

JACKSONVILLE HARBOR DEEPENING

MAYOR'S TASK FORCE

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JACKSONVILLE HARBOR

AN INVESTMENT IN THE NATIONAL INTEREST

- 47-foot Deepening
- 2.7 BCR
- Total Federal Cost:
\$ 312.7 million
- Total Non-Federal Cost:
\$ 371.5

- Nationally Significant Infrastructure Project as defined by President Obama's "We Can't Wait" Initiative
- #39 in U.S. for overall tonnage
- #12 in U.S. for container traffic
- Leading auto exporter in U.S.
- Department of Defense and MARAD* Designated Strategic Port

* MARAD: United States Maritime Administration



Images, left to right: President Obama visits JAXPORT; Post-Panamax Cranes at Dames Point TraPac Terminal

JACKSONVILLE HARBOR

VITAL PORT/STRATEGIC LOCATION

LOGISTICS

- Access to nationwide transportation:
 - Rail: CSX, Norfolk Southern, Florida East Coast
 - Interstates: I-10, I-75, I-95
- Port pro-active in infrastructure development (recent USDOT grant for intermodal transfer station)

DEMAND

- S.E. U.S. most rapidly growing region

MULTIPLE USES/VITAL PORT

- Leading automobile exporter nationwide
- #12 in container traffic nationwide
- Strategic Military Cargo Port (832nd Transportation Battalion)



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JACKSONVILLE HARBOR

PROBLEMS



- Inadequate Depths and Widths
- Navigation Restrictions



- Vessel light-loading
- More frequent trips

OPPORTUNITIES



- Forecasted volume of goods on fewer, larger ships



- Reduce transportation costs



JACKSONVILLE HARBOR LEGISLATIVE AUTHORITY

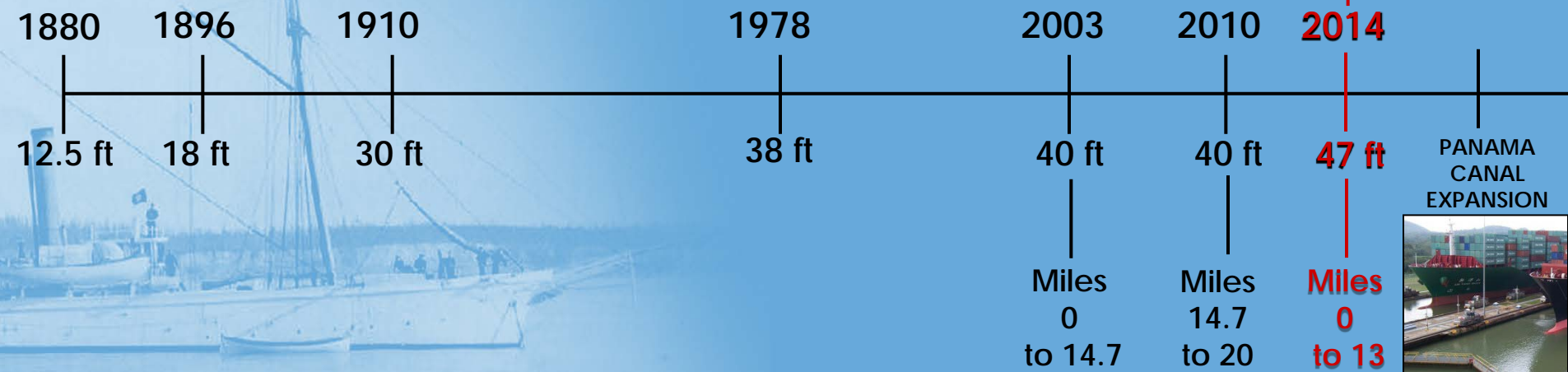
Authorization: Resolution from the Committee on Public Works and Transportation, United States House of Representatives, dated February 5, 1992:

"...to determine whether modifications of the recommendations contained therein are advisable at the present time, in the interest of navigation and other purposes."

