

The **castle**

U.S. Army Corps of Engineers, Savannah District

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An in-depth look at the
**Savannah Harbor
Expansion Project**

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(Cover Photo) When the CMA CGM Figaro sailed up the Savannah River in August, it came in on high tide carrying only 50 percent of its total capacity to avoid dragging the bottom of the river. At 8,500 TEUs (20-foot container units), it is the largest container ship ever to call on the port of Savannah. The ships' departure was delayed 14 hours due to thunderstorms and a closed tidal window. To address the needs of vessels like the Figaro, the Savannah Harbor Expansion Project, highlighted in this special edition of *The Castle*, studied the engineering alternatives, environmental impacts, and economic costs and benefits of deepening the Savannah Harbor and shipping channel. *Photo by Billy Birdwell*

CONTENTS

This special edition of *The Castle* highlights key aspects of the Savannah Harbor Expansion Project

- 3** From Where I Sit:
Public participation and government transparency at its best!
- 4** Balancing the three "Es" of expansion
Engineering, environment and economics
- 5** Frequently Asked Questions
Answers to inquiries about the expansion project
- 8** Navigation features added
Engineering alternatives
- 10** A collaborative process
Researching environmental issues
- 12** A new model for container trade
Economic costs and benefits
- 14** Public workshop provides forum for open communication

Viewpoint

From where I sit

Public participation and government transparency at its best!

I'm extremely proud of the report we released on proposals to deepen the Savannah Harbor—the fastest growing, fourth largest port by container volume in the nation and the second largest on the East Coast. The draft General Re-evaluation Report and Environmental Impact Statement lay out a proposal to deepen the Savannah Harbor from its current depth of 42 feet up to a maximum depth of 48 feet. In our report, we've identified the tentatively selected 47-foot "National Economic Development" Plan and also indicated a "Maximum Authorized Depth" Plan of 48 feet. The harbor's current 42-foot depth limits efficiencies and increases transportation costs.

This extensive study presents information on the in-depth analysis of engineering alternatives, environmental impacts and associated mitigation, and economic costs and benefits of deepening the harbor to various depths, including not deepening at all.

I understand many people in the local community—and beyond—have an interest in the harbor and the impacts of its expansion. FROM WHERE THEY SIT, the viewpoints of businessmen, federal, local and state government officials, natural resources specialists, environmentalists, and others may agree with the study or be in opposition.

FROM WHERE I SIT, our job is to work with these individuals and the public to explain the great magnitude and complexity of this project and address their questions and concerns. My responsibility is to assist the Savannah District and the project delivery team in providing the engineering and science to clarify the findings in the report.

The public workshop held on Dec. 15 (see pages 14-15) provided an opportunity for an open and transparent exchange on the issues so we're glad there was a tremendous turn-out. It was a chance for our engineers, project managers, biologists, environmental specialists, and economists who helped formulate the report, to explain—FROM WHERE THEY SIT—their analysis and how we reached our decisions.

Throughout the years of the study, we employed an open and transparent process to provide information to the public. And FROM WHERE I SIT, the public participation and government transparency is at its very best.

We will continue to update the public concerning the report online at www.sas.usace.army.mil. 

By Col. Jeffrey M. Hall, District Commander



Col. Jeffrey M. Hall



William Bailey (right), Chief of Planning Division, explains environmental aspects of the Savannah Harbor Expansion Project during a public workshop Dec. 15. Read more about the workshop on pages 14-15. *Photo by George Jumara.*

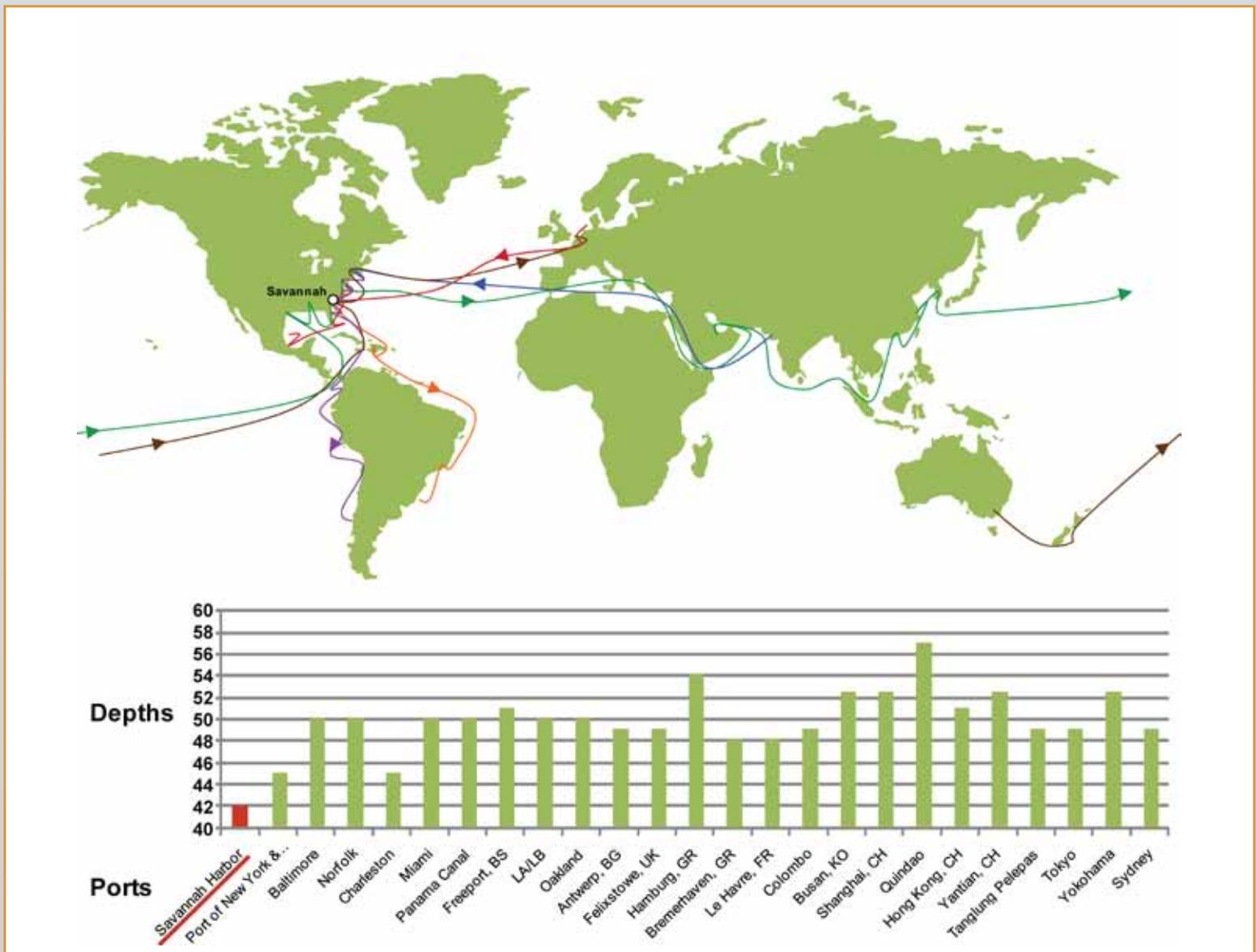
Balancing the three “Es” of expansion Engineering, environment and economics

