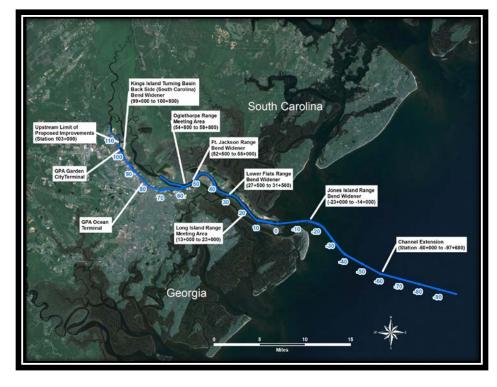
SAVANNAH HARBOR EXPANSION PROJECT CHATHAM COUNTY, GEORGIA AND JASPER COUNTY, SOUTH CAROLINA

22 March 2012



ABSTRACT: Savannah Harbor is an approximately 32.7 mile long Federal navigation project located along the Savannah River in southeast Georgia. The current Savannah Harbor Navigation Project generally has an authorized project depth of 42 feet Mean Lower Low Water (MLLW) in the inner harbor, with depths ranging from 30 feet to 42 feet MLLW from the upstream limit of the inner harbor to the entrance channel. The authorized depth of the entrance channel to the Atlantic Ocean is 44 feet MLLW. The non-Federal sponsor for the existing project is the Georgia Department of Transportation. The existing Federally-maintained navigation channel includes 2-feet allowable

overdepth and up to 6-feet advance maintenance (depending on location). Savannah Harbor was last deepened in 1993/1994. Since that time container traffic has greatly exceeded projections. Economic studies show that 70% of the vessels do not call on Savannah Harbor at their maximum capacity or design draft. The "light loading" of vessels increases costs to the shipper, which are eventually passed onto the consumer. Less efficient vessels also generally result in higher shipping costs.

Congress conditionally authorized deepening the harbor up to an additional six feet in the Water Resources Development Act of 1999 (Section 102(b)(9)). The authorization is contingent upon: (1) completion of an Environmental Impact Statement evaluating incremental depth increases, (2) approval of the Selected Plan by the Secretary of Interior, Secretary of Commerce, Secretary of the Army, and the Administrator of the Environmental Protection Agency; and (3) a determination by the Secretaries that the associated mitigation plan adequately addresses the potential environmental impacts of the project. The Corps of Engineers issued a Report of the Chief of Engineers (Chief's Report) later in 1999, which provided further direction on the additional studies that needed to be conducted.

The Corps evaluated a wide range of alternatives for addressing the navigation problems in the harbor, including structural methods (e.g., alternate terminal locations, modifications to the navigation channel) and non-structural methods (e.g., optimization of traffic management practices, reduction of underkeel clearance requirements). An iterative alternatives evaluation revealed that channel deepening would be the most effective way to reasonably address the navigational inefficiencies. Detailed evaluations were conducted on the channel deepening alternatives using a 50-year period of analysis. As a result of its investigations, the Corps has identified the 47-foot depth alternative as the National Economic Development (NED) Plan – the plan that maximizes net economic benefits to the Nation and fully complies with Army policy. The NED plan is the Selected Plan.

The Selected Plan includes dredging 31 miles of the existing navigation channel and one existing turning basin (Kings Island Turning Basin at Stations 98+500 to 100+500) 5 feet deeper (to an authorized navigation

depth of 47-feet), deepening eight berths at the Garden City Terminal (Berths 2, 3, 4, 5, 6, 7, 8, and 9), constructing three bend wideners (Stations -23+000 to -14+000, 27+700 to 31+500, and 52+250 to 55+000), constructing two meeting areas (Stations 14+000 to 22+000 and 55+000 to 59+000), and constructing an approximately 38,000 foot (7.1 mile) long extension to the existing ocean bar channel from Station -60+000 to -97+680. The existing allowable overdepth and advance maintenance would be retained.

Extensive investigations were conducted to identify potential impacts of the alternative plans. Savannah District, in close coordination with Federal and State agencies, used state-of-the-art hydrodynamic and water quality models to identify many of the impacts to natural resources from the proposed alternatives. Results show that the proposed action would impact fringe brackish marshes, as a direct result of sediment removal and the physical act of dredging. Additional impacts would occur to habitat of striped bass and the endangered shortnose sturgeon, tidal freshwater wetlands, and brackish marsh through increased salinity and changes in dissolved oxygen levels, which are indirect effects resulting from harbor deepening. Conversion of salt marsh to brackish marsh would occur as a result of mitigation features to protect freshwater marshes. All impacts are discussed in detail in the Final EIS, and impacts are avoided or minimized to the maximum extent practicable. Mitigation is proposed for unavoidable impacts to significant resources such as loss of shortnose sturgeon and striped bass habitat, conversion of tidal freshwater, brackish and salt marsh in the project area, and changes in dissolved oxygen levels in the inner harbor.

The Selected Plan FY 2012 annual average equivalent cost (including annual maintenance) is \$39 million. The average annual equivalent benefits for the Selected Plan are \$213 million which result in average annual equivalent net benefits of \$174 million and a benefit-to-cost ratio of 5.5. The current authorized cost escalated in accordance with WRDA 86 yields a Section 902 limit of \$514,684,000. The first cost of construction for the Selected Plan is about \$652 million. Additional authorization is being sought because this exceeds the Section 902 limit. In accordance with the provisions of Federal laws and policies, the Federal share of the first cost of implementing the Selected Plan is \$191 million (FY 2012). The estimated non-Federal share of the Selected Plan is \$191 million (FY 2012), including lands, easements, rights-of-way, and relocations, but does not include associated non-Federal costs. Additional annual maintenance costs to the United States are estimated to be \$5.1 million (FY 2012). Maintenance of any non-Federal ancillary facilities is a 100% non-Federal responsibility.

REPORT DOCUMENTATION: Pertinent documentation on the project, the results of the CWRB, and subsequent Washington-Level Review Actions, are linked below:

- <u>CWRB Agenda</u>
- Project Summary
- CWRB Briefing Slides
- CWRB Lessons Learned
- CWRB Meeting Record
- <u>State & Agency Review Comment Letters</u>
- <u>Corps Reponses to State and Agency Comments</u>
- Agency Approvals Required by Authorization
- Documentation of Review Findings
- Signed Chief of Engineers Report 17 August 2012
- Advance Copy to Congressional Committees
- ASA(CW) Memo to OMB
- OMB Response
- <u>ASA(CW) Transmittal to Congress</u>
- Signed Record of Decision
- Authorization

ADDITIONAL INFORMATION:

South Atlantic Division

Savannah District - Savannah Harbor Expansion Project