Non-federal Sponsor: Jacksonville Port Authority (JAXPORT)

DEEPENING HISTORY TIMELINE

RECOMMENDED PLAN



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JACKSONVILLE HARBOR EXISTING CONDITIONS

ECONOMICS

- Annual Tonnage: 15 million
- Annual Containers: 900,000 (12th in Continental U.S.)
- Trade Routes: Increase in cargo throughput on major East-West trades

ENGINEERING

- Dredged Material Management limited in upland capacity
- New ODMDS
- Annual O&M
 - 100% federally funded
- Advance Maintenance
- Shoreline Erosion

ENVIRONMENTAL

- St. Johns River/American Heritage River
- Lower river is an estuary (great variability in salinity)
- Threatened and Endangered species (e.g., manatees & sea turtles)
- Essential Fish Habitat
- Timucuan Ecological & Historic Preserve (TIMU) overlaps a portion of the study area



DEEPENING STUDY

Federal Objective:

- Reduce navigation transportation costs and develop an alternative that is environmentally sustainable

Constraints:

- Avoid or minimize impacts on environmental resources (i.e., wetlands, submerged aquatic vegetation, and Threatened and Endangered species)



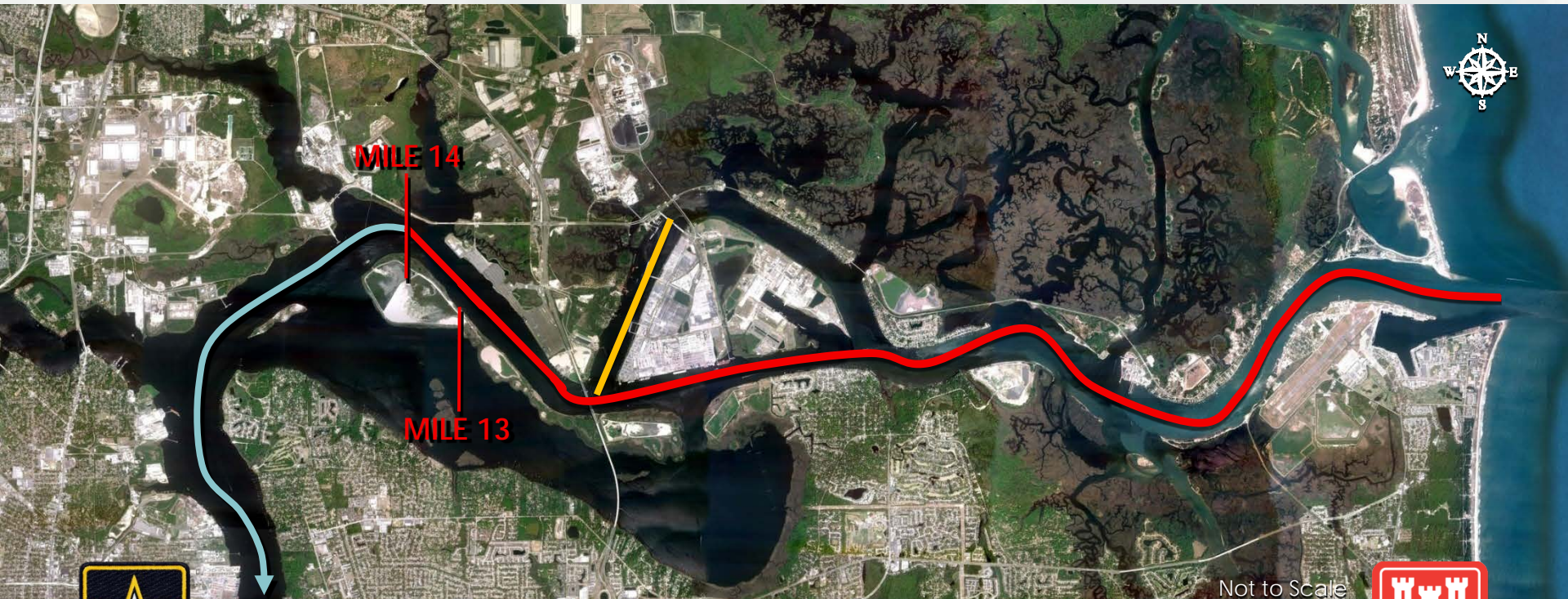
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ALTERNATIVES CONSIDERED