Savannah Harbor is the fastest growing and fourth largest port by container volume in the nation and second largest on the East Coast, according to Port Import Export Reporting Service compiled by the Journal of Commerce. The U.S. Army Corps of Engineers, Savannah District last deepened the harbor from 38 to 42 feet in 1994.

Since the last expansion, container shipping has significantly increased. To accommodate the increased containerized cargo, the world’s shipping vessels

continue to increase in capacity, size, and efficiency. However, Savannah Harbor has the shallowest depth of the top 10 containerized cargo ports in the United States. Most of the ports on the trade route that include Savannah are deeper than 42 feet, with the majority at a depth of 50 feet or greater. Harbor improvements, particularly deeper channels, reduce waterborne transportation costs and enhance efficiency in national and international trade.

Major Trading Routes and Port Depths



While Savannah has the fastest growing container port in the nation, its harbor has the shallowest depth in comparison with its trade partners, which limits transportation efficiencies.

Request for Expansion

The state of Georgia is seeking a deeper port, in particular to prepare for expansion of the Panama Canal set for completion in 2014. The expansion will shorten the trip from Asia to the U.S. East Coast for larger ships with deeper drafts.

On Nov. 15, 2010, after in-depth study and analysis, the Savannah District released the Draft General Re-evaluation Report (GRR) and Environmental Impact Statement (EIS) on a proposal to deepen the Savannah Harbor from its current depth of 42 feet to a maximum depth of 48 feet. The GRR and EIS identify the tentatively selected 47-foot "National Economic Development" Plan and the "Maximum Authorized Depth" Plan of 48 feet. A single plan will be recommended in the final report.

The congressionally-authorized study reflects an extensive analysis of the engineering alternatives, environmental issues, and economic costs and benefits of deepening the Savannah Harbor and shipping channel. Funded by the federal government and the state of Georgia, the study examined the characteristics of future international shipping fleets, current and future trade routes, and the capacity of the Garden City terminal on the Savannah River. The articles in this issue provide an in-depth explanation of the engineering, environmental, and economic aspects of the project.



Cargo is loaded and unloaded from container ships at the Georgia Ports Authority Garden City Terminal. *Photo courtesy of Savannah Morning News.*

The way ahead

The Savannah District held a public workshop Dec. 15 to give the public a chance to learn more about the project, ask questions, and provide comments (See pages 14-15). The public was given 60 days to comment on the report, and their input will be considered and become part of the official record. The Record of Decision, issued by the Corps' Chief of Engineers, is scheduled to be released in December 2011 and will state what actions will be taken. 

By Sandra Hudson, Corporate Communications Office

Frequently Asked Questions

The Corps answers questions about the Savannah Harbor Expansion Project:

Why is the Corps of Engineers involved in a navigation plan like the Savannah Harbor Expansion Project?

- ▶ Congress charged the Corps of Engineers (USACE) with the responsibility for improving harbors under the Rivers and Harbors Act of 1899. That responsibility remains with the Corps of Engineers. As part of this mission, we must ensure that commerce has safe and adequate access to ports throughout the USA.
- ▶ Congress provides funding to the Corps to study potential harbor improvements around the country. These studies provide Congress with information to decide which projects are justified and would best benefit the nation.
- ▶ The Savannah District is the long term operations and maintenance agent for the harbor.

- ▶ The non-Federal sponsor for the project, the Georgia Department of Transportation, participates in the project by sharing the costs of deepening the harbor.

What is the Corps of Engineers current role in the expansion project?

- ▶ Congress charged the Corps with evaluating all practical expansion alternatives. We began with looking at alternatives to deepening the harbor. We found that none of those preliminary measures would provide the same level of transportation efficiencies as would deepening up to the Garden City Terminal. The Corps analyzed each harbor deepening alternative—dredging to depths from 42 to 48 feet—in detail using computer models of water and wave actions, computer-simulated ship movements, and

Frequently Asked Questions *continued*

The Corps answers questions about the Savannah Harbor Expansion Project:

analyzed engineering and economic data as part of the General Re-evaluation Report.

- ▶ In addition, the Savannah District has prepared an Environmental Impact Statement (EIS) that describes the impacts of each depth alternative. By law, we also must provide a mitigation plan for the significant environmental impacts. In other words, the Corps identifies what steps must be taken to avoid impacts, reduce impacts and replace/compensate for impacts to the environment at each alternative dredging depth.
- ▶ Both the GRR and EIS can be reviewed at www.sas.usace.army.mil.

What is determined through the economic review?

- ▶ The Corps is a steward of taxpayer money and must determine which projects are good investments for the nation. It's charged with making the best use of the country's resources.
- ▶ The Corps determines engineering feasibility, environmental acceptability, and economic viability, and then the Congress determines which projects the nation invests in.
- ▶ We look at the issues from a national perspective. We consider actions that will increase the net value of the national output of goods and services. In the case of the proposed deepening, we look at future shipping fleet configurations, projections on trade, and the state of the economy now and projected into the future. At the end of our evaluation, we identify the plan that best benefits the nation from an economic perspective.

