Woolpert to collect bathymetric data in Chesapeake Bay



Woolpert has been awarded a contract by the National Oceanic and Atmospheric Association (NOAA) to conduct hydrographic surveying and collect bathymetric data in the Chesapeake Bay Watershed. The project, funded in part by the bipartisan Infrastructure Investment and Jobs Act, has a value of US\$5.5 million with a US\$1.4 million option and is being managed through NOAA's Office of

Coast Survey hydrographic services contract.

The project will concentrate on an area of 615 square nautical miles, including sections of the Potomac, Rappahannock, James and York rivers. Some parts of these rivers have not been surveyed for over 50 years. Woolpert will utilize almost a quarter of its fleet, consisting of five hydrographic survey vessels equipped with multibeam and sidescan sonar systems from its East Coast hydrographic hub in Charleston, S.C. A customized GIS dashboard will display vessel locations in real time to enhance situational awareness and provide real-time information throughout the project.

The benefits of hydrodynamic modelling

The data collected will support several future missions, such as navigation, inundation modelling, floodplain analysis and coastal resilience. Hydrodynamic modelling will aid forecasters and decision-makers in updating NOAA's Office of Coast Survey nautical charts and services to ensure safe navigation. It will also help determine the timing of rapid river stage increases and decreases, the duration of high water, inundation and drought, predict the movement of oil and hazardous materials along the heavily industrialized James River, and determine site suitability for oyster restoration reefs in the Hampton River.

In addition, it will support flow models that gauge temperature and salinity distributions in the Rappahannock River, which is home to a thriving oyster industry, provide data to support the hydrodynamics of the Potomac River's reservoir and dam infrastructure, and inform best preservation practices for NOAA's National Marine Sanctuary at Mallows Bay in the Potomac, allowing the sanctuary to operate better and promote its maritime historic and cultural resources.

Woolpert programme director and certified hydrographer Dave Neff praised NOAA for its efficient and effective use of federal funding to address critical and overdue infrastructure needs. "This is an outstanding use of taxpayer dollars because it is all about improving public safety, advancing the blue economy and preserving the environment for decades to come", Neff said. "Having highly accurate, up-to-date data enables us to predict and respond to our changing world so we can make informed decisions and build towards a better tomorrow."



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https://www.hydro-international.com/content/news/woolpert-to-collect-bathymetric-data-in-chesapeake-bay