Segment 1: Entrance Channel to River Mile 14
(Reduced to approximately River Mile 13)


Segment 2: River Mile 14 to 20 (eliminated)


Segment 3: West Blount Island Channel (eliminated)




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AUTHORIZED PROJECT

 **DEEPENING:**
Entrance Channel to ~ River Mile 13
from existing 40-foot depth to 47 feet

 **WIDENING:**
Areas 1 and 2: ~ 100 to 300 feet

 **NEW TURNING BASINS:**
Blount Island: ~ 2700' long by 1500' wide
Basin Brills Cut: ~ 2500' long by 1500' wide



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AUTHORIZED PROJECT 47 FEET

SUMMARY OF PROJECT COST

(FY14 Discount Rate 3.5% and October 2013 Price Level)

Total Cost: \$ 684,200,000

■ Federal Share: \$ 312,700,000

■ Non-federal Share: \$ 371,500,000



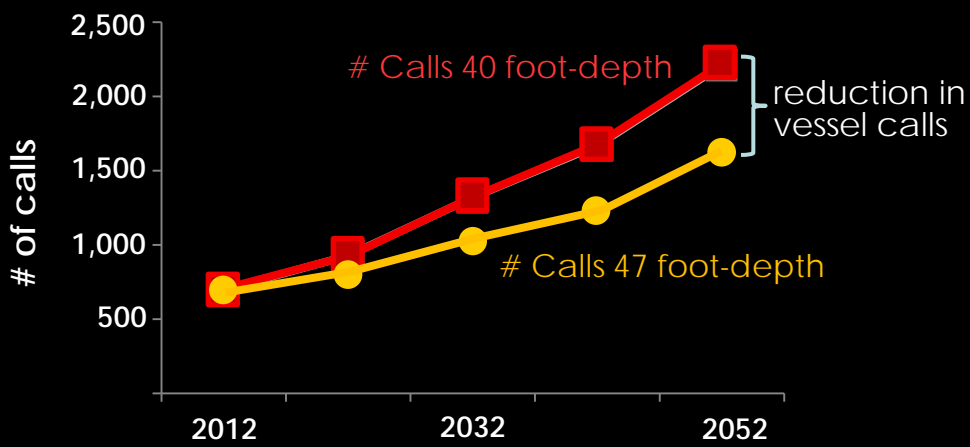
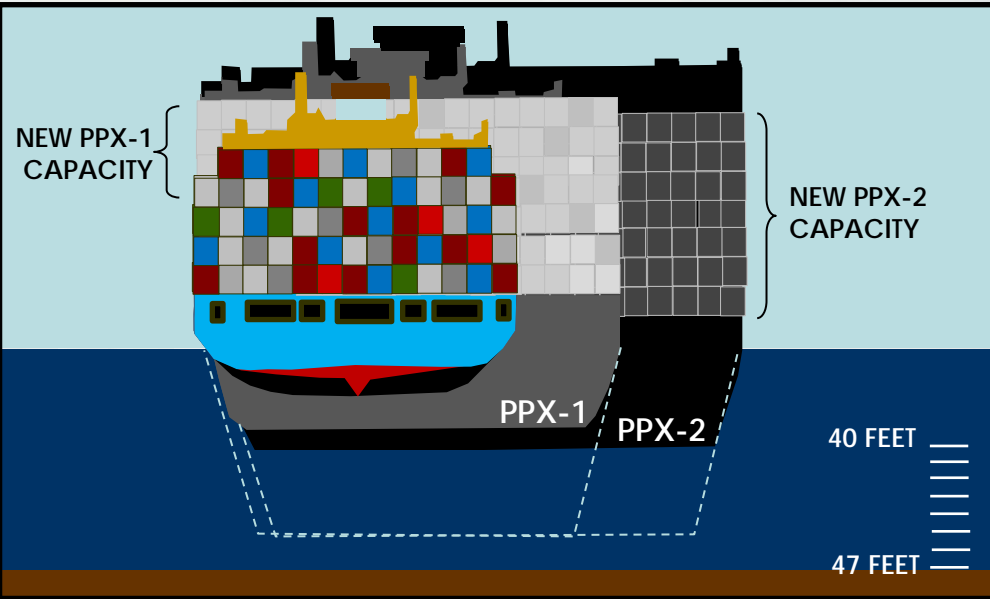
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AUTHORIZED PROJECT ECONOMIC SUMMARY