I understand that the Georgia Ports Authority/State of GA didn't agree with the Corps' recommendation and wants the harbor dredged to a deeper depth. How do you reconcile that?

- ▶ The draft GRR identifies a 47-foot depth as the tentatively selected alternative plan. The state of Georgia requested consideration of a "Maximum Authorized Depth" of 48-foot depth and agreed to pay 100 percent of the additional costs to dredge and maintain the extra foot. A final recommended plan agreed to by the Secretaries of the Army, Commerce, and Interior, and the Administrator of EPA will be included in the final GRR and EIS.

Who pays for the harbor expansion?

- ▶ The cost share percentage depends on the depth ultimately selected once all the reviews and coordination are complete. For example, the estimated first costs for the 48-foot alternative is \$551 million, with 70 percent supported by the federal government and the remaining 30 percent provided by the state of Georgia.

How are you balancing the environmental and economic issues?

- ▶ We are charged by Congress to oversee the nation's ports, including the Savannah Harbor. Our studies and recommendations considered both the economic needs of the nation and environmental protection and mitigation. We conducted the studies to ensure we can meet both goals. Mitigating for environmental impacts will be a significant portion of the total project cost.
- ▶ The EIS was coordinated with the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, NOAA Fisheries Service, and state agencies in Georgia and South Carolina as well as others.

Will the public have the opportunity to review the decision?

- ▶ The draft GRR and EIS were released to the public on Nov. 15, 2010. Originally the public had 45 days to review and comment on the draft GRR and EIS as noted in the Federal Register. The comment period was extended to 60 days.
- ▶ After we receive both agency and public comments, we will revise our documents as necessary and issue a final report. The public will be able to review and provide comments on those documents as well.

Why has the economics analysis been so complicated?

- ▶ As we studied the economics of a possible deepening, we discovered that our standard model no longer fit the changing world of international shipping as it applies at Savannah Harbor. Our earlier standard had a greater mix of bulk cargo while international shipping, especially in Savannah, is heavily comprised of containerized cargo. We also discovered that the shipping industry, international trade routes, and



Depending on the depth selected, the Savannah Harbor Expansion Project may convert up to 340 acres of freshwater marshes into brackish marsh. Some of these converted wetlands are located in the Savannah National Wildlife Refuge (shown above). *Photo by Genevieve Bailey-Rogers*

consumer demand has rapidly changed. This all meant we needed to create a new model to predict the impact of deepening at various depths, particularly suited for Savannah. We also had to make some modifications based on new information about the expansion of the Panama Canal.

- ▶ We sought input from the Corps' economics experts in navigation at the Institute for Water Resources, plus input from industry experts to evaluate the sophisticated nature of container ship operations. The Institute for Water Resources and industry experts worked together to identify the aspects of container ship operations that impact vessel loading and operating characteristics. We needed this detailed data to evaluate vessel operations under each of the proposed channel deepening alternatives being studied. Further, we revised model inputs to estimate the impact of the Panama Canal expansion on the industry's switch to more efficient vessels.
- ▶ Creating this new model took longer than anticipated but will be worth the effort in providing more refined data needed for a decision.

What are the next steps in the planning process?

- ▶ The Savannah District has submitted the draft GRR and EIS for a thorough review with the three other federal co-operating agencies: Department of

Commerce (NOAA Fisheries Service); Department of the Interior (U.S. Fish & Wildlife Service); and the Environmental Protection Agency.

- ▶ A provision of the Water Resources Development Act of 1999, legislation that authorized the project, required that the three agencies named above, along with the Secretary of Army, must approve the project and mitigation plan. This is a unique provision for a civil works project that Congress has required to insure that the project adequately mitigates for effects on the environment.
- ▶ The study details our draft recommendations and includes the tentatively selected alternative of -47 feet (the depth which provides the greatest benefits to the nation) and the "Maximum Authorized Depth" of -48 feet which is supported by the non-Federal sponsor – the state of Georgia. The GRR and EIS must also withstand the scrutiny of a formal independent external peer review and review by the public.
- ▶ In late 2011, the Corps' Chief of Engineers is scheduled to issue a Record of Decision, which states what actions will be taken.

How long will the project take to construct?

- ▶ Dredging will take from 48 months to 60 months depending on the depth selected and the annual funding provided by Congress and the non-federal sponsor. 

Navigation features added

Studying engineering alternatives

Since the last major navigation improvements were completed by the Corps of Engineers, Savannah District in April 1994, the Savannah Harbor has experienced significant growth in containerized cargo volume, vessel traffic, and the size and frequency of container ships calling at the port.

A study undertaken by the Savannah District proposes to deepen the harbor from its current authorized depth of 42 feet down to a maximum authorized depth of 48 feet. It also identifies improvements that would increase the efficiency and safety of cargo vessel operations. The study identifies and evaluates alternatives that will:

