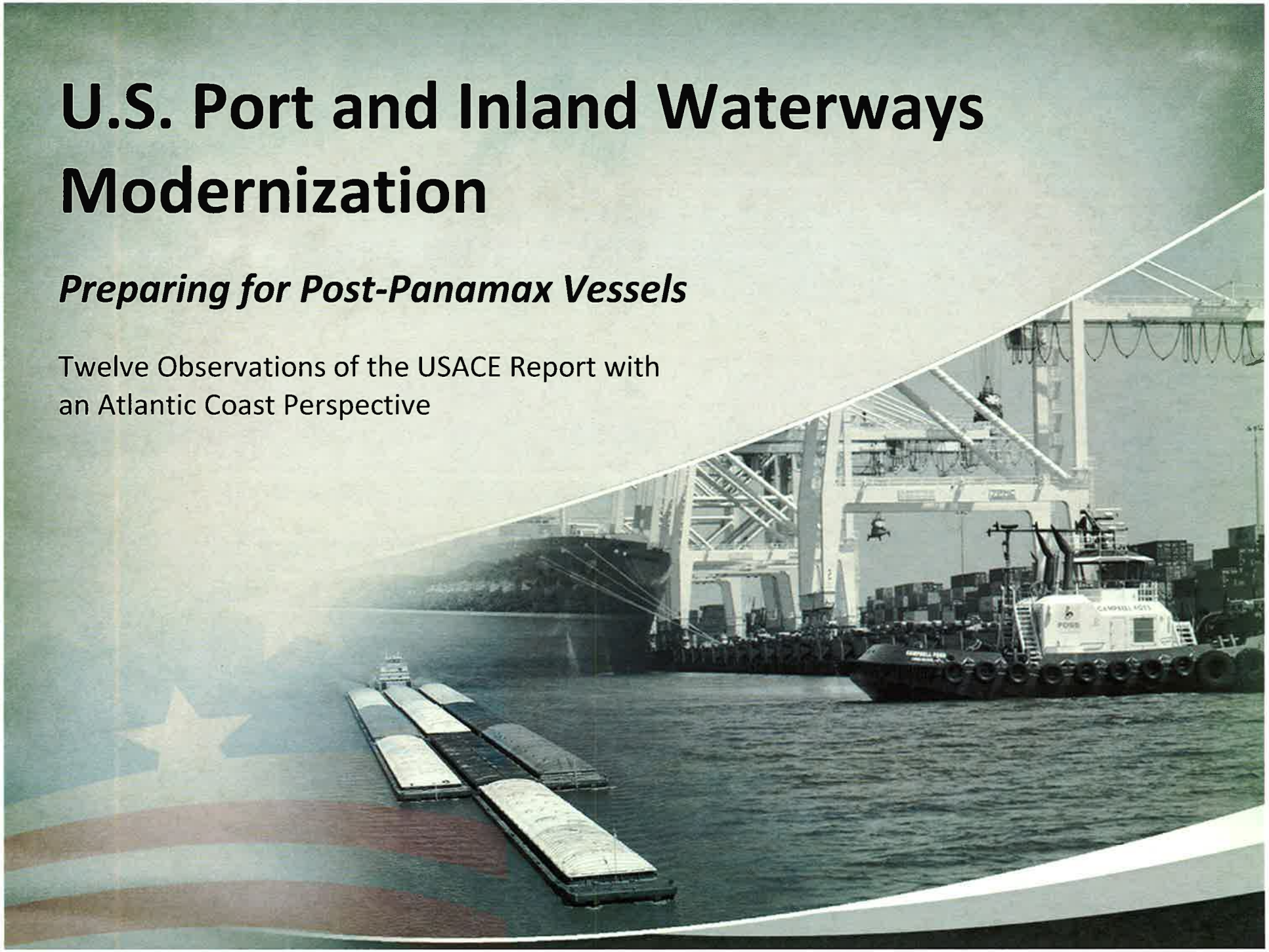
U.S. Port and Inland Waterways Modernization