Federal Benefit to Cost Ratio 2.7



CONCEPTUAL RENDERING:
ADDITIONAL TEU CAPACITY
AT 47-FOOT DEPTH



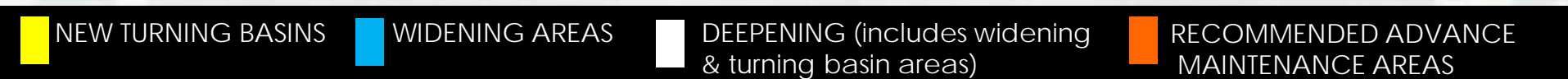
TRANSPORTATION SAVINGS PER TEU BY TRADE ROUTE			
	40'	47'	SAVINGS
PANAMA / SUEZ	\$1,104.75	\$965.70	\$139.05
EUROPE	\$386.75	\$319.53	\$67.22
SOUTH AMERICA	\$532.86	\$516.30	\$16.56

AUTHORIZED PROJECT ENGINEERING SUMMARY

Dredging Quantities: ~18 million cubic yards of material to new ODMDS

Blasting: Probable (depends on selected contractor's dredging equipment)

Advanced Maintenance: Strategically located to maintain existing level of service (same annual dredging frequency as existing conditions)



AUTHORIZED PROJECT ENVIRONMENTAL SUMMARY



SUMMARY OF SALINITY AND WATER LEVEL IMPACTS



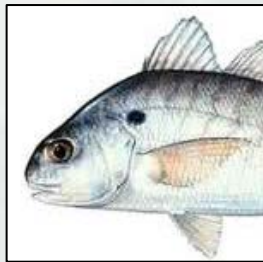
EELGRASS

- 1%-3% increase in salinity stress frequency between Acosta and Buckman Bridges
- No beds would disappear because of the deepening



WETLANDS

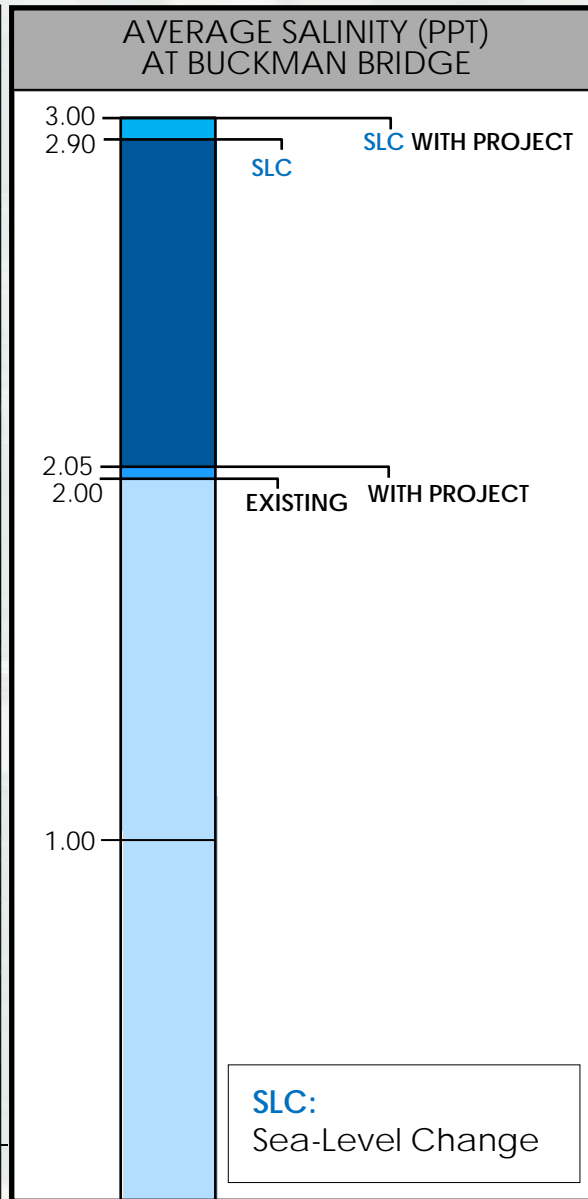
- Due to minor changes in salinity, wetlands would not disappear or significantly change due to deepening
- Deepening may contribute in a small way to ongoing changes in plant composition and soil subsidence
- Proposed deepening would not cause changes in water level that would affect salt marsh or other wetlands



