

# New York/New Jersey Harbor Estuary

## *One estuary, One port, One vision*

### WEDA Eastern Chapter Dredge Scheduling Meeting

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New York District

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US Army Corps of Engineers  
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## Agenda

- Review current status of the NJ/NJ Harbor Deepening Project and plans for upcoming year.
- Discuss linkage of the HDP with Ecosystem Restoration throughout the Harbor Estuary,
- Highlight the Comprehensive Restoration Plan for the Harbor estuary that we developed in partnership with our Stakeholders.
- Discuss Beneficial use of Dredged Material "Successes"



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# New York/New Jersey Harbor Project Overview

## Description:

- Deepening of 35 miles of navigation channels to 50 - 53 ft (mean low water) 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:
  - 17 large multiyear dredging contracts
  - 2 mitigation contracts that restored 93 acres of tidal wetlands
  - Air mitigation to offset NOx air emissions from project
  - Beneficial use of ALL dredged material from project

**Total Project Cost (GNF)** \$2.5B

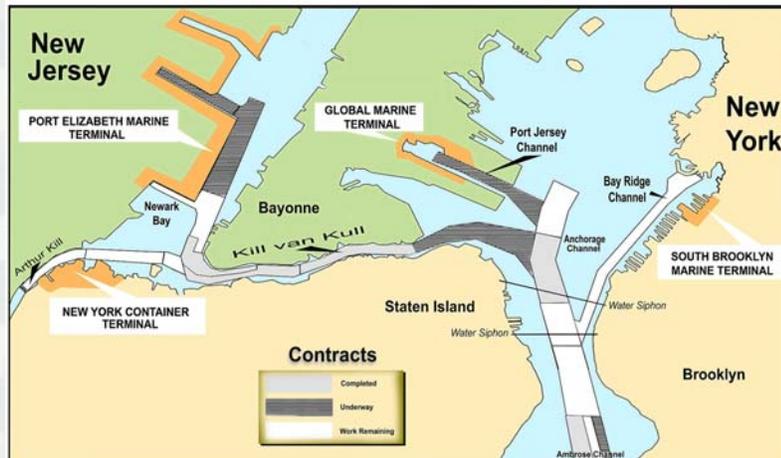
**Benefit to Cost Ratio (remaining):** 3.0 to 1

**Sponsor:** Port Authority of New York & New Jersey



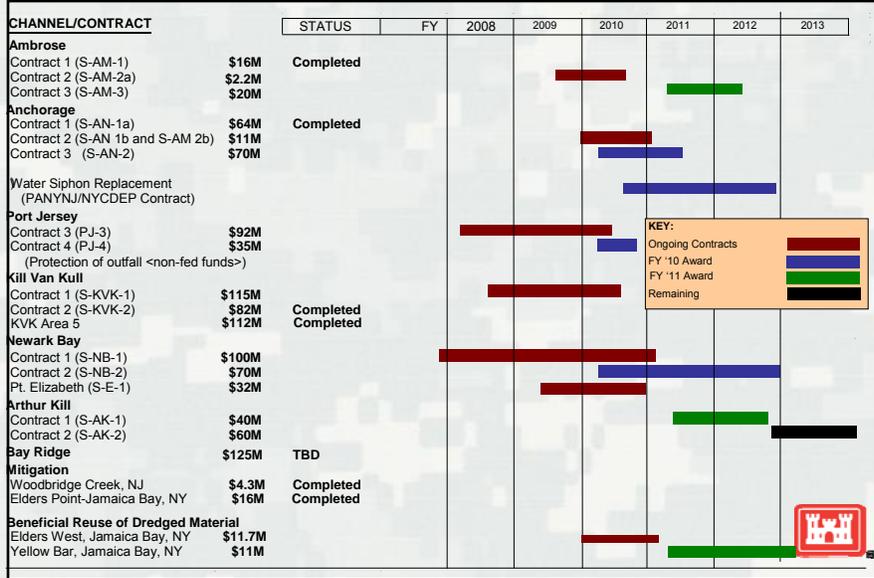
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## General Map of NY & NJ Harbor Deepening Contract Areas



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



## Components of a World Class Harbor Estuary



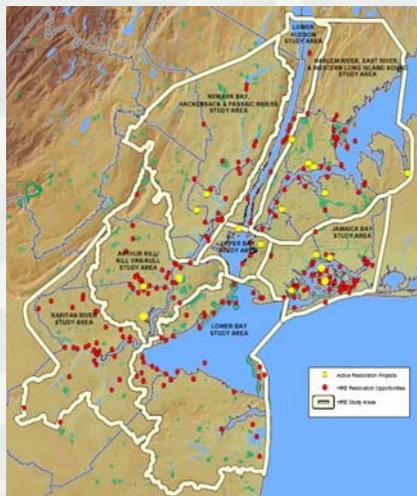
# Hudson-Raritan Estuary (HRE) Environmental Restoration Program

