



## New York and New Jersey Harbor

*One Estuary, One Harbor, One Vision*



WEDA Eastern Chapter Dredge Scheduling Meeting - October 8, 2008

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## Significance of the Port of New York and New Jersey

- Largest port on the East Coast (3<sup>rd</sup> largest port in U.S. – 13% share)
- Serves 35 % of American population
- \$150 B in ocean-borne cargo
- 5 million containers (TEUs) annually (+10 %/year)
- Largest vehicle import/export handling port in the country (852,000 vehicles)
- 230,000 direct and indirect jobs
- \$14 B in wages





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# New York and New Jersey Harbor Project Overview

## Description:

- Deepen 35 miles of navigation channels to 50 - 53 ft. to provide deep draft access to the four major container terminals within the Port of New York and New Jersey.
- Includes four separate authorized projects that were consolidated in 2002.
- Key features of the 50 ft. project include:
  - 16 large multi-year dredging contracts
  - Restoring 140 acres of tidal wetlands
  - Offsets NOx air emissions from project
  - Beneficial use of 100 % of dredged material from project
  - Utility relocations (\$300 million)

Total Project Cost (GNF) \$2.5B

Benefit to Cost Ratio: 2.7

Sponsor: Port Authority of New York & New Jersey

Schedule: FY14 Overall Completion



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# New York and New Jersey Harbor Partnerships

Working collaboratively, the interagency partners and non-governmental stakeholders have addressed and balanced environmental and economic development issues allowing the project to move forward on schedule and within budget.

• **USACE**

**THE PORT AUTHORITY OF NY & NJ**

• *The Port Authority Of New York and New Jersey*

• **USEPA**

• **NMFS**

• **USCG**

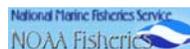


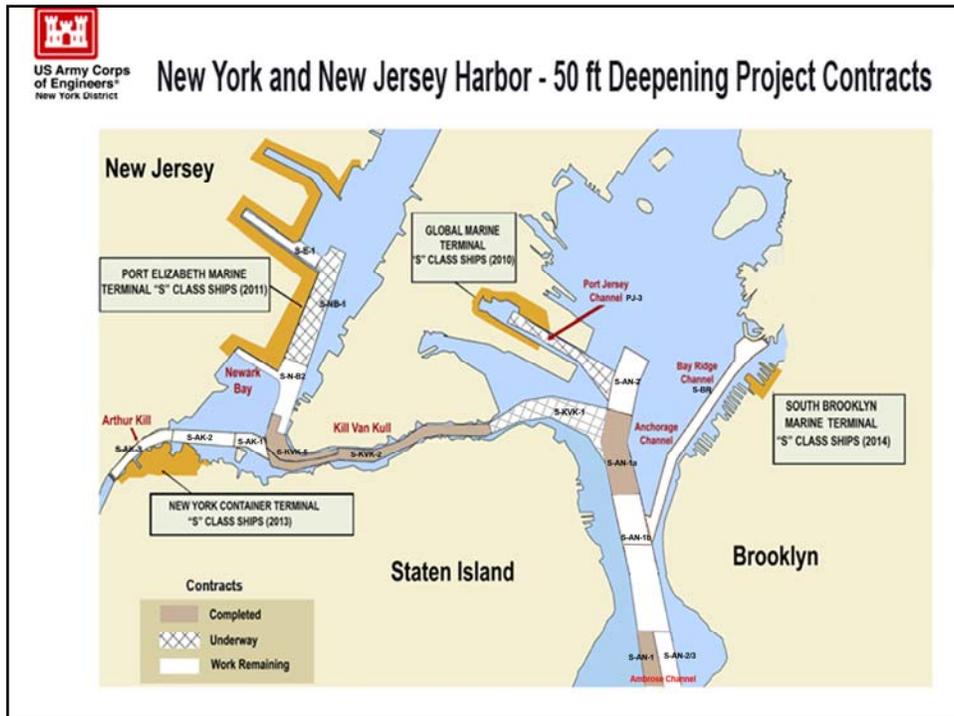
• **State of New York (ESDC, NYSDEC, NYSDOS)**

• **State of New Jersey (DOT-OMR, NJDEP)**

• **City of New York (EDC, DEP)**

• **Non-governmental Hudson River foundation, Env. Defense, Baykeeper, etc...**

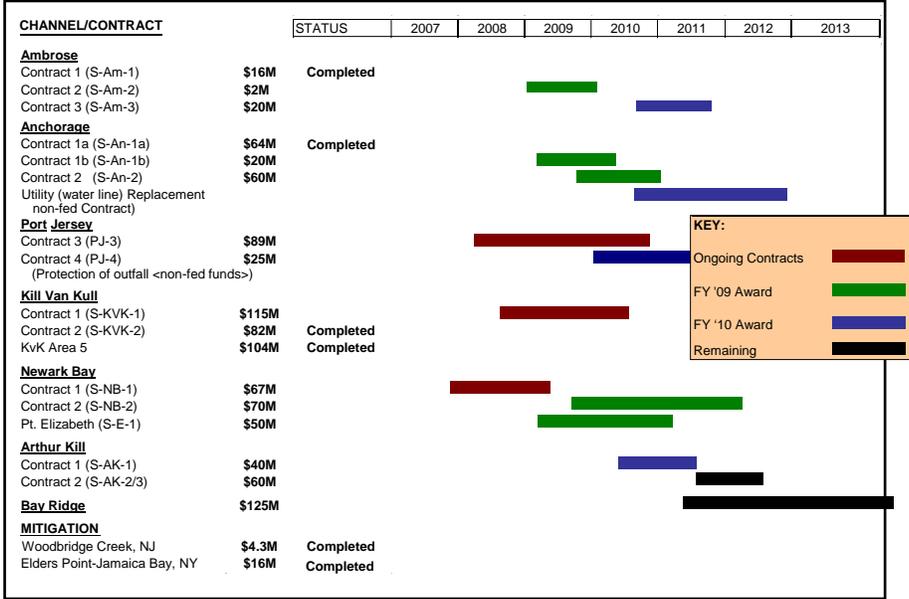






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# New York and New Jersey Harbor (50 Foot) Construction Schedule