FISH AND MACROINVERTEBRATES

- 0-8% change in salinity-based habitat for some fish and shrimp

AUTHORIZED PROJECT AND SEA-LEVEL CHANGE



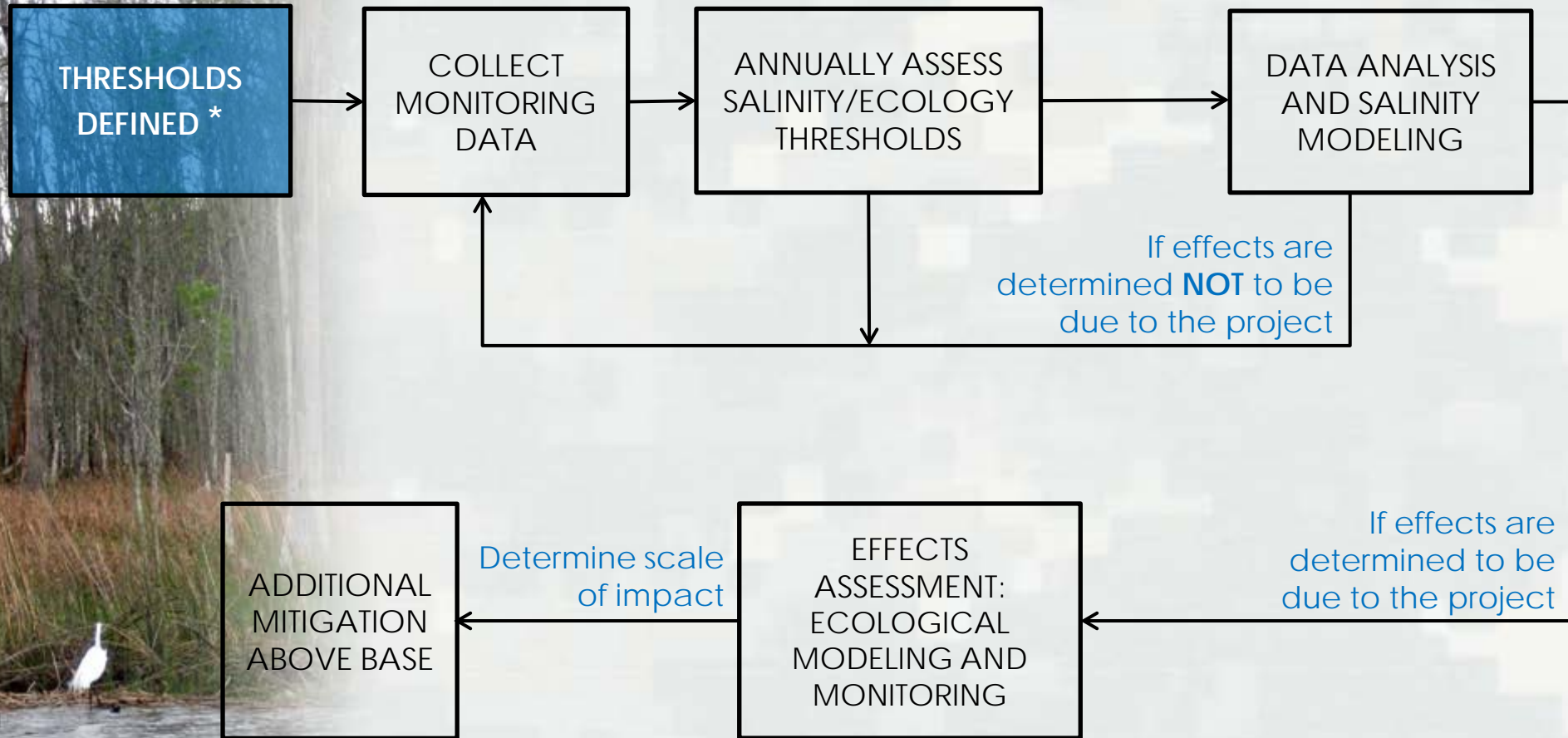
- Used current guidance (EC 1165-2-212)
- Results of analysis for the 50-year period, 2018-2068:
 - Low: 0.39 feet
 - Intermediate: 0.87 feet
 - High: 2.4 feet
- Conclusion for navigation:
 - Based on these sea-level rise projections and elevations of current and planned port facilities, no impacts on navigation and minor impacts on port facilities
- Conclusion for salinity impacts:
 - Majority of salinity changes will occur due to sea-level change; only minor impacts attributable to the project

