JACKSONVILLE HARBOR NAVIGATION STUDY

Duval County, Florida

General Reevaluation Report II and Supplemental Environmental Impact Statement

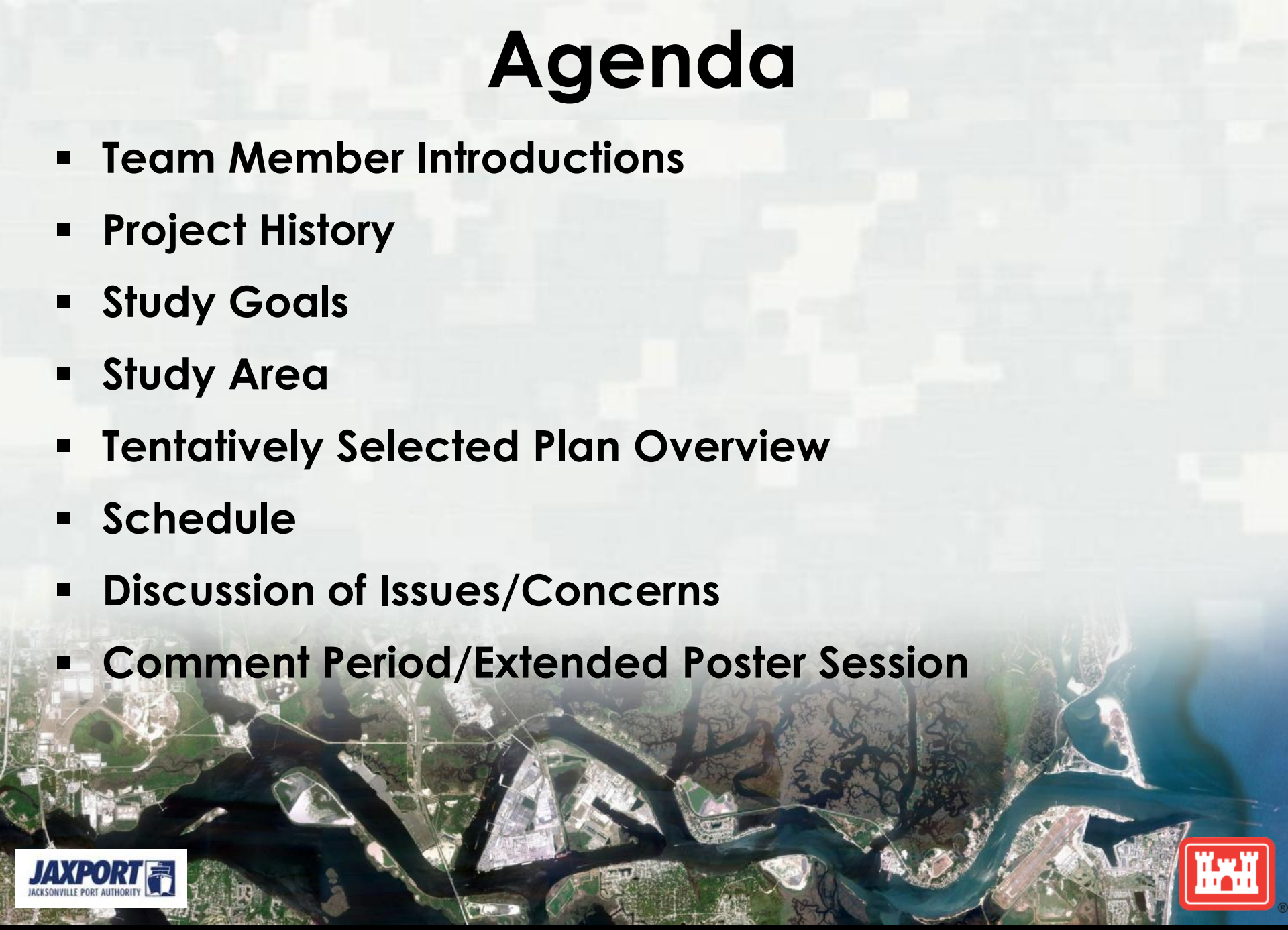
Public Workshop

June 27, 2013

JAXPORT
JACKSONVILLE PORT AUTHORITY

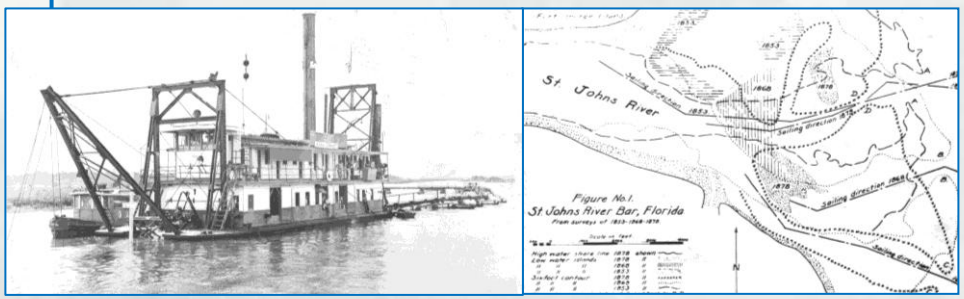
Agenda

- Team Member Introductions
- Project History
- Study Goals
- Study Area
- Tentatively Selected Plan Overview
