## Mid-Chesapeake Bay Island Ecosystem Restoration Project, Maryland 17 July 2008

FINAL MID-CHESAPEAKE BAY ISLAND ECOSYSTEM RESTORATION INTEGRATED FEASIBILITY REPORT & ENVIRONMENTAL IMPACT STATEMENT (EIS)

June 2008









**Abstract:** Land subsidence, rising sea level, and wave action are causing valuable remote island habitats to be lost throughout the Chesapeake Bay. Approximately 10,500 acres of island habitat has been lost in middle-eastern portion of Chesapeake Bay in the last 150 years, and should present island loss rates continue in the future, it is estimated that remote island habitats will disappear from the Mid-Chesapeake Bay region within 20 years. The Mid-Bay Island project would restore thousands of acres of lost wetland and upland island habitats. This restoration would provide critical regional habitats supporting resident fisheries and wildlife, while providing an environmentally sound method for the disposal of dredged material from the Chesapeake Bay approach channels to the Port of Baltimore.

The restoration of island habitat in the Mid-Chesapeake Bay was one of three actions specifically recommended by the USACE-Baltimore Districts Dredged Material Management Plan (DMMP) and Tiered Environmental Impact Statement (September 2005). The DMMP EIS concluded that there is insufficient capacity for dredged material placement to meet Federal and State of Maryland dredging needs in the next twenty years and that there is potential for overloading and subsequent loss of capacity at existing placement sites if new placement sites are not constructed. More than 130 miles of dredged shipping channels serve the Port of Baltimore, and annual channel maintenance and

improvement projects require that approximately 4 to 5 million cubic yards of sediment be dredged from these Federal and State channels.

The recommended plan will provide for approximately 90 to 95 million cubic yards of dredged material placement capacity at James Island and restore 2,144 acres of essential remote island habitat at both James and Barren Islands. The total project impact area is 2,172 acres, including the breakwater and sill construction of Barren Island. In addition, the recommended plan provides added protection of existing island habitat by minimizing erosion of the existing remnant islands.

Restoration of James Island and protection of existing remnants would consist of creating a 2,072 acre fill area, subdivided to provide approximately 55% tidal wetland habitats and 45% upland island habitats. Dredged material to construct the proposed wetland and upland habitat area at James Island will be dredged from the several Federal navigation channels in the Chesapeake Bay. Restoration and protection at Barren Island would incorporate the use of sills to protect the current acreage of the Island and the submerged Aquatic Vegetation (SAV)/shallow water habitat off the eastern shore of Barren Island. Sills constructed along the current shoreline would be backfilled with dredged material to create wetland habitat. Approximately, 72 acres of wetlands will be created by backfilling on the north and west, respectively. The material that would be used to backfill behind the breakwaters at Barren Island will be from the Federal

**Report Documentation:** Pertinent documentation on the project, the results of the CWRB, and subsequent Washington Level Review Actions are linked below.

- CWRB Agenda
- Project Summary
- CWRB Briefing Slides
- CWRB Lessons Learned and AAR
- CWRB Meeting Record
- Comment Letters
- Documentation of Review Findings
- Signed Chief of Engineers Report 24 Aug 2009
- ASA(CW) Memo to OMB
- OMB Clearance
- Congressional Notification
- Signed Record Decision
- Authorization

## **Additional Information:**

**North Atlantic Division** 

**Baltimore District** 

**Baltimore Harbor and Channels DMMP**