

American Bird Conservancy and the North Atlantic Division Army Corps of Engineers

Dredge Material Management and Habitat Restoration

East Inlet Island FWS Long Island Field Office, 2005

Dredge Material Management and Habitat Restoration in the North Atlantic Division

- Scope of Dredging Activity
- Some Typical Projects
- Performance Based Budget Decisions



Scope of Dredge Material Management In the North Atlantic Division

29,758,400
Cubic Yards
of material
were
dredged in
2004.



Historic Area Remediation Site (HARS) “Mud Dump”



Scarborough River Federal Navigation Project
Scarborough, ME
FY 2005 Maintenance Dredging



82,000 cubic yards of Sand



New 6 Acre Beach



Habitat Gains

- First year after beach nourishment the beach attracted three pairs of Plovers and over **20 pairs of Least Terns**
- First time **nesting Least Terns** have been recorded as on Western Beach.

Photo by Jim Zingo



Bird Island Section 206



Bird Island is located in Buzzards Bay in Marion, Massachusetts, southwest of Butler's Point at the entrance of Outer Sippican Harbor.

Bird Island Sand Spit



Supports 25-30% of the North American population of Roseate Terns and a population of Least Terns.

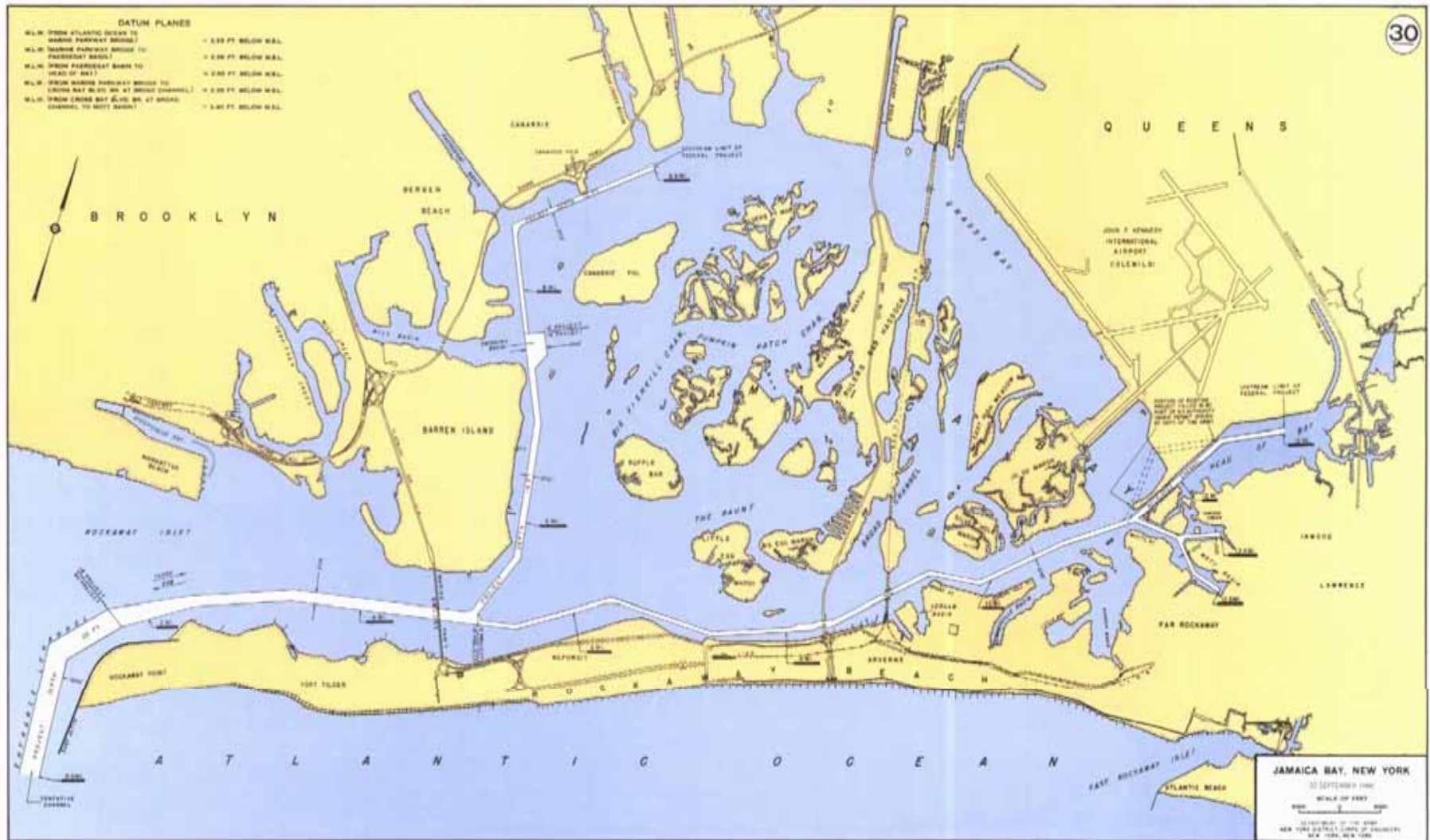
Bird Island Section 206

Out Puts

- Double the 1.5-acre nesting area;
- **Relieve current crowding;**
- Allow increase of ~2,000 pairs of **Common Terns** to ~ 4,000 pairs;
- Allow increase of ~1,200 pairs of **Roseate Terns** to ~ 2,300 pairs.



Jamaica Bay, New York



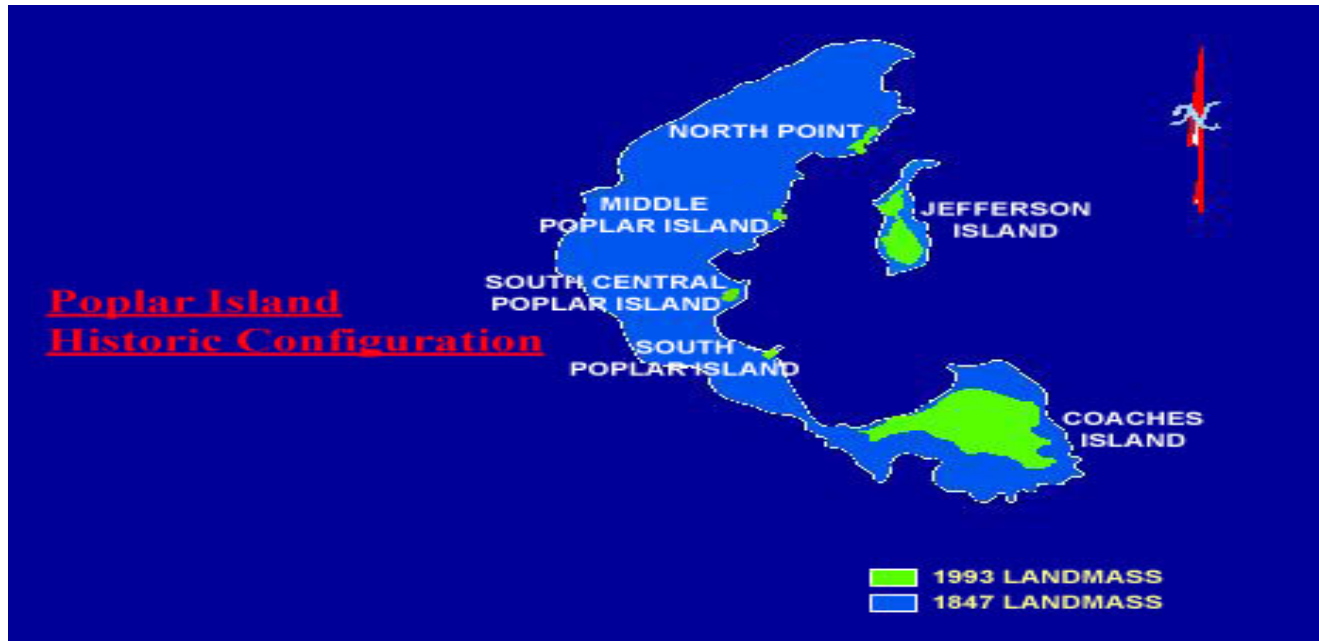
Jamaica Bay Marsh Islands



Dredged material stockpiled at Floyd Bennett Field



Poplar Island, MD



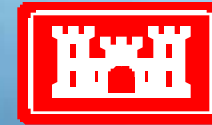
- Poplar Island once teemed with birds and was a hunting preserve for politicians in the 1930s.
- “There were thousands and thousands of ducks, great blue heron and a lot of different shore birds.”

Poplar Island



Poplar Island Habitat Creation





Poplar Island Chesapeake Bay, MD

- Beneficial Use of Dredged Material From Baltimore Harbor Approach Channels to Create 1140 Acres of Remote Island Habitat
- Capacity: 38 Million Cubic Yards
- Project Cost: \$427,000,000
- **Project completion: FY2022**
- **Coastal America Partnership Award 2003.**

Restore Poplar Island to about 1,140 acres, the same size it was in 1847.