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# Dredged Material Management

Goal is to utilize all material beneficially

## Dredged Material Management Plan:

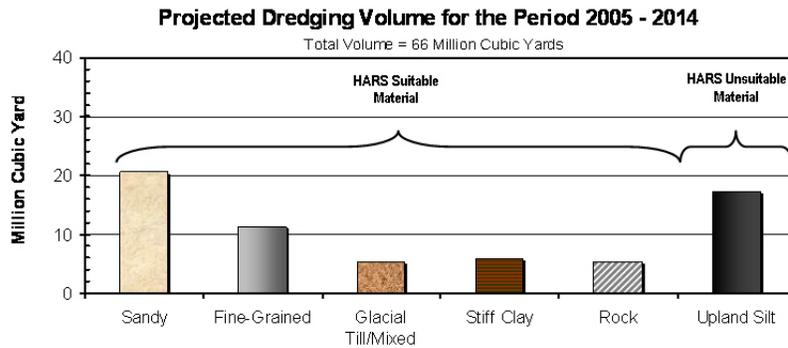
- Address regional dredging needs through 2065
- Plan prepared in 1999 (updated 2005 and 2008)
- Regional Dredging Team
  - Interagency team provides overall management and implementation of DMMP



- ✓ Cap Landfills & Brownfields
- ✓ Habitat Creation & Restoration
- ✓ Beach Nourishment
- ✓ Reefs



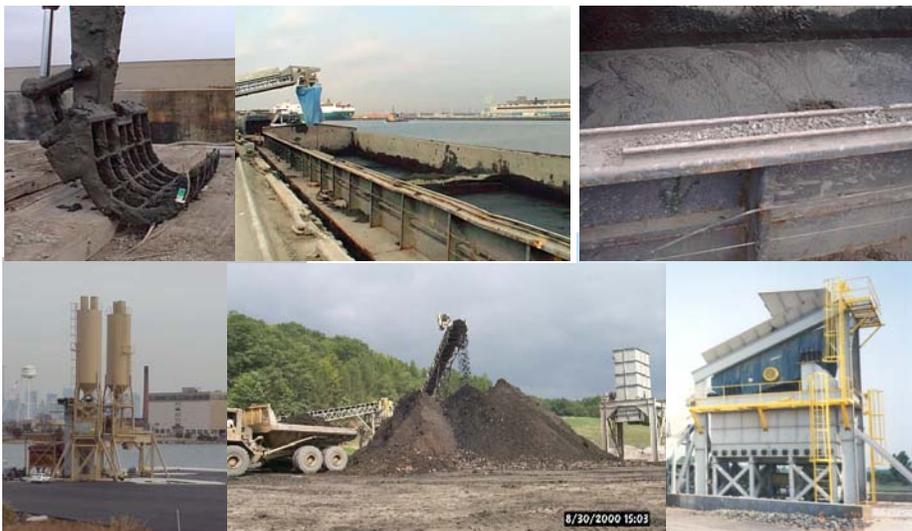
## New York & New Jersey Harbor Deepening Projected Volume of Dredged Material by Type



- **Rock** – used to create artificial reefs and lobster habitat.
- **HARS suitable** – used to nourish beaches, for marsh and habitat restoration, as construction grade fill, and for capping former ocean disposal site.
- **HARS unsuitable** - used for upland beneficial use after being processed to stabilize/solidify material.



## Sediment Stabilization





## Beneficial Use of Dredged Material Successes, Challenges, and Partnering Opportunities



### • Non-HARS Processed Dredged material

- > 1,000 acres of landfills and brown field sites remediated/closed
- Managed by Interagency Regional Dredging Team
- High cost (\$60 cy) and availability of sites.

### • Rock

- > 1,000 acres of offshore fishing/lobster reefs created, mostly off NJ waters
- Regulatory constraints within NY State waters and Harbor

### • Capping Historic Area Remediation Site (HARS)



## Beneficial Use of Dredged Material Successes, Challenges, and Partnering Opportunities



### • Construction Fill Material

- Sand Mining in Ambrose Channel - \$ Savings
- Strong interest by NYC for use of clean sand for redevelopment projects

### • Marsh/Habitat Restoration

- Bayonne, NJ –1 million cy being used to create about 60 acres of shallow water habitat.
- Jamaica Bay, NY
  - 48 acres of salt marsh (Elders east) restored as mitigation using about 300,000 cy of dredged material
  - Long term goal – restore up to 300 acres of marsh
  - Issue – Very expensive!





## Overview of Ongoing Jamaica Bay Efforts

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## Challenges in Restoring Jamaica Bay

- How to Make Restoration more cost effective both short term (Elders West) and Long Term?
- Requires Partnering among Corps, NPS, State, City, Dredgers, and Marsh builders
- **INDUSTRY MEETING:**  
October 29 at 1 pm





## **New York and New Jersey Harbor** *One Estuary, One Harbor, One Vision,*

# Questions?

- Visit Us at <http://www.nan.usace.army.mil/harbor/index.htm>