



# Jamaica Bay Marsh Islands, Brooklyn, NY

## Marsh Islands Restoration, Beneficial Use of Dredged Material

As of February 2013

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

### DESCRIPTION

Jamaica Bay is situated within the boroughs of Brooklyn and Queens, New York City. Approximately eight miles long by four miles wide, it covers 26 square miles, and opens into the Atlantic Ocean via the Rockaway Inlet.

Over the past century, the Bay's fragile ecosystem has been degraded through human encroachment and increased urbanization. There is an existing federally maintained navigation project within Jamaica Bay.

The Jamaica Bay Marsh Islands are at the heart of the complex urban ecosystem of Jamaica Bay that is a part of the U.S. Department of the Interior - National Park Service, Gateway National Recreation Area (GNRA).

Analyses conducted by the New York State Department of Environmental Conservation (NYSDEC) confirmed the loss of intertidal salt marsh on the marsh islands and the effect it may have on the ecosystem if the trend continues. It is estimated that approximately 1,400 acres of tidal salt marsh have been lost from the marsh islands since 1924, with the system-wide rate of loss rapidly increasing in recent years.

From 1994 and 1999, an estimated 220 acres of salt marsh were lost at a rate of 47 acres per year. Left alone, the marshes could vanish by the year 2025, destroying wildlife habitat and threatening the bay's shorelines.

National Park Service experts concurred with the NYSDEC analysis and urged immediate action. It was recommended that the causes of the accelerating marsh losses be determined in order to formulate a long-term solution. It was also recommended that a series of pilot projects be developed to stem further losses and re-establish habitat while long-term initiatives are being pursued.

Under the U.S. Army Corps of Engineers' (USACE) Continuing Authorities Program (CAP), the New York City Department of Environmental Protection (NYCDEP) and NYSDEC requested assistance in implementing one or more restoration projects. A feasibility report titled *Jamaica Bay Marsh Islands, Jamaica Bay, NY, Integrated Ecosystem Restoration Report, Environmental Assessment and Finding of No Significant Impact* was approved in 2006, recommending restoration of three marsh islands: Yellow Bar Hassock, Elders Point East, and Elders Point West.

Construction of the Elders Point East marsh island took place in 2006-2007 and Elders Point West in 2009-2010 restoring approximately 80 acres of marshland. The *Engineering Documentation Report for Yellow Bar Hassock* and the *Amendment to the Project Cooperation Agreement for the NY&NJ Harbor Deepening Project* were both approved by the Assistant Secretary of the Army in June and September 2011, respectively.



Yellow Bar Hassock was constructed through the beneficial use of dredged material from the New York & New Jersey Harbor Navigation Project per Section 207 authority in cooperation with The Port Authority of New York & New Jersey, the non-Federal sponsor. The NYSDEC and NYCDEP funded the local share (35 percent) of the Yellow Bar marsh restoration project.

Approximately 44 acres of salt marsh habitat were restored at Yellow Bar Hassock via placement of ~375,000 cubic yards of sand from Ambrose Channel. The 44 acres of marsh is comprised of approximately 14 acres of transplanted low marsh plant hummocks, 20,966 newly planted high marsh transition plants and 16,421 high marsh plants and 500 pounds of dispersed seed (Note: these values are currently pending contractor verification).

Ambrose Channel sand was also beneficially used in September and October 2012 to restore an additional 30 acres of marsh islands at Black Wall (155,000 cubic yards of sand, 20.5 acres) and Rulers Bar (95,000 cubic yards of sand – 9.8 acres). Black Wall and Rulers Bar Marsh Islands were constructed as part of the USACE Beneficial Use Program along with USACE partners NYCDEP, NYSDEC, and The Port Authority of New York and New Jersey. The NYSDEC and NYCDEP paid 100 percent of the costs associated with sand placement.

The marsh island restoration efforts are being monitored and are providing valuable data on the cause of the problems and helping identify the most effective future restoration options. This program also has significant implications for the future success of restoration activities from beneficially using sand from the Operations and Maintenance (O&M) Program.

### **AUTHORIZATION**

Section 204 of the Water Resources Development Act of 1992, Public Law 102-580, as amended by Section 207 of the Water Resources Development Act of 1996 (codified as amended at 33 U.S.C. § 2326), and as amended by Section 2037 Regional Sediment Management of the Water Resources Development Act of 2007.

### **STATUS**

A total of 625,000 cubic yards of Ambrose Channel sand to be placed at Yellow Bar, Rulers Bar and Black Wall from the Harbor Deepening Project was awarded to Great Lakes Dredge & Dock, Inc. (\$9,937,500) on 9 December 2011. A separate Marsh Building Construction Contract was awarded to Village Dock, Inc., on 11 January 2012 (\$7,293,548) to conduct final grading and marsh planting at Yellow Bar. All sand has been placed at the three marsh islands and wetlands created at Yellow Bar as described above. A community-based planting effort led by NYCDEP, EcoWatchers, Jamaica Bay Guardian and the American Littoral Society will be implemented spring 2013.

### **PROJECT COST**

<u>Yellow Bar Hassock Total Project Cost</u>		<u>Black Wall</u>	
Federal	\$12,767,857	Total 100% Non-Federal	\$2,100,000
Non-Federal	<u>\$6,875,000</u>		
Total	\$19,642,857	<u>Rulers Bar</u>	
		Total 100% Non-Federal	\$1,311,000

### **CONTACT**

Ms. Lisa Baron, Project Manager, E-mail: [lisa.a.baron@usace.army.mil](mailto:lisa.a.baron@usace.army.mil), phone: 917.790.8306.

### **CONGRESSIONAL DISTRICT**

<u>State</u>	<u>Senator/Representative</u>
NY	Sen. Charles E. Schumer
NY	Sen. Kirsten E. Gillibrand
NY-05	Rep. Gregory W. Meeks
NY-06	Rep. Grace Meng
NY-09	Rep. Yvette Clarke