- Schedule
- Discussion of Issues/Concerns
- Comment Period/Extended Poster Session



Jacksonville Harbor Deepening History

1880	1896	1910	1978	2003	2010	2013
12.5 ft	18 ft	30 ft	38 ft	40 ft	40 ft	TSP 47 ft
				Miles 0 to 14.7	Miles 14.7 to 20	



Federal participation begins

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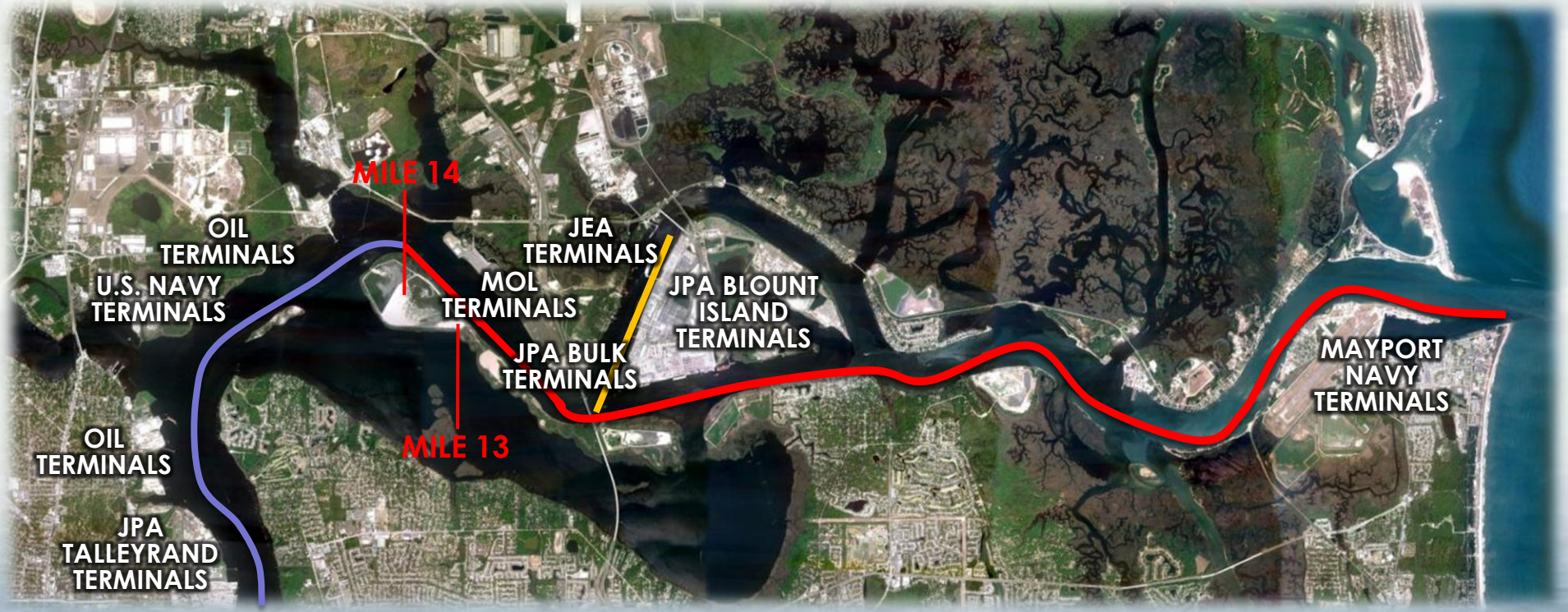
Purpose

