

Physical Oceanographic Real-Time System (PORTS®) NOAA/National Ocean Service New York/New Jersey Harbor

Project Characteristics

- *Physical Oceanographic Real-Time System (PORTS®)*
- *Acoustic Doppler Current Profiler (ADCP)*
- *Meteorological sensors*
- *Conductivity and water temperature sensors*
- *Water level (tide) sensors*
- *Air gap sensor*

NOAA, through the National Ocean Service (NOS) CO-OPS has established real-time systems for the collection and dissemination of environmental data in Ports and Harbors. The Physical Oceanographic Real-Time System (PORTS®) installed in New York/New Jersey Harbor is an example.

New York/New Jersey PORTS® integrates real-time current profile, water level, wind, meteorological, water quality, and air gap data taken from 7 sites located throughout the Harbor System, including: Kings Point, The Battery, Robbins Reef, Bayonne Bridge, Bergen Point West Reach, The Narrows, and at Sandy Hook, NJ. Data are routed through NOAA/NOS/CO-OPS Continuous Operational Real-Time Monitoring System (CORMS) before being disseminated on the web in near real-time every six (6) minutes.

Since 1995, Woods Hole Group has been responsible for the operation and maintenance of New York/New Jersey PORTS®. Woods Hole Group is responsible for maintenance of four primary and back-up water level, four water temperature, four atmospheric temperature, one current meter, four wind, one air gap, one water conductivity-temperature, and four barometric pressure sensors.

Woods Hole Group maintenance responsibilities include daily monitoring of PORTS® display information for QA purposes, monthly maintenance visits to the water level and meteorological stations, quarterly service of the air gap station on the Bayonne Bridge, and bi-annual service of the ADCP station.



Woods Hole Group also provides annual inspection services for the water level stations, including second order vertical leveling, DGPS positioning, and annual documentation as per the NOAA required formats.

In addition, Woods Hole Group is responsible for providing monthly system status reports, and is on call for any required emergency maintenance in order to ensure the best possible data return from the PORTS® system.

Real-time data collected by the New York/New Jersey Harbor PORTS® are available to the public at:

<http://tidesandcurrents.noaa.gov/ports/index.shtml?port=ny>