ENVIRONMENTAL MONITORING

- Address uncertainty of the models
- Inform agencies and public on monitoring data
- Monitoring would include water quality, wetlands, eelgrass, and fisheries



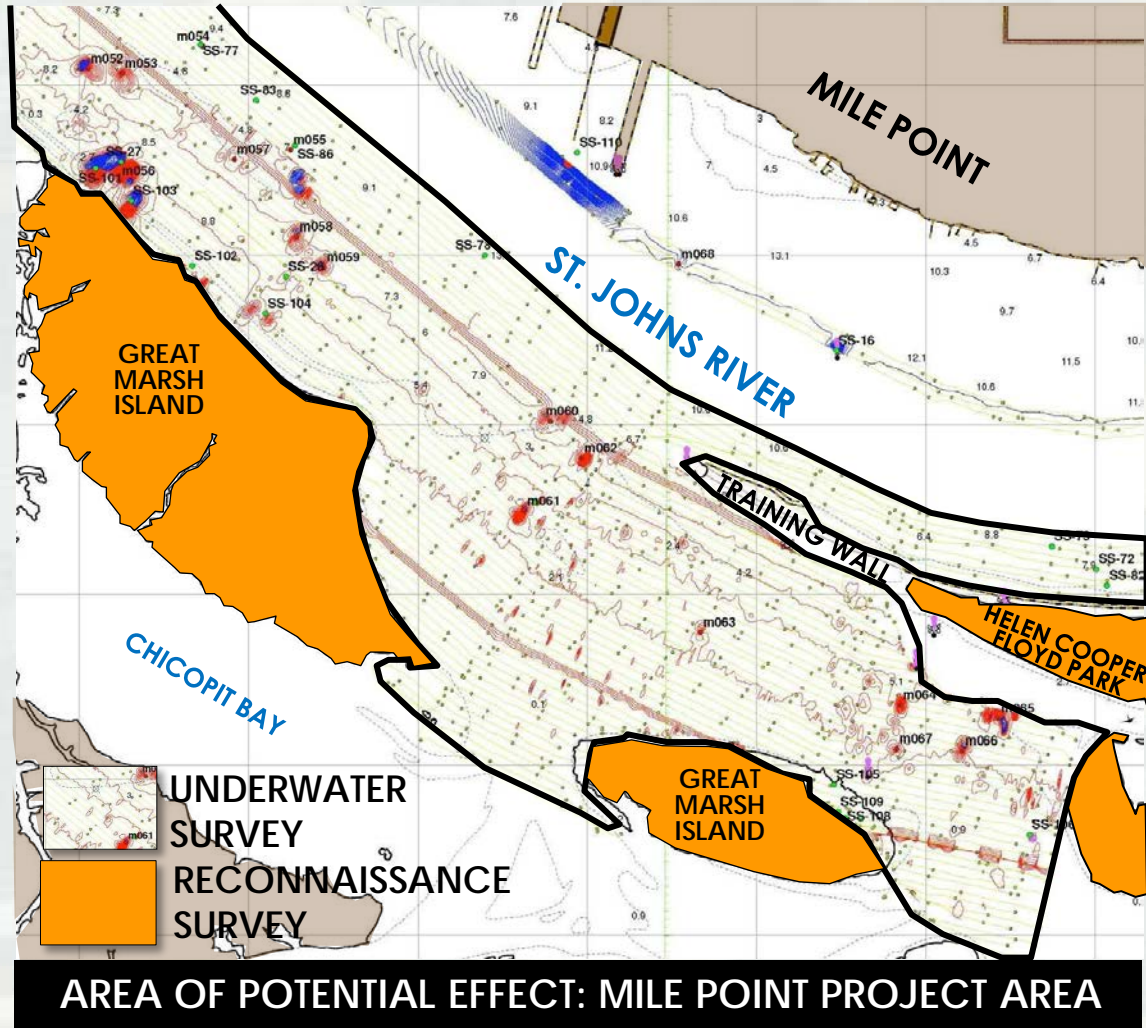
CORRECTIVE ACTION PLAN



* Draft thresholds identified during feasibility phase; thresholds are updated and finalized during Preconstruction Engineering and Design (PED)

CULTURAL RESOURCES SUMMARY

- Conducted underwater cultural resources surveys from River Miles 0 to 13, and in the Mile Point project area
- Completed reconnaissance surveys of the islands at Mile Point
- Both the Deepening and the Mile Point Projects are compliant with Section 106 of the National Historic Preservation Act of 1966
- Coordination with the Florida State Historic Preservation Officer (SHPO) and appropriate federally recognized Tribes has been completed
- Based on these surveys, the proposed projects will not adversely affect cultural resources



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PUBLIC/AGENCY INVOLVEMENT

Public Outreach

- Public Coordination initiated in 2007
- Public Meetings
 - 6 Public Meetings or Workshops
 - Bi-Monthly Teleconferences

Agency Coordination

- Cooperating Agency Letters: 2011
- Meetings on Ecological Modeling: March and October 2012
- Monthly Teleconferences
- Endangered Species Act (ESA) coordination with U.S. Fish and Wildlife Service (November 2013) and National Marine Fisheries Service (February 2014)
- Magnuson-Stevens Fishery Conservation and Management Act (EFH) coordination with National Marine Fisheries Service (January 2014)