- ✓ Reduce Navigation Transportation Costs
- ✓ Reduce Navigation Constraints (one-way traffic areas)
- ✓ Accommodate Larger Vessels
- ✓ Develop a Recommended Plan that builds a sustainable future for the nation and is environmentally acceptable

Study Area

Segment 1: Entrance Channel to Mile 14 (Reduced to ~ Mile 13)
Segment 2: Mile 14 to 20 (eliminated)
Segment 3: West Blount Island Channel (Cuts F&G) (eliminated)



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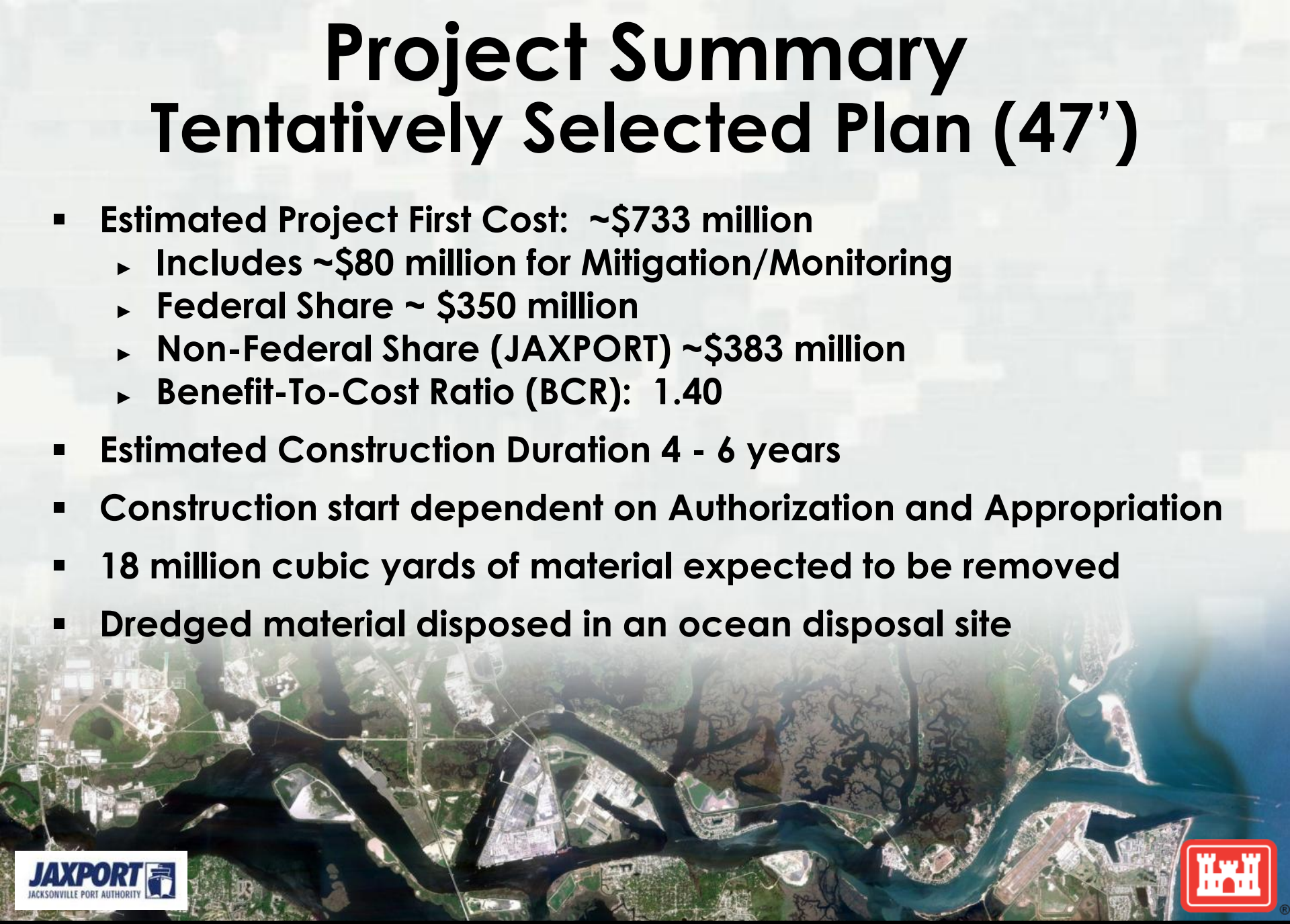
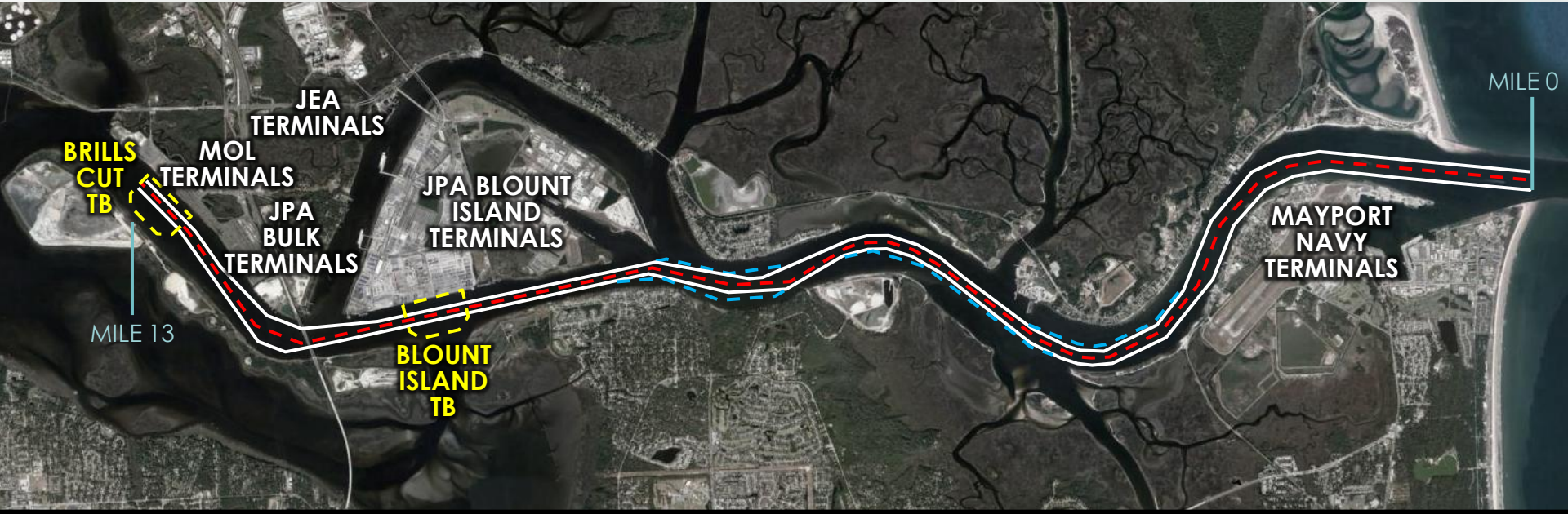
Project Summary
Tentatively Selected Plan (47')