Poplar Island



- <http://www.nab.usace.army.mil/projects/Maryland/PoplarIsland/index.html>

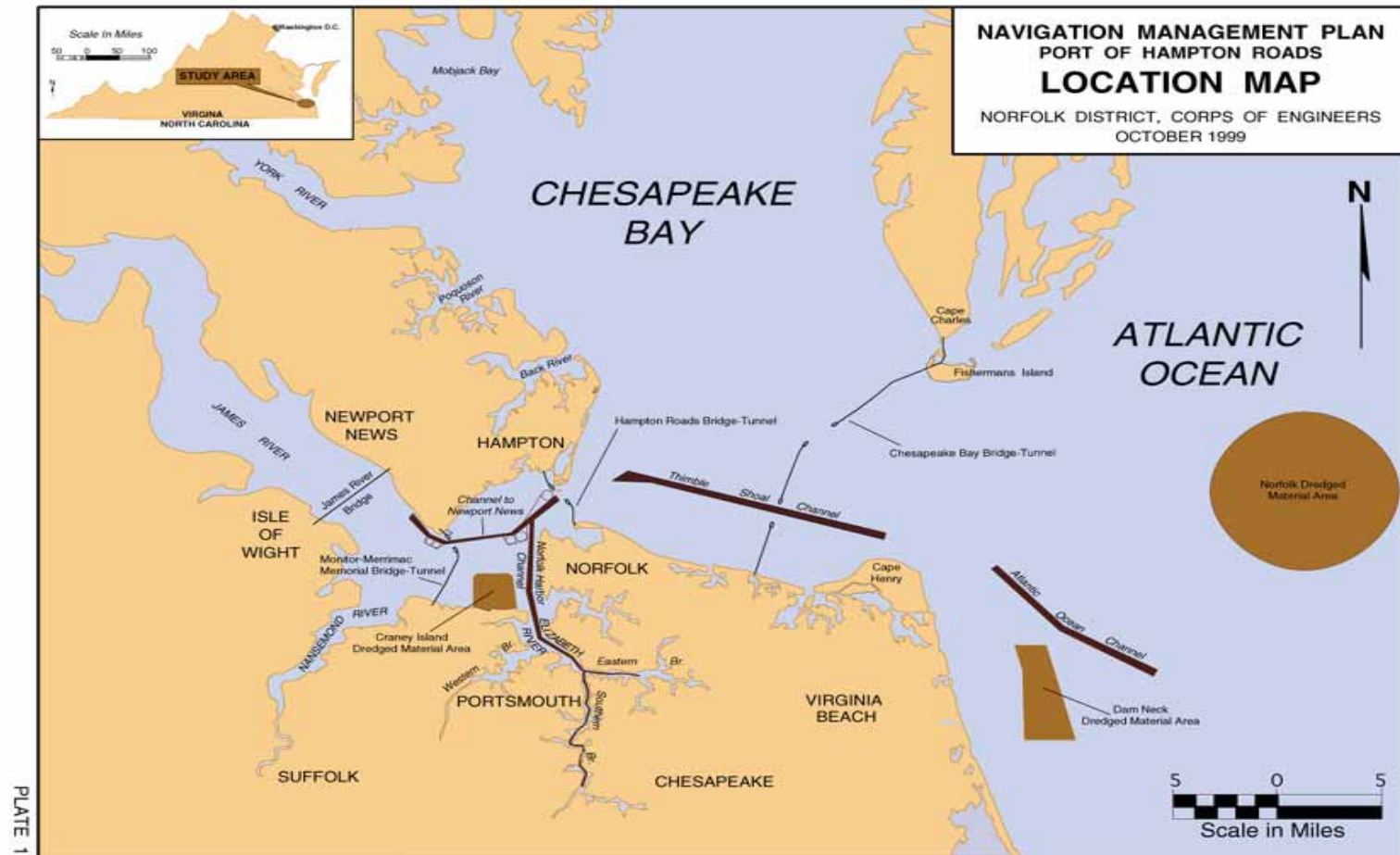


“Build it and they will come”

Poplar Island Resident



Craney Island, VA



Craney Island Disposal Site



Craney Island Dredged Material Management Area (CIDMMA), Portsmouth, VA.



A lined scrape containing two Least Tern eggs.



