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*

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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.