Preparing for Post-Panamax Vessels

Twelve Observations of the USACE Report with an Atlantic Coast Perspective



Observation 1: Clear Themes (page iii-iv)

- Our nation is a maritime nation
- Our networks connect us to the world and keep our nation competitive
- Our past networks resulted in a competitive trade position
- Our nation needs to ensure reliable networks in the 21st century
- Post-Panamax vessels are a reality today
- This nation must address the need

Observation 2: Clear Congressional Direction

- **Authorization:** Institute of Water Resources Under Consolidated Appropriations Act of (P.L. 112-74)
- **Report time line: 180 days to complete/no delays**
- **Report factors should include:**
  - Costs associated with deepening and widening
  - Enhancement of export initiative
  - Population trends
  - Intermodal access
  - Environmental impacts

Observation 3: Logically Organized

Chapter 1 – Demand for Future Capacity

Chapter 2 – Existing U.S. Port & Inland Waterways Infrastructure

Chapter 3 – Evaluating the Critical Need for Capacity Maintenance and Expansion

Chapter 4 – Environmental Impacts of Capacity Expansion

Chapter 5 – Historical Review and Vision for the Future

Chapter 6 – Financing Options

Chapter 7 – Future Federal Role in Navigation

Chapter 8 – Considerations in a Modernization Strategy

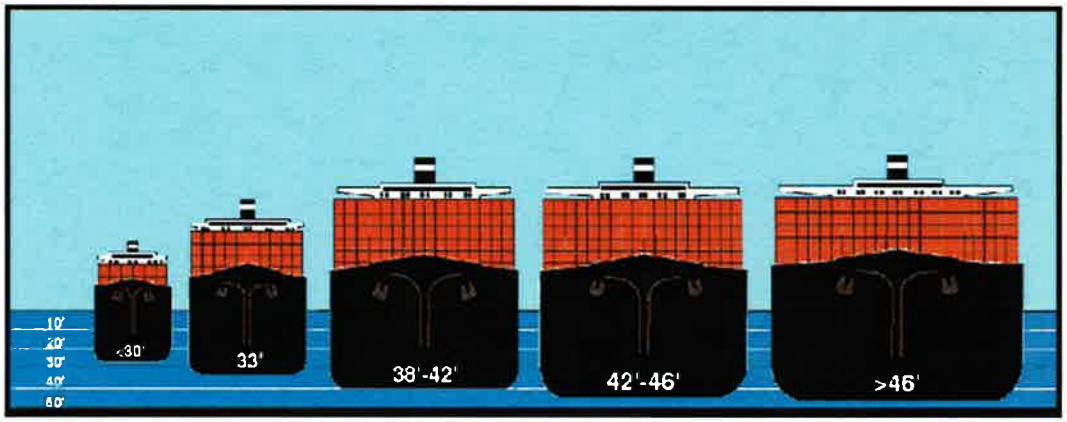
Observation 4: Outlines demand for future capacity

- As a region, Atlantic ports in the southeast are seeing the most growth (page 6)
- By 2030, 62% of container ship capacity will be Post-Panamax (page 15)
- Movements of TEUs through East Coast ports are expected to triple from current 15 million to about 45 million in 2035 (page 12)
- Population and trade growth, coupled with port capacity, have shown the nations most critical *capacity* needs are along the southeast and gulf coasts. (page 58)

Post-Panamax vessels will dominate the East Coast fleet by 2020 (page 18)

Observation 5:
Defines "Post-Panamax Ready"

- **Navigation Infrastructure:**
  - Channels
  - Turning Basins
  - Navigation Jetties
  - Dredge Material Placement Facilities
  - Berthing Facilities
  - Aids to Navigation



