

# AGENDA

## JACKSONVILLE HARBOR DUVAL COUNTY, FLORIDA

### CIVIL WORKS REVIEW BOARD 25 February 2014



0900	Welcome & Introductions	MG John Peabody <i>CWRB Chair and Deputy Commanding General for Civil and Emergency Operations</i>
0910	Division Opening Remarks	BG Donald (Ed) Jackson, Jr. <i>Commander, South Atlantic Division</i>
0915	Project Briefing	COL Alan Dodd <i>District Commander, Jacksonville District</i>
0950	Sponsor Support	Mr. Brian Taylor <i>Chief Executive Officer, Jacksonville Port Authority</i> Mayor Alvin Brown
1000	Division Support	BG Donald (Ed) Jackson, Jr. <i>Commander, South Atlantic Division</i>
1010	Agency Technical Review	Mr. Todd Nettles <i>Technical Director, Deep Draft Navigation Planning Center of Expertise</i> Ms. Sheridan Willey (via phone) <i>Lead ATR Reviewer, Deep Draft Navigation Planning Center of Expertise</i>
1015	Independent External Peer Review	Ms. Karen Johnson-Young <i>IEPR Program Manager, Battelle Memorial Institute</i> Dr. William McAnally <i>Lead IEPR Panel Member, Hydraulic Engineering</i>
1025	Break (15 minutes)	MG John Peabody <i>CWRB Chair</i>
1040	Policy Review Assessment	Mr. Jeremy LaDart <i>Review Lead, Office of Water Project Review</i>
1050	Board Discussion <ul style="list-style-type: none"><li>• Member Questions</li><li>• Office of ASA(CW), OMB Questions</li></ul>	MG John Peabody <i>CWRB Chair</i>
1120	Action	Mr. Theodore Brown <i>Chief, Planning Community of Practice</i>
1125	Lessons Learned / After Action Report: <ul style="list-style-type: none"><li>• What was supposed to happen?</li><li>• What did happen?</li><li>• Why did it happen that way?</li><li>• How will we improve next time?</li></ul>	COL Alan Dodd <i>District Commander, Jacksonville District</i>
1130	Lessons Learned	SAD, OWPR, Sponsor, Others
1135	Close	MG John Peabody <i>CWRB Chair</i>

# JACKSONVILLE HARBOR GRRRII

Civil Works Review Board (CWRB)

Duval County, Florida

Integrated General Reevaluation Report II and  
Supplemental Environmental  
Impact Statement

Presented by:  
Colonel Alan Dodd  
Jacksonville District

25 February 2014



# 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.
- DOD 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

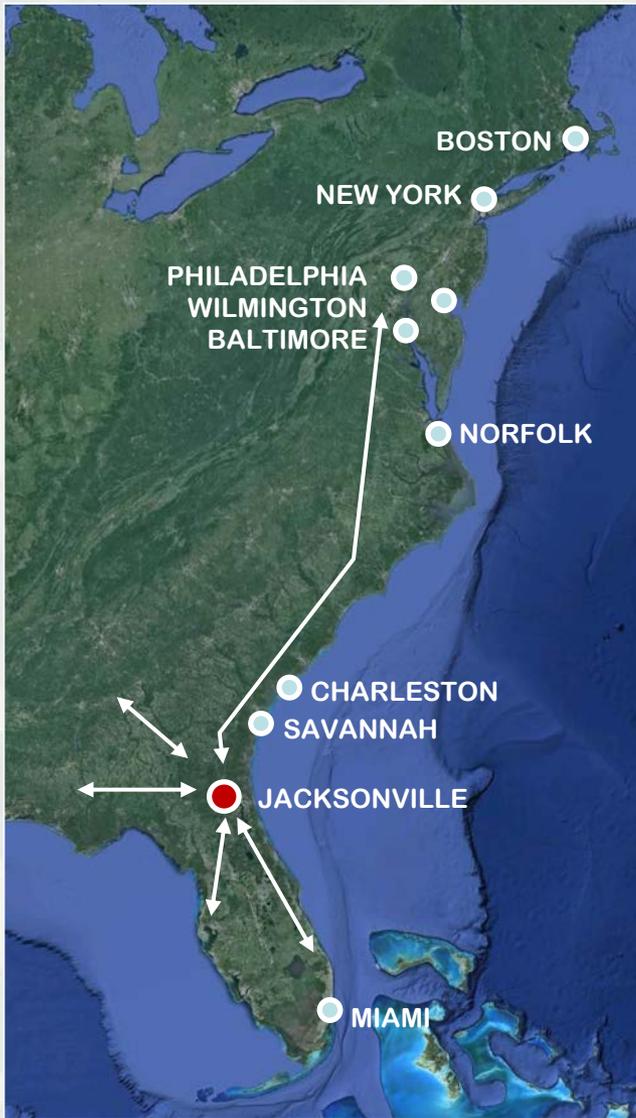
- Access to nationwide transportation:
  - Rail: CSX, Norfolk Southern, Florida East Coast
  - Interstates: I-10, I-75, I-95
- Port pro-active in infrastructure development (recent USDOT grant for intermodal transfer station)

