Building a Resilient Houston

Our Maritime and Bay “Communities”
PHA Communities at Risk

• Neighborhood terminals
• Maritime community—ship channels and dredged disposal areas
• Bay community—marsh sites
PHA

- Resilience—the ability to bounce back, and quickly—is critical to commerce
- We plan, analyze risk, prioritize, and provide redundancy—when we can afford it
- “Fast disasters”—storms—are recognized and supported
- “Slow disasters”—SLR—can be a hard sell
Terminals

• 50-80 year old terminals—vulnerable (low dock height). Major reconstruction is unaffordable today.

• New terminals are “safe” for 50 years; recapitalization cost may be double current estimates to accommodate for sea level rise
The “Bay” Community

• Sea level rise brings increased salinity to the Bay—adversely affecting habitat

• Accelerated marsh loss throughout the bay—inundation without nourishment
“Bay” community threats

• Threat to man-made marshes
  – Continuous repair and armoring
  – Continuous nourishment of established sites puts the marsh at risk, and renders them less valuable
Maritime Community—Ship Channels

- Little or no redundancy-terminals and industry are served by one channel
- Each foot of depth lost can cost the economy over $300 million per year
Maritime Vulnerability—ship channels

• Less sediment load into Galveston Bay will be offset by more turbulent waters
• Increased frequency of storms will have a huge impact on the ability of ships to access industry in Houston
• One storm can double the annual cost of dredge a berth, and quadruple the cost of maintaining the federal channel
What We Must Do

• Apply resources where they were intended and are needed: Harbor Maintenance Trust Fund
  – Only about 15% of taxes collected on import tonnage for harbor maintenance is returned to Houston
What We Must Do

• Continue to balance environmental and economic needs
• Promote beneficial uses of dredge material
• Treat the “slow disaster” as a problem for our lifetime