



“OYSTER RESTORATION IN THE ELIZABETH RIVER SYSTEM WITH PARTICULAR EMPHASIS ON THE LAFAYETTE RIVER AND MONEY POINT IN THE SOUTHERN BRANCH”

DAVID BRUCE, NOAA Chesapeake Bay Office
TOMMY LEGGETT, Chesapeake Bay Foundation
JOE RIEGER, Elizabeth River Project

Monday, March 4, 2013

3:30 PM

Room 1202, Engineering and Computational Sciences Building

Abstract

The Elizabeth River is a tributary of the James River, Virginia. The Elizabeth River watershed lies in parts of Norfolk, Virginia Beach, Chesapeake, and Portsmouth, and is often characterized as being both heavily urbanized and industrialized, which has resulted in extreme water quality impairment and habitat degradation. Massive efforts by NGOs and government agencies have been underway for several decades to clean up the river. Despite the degraded state of the River, there is a robust oyster population as a result of decades-long shellfish closures and active restoration since 1998. A multifaceted plan was developed by restoration partners to restore the oyster population in the Lafayette River, a sub-estuary of the Elizabeth, which included a baseline inventory of the oyster population, a determination of available restorable bottom derived from seabed mapping, a hydrodynamic survey of the river as it relates to larval oyster distribution, restoring oyster habitat coupled with broodstock enhancement, and massive citizen engagement to accomplish these tasks. In addition, The Elizabeth River Project has undertaken extensive efforts to restore oysters, wetlands and benthic habitat to the Money Point section of the Southern Branch of the Elizabeth River, which is widely known for its elevated levels of polyaromatic hydrocarbons and other toxics. The oyster restoration plan for the Lafayette is discussed; including restoration of oyster reefs, oyster population numbers, the NOAA acoustic seabed mapping survey, the VIMS hydrodynamic model, a citizen-based spat catcher program, a oyster larval shell string survey, and preliminary results for habitat restoration and broodstock enhancement. The success of the Money Point Project is also presented.

Biography

David Bruce is a Habitat Ecologist/Geographic Information System (GIS) analyst with the NOAA Chesapeake Bay Office's Habitat Assessment Team (NOAA Fisheries - Office of Habitat Conservation). He received a B.S. in Wildlife Biology from the University of Vermont and a M.S. in Fisheries Sciences from the University of Georgia. Mr. Bruce's primary research interest is identifying relationships between fishes and their habitats. His current work at NOAA involves application of hydrographic surveying techniques and GIS to assess seabed habitat quality for restoration purposes.

Tommy Leggett manages the Chesapeake Bay Foundation (CBF) Virginia Oyster Restoration Center. He has a M.S. in Marine Science from the Virginia Institute of Marine Science and is a past appointee to the Virginia Marine Resources Commission. Mr. Leggett also serves as the Virginia Oyster Restoration and Fisheries Scientist and is the VA CBF lead on policy-making decisions relating to native oyster restoration.

Joe Rieger is the Deputy Director for Restoration at the Elizabeth River Project. He received a B.S. from Ohio University and a M.S. in Aquatic Ecology from Old Dominion University. At the Elizabeth River Project, he oversees projects that include wetland, oyster, and sediment restoration.

Reception before seminar at 3:00 PM