

## “Smart Buoy” Deployed in Chesapeake Bay over Artificial Reef

On July 27<sup>th</sup>, 2010, the National Oceanic and Atmospheric Administration (NOAA) Chesapeake Bay Office and its partners at the Maryland Department of Natural Resources (DNR) deployed a “smart buoy” in the Chesapeake Bay west of the Little Choptank River (Figure 1). The new buoy is located over the Dominion Reef at the Gooses, an 80-acre artificial reef constructed, in part, with materials from the old Woodrow Wilson Bridge, and was made possible by a \$200,000 grant from the Dominion Foundation to the Coastal Conservation Association of Maryland via the Maryland Artificial Reef Initiative.

The new buoy is the ninth in NOAA's Chesapeake Bay Interpretive Buoy System (CBIBS), a network that provides scientists, boaters, and educators with real-time data about the Bay. In addition to monitoring water quality at the surface, as do all CBIBS buoys, the newest buoy also tracks water quality at the bottom.



**Figure 1.** Map showing location of new CBIBS Buoy in the Chesapeake Bay west of the Little Choptank River.



“The Dominion Gooses Reef CBIBS buoy gives us the opportunity to do some really innovative monitoring,” said Peyton Robertson, Director of NOAA’s Chesapeake Bay Office, which manages CBIBS. “Data from this buoy’s water-quality sensor on the Bay bottom will give us an unprecedented look at the health of the Bay in this location.”

CBIBS buoys collect measurements on weather, waves, currents, and water-quality, and transmit data hourly to the web. The buoys also mark points along the Captain John Smith Chesapeake National Historic Trail. This trail runs about 3,000 miles in the Chesapeake and its tributaries along routes taken by Smith in 1607 and 1608 to chart the land and waterways of the Bay. Weather and water data, as well as historical and cultural information about the trail can be accessed at [www.buoybay.org](http://www.buoybay.org)

([www.buoybay.org/m](http://www.buoybay.org/m) for mobile devices) and by phone at 877-BUOY-BAY (877-286-9229). Data from this buoy will also be available through DNR’s Eyes on the Bay website ([www.eyesonthebay.net](http://www.eyesonthebay.net)) and DNR has also committed to maintain the water quality instruments for the next five years.

"This is a tremendous effort by everyone involved and the information it is going to provide is critical to understanding the artificial reef and the health of the Bay," said Bruce Michael, Director of DNR’s Resource Assessment Service.