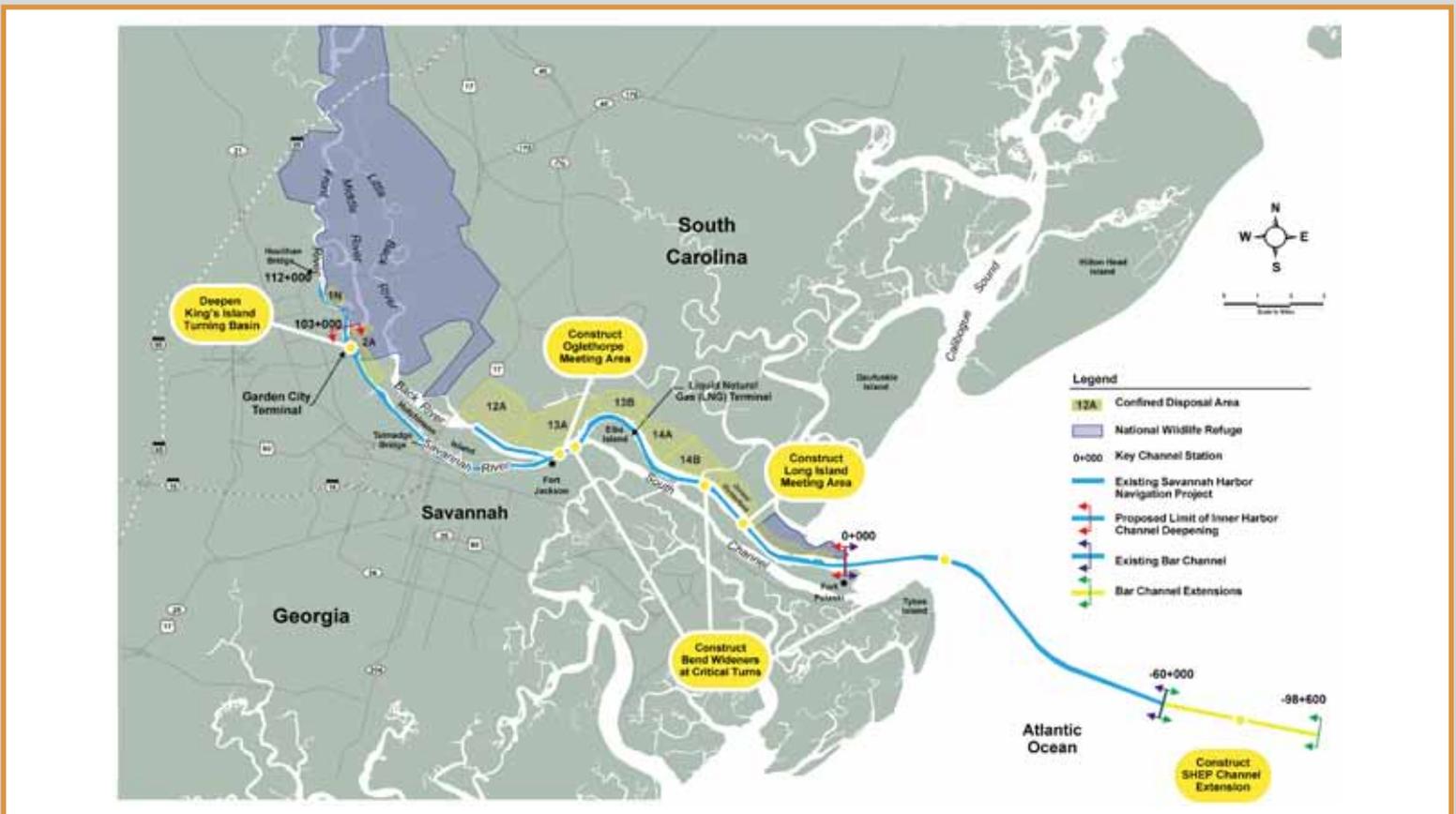
- ▶ Reduce congestion and improve the efficiency of operations for container ships within the navigation channel
- ▶ Accommodate recent and anticipated future growth in containerized cargo and container ship traffic expected to call on the port in Savannah

Navigation Features

The journey for cargo vessels traveling on the Savannah River, from ocean buoy to berth, requires carefully timed passage and skillful maneuvering. Using computer models of water and wave actions, computer-simulated ship movements, and engineering analysis, the Savannah District has devised navigation features that would accommodate a new generation of deep draft container ships expected to call on the port in Savannah. The improvements would:

- ▶ Extend the harbor entrance channel across the ocean bar an additional 7.3 miles
- ▶ Deepen the navigation channel up to an additional 6 feet
- ▶ Construct vessel meeting areas at Long Island and Oglethorpe Ranges to allow large vessels to meet thereby preventing delays while navigating the channel
- ▶ Widen the Kings Island Turning Basin to accommodate the dimensions of the larger container ships

General Navigation Features



The study undertaken by the Savannah District identified navigation features which will improve the efficiency and safety of the shipping channel.

- ▶ Widen the channel at three bends to allow the larger ships to safely navigate these areas

Other Studies

The Corps undertook more than 40 engineering studies that included:

- ▶ Ship simulations to aid in channel design, including vertical ship motion study
- ▶ Ship wake analysis to develop shoreline erosion estimates
- ▶ Soil borings for physical characterization of materials to be dredged
- ▶ Slope stability analysis to determine impacts to side slopes and banks
- ▶ Geologic field investigation & modeling to determine groundwater impacts to the aquifer
- ▶ Coastal erosion analysis to determine impacts to Tybee Island
- ▶ Nearshore placement of dredged material to provide a beneficial use
- ▶ Shoaling and sedimentation analysis
- ▶ Hydrodynamic & water quality modeling for impact determination and mitigation plan development, including oxygen injection
- ▶ Analysis of chloride impacts to the City of Savannah's water supply on Abercorn Creek
- ▶ Analysis of dredged material, including physical & chemical analysis
- ▶ Impacts to Savannah Harbor Operation & Maintenance practices, including a dredged material management plan
- ▶ Mitigation feature design, including oxygen injection system, boat ramp and marsh restoration
- ▶ Cost estimating & cost risk analysis for all depth alternatives
- ▶ Value engineering study
- ▶ Sea level rise risk analysis

River Banks and Drinking Water

Geotechnical engineers investigated the effect of deepening on the river banks. The proposed design (diagram 1) would not widen the navigation channel along River Street but would instead extend the existing side slopes down further, resulting in a deeper and narrower channel with minimal effects to the river bank. The Corps also conducted a bank erosion analysis that focused on locations where vessel waves could cause shoreline erosion. The analysis found the larger vessels would not cause more erosion than is presently occurring. The harbor pilots move vessels past River Street at a slow speed which does not generate waves that could erode the shore.