- **Other Contributing Factors: Productivity, Storage Area, Stacking Height Rules, Operating Hours, Training, etc.**

$$C_{CAP} = f(D_C\ W_C\ S_{TB}\ L_B\ S_{CRANE})$$

Observation 6: Identifies who is ready? (page 49)

Norfolk

- Green

New York/New Jersey

- Amber for channel depth

Baltimore *

- Amber for channel depth

Charleston

- Red for channel depth (tide)

Savannah

- Red for channel depth (page xvi)

Miami

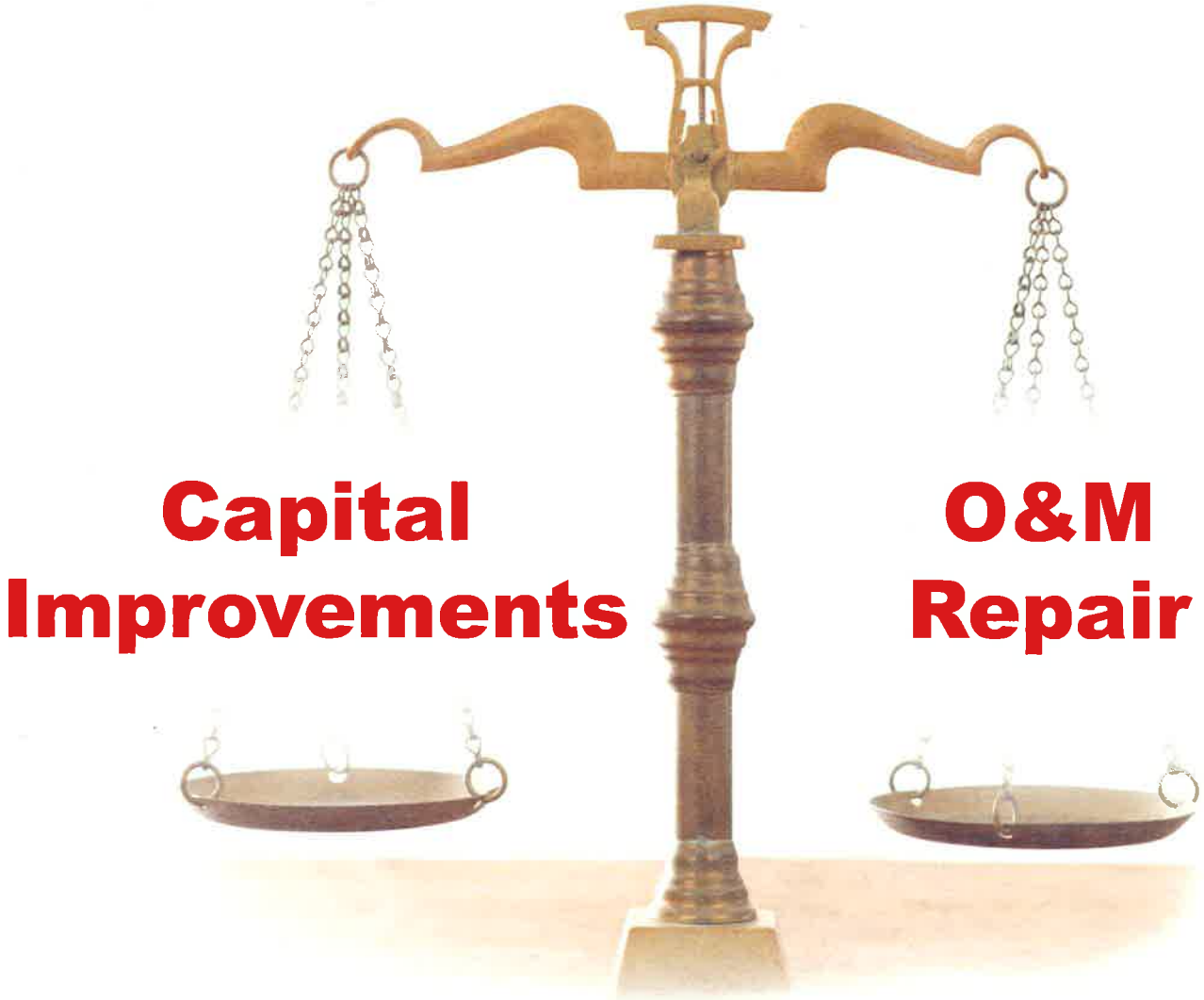
- Red for channel depth

* Reflects data from 20 Jun, 2012. Baltimore now has a 50' berth

Observation 7: Visualizes that we must be "Cascade Ready" (page 49)

"For U.S. ports to be ready to take advantage of Post-Panamax vessel opportunities, major ports not only need to be "Post-Panamax ready," but second tier ports need to be "cascade ready" as they in turn have the opportunity to take advantage of larger vessels that begin to service their trade." (page 49)

Observation 8:
Cautions about balance



Observation 9: Offers financing options (page 77)

Option 1	• Business as usual
Option 2	• Increase appropriations from general federal revenues
Option 3	• Modify authority to use HMTF revenues as appropriations
Option 4	• Increase cost share contributions