### 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 (832<sup>nd</sup> Transportation Battalion)



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# JACKSONVILLE HARBOR

PROBLEMS



- Inadequate Depths and Widths
- Navigation Restrictions



- Vessel light-loading
- More frequent trips

OPPORTUNITIES

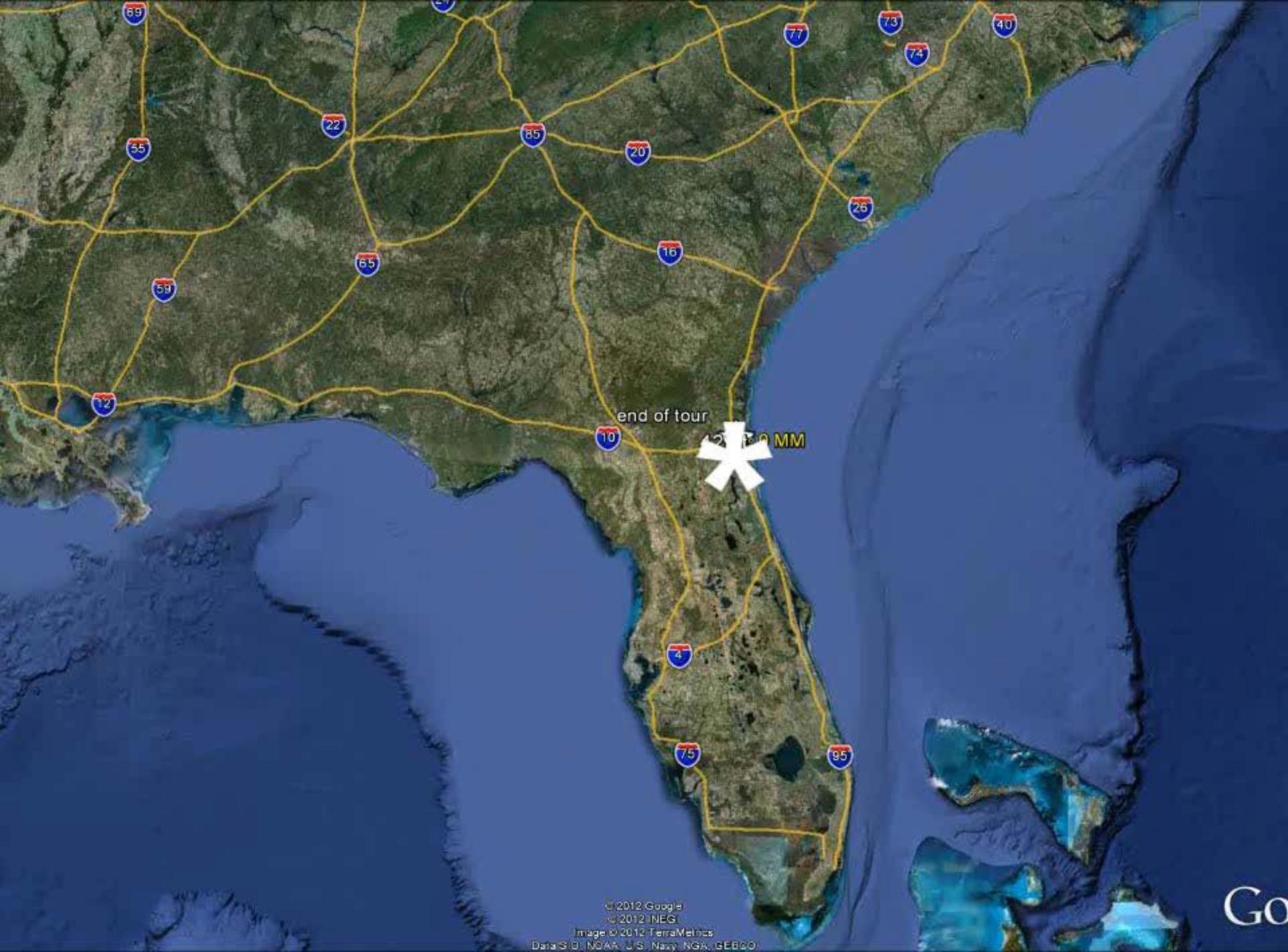


- Forecasted volume of goods on fewer, larger ships



- Reduce transportation costs





end of tour

2,100 MM

# JACKSONVILLE HARBOR LEGISLATIVE AUTHORITY

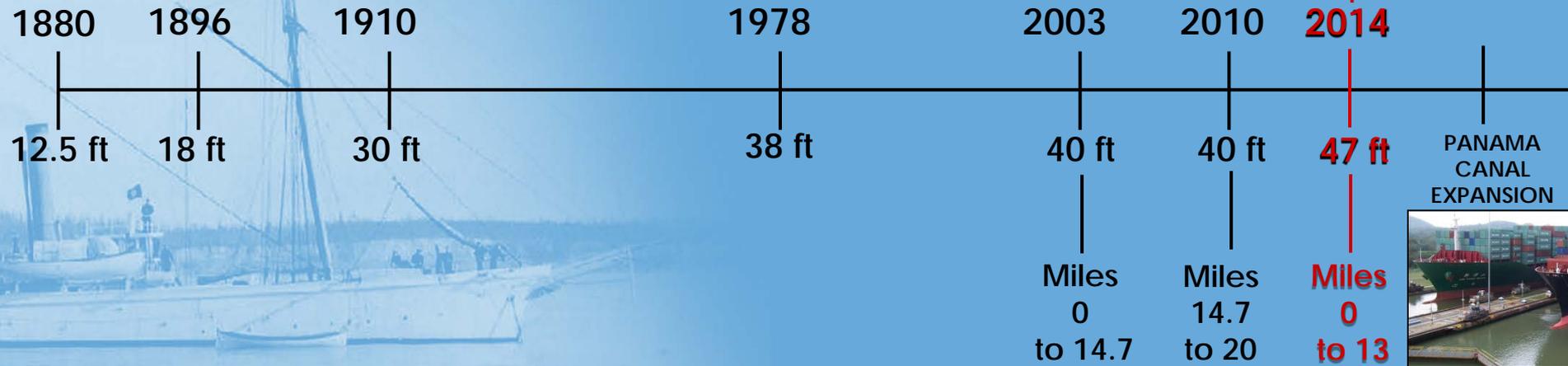
**Authorization:** Resolution from the Committee on Public Works and Transportation, United States House of Representatives, dated February 5, 1992:

