A new partnership with sloop Clearwater will provide more real-time water quality data to monitor the Hudson River, New York State Department of Environmental Conservation (DEC) Commissioner Pete Grannis announced today. When the boat launches for the year on Saturday, May 1, it will be equipped with monitoring equipment to broadcast river data round-the-clock, focusing on water temperature, salinity, turbidity and other measurements.

Clearwater’s participation is the latest component of the Hudson River Environmental Conditions Observing System (HRECOS) - a network of eight stations being installed in the Hudson River Estuary from Schodack Island to the New York/New Jersey harbor. HRECOS stations send continuous updates to www.hrecos.org for the purposes of environmental forecasting and assessment. The partnership with Clearwater adds a mobile dimension to the monitoring network.

“Installing a station on the Clearwater dramatically expands the reach of HRECOS and will help scientists and river enthusiasts learn new information about this historic resource,” Commissioner Grannis said. “The mobile station will give researchers the ability to access areas of the river that are not reachable from our permanent stations, enhancing our understanding of the Hudson’s ecosystem.”

HRECOS is operated by a consortium of partners from government and the research community including DEC, National Estuarine Research Reserve, Stevens Institute of Technology in New Jersey, Lamont-Doherty Earth Observatory, Hudson River Foundation, U.S. Geological Survey, and the Cary Institute. HRECOS staff are sponsored by DEC’s Hudson River Estuary Program; additional funding is provided by DEC, the U.S. Environmental Protection Agency, National Oceanographic Atmospheric Administration, and the Hudson River.
Foundation.

Since the six first stations were installed in 2008, the data collected have helped scientists, environmental monitors and recreational users of the river. Kayakers can access forecasts for wind and water level conditions and anglers can monitor salinity and temperatures. Cities and towns on the river shores can access flood forecasts and warnings when dangerous storms approach.

In March 2010, the network provided extensive information about storm surges being experienced throughout the river. Last fall, the data were used to provide more information about the role the Hudson’s tidal cycles and rain events play in the migration of American eels. HRECOS also provides opportunities to integrate the information being collected into educational planning.

The Clearwater station will track conditions from Albany to the New York harbor. Instruments purchased by the Hudson River Foundation and installed by the Stevens Institute will continuously transmit the location of the Clearwater, as well as measurements of water quality that include: dissolved oxygen, turbidity, salinity, and water temperature. The eighth station will be installed at Marist College in Poughkeepsie later this year.

Jeff Rumpf, Executive Director of Clearwater, said: “Clearwater is excited to be part of the HRECOS network. This is a great opportunity for the thousands of kids who sail on Clearwater to see the direct connection between their experience on the river and the work of some of the best scientific organizations in the country.”

Alan Blumberg, Director of the Center for Maritime Systems at the Stevens Institute of Technology, said: “Having a capability to acquire data in real-time from the Hudson River via the Clearwater as she sails will greatly benefit all those who care about and use the river. Scientists and engineers in particular will use the data to better understand the estuarine conditions that are occurring at that moment and predict what is likely to occur in the next few days. A successful installation on Clearwater will be a prototype for similar installation on other vessels, enabling an ever more comprehensive view of the Hudson.”

Clay Hiles, Executive Director of the Hudson River Foundation for Science and Environmental Research, said: “The Hudson River Foundation has been very pleased to support the overall development of HRECOS and this significant expansion. This
comprehensive effort to increase our understanding of the Hudson River on a real-time and long-term basis has brought together the talents of several outstanding research and education institutions in an extraordinary example of collaboration that now includes the Hudson’s environmental flagship."