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PROJECT IMPLEMENTATION

(Key Dates)

Feasibility Phase:

- Chief of Engineers Report: April 16, 2014
- Authorized in Water Resources Reform and Development Act (WRRDA): June 2014

Preconstruction Engineering and Design (PED) Phase:

- June 2014 – September 2015

Construction Phase:

- Subject to Appropriations: 2016 – 2022



EXTENSIVE REVIEWS

- May 2013: Draft Legal Certification
- May 2013 – October 2013: Draft Agency and Public Review
- July 2013 Draft Report Reviews: Agency Technical Review/HQ Policy Review/Independent External Peer Review
- 2013 Cost Certification/Value Engineering Analysis:
- February 2014 Final Agency Technical Review and Legal Certification
- January 2014: Agency Approval for Use of Ecological Models
- February 2014: Final State and Agency Review and National Environmental Policy Act (NEPA) Review



SUMMARY OF INDEPENDENT EXTERNAL PEER REVIEW (IEPR) FINDINGS

- Panel Members: 5 Technical Experts
 - Hydraulic Engineering
 - Geotechnical Engineering
 - Economics
 - Environmental
 - Plan Formulation
- Comments: 13 Final Panel Comments
- The Panel concurred with all Project Team responses to the Final Panel Comments
- The Final IEPR report is available at www.saj.usace.army.mil



CONCLUSIONS

- Final authorized report is legally and technically sound
- Extensive coordination will continue throughout the life of the project
- For more information visit www.saj.usace.army.mil



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