Justifying the Action for Budget Purposes

- Decision tool to get best buy for federal dollar
 - Science based
 - Value of cumulative contribution.
- Create a point based rating of national significance that can be used to support decisions to budget for the project.
- Partnering Role in the Process? (USFWS, NMFS, DNRs, USGS, TNC, DU, NRCS, CWRPs etc)

Systems/Watershed Context

Budget Performance Criteria

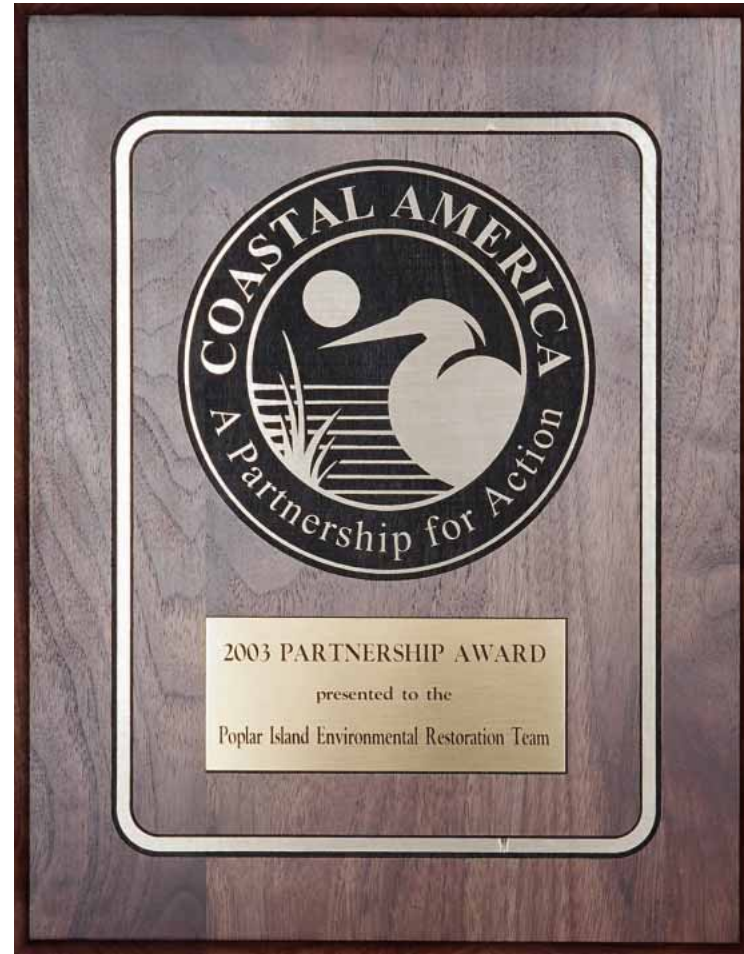


- Scarcity
- Connectivity
- Special Species Status
- Plan Recognition

Plan Recognition

10 Points

- National Recognition: Coastal American 2003 Partnership Award
- Innovative partnership of federal, state, and local governments combined with non-government efforts to restore and protect the coastal environment.
- The recommended plan will continue this partnership and will integrate lessons learned to improve future habitat restoration initiatives.
- Address federal priorities ie Chesapeake Bay Agreement.



Special Species Status

10 points



- Foraging habitat for Federally-listed Bald Eagle (nesting on Coaches Island)

- Bird islands in wetland cells designed to encourage nesting by State-listed Least Terns



- Other observed State-listed species have been observed, such as: Royal Terns, American Oystercatchers, Northern Harriers, and Spotted Sandpiper.

Scarcity

20 points



- Poplar Island-Approximately 10,500 acres of remote island habitat in the Chesapeake Bay has been lost in the last 150 years due to erosion and sea-level rise.
- Significant loss of islands, including marsh islands, in the Chesapeake Bay make this habitat rare and remaining islands are in jeopardy.
- Scarcity on a national scale and declining locally

Connectivity

20 points



- Beaches can serve as a significant feeding area connection during spring and fall migration for many shorebirds and some waterfowl.



- Island salt marsh habitat provides a connection between deep, open water predator finfish and marsh-dependent forage species, making it unique compared to mainland salt marshes



- **Physical connections are important tend to rank higher.**

Take Away Points

- Restoration activities in NAD are diverse and range from simple to complex engineering actions.
- Emphasis is on win –win synergies based on beneficial use and cumulative actions by others in a watershed context
- Project funding decisions will be supported by science based performance rankings