
PROJECT SUMMARY:

Factory Point/Back River Breach Restoration and Navigation Improvements, Hampton, VA

Dates: April 2007-September 2009

Job Number: E04-07

Client: URS



Description: In April 2007 the City of Hampton contracted with REMSA, URS and Waterway Surveys and Engineering to begin the design and permitting process for the Factory Point breach restoration project, a controversial project that was the focus of several citizen meetings. The

City set up a Citizens Committee and the team educated the Committee and helped them give their City Council presentation. Erosion of tidal wetlands, loss of commercial potential of local clamming grounds, and serious sand migration into existing channels were ongoing concerns since the spit feature, a seemingly stable feature, was breached by storms in the early 2000s. The City and its consultants developed a plan to restore full navigability to Back River, return economic vitality to clamming grounds, restore the spit for reducing erosion and storm surge and recreate habitat for the Federal threatened northeastern beach tiger beetle and state endangered piping plover. The project was permitted by the Virginia Marine Resources Commission and the US Army Corps of Engineers in late summer 2009. The state Department of Environmental Quality issued a waiver in 2008.

The Back River/Factory Point project involved approximately 228,500 cubic yards of sand to be taken from 35 acres within the offshore sand mound that had moved into the Bay and pumped via a hydraulic cutter head dredge to the newly restored spit. The berm with its tombolos is 300 feet wide, 2900 feet in length, and 8 feet high. Five breakwaters with an average length of 275 feet are being placed channelward of the restored spit to keep the restored berm in place. In addition, approximately 29,175 cubic yards of dredging is taking place in Back River to improve navigation in the existing channels.

Environmental concerns that were solved through the constant coordination provided by REMSA included mitigation offsite for unavoidable losses to submerged aquatic vegetation (eelgrass and widgeon grass) in a Virginia Institute of Marine Science approved site along the southern shoreline of Hampton. REMSA determined that some nonvegetated wetlands would be impacted and converted back to sandy beach. The northeastern beach tiger beetles were surveyed in 2008 and again in 2009 by an internationally recognized expert on the species, who concurred that the project would restore lost beetle habitat. Geotechnical reports by Waterway Surveys and Engineering showed that the berm sand was suitable for the beetles. A wildlife management plan was developed in conjunction with the City, the Virginia Department of Parks and Recreation and US Fish and Wildlife Service to add protection to the birds and beetles using the spit. The completion of underwater archaeological surveys revealed no significant features to be impacted by the dredging or beach placement, and avoidance measures are in place for nearby cultural resources. The Corps of Engineers, REMSA and Waterway Surveys and Engineering developed an unexploded ordnance safety plan for proper handling of any unexploded ordnance that may be encountered during beach placement of sand. Dredged fines that are to be removed from the Back River channels will be disposed of in an approved upland borrow site in Hampton. The project is under construction as of October 2009.