- Estimated Project First Cost: ~$733 million
  - Includes ~$80 million for Mitigation/Monitoring
  - Federal Share ~ $350 million
  - Non-Federal Share (JAXPORT) ~$383 million
  - Benefit-To-Cost Ratio (BCR): 1.40
- Estimated Construction Duration 4 - 6 years
- Construction start dependent on Authorization and Appropriation
- 18 million cubic yards of material expected to be removed
- Dredged material disposed in an ocean disposal site



Tentatively Selected Plan (47')
Features



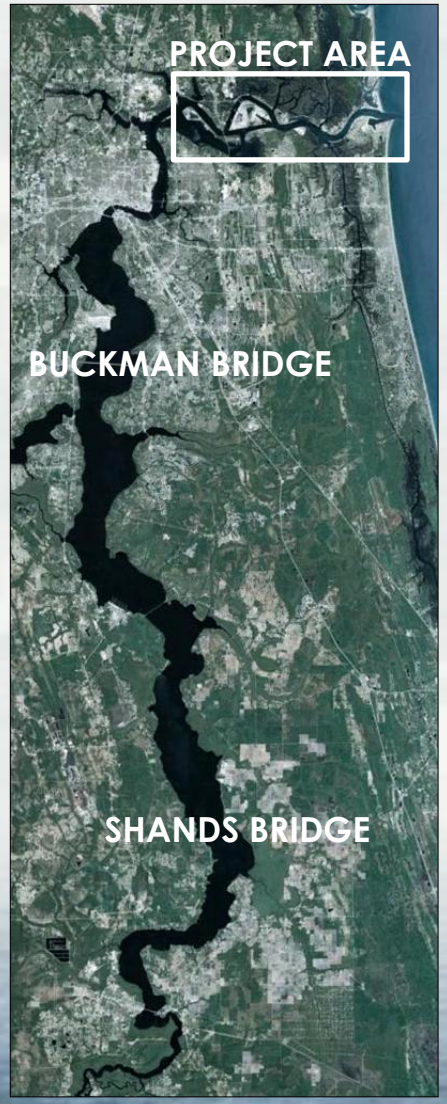
Project Timeline
President's "We Can't Wait Initiative"

ACTIVITY	DATES
Public Review Period Ends	July 31, 2013
Submit Final Report to Division Commander	Sept 30, 2013
Chief of Engineer's Report	April 30, 2014
Congress Receives Report for Authorization*	September 2014 **Pending Administration Approvals*
Construction Starts*	**Pending Authorization and Appropriations*

Issues/Concerns

- Changes to Salinity
- Salinity Impacts (Freshwater Wetlands, Grass Beds, Fish, Shrimp)
- Mitigation
- Monitoring
- Confined Blasting
- Bank Erosion
- Study Schedule
- 45 Day Public Review Period

Changes to Salinity



Comment

How will the proposed deepening affect salinity levels?

Response

- Hydrodynamic modeling predicts small increases in salinity levels within the St. Johns River main stem
- Increase is small in comparison to other factors that can influence salinity such as drought, ocean level, sea level rise, etc.
- Tributary modeling is still ongoing, but effects are expected to be minor

Example, at Buckman Bridge

- Without-project average salinity = 2.0 ppt
- With-project average salinity increase < 0.1 ppt
- Extreme dry year (2011) average salinity = 7.3 ppt

Salinity Impacts to Ecosystem

Wetlands, Grass Beds, Fish, and Shrimp

Comment

How will these increases in salinity affect the St. Johns River ecosystem?

Response

Ecological modeling predicts minor main stem salinity effects

- **No elimination of grass beds or wetlands in main stem**
- **Small increases in salinity induced stress on grass beds and wetlands in comparison to stress levels caused by drought, ocean levels, etc.**
- **Fish and shrimp modeling is ongoing. Preliminary results indicate some change in fish and shrimp distribution.**

Of note: Technical staff is available to discuss details of the modeling.