"...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 PORT AUTHORITY

Brian Taylor  
Chief Executive Officer

# THE DECISION TO DELIVER 47 FEET

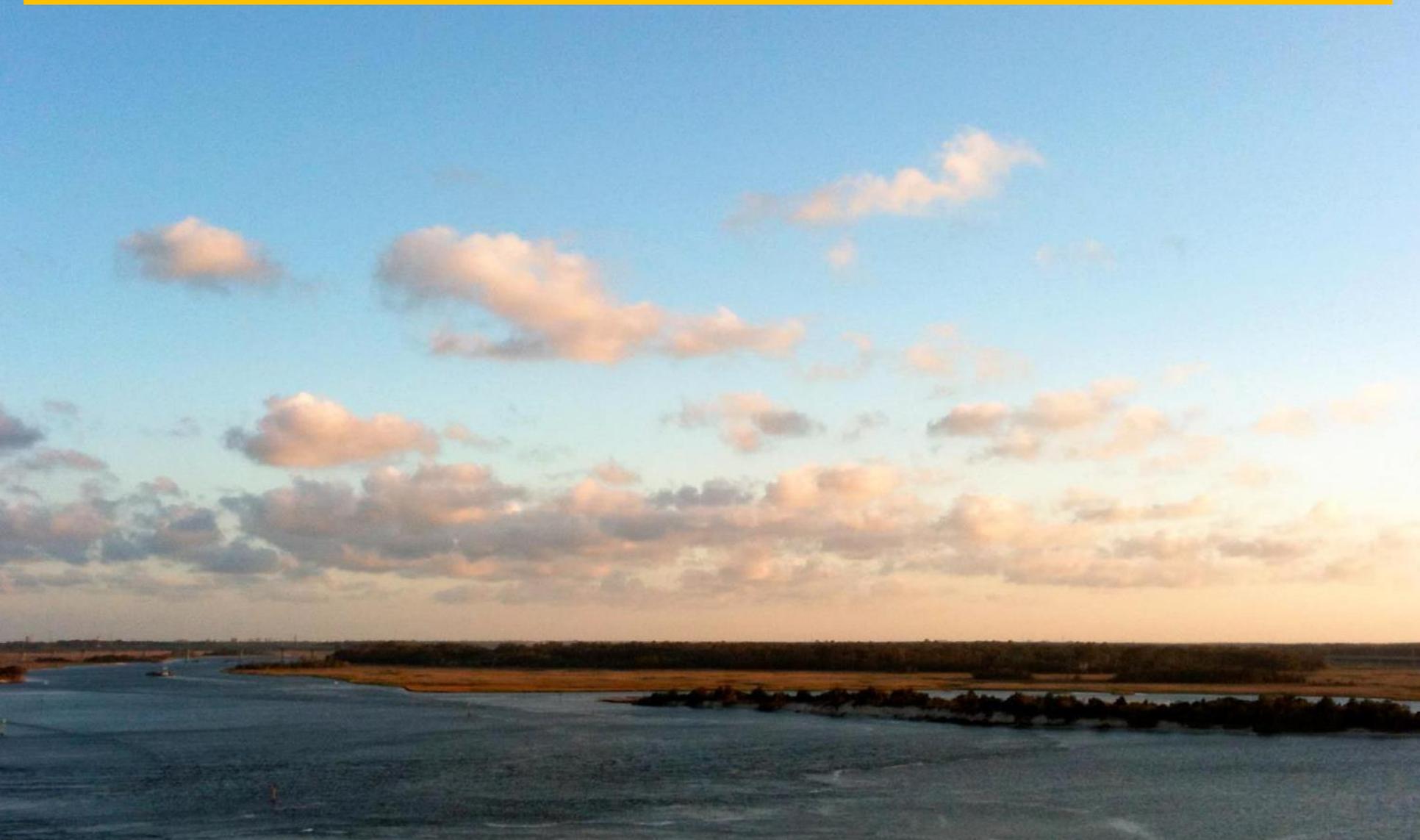


# “WE CAN’T WAIT”



“We’ve got to create more jobs today doing what you’re doing right here at JAXPORT, and that’s building this country’s future.”

# MILE POINT



# LEVERAGING INVESTMENTS



# ECONOMIC BENEFITS



# ENVIRONMENT



# COMMUNITY INVOLVEMENT



# POLITICAL SUPPORT



## **Congresswoman Corrine Brown:**

“I will not let Jacksonville be on the losing end.”

## **Congressman Ander Crenshaw:**

“Deepening the St. Johns River means more jobs, more trade and more economic growth for the region; that’s why my support for this project is stronger than ever.”

## **Florida Governor Rick Scott:**

“My top priority as Governor is job creation. Florida’s ports are critical to providing jobs for Florida families.”



## **Jacksonville Mayor Alvin Brown:**

“My administration is working to help lead our efforts with members of Congress, state leaders and national officials to elevate JAXPORT to its full potential and create jobs and investment in Jacksonville.”

# HARBOR DEEPENING ROI



DAMES POINT

BLOUNT ISLAND

ICTF

TRAPAC

**13,844**

JOBS

**1.95 MILLION**

TEUS: TWENTY-FOOT EQUIVALENT UNITS

**\$1 INVESTED = \$14.80**

RETURNED TO THE ECONOMY

# ECONOMICS

- Annual Tonnage: 15 million
- Annual Containers: 900,000 (12<sup>th</sup> 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
- 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



Problems  
Opportunities

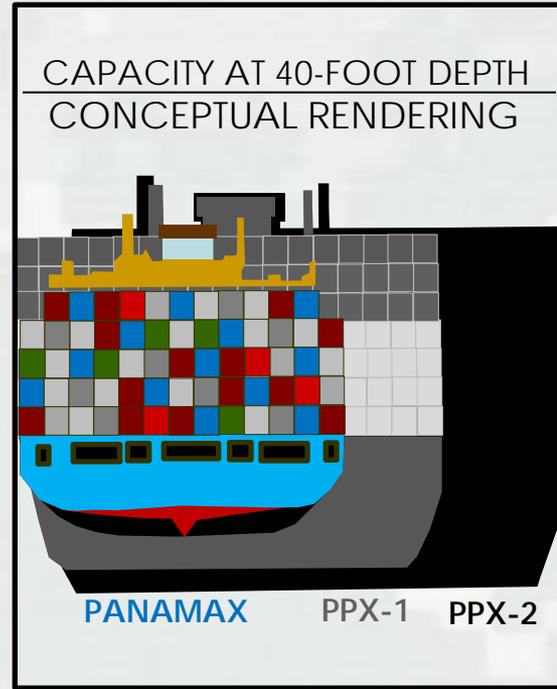
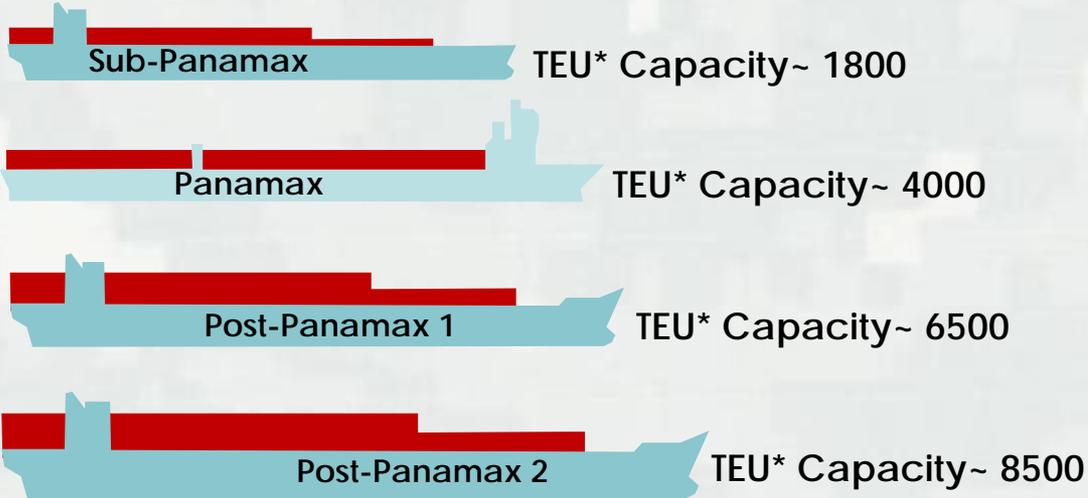
Existing  
Conditions

