OYSTER REEFS
- HISTORIC OYSTER REEFS
- PRIORITY PROTECTION HABITATS
Alternative Procedural Scenarios to Construct Galveston Bay Park Plan

- Prepare Feasibility Study Under Section 1043(a)(1) of WRRDA 2014 for Joint Hurricane Damage Abatement and Navigation Improvement Work
  - Not sure if provision has been utilized previously
  - Would involve multiple parties
Alternative Procedural Scenarios to Construct Galveston Bay Park Plan

• Submit Separate Section 10 and Section 404 Permit Application along with necessary environmental clearance documents
Consensus-Based Design

• MUST form large, working partnership
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• SSPEED Center reaches out to Harris County, City of Houston, Port of Houston, General Land Office, Corps of Engineers and Texas Parks and Wildlife at the least
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• Reach out to Galveston County, Chambers County, City of Galveston, Galveston and Harris County Bayshore Communities and Bay Area Houston Economic Partnership
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• Hope for support from disenchanted coastal residents – offering a real alternative
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• Reach out to the Galveston Bay Foundation, Houston Audubon Society, the Bolivar Residents, the Houston Yacht Club, the Texas Corinthian Yacht Club, Sierra Club and Bayou City Waterkeeper
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• Endorsed By Bayou City Initiative citizens group
Galveston Bay Park