Option 5	• Individual Port Initiative

These options are illustrative only and do not represent the Administration, USACE, or IWR.

"Business As Usual"
Port of Sunny Bay

Land Based Infrastructure

- Railway and Highway
- Crane Capacity
- Berthing Facilities

Navigation Infrastructure

- Channel Width and Depth
- Turning Basins
- Navigation Jetties
- Dredged Material Placement
- Anchorages
- Aids to Navigation

Civil Works Process

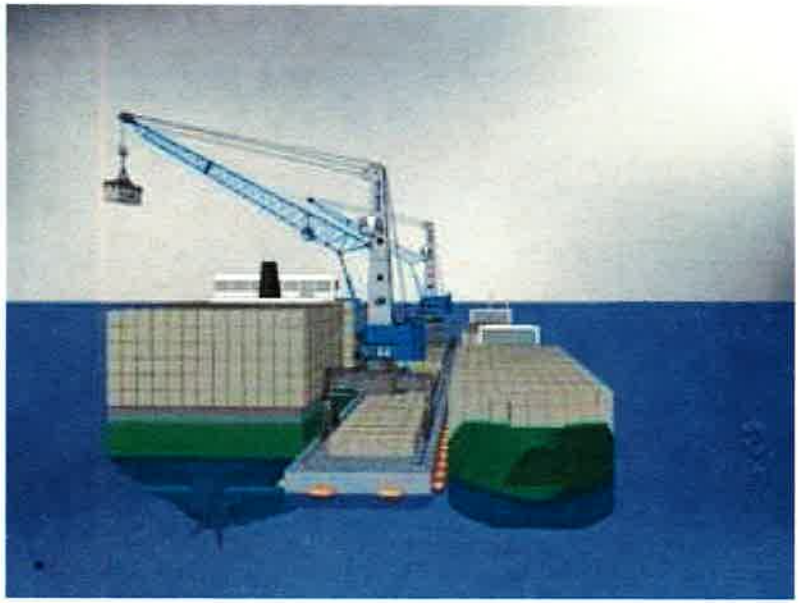
- Study Authority
- 3 x 3 x 3 Initiative…Chief of Engineer's Report
- WRDA and Appropriations to Construct

10 to 15 Years

Observation 10: Presents environmental impacts

- Environmental impacts are measurable
- Vulnerability scores were slightly lower in the north east (page 68)
- No region was consistently more or less vulnerable across all indicators (page 68)
- Regardless of financing option, USACE will continue to have a regulatory oversight responsibility (page xvii)
- There are potential environmental benefits from modernization (page 68)

Observation 11: Points out game changing impacts (page 18)



- Intermodal Land-Bridge
- Transshipment
- US Bulk and Agricultural Exports
- Socio-Political Pivots (page 20)