Future  
Without-Project

Objectives  
Constraints

Plan  
Formulation

Recommended  
Plan



\* Intermodal Shipping Container Measured as a Twenty-foot Equivalent Unit (TEU)

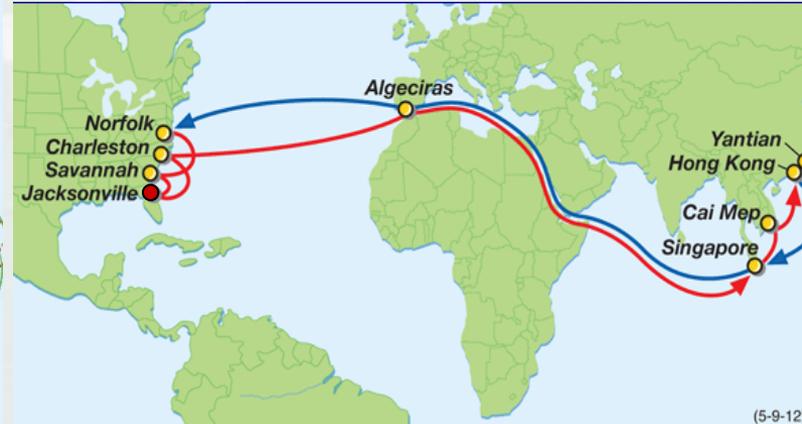
### PANAMA CANAL



### SOUTH AMERICA



### SUEZ CANAL



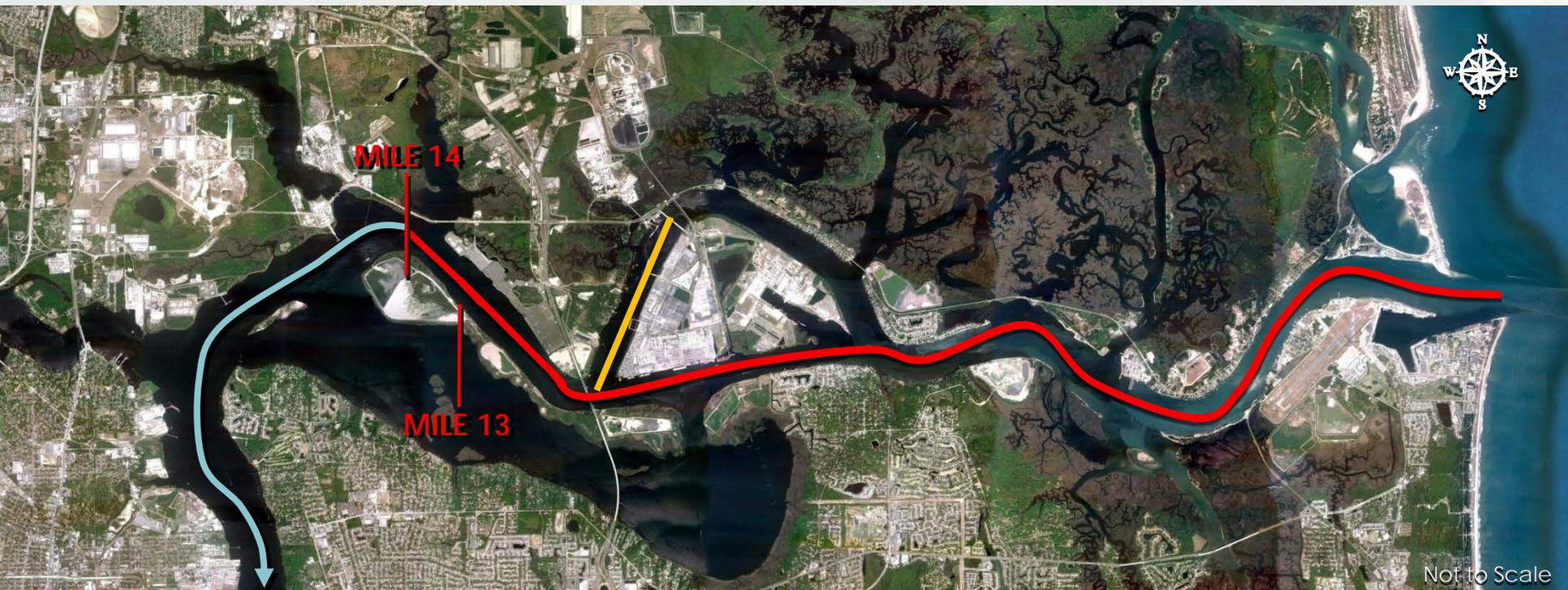
# Objectives:

- **Federal Objective:** Increases in net value of national output of goods and services
- **Project Objective:** Reduce navigation transportation costs and develop an alternative that is environmentally sustainable



# ALTERNATIVES CONSIDERED

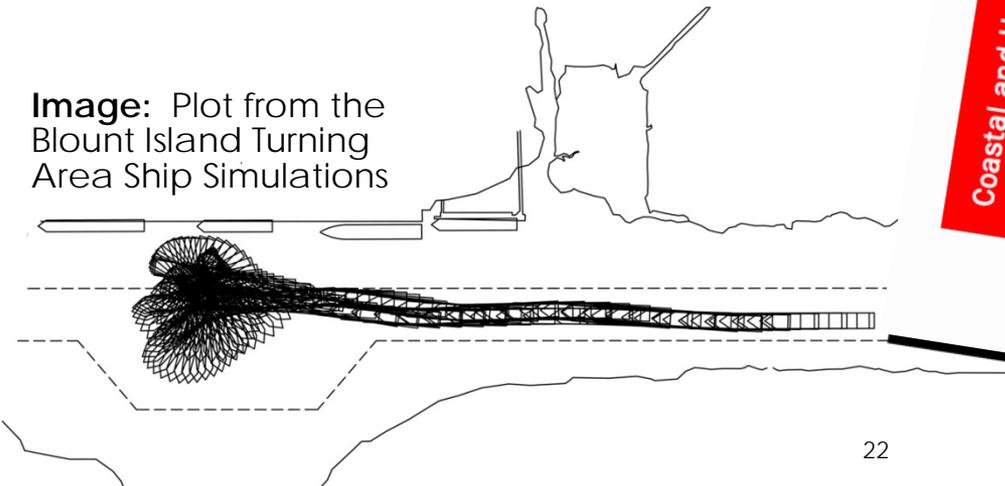
- Segment 1:** Entrance Channel to River Mile 14  
(Reduced to approximately River Mile 13)
- Segment 2:** River Mile 14 to 20 (eliminated)
- Segment 3:** West Blount Island Channel (eliminated)



