

# New York and New Jersey Harbor Deepening Navigation Program

September 1, 2016



*The Port of New York and New Jersey is the premier gateway to the world. It is a conduit of global commerce and a major generator of jobs and economic activity. The Port of New York and New Jersey is the largest port on the East Coast of North America, the third largest in the nation, and one of the most productive high-volume port operations globally.*

In 2015, The Port Authority of New York & New Jersey facilitated the movement of approximately 6.4 million twenty-foot equivalent units (TEU), an increase of over 10 percent from 2014. Getting goods into the hands of the consumers through an efficient and reliable transportation network is the cornerstone of the port's competitive edge with global markets. The port has premier access to rail, road, and inland waterway routes to transport goods to 23 million local consumers and up to 100 million customers within 36 hours at markets all over the U.S. and Canada.

The Port of New York and New Jersey's six container terminals receive vessels from all of the world's major ocean carriers serving nearly every region of the world. Of the services that call on the Port of New York and New Jersey, 74 percent are first calls.

Prior to the initiation of the Harbor Deepening Program, channels to the Harbor were inadequate to provide access to the large Neo-Panamax ships, which have drafts of 48 feet or more.

The authorized project, which began construction in 2004, provided 50-foot water access to the container terminals by deepening Ambrose Channel from deep water in the Atlantic Ocean to the Verrazano-Narrows Bridge, the Anchorage Channel from the Verrazano-Narrows Bridge to its confluence with the Port Jersey Channel, the Kill Van Kull Channel, the main Newark Bay Channel to Port Elizabeth and Port Newark facilities, and the Port Elizabeth and South Elizabeth tributary channels, the Arthur Kill Channel adjacent to the Howland Hook Marine Terminal, and the Port Jersey Channel.

The primary non-federal sponsor of the project is The Port Authority of New York and New Jersey.





The project also facilitated the beneficial use of all 52 million cubic yards of dredged material from the channel deepening project. The dredged materials included silts, sands, glacial deposits such as till and clay, as well as six different types of bedrock.



Some of the beneficial uses included creating fishing reefs from blasted rock, restoring marshes, capping the ocean Historic Area Remediation Site (HARS) off of New Jersey, and capping/remediating existing impacted landfills and brownfields in the region.

The project involved 20 dredging contracts and construction of four marsh restoration projects. Two marsh restoration projects at Woodbridge, NJ and Elders Point East, Jamaica Bay, NY (40 acres of wetlands) were constructed in 2006-2007 as mitigation for the channel deepening. In 2009 through 2012, the project was modified to include the restoration of two additional Jamaica Bay marsh islands at Elders West and Yellow Bar Hassock through the beneficial reuse of dredged material. In 2010, with additional funds provided to the U.S. Army Corps of Engineers by The Port Authority of NY & NJ, 339,235 cubic yards of sand was beneficially used for the restoration of Lincoln Park, NJ.

Two dredging contracts involved the removal of accumulated shoals and debris, partially due to Hurricane Sandy in previously deepened channel areas inside the Narrows, to facilitate the transition of the project from construction to operation and maintenance.

The final contract for the 50 ft. channels, which involved the removal of material in five separate utility corridors and other shoals in the Anchorage and Port Jersey Channels, was sequenced with the completion of the abandonment of two New York City Department of Environmental Protection water supply siphons within the Anchorage Channel as a new line was relocated deeper under the channel. This relocation by The Port Authority of NY & NJ and the New York City Economic Development Corporation was severely impacted and delayed by Hurricane Sandy such that the utility corridor deepening contract was rescheduled for completion in the summer of 2016.

## Program Cost

*Original Total Program Cost Estimate:*  
**\$2.965B**

*Actual Total Program Cost (2016):*  
**\$2.1B (Cost savings of \$800M\*)**

*Benefit to Cost Ratio:*  
**6.8**

*\*Cost savings achieved by combining authorities to allow for efficient acquisition strategies and execution.*



**US Army Corps  
of Engineers**  
New York District

**THE PORT AUTHORITY  
OF NY & NJ**