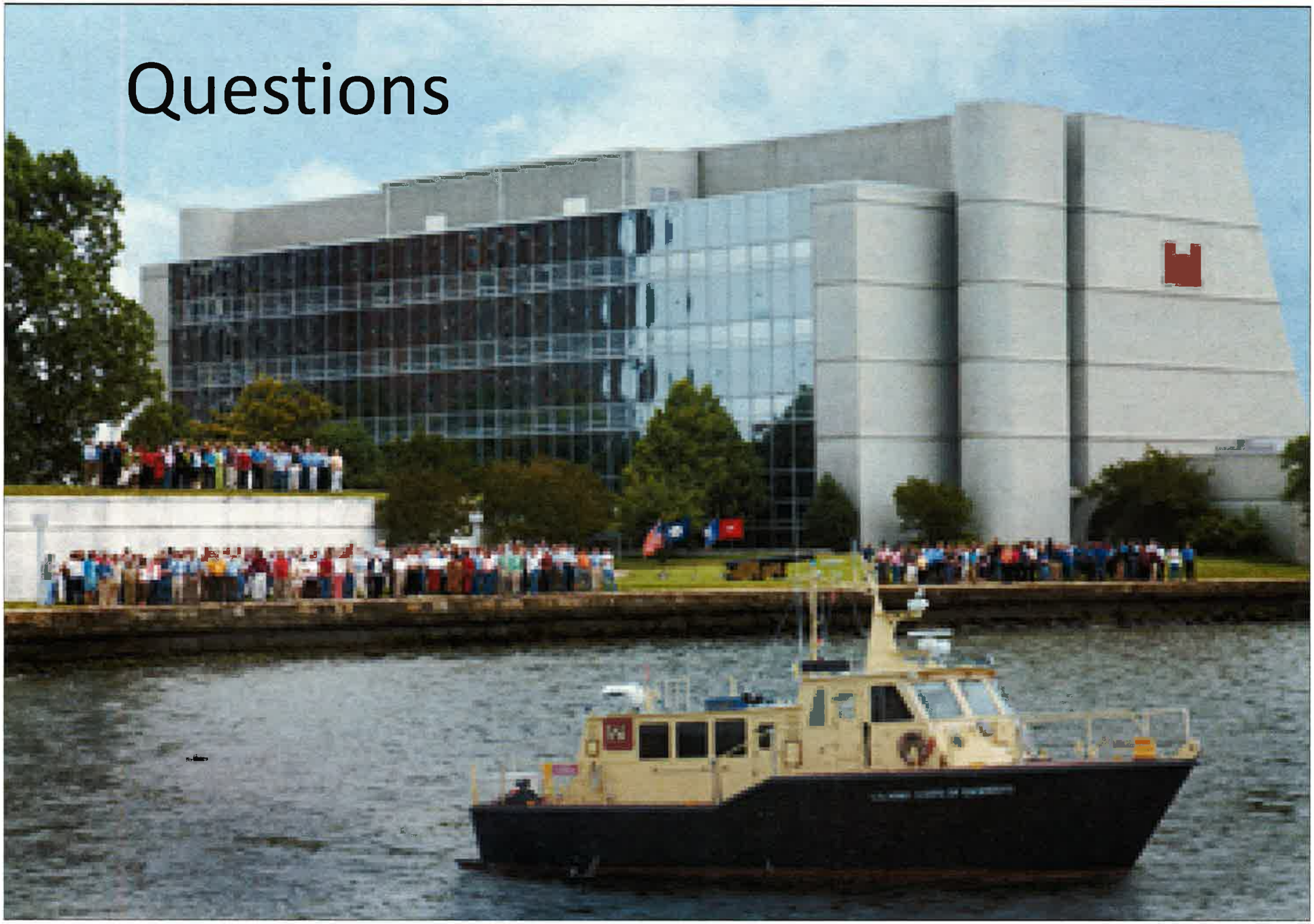
Observation 12: Offers a call to action

"This Nation must address the need and the challenges of a modern transportation system and evaluate potential investment opportunities. This report advances that objective. It contributes to an ongoing public discussion, which is already underway, and will help inform current and future decisions on the maintenance and future development of our ports and waterways and their related infrastructure."