# WIDENING AND SHIP SIMULATION

- Ship simulation: Defined Widening footprint
- Incremental Analysis: Widening increments evaluated independently and with deepening
- Turning basins: Included with widening measures due to their interdependencies

Image: Plot from the Blount Island Turning Area Ship Simulations



Coastal and Hydraulics  
Laboratory

ERDC/CHL



US Army Corps  
of Engineers®  
Engineer Research and  
Development Center

## NAVIGATION STUDY FOR SAINT JOHNS RIVER GRR-2 IMPROVEMENT PROJECT DATA REPORT

Dennis W. Webb, Phil Sylvester, Laurel Reichold, Steve  
Conger



# ECONOMIC ANALYSIS

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

Depth	\$Million Average Annual Equivalent			BCR
	Costs*	Benefits	Net Benefits	
44 feet	\$23.3	\$66.7	\$43.4	2.9
<b>45 feet (NED)</b>	<b>\$25.5</b>	<b>\$84.2</b>	<b>\$58.7</b>	<b>3.3</b>
46 feet	\$31.8	\$88.0	\$56.2	2.8
<b>47 feet (LPP)</b>	<b>\$33.7</b>	<b>\$89.7</b>	<b>\$56.0</b>	<b>2.7</b>

\*Costs include Interest During Construction (IDC) and O&M



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# RECOMMENDED PLAN

 **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



# RECOMMENDED PLAN (LPP) 47 FEET SUMMARY OF PROJECT COST

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

## NED Plan (45 feet)

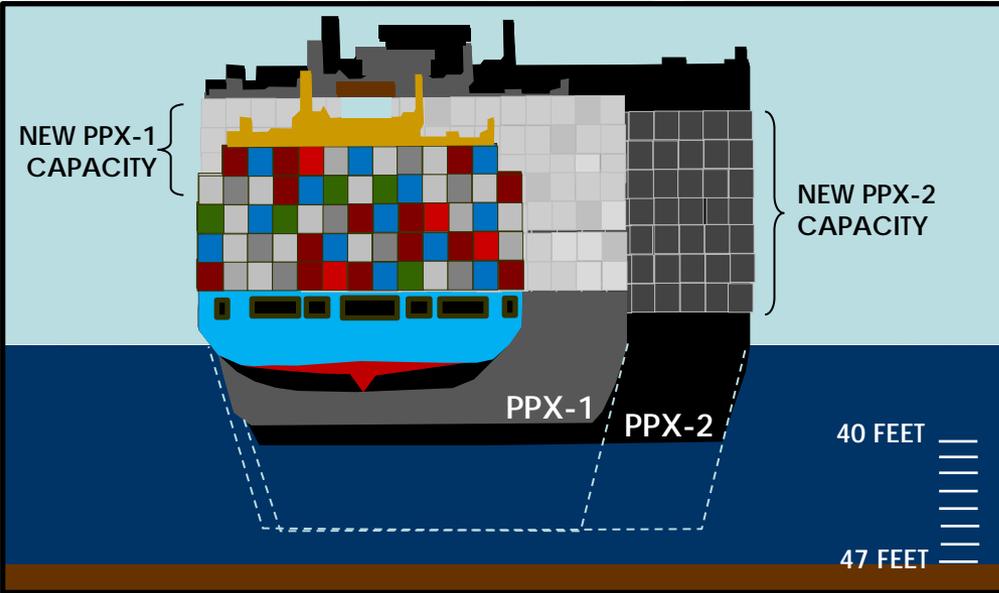
- GNF Cost: \$ 505,400,000
- First Cost (*902 Basis*): \$ 506,100,000
- Total Cost: \$ 508,500,000
- Federal Share: \$ 312,800,000
- Non-federal Share: \$ 195,700,000
- BCR: 3.3

## Recommended Plan (47 feet)

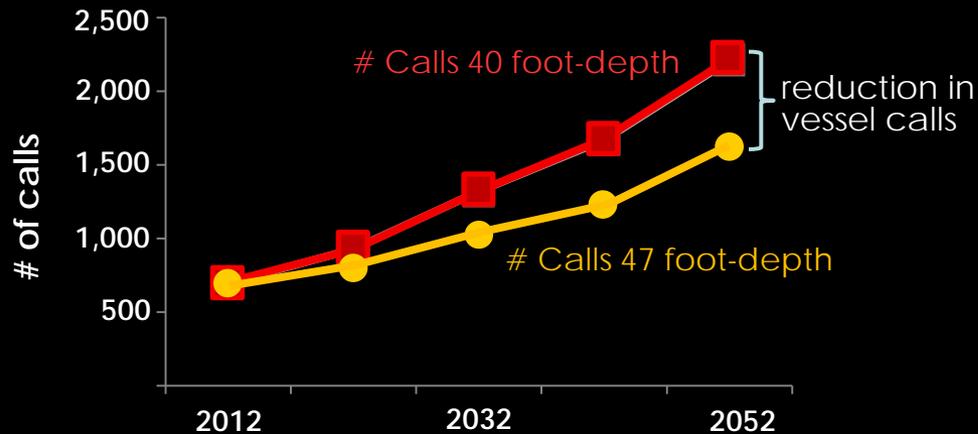
- GNF Cost: \$ 600,200,000
- First Cost (*902 Basis*): \$ 600,900,000
- Total Cost: \$ 684,200,000
- Federal Share: \$ 312,700,000
- Non-federal Share: \$ 371,500,000
- BCR: 2.7