- Broad study authority (1999) to evaluate restoration opportunities within the entire Port of NY/NJ
- Comprehensive Restoration Plan (March 2009 draft report)
  - ▶ Developed in partnership with PANYNJ, EPA Harbor Estuary Program and key stakeholders including 4 federal, 8 State/City agencies, 13 Research institutions and 28 NGO's.
  - ▶ Goal: to create a mosaic of habitats that provide society with new and increased benefits from the estuary environment, based on a consensus vision of what a restored estuary should look like.
  - ▶ Includes specific goals for each of 11 priority "Target Ecosystem Characteristics" identified by science panel.
  - ▶ Intended to serve as Master Plan for Restoration, in the Estuary and to be utilized by all stakeholders involved in restoration.
- Individual Feasibility Studies
  - ▶ Liberty State Park, NJ (authorized for Construction)
  - ▶ Lower Passaic River, NJ
  - ▶ Hackensack Meadowlands, NJ
  - ▶ Gowanus Canal, NY
  - ▶ Potential future additional spinoff feasibility studies



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## Ecosystem Restoration Projects and Opportunities



Harbor Estuary Program/HRE  
Nominated Sites

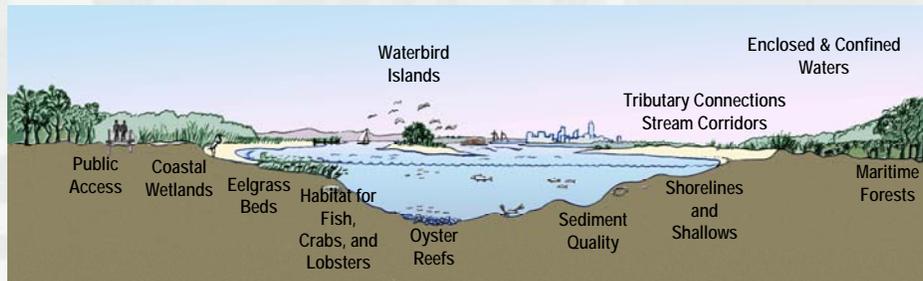


Active Corps Restoration  
Projects



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## Potential Restoration Opportunities: Target Ecosystem Characteristics



[What] [Where] [How Much] [By When]



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## Dredged Material Management

Goal is to utilize all material beneficially

Dredged Material Management Plan:

- Plan prepared in 1999 (updated 2005 and 2008)
- Regional Dredging Team
  - Interagency team provides oversight and implementation of DMMP
  - Promote beneficial use of dredged material whenever possible.



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## Beneficial Use of Dredged Material From NY/NJ Harbor Deepening Project

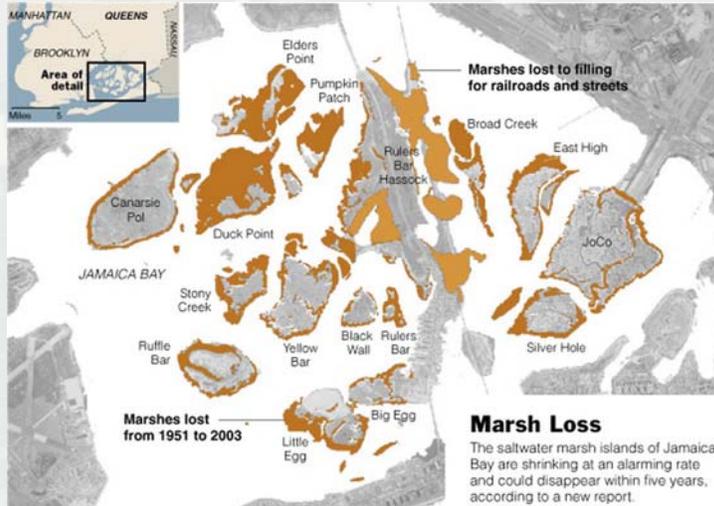
	Placed/Scheduled (MCY)	Projected/Remaining (MCY)
<b>HARS Suitable Material</b>	<b>17.8</b>	<b>14.0</b>
•HARS Remediation	13.2	?
• Offshore/ Inshore Reefs	2.1	2.5
• Marsh Creation	0.6	?
• Upland Fill	1.1	?
• Bird, wildlife Islands	0	?
• Borrow Pit Remediation	0	?
• Oyster Reef Restoration	0	?
<b>Non-HARS Suitable Material</b>	<b>3.7</b>	<b>1.2</b>
• Landfill/Brownfield Remediation	3.7	1.2



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## Jamaica Bay

### Marsh Islands Restoration



Source: Jamaica Bay Watershed Advisory Committee

The New York Times



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# Jamaica Bay

## Marsh Islands Restoration

### Elders Island East

- Restored 50 acres of marsh in 2006 as mitigation
- 200k cy of dredged material utilized
- Very successful, ... but expensive (\$15 million!)



### Elders Island West

- HDP PCA modified to include as project feature
- ARRA funds provided
- Two contracts awarded in Sept 2009
  - ▶ 200k from Anch 1b
  - ▶ 50 acre marsh restoration contract



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## Components of a World Class Harbor Estuary



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## Questions?

*Visit us at <http://www.nan.usace.army.mil/harbor/>*



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