Major General Michael J. Walsh

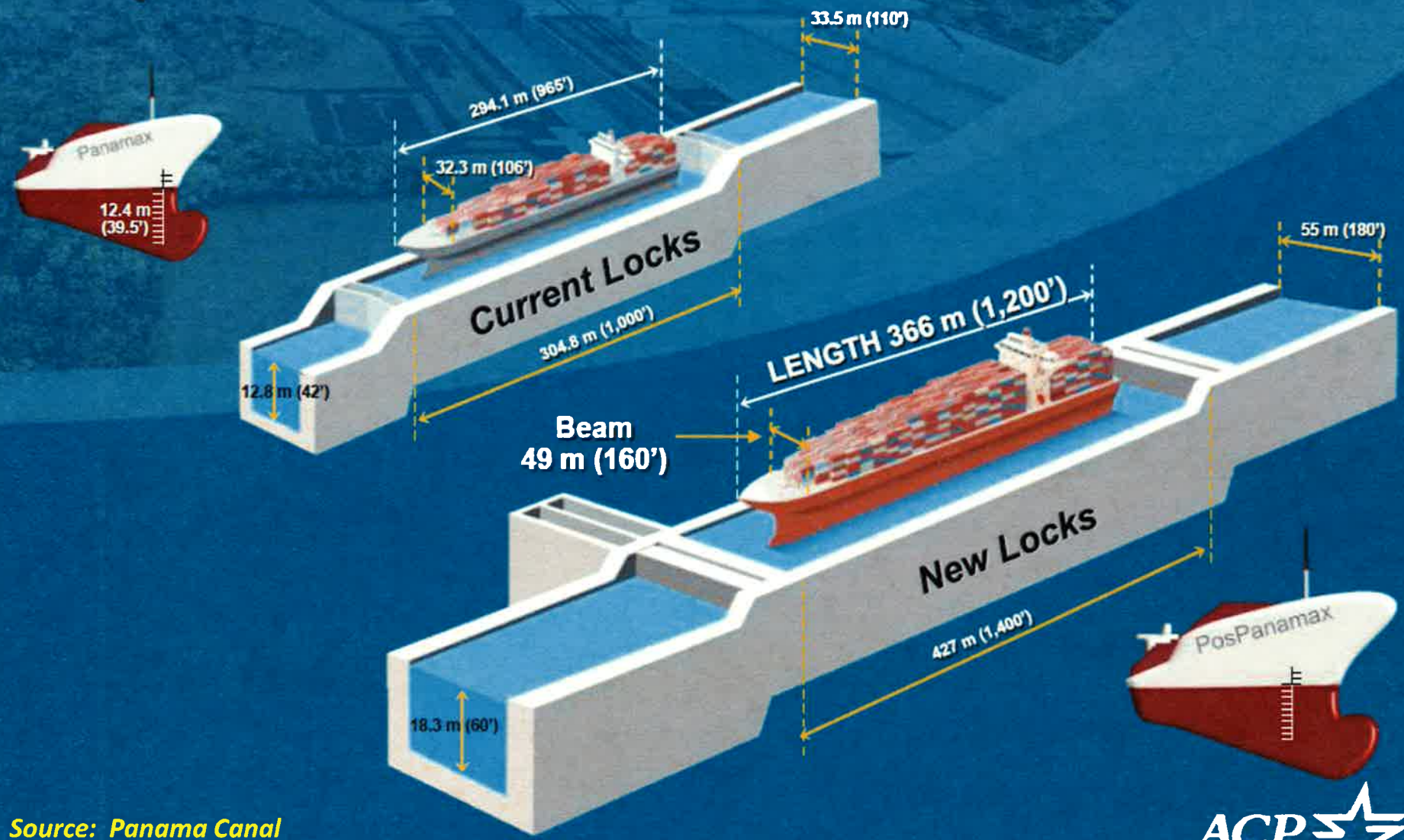
http://www.iwr.usace.army.mil/Portals/70/docs/portswaterways/rpt/June_20_U.S._Port_and_Inland_Waterways_Preparing_for_Post_Panamax_Vessels.pdf

