

# **GDOT** Waterways Program

#### Savannah Harbor Expansion Project

Presented to Intermodal Committee
September 18, 2019





# Port of Savannah



- Fastest growing Port in the Country
- Major Growth
  - June 2014: Record 3M TEU's
  - June 2019: over 4.5M TEU's
- Problems associated with major growth:
  - Larger ships
  - Shallow channel





#### **Panama Canal Expansion**



- Panama Canal Expansion
   Opening: June 26, 2016
- The Chinese based container ship COSCO SHIPPING PANAMA makes the maiden voyage through the newly expanded Panama Canal ushering in a new era in Global Shipping



#### Panama Canal Expansion – ZIM Tianjin and MOL Benefactor





March 18, 2015

July 14, 2016



# Panama Canal Expansion - Cosco Development and the OOCL France





 May 11, 2017 – the Cosco Development

June 1, 2017 - the OOCL France



#### **CMA-CGM Theodore Roosevelt**





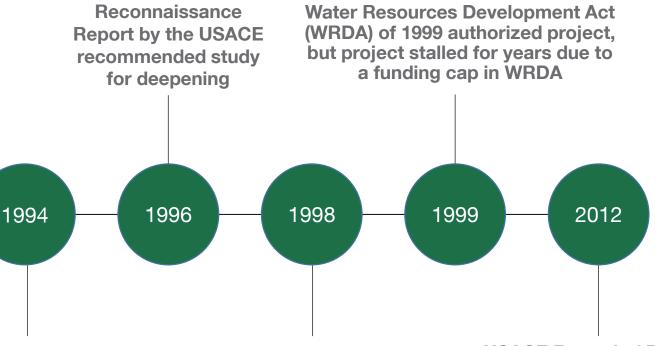
August 31, 2017

August 23, 2019



# Development of Savannah Harbor Expansion Project (SHEP)

**Timeline** 



Construction completed to deepen channel to its current depth of -42 ft. Immediately recognized that the channel would have to be deeper.

Feasibility Study and Environmental Impact Statement completed

USACE Record of Decision signed by Assistant Secretary of the Army



#### **Development of SHEP**





June 10, 2014 - President Obama Signs the Water Resources Reform Development Act (WRRDA) of 2014 Authorizing Construction of SHEP and Addressing the Funding Cap



October 8, 2014 - Signing of the Project Partnership Agreement (PPA) Enabling SHEP to proceed to Construction using non-Federal Funding



## The SHEP Partners and their Roles





**US Army Corps of Engineers** 



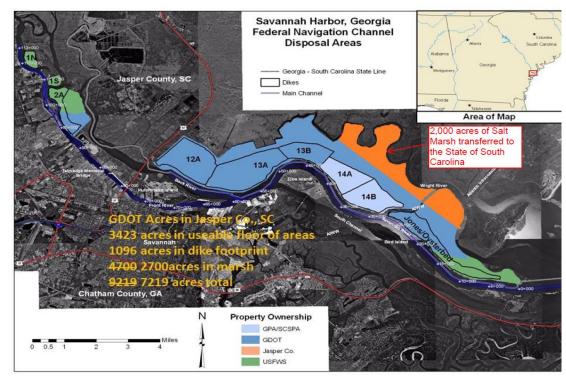




#### **GDOT's Role in SHEP**



- Partner with Georgia Ports
   Authority and US Army Corps
   of Engineers on SHEP
- GDOT is primarily responsible for providing lands, easements, rights of ways, and disposal areas for all SHEP features
- Provide technical assistance and plan review for construction projects





## **GDOT ROW Acquisitions to Date**

Total No. of Parcels	Total Acreage Acquired	Total Cost of Acquisitions to Date
29 Parcels	2,628 Acres	\$21.7 M

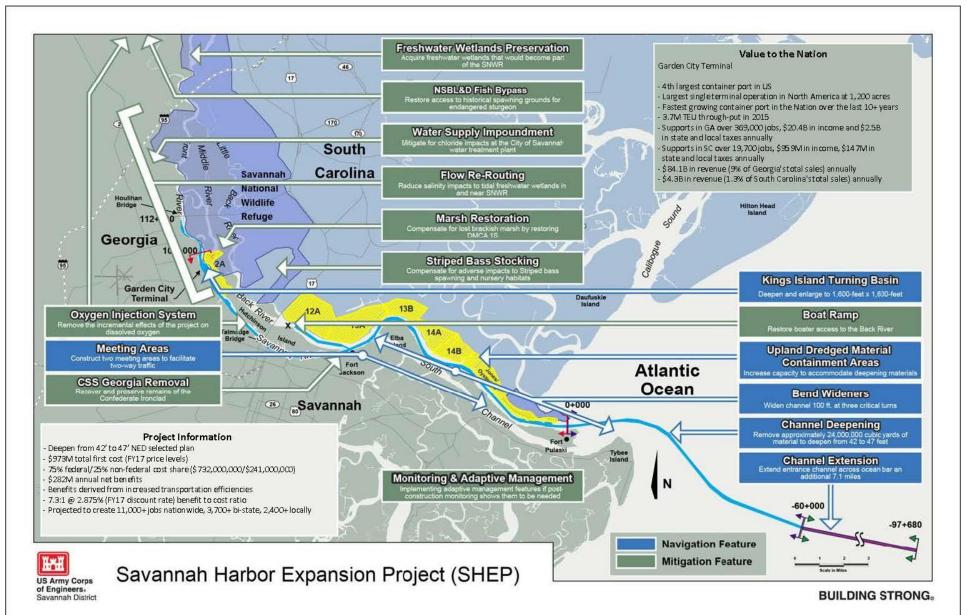
SHEP Feature	No. of Parcels	Acreage
Upper and Lower DO Sites	12 Parcels (Easements and Fee Simple)	56 Acres
Raw Water Storage Impoundment	4 Parcels (Easements and Fee Simple)	273 Acres
Sediment Basin - Tide Gate Removal	5 Parcels (Easements and Fee Simple)	6 Acres
Channel Wideners / Kings Island Turning Basin	6 Parcels (Easements and Fee Simple)	12 Acres
Freshwater Wetlands Preservation	2 Parcels – Transferred to USFWS Incorporated into the Savannah National Wildlife Refuge	2,281 Acres



