

NOAA IDIQ Regional Services Contract Task IX

Blue Water Bridge Horizontal ADCP

River Current Measurement Project

Project Characteristics

- *Great Lakes and River Survey*
- *Fabrication, Sub-contractor Management, Deployment Planning and Execution*
- *Horizontal Mounted 300 KHz ADCP*

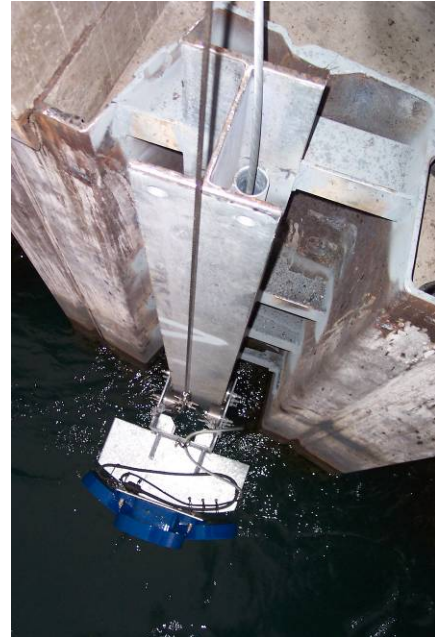
NOAA CO-OPS partnered with the U.S. Army Corps of Engineers (USACE), Detroit District office to design a 300 KHz H-ADCP mount to measure currents at the head of the St. Clair River beneath the Blue Water Bridge in Port Huron, MI year-round. The real time current information will assist the Great Lakes Shipping Association, Lake Carriers Association, and Lake Pilots Association to safely navigate through the constricted river reaches connecting all of Great Lakes.

Woods Hole Group partnered with a local marine construction company to accomplish the following tasks: underwater site inspection survey to insure the area was clear of obstructions and suitable for the installation design, demolition of a portion of the existing sidewalk; fabrication to CO-OPS design drawings; installation; and re-construction of all disturbed areas back to the park like setting of the area. Electronic configuration of the system on site and confirmation of data quality and throughput to CORMS was confirmed prior to departure from the site.

Due to the location and security reasons, liaison with USCG, US Department of Homeland Security, and Canadian Coast Guard was required on this project. Woods Hole Group was responsible for day-to-day clearances and permits, updates, and disseminating plans to the CO-OPS Task Manager.

Woods Hole Group provided site inspection reports within 7 days and developed detailed installation methodology plans for approval by NOAA. Communications with NOAA and sub-contractors were frequent and resulted in a well executed installation plan.

The installation was accomplished with the design of a single 'H' Beam system. Vertical Installation was accomplished with heavy construction equipment and on-site safety was a primary concern due to the size and weight of the components and the velocity and low temperature of the river. Safety harnesses and work float vests were utilized during the installation activities over water.



Location: Upper St. Claire River, MI
Client: NOAA
Center for Operational Oceanographic
Products & Services (CO-OPS)
Task Manager: Carl Kammerer