Questions



Dimension of Locks and New-Panamax vessels

Existing Locks Max Vessel: 4,400 TEU's



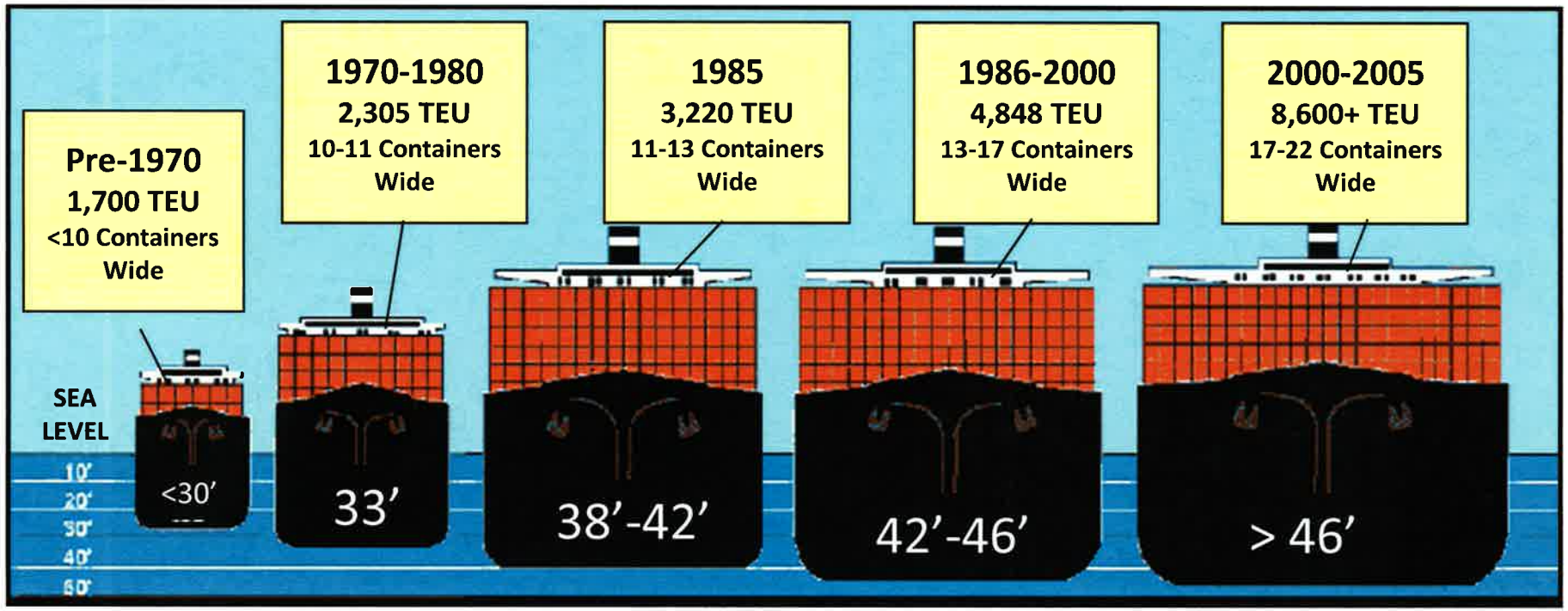
Source: Panama Canal Authority (ACP)