# ECONOMICS



**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

# ENGINEERING

**Project Datums:** In compliance with current regulations  
(vertical: MLLW tied to NAVD 88; horizontal: NAD 83)

**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)

NEW TURNING BASINS

WIDENING AREAS

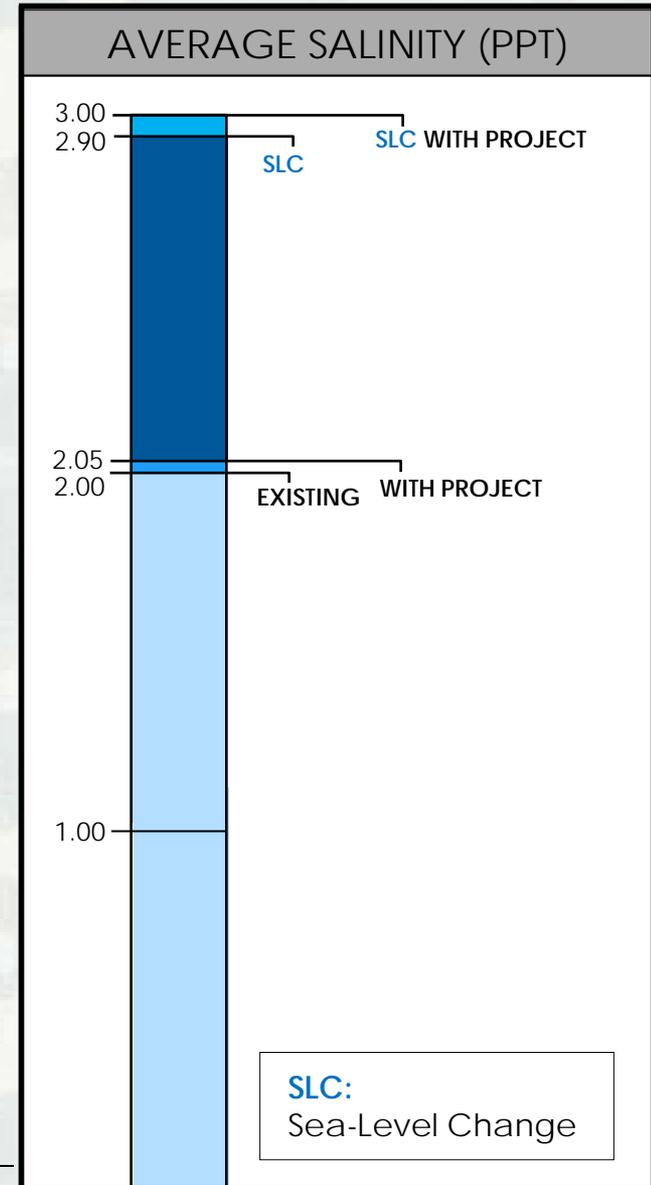
DEEPENING (includes widening & turning basin areas)

RECOMMENDED ADVANCE MAINTENANCE AREAS

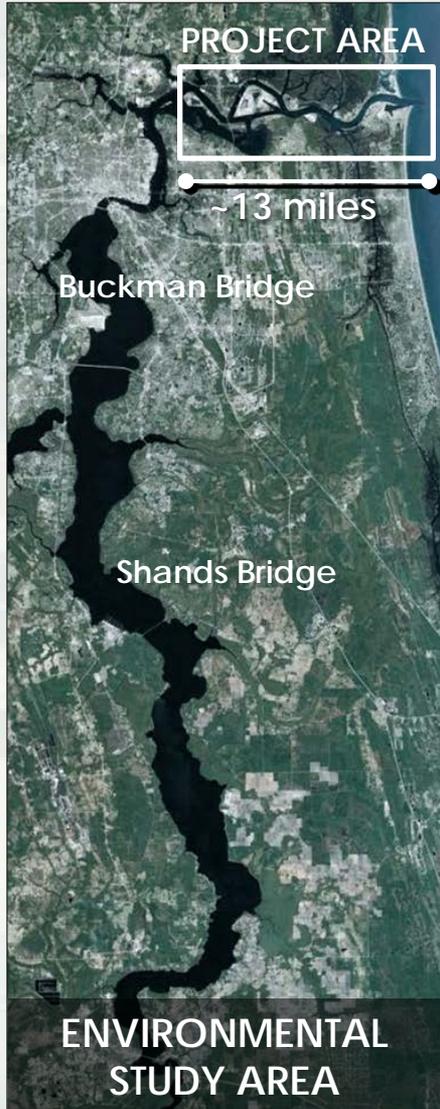


# SEA-LEVEL CHANGE

- 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 IMPACTS & MITIGATION



## MINOR INCREASES IN SALINITY:



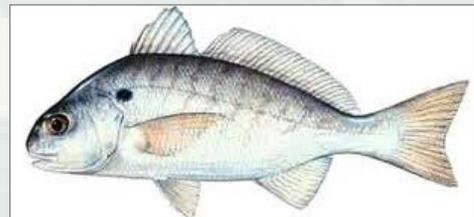
### Wetlands:

395 acres affected by minor increase in salinity stress



### Submerged Aquatic Vegetation (SAV):

180 acres affected by minor increase in salinity stress



### Fish Distribution:

<5% change (minor impact to species distribution)

## MITIGATION

- 638 acres of Conservation Lands
- Monitoring



# ENVIRONMENTAL COMPLIANCE



SEIS prepared and coordinated



Endangered Species Act Coordination (USFWS)



Endangered Species Act Coordination (NMFS)



Essential Fish Habitat Coordination (NMFS)



Cultural Resources Coordination



Coastal Zone Consistency



# PUBLIC/AGENCY INVOLVEMENT

## Scoping

- Scoping letters issued, 2007
- Notice of Intent (NOI) to prepare a Draft Supplemental Environmental Impact Statement (DSEIS) published in Federal Register, 2007
- Public Meetings
  - ▶ 6 Public Meetings or Workshops
  - ▶ Bi-Monthly Teleconferences

## Agency Coordination

- Feasibility Scoping Meeting held February 7, 2008
- Cooperating Agency Letters: 2011
- Meetings on Ecological Modeling: March and October 2012
- Monthly Teleconferences
- Endangered Species Act (ESA) coordination with USFWS (November 2013) and NMFS (February 2014)
- Magnuson-Stevens Fishery Conservation and Management Act (EFH) coordination with NMFS (January 2014)