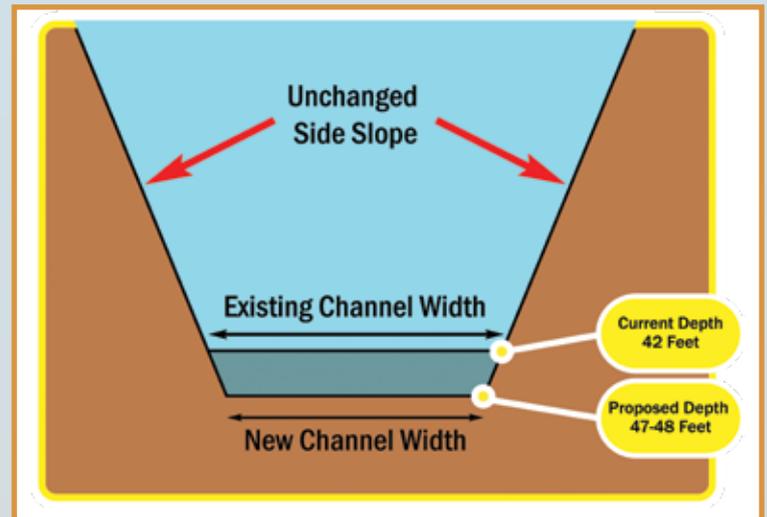


Diagram 1 shows how the proposed channel design would extend the existing side slopes down further, resulting in a deeper and narrower channel with minimal effects to the river banks.

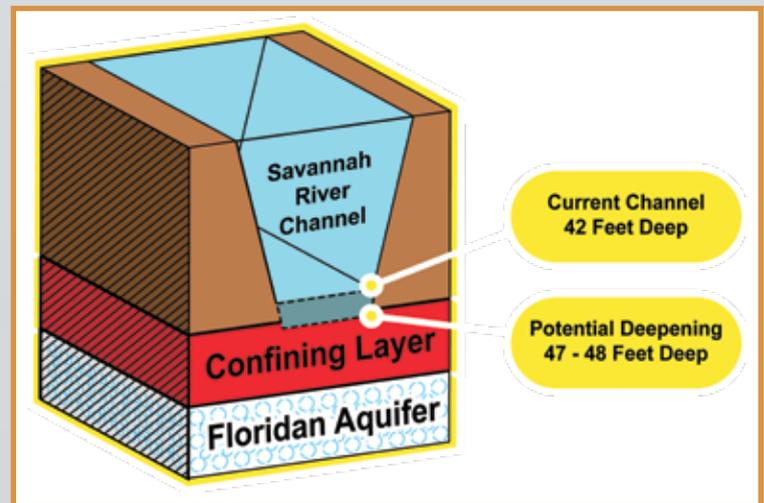


Diagram 2 illustrates the insignificant effects to drinking water due to harbor deepening.

Geologists and engineers also studied the effect of harbor deepening on drinking water from the aquifer (diagram 2). Deepening the harbor to the proposed 47-48 feet will have an insignificant impact on drinking water and the aquifer. The extensive study, conducted in cooperation with the Georgia Department of Natural Resources Environmental Protection Division, the South Carolina Department of Health and Environmental Control, and the U.S. Geological Survey, showed that deepening will not significantly increase the rate of saltwater intrusion below the Savannah area, and therefore will pose little measurable change to the water quality in the aquifer. The analysis clearly shows that the greatest impact to the Floridan aquifer is the high withdrawal and use rate, not harbor deepening. 

Illustrations by George Jumara

A collaborative process

Researching environmental issues



To mitigate for impacts, the project would purchase up to 2,700 acres of threatened wetlands. The U.S. Fish and Wildlife Service previously identified the lands to be acquired as valuable additions to the refuge (shown above). *Photo courtesy Savannah National Wildlife Refuge.*

The Corps of Engineers, Savannah District, in conjunction with federal and state agencies, extensively examined the potential environmental impacts to deepening the Savannah harbor shipping channel to various depths, including not deepening at all. Agency coordination on the Environmental Impact Statement included the U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service, NOAA Fisheries Service, state agencies in Georgia and South Carolina, and others.

The Savannah District started the mitigation process early on and it remained a priority through completion. The process included both the normal steps followed during a typical Corps civil works study and additional steps to meet congressional authorization which stipulates the study's recommendations must receive approval by the federal agencies listed above.

From a broad perspective, mitigation planning consists of three major steps:

- 1) avoid impacts,
- 2) reduce impacts and,
- 3) replace/compensate for impacts.

The draft EIS describes—in detail—research on groundwater saltwater intrusion in the Upper Floridan aquifer; impacts to freshwater marshes, especially inside the Savannah National Wildlife Refuge; impacts to fish habitat, endangered species, wetlands, and air quality; changes to dissolved oxygen content in the harbor's waters; and dredged material management, among other topics.

The study concluded that the environmental impacts of deepening the shipping channel to 47 or 48 feet can be mitigated to an acceptable level. The report's EIS provides information on:

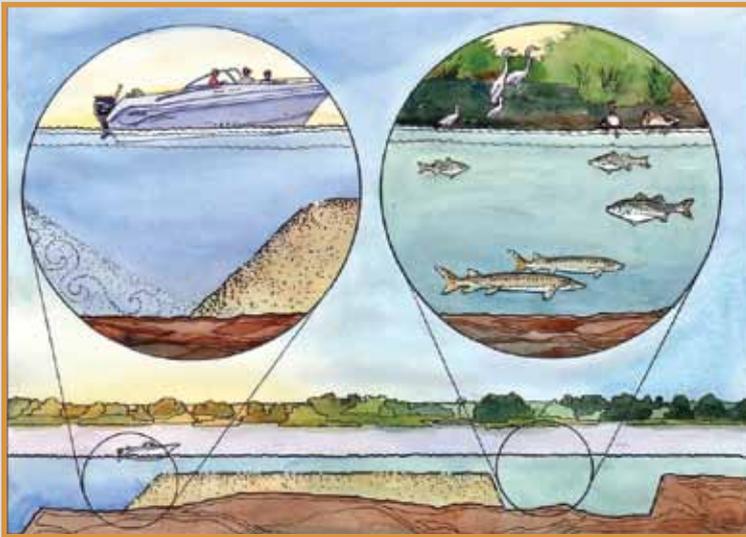
Upstream Saltwater Encroachment

The Savannah District conducted extensive analyses to determine how modifications to the Savannah River estuary reduce the effects of saltwater encroachment. After investigating numerous scenarios, experts determined that specific modifications to the existing flows would best reduce these effects. Several modifications to tidal creeks in the upper harbor are part of the project.