ACP

New Locks Max Vessel: 12,600 TEU's

Ever Larger Containerships

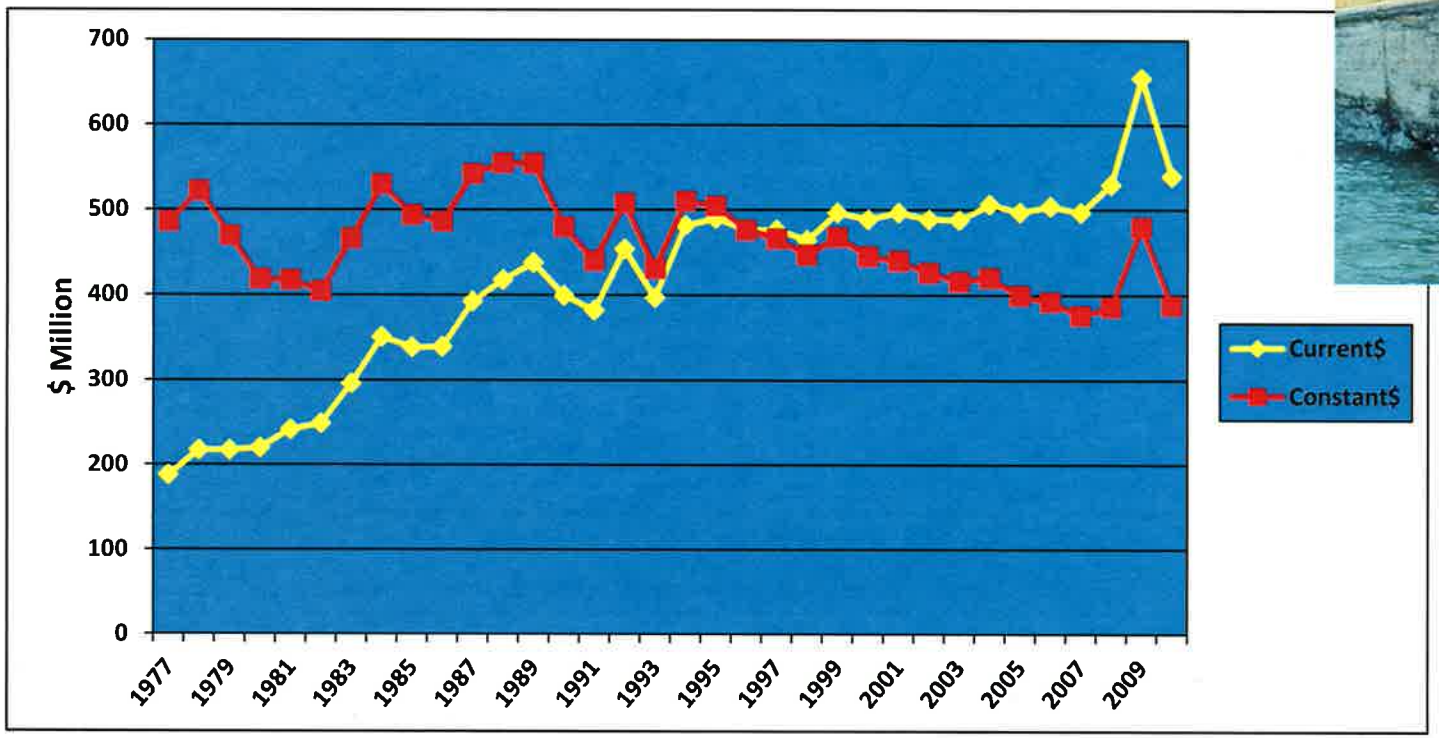
Driving Need for Ever Larger Channels



Challenge: Inland Waterway O&M Funding

1977-2010 Current $ and 1996 Constant $ *

Challenge: Flat O&M funding in constant dollars, even as project portfolio grows and ages…



Lock wall, Lower Mon 3

Lock wall deterioration, Chickamauga

** Fuel-Taxed Waterways Only*