Mitigation Options

Comment

How will you mitigate salinity effects?

Response

Mitigation options being considered include:

- **Enhancement of the river's water quality**
  - **Funding nutrient reduction projects such as agricultural storm water and wetland treatment facilities**
- **Preservation of wetlands and important upland habitats**
  - **Purchase of conservation lands**
- **Funding Timucuan Preserve environmental management and analysis support**
- **Funding Florida Fish and Wildlife Conservation Commission habitat management program**

Mitigation Continued

Comment

Is the removal of Kirkpatrick (Rodman) Dam being considered as a potential mitigation option?

Response

- **Removal of the dam is screened from further consideration due to the complexity of this option**
  - **Unable to fully evaluate under this SEIS, beyond the scope of this study**
- **Benefits of dam removal and Ocklawaha River restoration is outside the area potentially impacted by harbor deepening**

Monitoring

Comment

Will USACE monitor the effects of deepening?

Response

USACE proposes a long-term (~15 years) monitoring plan to include:

- **Placement of water quality monitoring stations in the main stem and selected tributaries**
- **Grass beds, wetlands, and fisheries monitoring**
- **Additional modeling would be performed to determine causes of any observed changes**
- **Per the adaptive management plan, if effects from deepening are greater than predicted corrective action may be recommended**

Confined Blasting


confined blast


aerial monitoring

Comment

Will blasting be used to remove rock?

Response

- **It is likely that confined blasting techniques would be used to deepen the channel.**
- **Confined blasting techniques that were successfully used at Miami Harbor and San Juan Harbor would be implemented**
- **Blasting methodology has greatly improved since the last time explosives were used to deepen Jacksonville Harbor**

Bank Erosion

Comment

Will the deepening project cause bank erosion and loss of docks?

Response

- **Level of erosion (or accretion) along the banks of the river is highly variable and site specific**
- **Main contributing factors to specific areas of erosion include:**
  - **Currents – influenced by tide, watersheds, storms, etc.**
  - **Wave Climate – influenced by ship wake, storms, wind, etc.**
  - **Geomorphology (shape of the land) – affected by materials present, etc.**

Evaluation of Potential Project Impacts

- **Hydrodynamic current, ship wake, and sediment transport modeling are being completed**
- **Anticipated channel side slopes and proximity of channel to the shoreline is being assessed**
- **Beneficial uses of dredged material including material placement adjacent to eroding shorelines is being investigated**

Study Schedule

Comment

Will everything previously discussed be included in the study schedule?

Response

- **USACE has prioritized effort to ensure that all technical analysis is completed**
- **Some modeling is pending and will be complete between draft and final publications**
  - **Shoaling ADH analysis: July 2013**
  - **Storm Surge Modeling: July 2013**
  - **Tributary/Salt Marsh Modeling: August 2013**
  - **USGS Groundwater Report: August 2013**

45 Day Public Review Period

Comment

Extend the Comment Period

Response

Comment Period has been extended 16 days (from 45 to 61days) ending on July 31, 2013

Public Comments

- **Additional comments are due July 31, 2013**
- **Comment cards are available**
  - **Please send all comments cards to:**

    Attn: Paul Stodola
    U.S. Army Corps of Engineers
    P.O. Box 4970
    Jacksonville, FL 32232-0019
    (904)232-3271, Paul.E.Stodola@usace.army.mil

- **The Draft Jacksonville Harbor General Reevaluation Report II (GRR2) and Supplemental Environmental Impact Statement (SEIS) can be found at the following locations:**
  - **Library Locations: Main, Highlands, Mandarin, Regency**
  - **Online: http://www.saj.usace.army.mil/Missions/CivilWorks/Navigation/NavigationProjects/JacksonvilleHarborChannelDeepeningStudy.aspx**