# SHEP Facts and Figures (\$)

- Purpose: Deepen Savannah Harbor from 42' to 47'
- Benefit to Cost Ratio of 7.3 to 1
- \$282 M in annual net benefits from gained transportation efficiencies
- Estimated cost of Construction: \$973 M
- State of Georgia has committed: \$266 M
- Construction to be complete in 2022







# SHEP Features Completed or in Progress



Feature	Awarded	Cost	Begin Construction	Complete
CSS GA Recovery	Dial Cordy, PanAmerican	\$16.5M	January 2015	August 2017
Entrance Channel Dredging	Great Lakes Dredge & Dock	\$134M	September 2015	March 2018
Dissolved Oxygen Injection System	CDM Constructors, Inc.	\$103M	February 2016	97% Complete (Downriver Operational)
Raw Water Storage Impoundment	Thalle Const. Co.	\$40.3M	March 2016	June 2018
First Dike Raising	Herve Cody Const.	\$6.5M	May 2016	July 2017
Sediment Basin / Tide Gate Removal	De Moya / Continental Joint Venture	\$21.3M	November 2016	December 2017
Real Estate and Fresh Water Wetlands Acquisition	N/A	\$21.7M		Deed Transferred to USF&WS June 2017
Stripped Bass Stocking Payment	N/A	\$3M		January 2015
McCoy's Cut	Continental Heavy Civil Corp.	\$21.9M	July 2018	63%



#### Recovery of the CSS Georgia

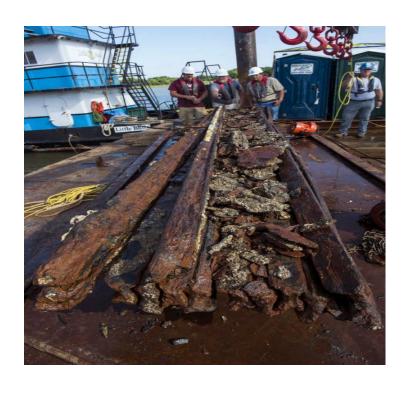
- 1st SHEP Project under Construction Recovery of the CSS Georgia
- Project Cost: \$16.5M
- Construction Began January 2015
- Recovery Complete August 2017
- A Kickoff Ceremony was held at Old Fort Jackson on January 25, 2015





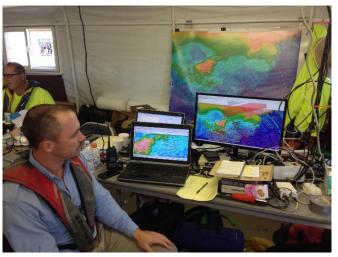


## Recovery of the CSS Georgia











## Recovery of the CSS Georgia













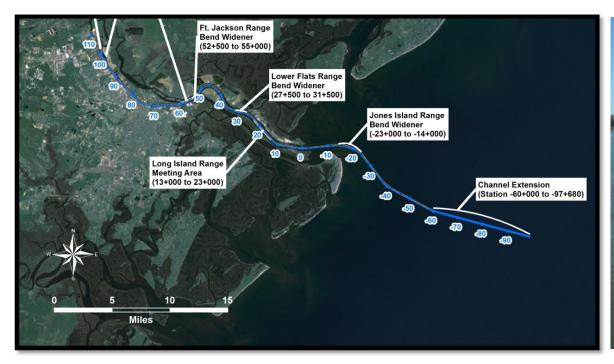




### **Entrance Channel Dredging**



- Contract Amount \$134M
- Construction Began September 2015
- Project Complete May 2018









### **Striped Bass Stocking**

- Cost \$3M
- Complete January 2015
- Mitigation feature consisted of a one time payment of \$3M to Ga DNR for the Striped Bass Stocking program





## **Dissolved Oxygen Injection System**

- Project Cost \$100.3M
- 99% Complete
- Downriver DO Site -Critical Path Feature of SHEP
- Must prove that it can generate 12,000 lbs. of oxygen before Inner Harbor Dredging can commence







