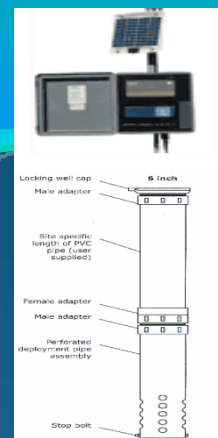




Water Quality Monitoring in New Jersey Estuaries Using Data Loggers



The **Urban Coast Institute (UCI)** has implemented an estuarine water quality monitoring network at eight locations in the northern and central estuaries of New Jersey, with the deployment of automated, near real-time water quality monitoring instruments.

A network of automated water quality sensors in important estuarine waters of the state will allow scientists to better understand these ecosystems and discern the links between water quality, biological activity, and stress-induced events i.e. fish kills, harmful algae blooms, over-nutrication and low dissolved oxygen events. Continuous monitoring of water quality conditions using near real-time data collection techniques eliminates the need for frequent trips to monitoring sites and benefits scientists and managers by allowing them to track environmental conditions at any given moment, and more readily respond to sporadic events as they happen which, in turn, can make possible more accurate planning and decision making.

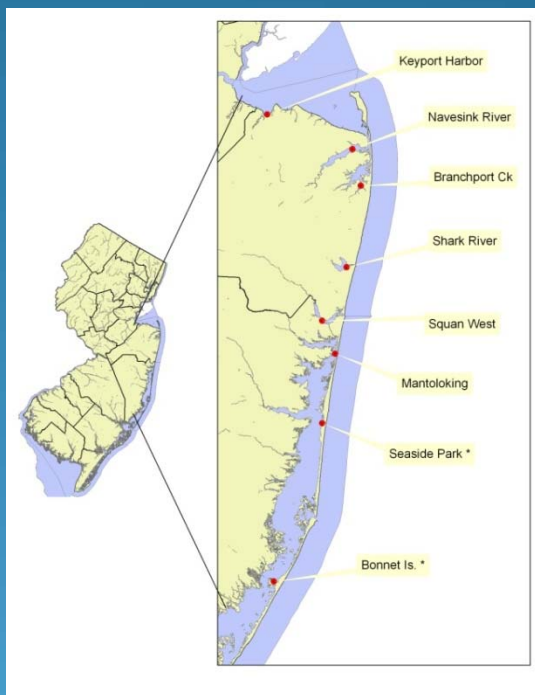
Collaboration with the NJDEP Bureau of Marine Water Monitoring, Barnegat Bay National Estuary Program, Stevens Institute of Technology, Monmouth County Board of Health, local and regional watershed management groups and other partners.

The first station, Shrewsbury River, Branchport Creek monitoring station went online in early October of 2007.

Data Collection

Readings are taken every 15 minutes and transmit once per hour to Monmouth, NJDEP and Stevens Institute of Technology.

Parameters include: Temperature, Salinity, pH, Dissolved Oxygen, Chlorophyll Turbidity and Depth.



*Owned by Barnegat Bay National Estuary Program, operated by Monmouth University

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Data is available on the internet at:

www.monmouth.edu/urban_coast_institute

www.nj.gov/dep/bmw/sensorhome.htm

<http://hudson.dl.stevens-tech.edu/maritimeforecast>

The Urban Coast Institute would like to thank EPA Region II for their initial support in establishing the network, and the Fairleigh S. Dickinson, Jr. Foundation for their continuing support of its operation.