

BUILDING COASTAL COMMUNITY SUPPORT FOR OBSERVING SYSTEMS: NOAA "SMART BUOYS" AND THE CAPTAIN JOHN SMITH CHESAPEAKE NATIONAL HISTORIC TRAIL

Andrew W. Larkin, NOAA Chesapeake Bay Office

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Recently, NOAA has launched six "smart buoys" at key locations throughout the Chesapeake Bay to provide real-time observations about local meteorological, oceanographic and water quality conditions and to mark and interpret the new Captain John Smith Chesapeake National Historic Trail. In 2007 and 2008, the NOAA Chesapeake Bay Office (NCBO) launched a comprehensive outreach and education campaign to connect potential users—scientists, sailors, fishermen, natural resource managers, educators—to these "smart buoys" located in their coastal communities. NCBO's campaign was successful in generating wide regional media coverage, increasing use of the buoy data and leveraging partnerships to expand the observing system. This presentation will focus on lessons learned and successful strategies employed in the NCBO outreach campaign and how they can be applied in other coastal communities.

While there are substantial sums being spent on Chesapeake Bay restoration activities, the difficulty and expense of sustaining continuous, real time offshore measurements in the Bay has led to a surprising lack of this data available to scientists, managers, and the public. In 2006, Congress directed NOAA to create "an interpretive buoy system in the Chesapeake Bay that will provide information on current conditions and water quality, as well as area history." These buoys would help to mark and interpret the newly created Captain John Smith Chesapeake National Historic Trail, the first water trail in the National Historic Trail System.

NOAA created the Chesapeake Bay Interpretive Buoy System (CBIBS) and launched the initial buoy in May of 2007 at Jamestown, Virginia. An additional five buoys were launched in 2007 and 2008 at the Potomac River, the Patapsco River, the Susquehanna River, the Rappahannock River, and the Elizabeth River. The sites were selected after assessing the need for both observational data and historical interpretation.

CBIBS fills critical observational gaps in the Chesapeake Bay and is a component of the Chesapeake Bay Observing System (CBOS) and the US Integrated Ocean Observing System (IOOS). The buoys measure wind speed and directions, air temperature, wave height, currents, water temperature, salinity, chlorophyll, dissolved oxygen and many other parameters. This observational data, as well as historical information can be obtained by logging on to www.buoybay.org or by calling 1-877-BUOYBAY.

The presentation will also discuss the CBIBS educational products that NCBO has developed for the buoybay.org website. "Chesapeake Exploration" builds upon the

“Estuaries 101” national curriculum, which was launched by the National Estuarine Research Reserve System in summer 2008 after extensive teacher testing. The Chesapeake Bay localization or “Chesapeake Exploration” is an online place-based application of the concepts learned in the national curriculum that applies real-time and archived data from CBIBS and other observational systems.

Andrew W. Larkin
NOAA Chesapeake Bay Office
NOAA at Nauticus
1 Waterside Drive
Norfolk, VA 23510
Andrew.W.Larkin@noaa.gov
(757) 627-3823 x36