# **Dissolved Oxygen Sites**





### Raw Water Storage Impoundment

- Project Cost \$40.3M
- Complete Turned over to the City of Savannah in June of 2018





#### Sediment Basin Pkg. 1, Removal of Tide Gate

- Project Cost \$21.3M
- Complete November 2016
- Remove Tide Gate from the Back River channel
- Remove existing banks to restore channel to original width







### **Area 14A Dike Raising**

- Project Cost \$6.5M
- Completed July 2017











### McCoy's Cut

- Project Cost \$21.9M
- 63% Complete

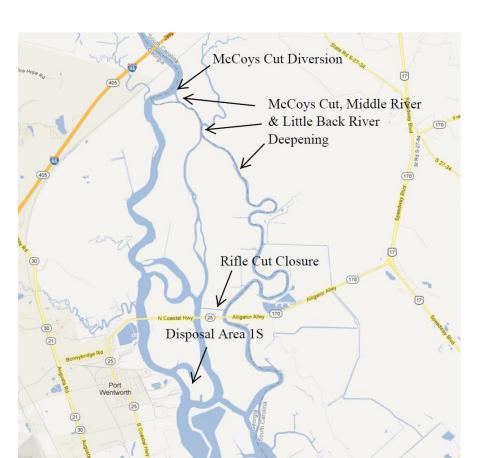
Divert freshwater from the Front River into the Middle and Back Rivers

for Savannah National Wildlife Refuge

Deepening of the Middle and Little Back River

Closure of McCoomb's Cut and Rifle Cut

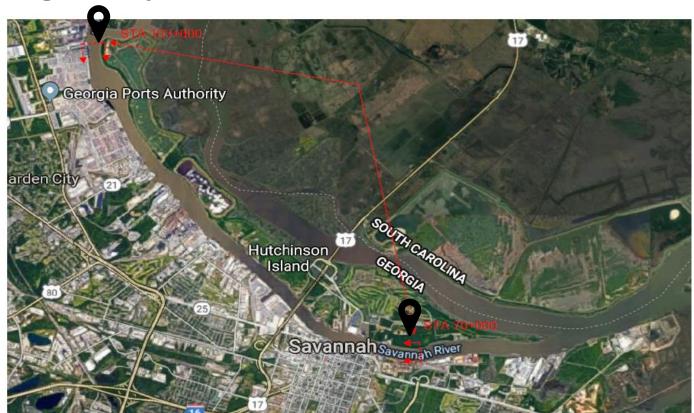






#### Inner Harbor Dredging - Reach AB

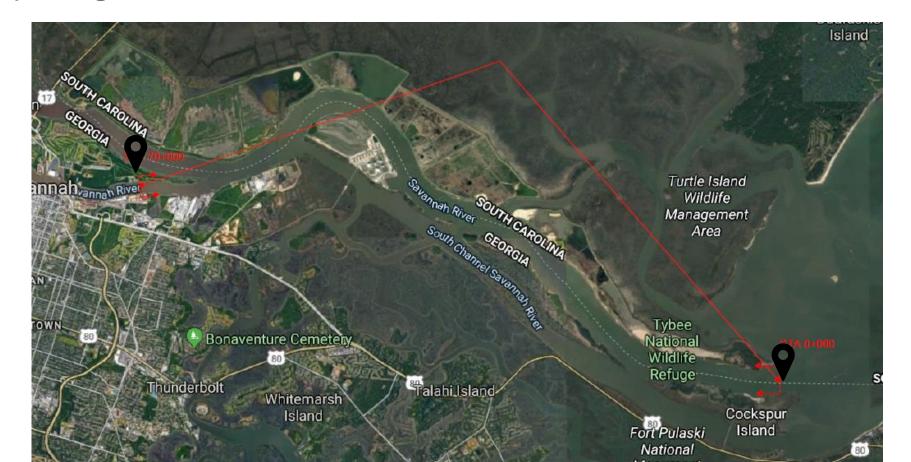
- Contract Awarded to Norfolk Dredging on August 19, 2019
- Contract Amount: \$133M
- Contract Time: 730 Days
- Construction Begin: Very Soon





#### Inner Harbor Dredging - Reach CDE

- Contract was Advertised July 11, 2019
- Bid Opening Scheduled for October 1, 2019





#### Fish Passage - New Savannah Bluff Lock & Dam



**Existing Condition** 



#### **Proposed Alternative:**

- Remove Lock and Dam and Construct Rock Weir across Savannah River
- Currently in Design Phase
- WIIN Act 2016 mandates that this project must be under construction by January 2021



## SHEP Remaining Projects



- Restoration of Area 1S to Salt Marsh
- Sediment Basin Package 2
- Rock Weir and Basin Fill
- Construction of Public Boat Ramp on Hutchinson Island







#### SHEP EXPENDITURES

Federal Funds vs. Non-Federal Funds (Including WIK, PED, and Construction)

Federal Funds =\$240,486,116.76

Non-Federal Funds =\$165,279,433.68

Total Funds Expended = \$405,765,550.44



# **QUESTIONS?**

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http://www.dot.ga.gov/IS/Waterways