Freshwater Wetlands

Depending on the depth selected, the project may convert up to 340 acres of freshwater wetlands into brackish marsh. Some of these converted wetlands are located in the Savannah National Wildlife Refuge. To mitigate for those impacts, the project would purchase up to 2,700 acres of threatened wetlands. The U.S. Fish and Wildlife Service previously identified the lands to be acquired as valuable additions to the refuge.

Saltwater Marsh



Artist rendering of fish sill designed to create a protected area where endangered fish are known to congregate.

In addition, up to 14 acres of saltwater marsh would be excavated by the project for the removal of the Back River tide gates and deepening of Kings Island Turning Basin. To mitigate for those impacts, up to 45 acres of marsh would be restored on Onslow Island, a former dredge material disposal site in the Savannah River in the upper portion of the harbor.

Striped Bass

The striped bass (*Morone saxatilis*), a popular game fish, is making a comeback in the lower Savannah River as a result of a Georgia Department of Natural Resources stocking program. The deepening project would provide funds for additional stocking to compensate for increasing the salinity of areas used by this species for spawning.

Shortnose Sturgeon

The project will adversely impact habitat for one endangered species, the Shortnose sturgeon (*Acipenser brevirostrum*). Harbor deepening would allow additional saltwater to enter the harbor and travel further upstream into areas currently used by this species. The increased salinity would reduce the suitability of some of these

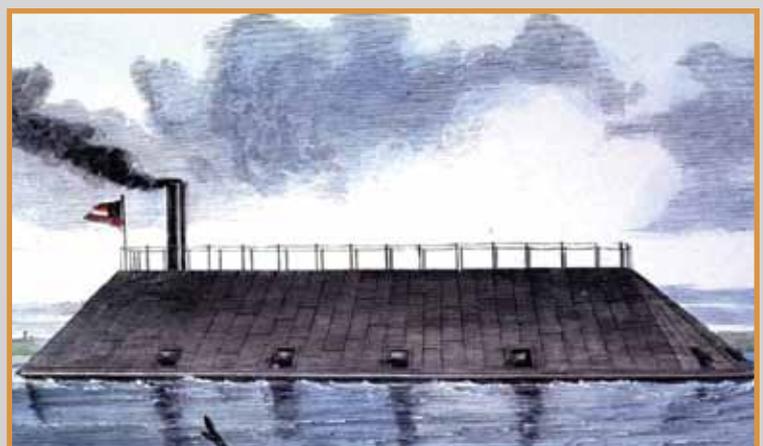
areas. To compensate for those impacts, the project includes construction of a fish passage structure around the first dam up the Savannah River and a sill to create a protected area where the endangered fish are known to congregate.

North Atlantic Right Whale

The Savannah District has been engaged in efforts to protect the endangered right whale for many years. The district actively participates in several organizations which monitor the whales and their environment. Specifically, the Corps includes measures to protect the species in its dredging contracts, and requires endangered species observers on all contracted hopper dredges. In accordance with our past practices to protect the right whale, the Savannah District would conduct the proposed deepening project and future maintenance activities in accordance with the NOAA Fisheries' South Atlantic Regional Biological Opinion (SARBO) in effect at that time. If a new SARBO is not finalized by the time the project is constructed, the district would restrict hopper dredges working on the project to a 10-knot speed limit during calving season.

CSS Georgia

In 1862, the Confederate Army built an ironclad warship to defend the rivers of Savannah. When the ship's propulsion system proved inadequate for maneuvering the massive vessel it became a floating battery. On the evening of Dec. 20, 1864, the Georgia's Confederate crew scuttled her in front of Fort Jackson to keep her from falling to the Union Army. Today, the Georgia rests some 40 feet below the river's surface at the edge of the navigation channel. Removal of and data recovery from this cultural resource will occur before the deepening project begins. 



Rendering of Confederate ironclad warship CSS Georgia which will be recovered from the Savannah River before deepening begins.

A new model for container trade

Economic costs and benefits

A proposal to deepen the Savannah Harbor to 47 or 48 feet will bring \$115 million in annual net benefits to the United States. The Corps of Engineers, Savannah District came to this conclusion following years of extensive research.

The economic portion of the studies examined the characteristics of the future international shipping fleet, harbor commerce, current and future trade routes, and the capacity of the Garden City terminal on the Savannah River.