# ENVIRONMENTAL OPERATING PRINCIPLES



Foster sustainability



Proactive consideration of environmental consequences



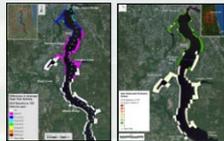
Mutually supporting economic and environmentally sustainable solutions



Accountability for activities which may impact human and natural environments



Collaborative leveraging of scientific, economic, and social knowledge to understand environmental context



Consideration of environment and risk management in context of project and program lifecycle



Open, transparent process respecting views of individuals and groups interested in Corps activities



# RECOMMENDED NATIONAL PRIORITIES



Reduce deficit



Create jobs/restore economy



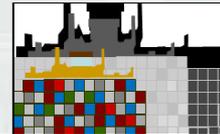
Improve resiliency and safety



Preserve and protect the environment



Maintain global competitiveness



Increase energy independence



Improve quality of life



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# REVIEWS

- FSM Guidance Memorandum: February 2008
- Tentatively Selected Plan (TSP) Milestone Meeting: May 2013
- LPP ASA(CW) Approval: May 2013
- Draft Report DQC/Legal Certification: May 2013
- Draft Report ATR/HQ Policy Review/IEPR: July 2013
- Cost Certification/Value Engineering Analysis: 2013
- Final ATR/DQC/Legal Certification: February 2014
- ECO-PCX and HQ Approval for Use of Ecological Models: January 2014
- DE Transmittal Notice: February 2014



# RISK MANAGEMENT

## STUDY PHASE

- The Walla Walla MCX completed a CSRA and determined that a 26% contingency should be included
- State of the art modeling performed to evaluate potential impacts
- Project impacts evaluated independently and in combination with future water withdrawal and sea level rise
- VE Study, DQC, ATR and IEPR completed with improvements incorporated

## CONSTRUCTION PHASE

- Risk register and risk management plan are living documents
- PED activities will include data collection, VE, and Industry Days
- Implement Lessons Learned from previous deepening contracts
- Best acquisition strategies developed to minimize costs and increase quality (eg., structure, scope and number of contracts)
- Plans & Specifications for all contracts will undergo DQC, ATR, and BCOE reviews



# PROJECT IMPLEMENTATION

## (Key Dates)

### Feasibility Phase:

- Chief of Engineers Report: April 2014
- OMB Review: May – August 2014
- ASA Process Report and Transmittal to Congress: September 2014

### Preconstruction Engineering and Design (PED) Phase:

- Contributed Funds from JAXPORT: June 2014 – September 2015

### Construction Phase:

- Subject to Authorization and Appropriations: 2016 – 2022



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# CONCLUSIONS

## We Can't Wait Project

- Selected in 2012 for the President's "We Can't Wait" Initiative reducing the study schedule by 14 months

## National Infrastructure Improvements

- Recommended Plan: Deepen 7 feet from 40 to 47 feet
- Direct return on investment (BCR 2.7)

## Economic benefit

- Project Cost at FY14 price levels yields \$56M in net annual benefits

## Comprehensive mitigation plan:

- Includes 638 acres of conservation land purchase
- Coordinated extensively with stakeholders

## Project Support

- Study support and participation by Local community, state, and Federal agencies
- Committed stakeholders and non-federal sponsor (JAXPORT)



# CLOSING COMMENTS



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# SAD Division Commander

**BLUF:** Approve final report, release State/Agency review, complete Chief's Report, and submit for authorization.

## Strategic Value:

- Recognized by President Obama as a Nationally Significant Infrastructure Project through a "We Can't Wait" Initiative designation.
- Leading US port in the export of automobiles.
- Federal Investment of \$312.7 million returns over \$56 million in Average annual net benefits.
- Economic benefit (BCR 2.7)... fewer large ships reduce transportation costs that are key to economic growth for the region and nation.
- Jacksonville Harbor complements other large regional container ports.
- Project benefits from Panama Canal Expansion along with other East Cost ports; Port is a link along U.S. East Coast network of ports...study received extensive support and participation by local community, state, and Federal agencies.

## Feasibility Report is legally and policy compliant:

- ATR conducted by DDNPCX, all comments resolved, and ATR certified
- IEPR completed. Limited use of Engineering dynamic model clarified, request for additional modeling acknowledged. Corps vertical team determined manner in which Corps used model acceptable for analysis.
- Cost DX certified/VE completed/HarborSym used for Economic modeling / Environmental UMAM Model Certified for use.

## Quality Assurance:

- Continuous involvement in development of economic methodologies throughout Feasibility Study.



**A team effort.....** thanks to the entire team (internal/external, horizontal/vertical)



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# Agency Technical Review Review Verifications

- ATR of Draft Report completed 28 June 2013.
- ATR of the Final Report completed 31 January 2014.
- All comments closed and no outstanding issues.

ATR Lead: Ms. Sheridan Willey, Galveston District

ATR Team Members:

Barbara Blumeris, CENAE -Plan Form

Richard Hurst, CEMVM -Costs

James Neubauer, CENWW –Costs

Lekesha Reynolds, CESAM -Env

Ben Lackey, CESAW -Geotech

Michael Wutkowski, CESAW-H&H,

Matthew Napolitano, CEMVN-Econ

Eugene Cover, CESWD-Real Estate



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# National Deep Draft PCX – Review Verifications

- ✓ Economic Analysis conducted thru DDNPCX
- ✓ Draft Agency Technical Review – 28 June 13
- ✓ Independent External Peer Review – 8 Aug 13
- ✓ Final Agency Technical Review – 31 Jan 14
- ✓ Economic Model is Corps Certified HarborSym

Recommend Report Release



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# Independent External Peer Review

- IEPR Completed – 8 Aug 2013:
  - ▶ One “Non-concur” Comment (FPC # 5)
- “Concur” achieved for FPC # 5 - 12 Feb 2014
- Supplemental IEPR Certification - 14 Feb 2014
- All IEPR comments closed.



# Independent External Peer Review (IEPR) Jacksonville Harbor, FL Navigation Project Integrated General Reevaluation Report (GRR2) And Environmental Impact Statement (EIS)

Presented to the USACE CWRB on February 25, 2014

**Battelle**

Karen Johnson-Young, PMP  
*Program Manager*

Patricia Strayer, PE  
*Project Manager*



# IEPR - Panel and Schedule

Jacksonville Harbor Panel Members	Panel Discipline
William McAnally, P.E., Ph.D., D. CE., (Lead Panel Member)	Hydraulic Engineering
Paul LaRosa, P.E.	Geotechnical Engineering
Daniel Maher,	Economics
Jon Staiger, Ph.D.	Environmental
Dave Sanford	Plan Formulation

## Jacksonville Harbor IEPR was conducted in June/July 2013

- Panel Reviewed the December 2012 version of the documents
- Project documents were prepared as a Pilot Study/Pre-SMART Planning Process.