Lower Costs

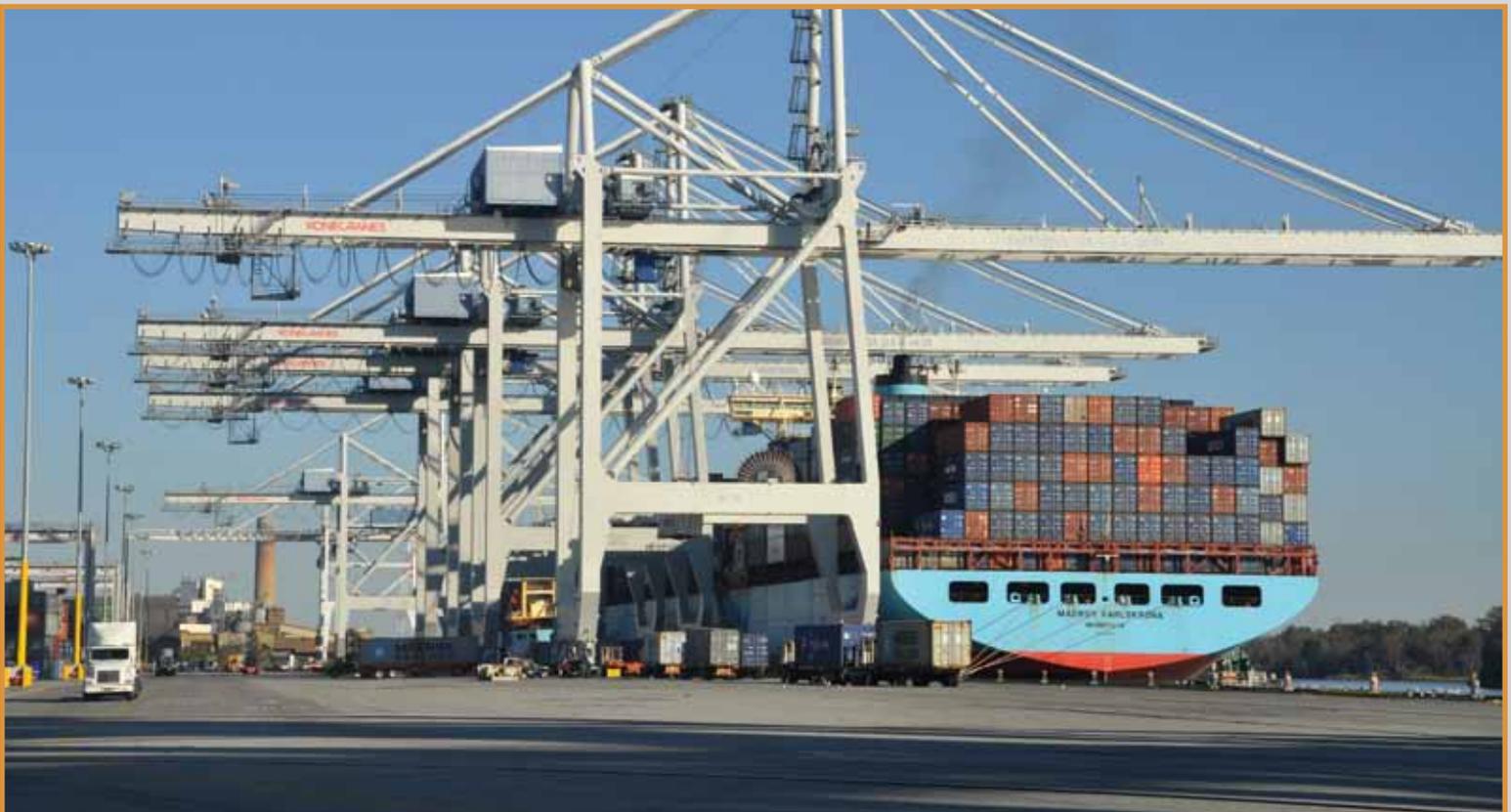
Savannah has the fastest growing container port in the nation but has the shallowest depth of its major worldwide trading partners. The harbor's current 42-foot depth limits efficiencies and increases transportation costs. Deepening the harbor will lower transportation costs, according to the report. Lower transportation costs can translate into lower consumer product costs.

Projections in the report indicate that the number of TEUs or 20-foot equivalent units (the standard measure for cargo containers) passing through Savannah Harbor will rise from 2.7 million in 2010 to 6.5 million by 2032.

Complex Issues

As the Corps' economic team studied the economics of a possible deepening, the experts discovered that the standard methodology no longer fit the changing world of international shipping as it applies to container trade. The Corps also discovered that the shipping industry, international trade routes, and consumer demand has rapidly changed. These issues all meant the Corps needed to create a new model to predict the impact of deepening to various depths at Savannah. The model also estimated the impact of the Panama Canal expansion on the industry's switch to more efficient vessels. The economic team, which included experts in navigation at the Corps' Institute for Water Resources, received input from industry experts to evaluate the sophisticated nature of container ship operations.

Although creating this new model added three years to the study time, the sophistication of the model provided higher quality, more refined information to be used in the decision-making process.



Containerized shipping, shown here at the Garden City Terminal, continues to grow at Savannah's port. *Photo by Brittany Phillips*

Costs

| Depth | Construction Costs (Millions) | + Mitigation Cost (Millions) | = Total Cost (Millions) |
|-------|-------------------------------|------------------------------|-------------------------|
| 44 | \$197.3 | \$191.0 | \$388.3 |
| 45 | \$232.9 | \$207.4 | \$440.3 |
| 46 | \$274.9 | \$209.7 | \$484.6 |
| 47 | \$302.4 | \$215.6 | \$518.0 |
| 48 | \$330.1 | \$221.3 | \$551.4 |

Costs and Benefits

| Depth | Annualized Benefits (Millions) | - Annualized Costs (Millions) | = Net Benefits (Millions) |
|-------|--------------------------------|-------------------------------|---------------------------|
| 44 | \$97.3 | \$25.7 | \$71.6 |
| 45 | \$128.3 | \$28.1 | \$100.3 |
| 46 | \$142.9 | \$30.8 | \$112.1 |
| 47 | \$148.7 | \$32.7 | \$116.0 |
| 48 | \$150.4 | \$34.7 | \$115.7 |

Although there are increasing costs associated with deepening the harbor, the increasing benefits could pay off the first costs within a few years.

The 47- or 48-foot alternatives provide more than \$115 million annually in net benefits to the nation.