# IEPR - Results

Final IEPR Report submitted on July 12, 2013

## Results:

- 13 Final Panel Comments
  - 2 high significance
  - 7 medium significance
  - 4 low significance

Post-Final Panel Comments/Response Results documented on August 6, 2013

## Results:

- PDT Evaluator Responses to Final Panel Comments
  - 11 concurs
  - 2 non-concur
- Panel BackCheck Responses to the PDT Responses
  - 12 concurs
  - 1 non-concur

# IEPR – Results (continued)

Supplemental Comment/Response Results documented on  
February 12, 2014

## Original Results:

- PDT Evaluator Responses to Final Panel Comments
  - 11 concurs
  - 2 non-concur
- Panel BackCheck Responses to the PDT Responses
  - 12 concurs
  - 1 non-concur FPC #5

## Final Results:

- PDT Evaluator Responses to Final Panel Comments
  - 11 concurs
  - 2 non-concur
- Panel BackCheck Responses to the PDT Responses
  - 13 concurs (concur on FPC#5)

# IEPR - Notable Findings

- The adaptive hydraulics (ADH) sediment modeling results do not provide a reliable estimate of the annual sedimentation rates necessary to establish environmental effects and sediment management requirements.
- Federal interest has not been demonstrated in the General Reevaluation Report II (GRR2) because a multi-port analysis assessing competition among regional ports is not provided.
- The tentatively selected plan (TSP) assumes that the proposed construction of a training wall at the Mile Point area of the main navigation channel is included in the without-project condition, but the wall construction is neither authorized nor budgeted.
- The methods and assumptions used to develop the economic analysis are not sufficiently documented.
- Use of different salinity models for the main stem versus the tributary evaluations makes evaluating salinity effects very difficult.

# IEPR - Conclusions

Based on additional discussions between the Panel and the PDT, the PDT modified the language in Appendix A to state the following:

*"The ADH sediment transport model results were not used in any way to calculate the O&M volumes for the future project. These model results were only compared to the historical dredging calculations to see if results were similar. The results of the ADH had no impact on the recommended plan or overall total project cost. The ADH model is simply a reference tool mentioned in the report as a comparative analysis.*

*The only other use of the ADH sediment transport model results were to assist with identifying locations of advance maintenance areas, again not for quantities just simply for location of these areas."*

Therefore, the Panel concurred with all PDT Responses to the Final Panel Comments.

# HQUSACE REVIEW CONCERNS

## Civil Works Review Board

### Jacksonville Harbor Navigation Study Duval County, FL

Jeremy LaDart

Office of Water Project Review

Planning and Policy Division

Washington, DC – 25 February 2014



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US Army Corps of Engineers  
**PLANNING SMART**  
**BUILDING STRONG**®



# HQUSACE Team Reviews:

- FSM was held February 2008
- TSP Milestone was held May 2013
- Review of Draft Report completed July 2013
- Back check of remaining outstanding comments completed February 2014
- Final GRR/SEIS HQUSACE review completed



## Policy Issues from Draft & Final Report Reviews

- Economic Projections and Analyses
- Alternative Sensitivity Analyses
- HarborSym Modeling
- Locally Preferred Plan (LPP)**
- Environmental Compliance
- Real Estate Plan and Costs
- Plan Formulation and Screening of Measures
- Project Cost Sharing**
- Dredged Material Disposal Measures
- Habitat Mitigation Planning**
- Model Approvals and Certification
- Editorial (Terms, displays, grammatical errors, etc.)



# Locally Preferred Plan (LPP)

**CONCERN:** Prior to the TSP Milestone, the planning analysis indicated that the project optimized net NED benefits at -45FT MLLW. The local sponsor requested a project depth to be -47FT MLLW. This required an LPP Waiver.

**REASON:** For navigation projects, the Principles and Guidelines and the Planning Guidance Notebook (ER 1105-2-100) require deviations from the NED Plan that are greater in scope to be approved by the ASA(CW).

**RESOLUTION:** The ASA(CW) approved the LPP to -47FT MLLW in May of 2013.

**RESOLUTION IMPACT:** Concern Resolved.



# Project Cost Sharing

**CONCERN:** The draft GRR incorrectly included associated costs in the cost sharing calculations. Also, clarification was needed on the treatment of mitigation lands and the additional 10% of General Navigation Features (GNF) over time.

**REASON:** Cost sharing is applied to the GNF costs based on the project depth zones (WRDA 1986, as amended). Mitigation lands are cost shared similar to GNF and are not included in LERR costs which are credited toward the additional 10% of GNF over time. Cost shares presented for the recommended plan should reflect the initial values prior to the additional 10% of GNF over time.

**RESOLUTION:** The report was revised to reflect the initial cost shares and to correct cost sharing of items treated as GNF including mitigation lands.

**RESOLUTION IMPACT:** Concern Resolved.



# Habitat Mitigation Planning

**CONCERN:** The recommended plan included a level of monitoring that appeared inconsistent with the degree of risk and uncertainty associated with the probable success of the mitigation.

**REASON:** Monitoring is appropriate for all mitigation actions to insure that those actions have achieved the objective. ER 1105-2-100, App C-3, requires that the level of monitoring be consistent with the magnitude of the project and the degree of risk and uncertainty with the probable success of the mitigation.

**RESOLUTION:** The recommended plan includes cost sharing of justified habitat mitigation and monitoring commensurate with the impact assessment and consistent with the degree of risk and uncertainty with the probable success of the mitigation.

**RESOLUTION IMPACT:** Concern Resolved.



# **HQUSACE POLICY REVIEW TEAM RECOMMENDATION**

**Release the GRR and SEIS for State &  
Agency Review.**



# LESSONS LEARNED

- **Aggressive Schedule: “We Can’t Wait” Initiative Challenges**
  - Benefits of the Planning Charette
  - Moving Forward with Uncertainty
  - Public Perception
  - Agency Challenges
- **Agency Involvement: Start early particularly under an aggressive schedule**
- **Public workshops and meetings: Recommended even when not required by policy**