Costs, Benefits, and Funding

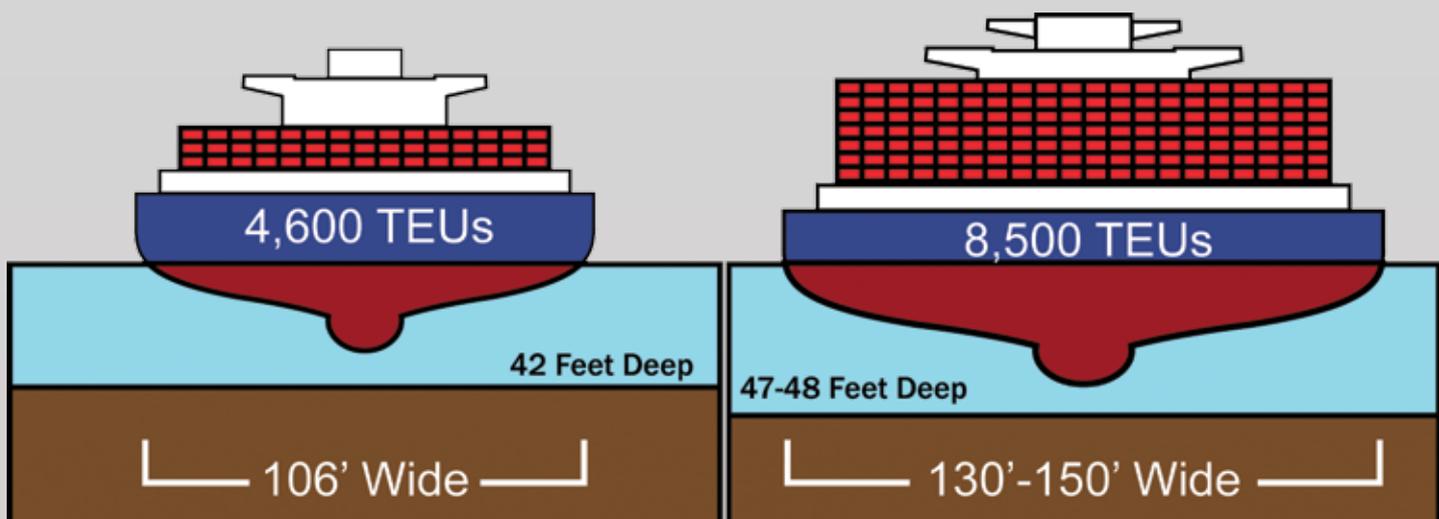
Costs of the study and construction are shared between the U.S. government and the state of Georgia. If the harbor is deepened, those costs would also be shared for dredging to 47 feet. The state of Georgia has indicated its willingness to pay 100 percent of additional costs to deepen the harbor an additional foot and to pay for additional annual costs of maintaining the greater depth.

The construction costs vary depending on the depth of the harbor. They run from \$197.3 million for a 44-foot depth to \$330.1 million for a 48-foot depth. Additional environmental mitigation costs also vary and range from

\$191 million to \$221.3 million respectively. The Corps calculates the nation will receive benefits of \$115 million annually or more depending on the depth. The economic study evaluated benefit years 2015 through 2065.

To realize these benefits, the harbor must allow safe passage for the newer, larger ships. The Corps has devised navigation features that would accommodate this new generation of deep draft container ships expected to call on the port in Savannah. 

Illustrations by George Jumara.



The harbor's current 42-foot depth limits efficiencies and increases transportation costs. However, deepening the harbor will lower transportation costs, which can translate to lower consumer product costs. *TEUs: Twenty-foot equivalent units. The international standard unit for measuring cargo containers.

Public workshop provides forum for open communication

Having served on the Savannah Harbor Expansion Project (SHEP) Stakeholder Evaluation Group for more than a decade, Will Berson has fewer questions about SHEP than most people.

But Berson, interim director of the Georgia Conservancy, Coastal Office, still felt that he could gain something from attending the SHEP public workshop hosted by the Savannah District Dec. 15.

“A lot of the conclusions [about the project] are not new to me, however hearing questions from others who are less familiar with the project tends to give me a different slant on things,” said Berson.

Berson was among more than 500 people representing businesses, environmental groups, and members of the general public, who attended the workshop to learn about the project, ask questions, and provide comments.

“I think it’s great of the Corps to do this,” said Berson. “The more info you can get out about the project, the better the community is served, and the more likely there will be firm support for the port as well as the river.”

Corps subject matter experts used displays, videos, models and handouts to help explain the different aspects of the project. Detailed information was provided



Savannah City Council member and Mayor Pro-Tem Edna Jackson fills out a comment card during the public workshop. Attendees were given the opportunity to provide formal responses by filling out comment cards, speaking to a court reporter, or submitting them online. *Photos by George Jumara*



Chuck Hayes, supervisory wildlife biologist for the U.S. Fish and Wildlife’s Savannah Coastal Refuges Complex, discusses areas that would be impacted due to harbor dredging, with an attendee.

on the engineering alternatives, environmental impacts, and economic costs and benefits of deepening the Savannah Harbor and shipping channel.

Because of the informal set-up, participants were allowed to come-and-go anytime during the four-hour time frame.

“This is an immense project, and the workshop format provides a comfortable forum for exchange of information,” said Andrea Malloy, South Coast Office Project Manager, Coastal Conservation League. “When you go to a presentation, you can become overwhelmed by the information, but here the agencies are on hand to answer questions about the different aspects of the study in a relaxed environment,” said Malloy.

Another interest group that was heavily represented at the workshop was the International Longshoremen’s Association.

“We are very excited about this [project],” said Willie Seymore, president of the International Longshoremen’s Association Local 1414. “It not only affects our jobs but our families as well. There are a lot of people involved from all sections of this city, not just longshoremen or a single group. This affects everyone.”



More than 500 people, representing businesses, environmental groups, and the general public, attended the SHEP public workshop hosted by the Savannah District Dec. 15.



Col. Jeffrey M. Hall, commander of the Savannah District, held a short press conference at the opening of the workshop to address questions from the media.



All major media outlets attended the news conference which preceded the workshop.

Representatives from one of the project's cooperating agencies, the U.S. Fish and Wildlife Service, joined the Savannah District to answer questions and explain their position on the project.

"We appreciate the Corps setting up this workshop and inviting us to participate," said Bill Wikoff, a fish and wildlife biologist with the U.S. Fish and Wildlife Service. "Fish and Wildlife and other cooperating agencies have been working with the Corps to ensure that all the impacts and benefits are characterized to the best of our ability, so that an informed decision can be made."

During the workshop, attendees were also given the opportunity to provide formal responses by filling out comment cards, speaking to a court reporter, or submitting them online. The public was given 60 days to comment on the report, and their input will be considered and become part of the official record. 

By Rashida Banks, Corporate Communications Office

A large container vessel, the Savannah, is docked at a pier. A tugboat and barge are positioned alongside it, performing a refueling operation. The tugboat is connected to the barge, which is in turn connected to the container vessel. The scene is set on a wide river with a bridge visible in the background. The sky is clear and blue.

Go to www.sas.usace.army.mil to see the comprehensive video “**Understanding SHEP**” which encapsulates the engineering, environmental and economic aspects of the project.

The draft General Re-evaluation Report and Tier II Environmental Impact Statement are also available on the Savannah District website.

A tugboat and barge refuel a large container vessel. *Photo by Brittany Phillips*