

CITY OF ANNAPOLIS & UNIVERSITY OF MARYLAND DEPLOY WATER LEVEL MONITORING SYSTEM

Project Involves Deployment of Hohonu Flood Monitors at Locations Including Annapolis City Dock to Provide Real-Time Data

ANNAPOLIS, MD - A new water level monitoring project will bring better monitoring and data collection to help protect coastal communities from the impacts of flooding. The new water level sensors, grant-funded through the University of Maryland, will be part of a larger resilience strategy in places around the Chesapeake Bay, including Annapolis' City Dock. Flooding concerns and storm preparedness are part of a larger program with the University of Maryland, City of Annapolis, and [Hohonu](https://www.hohonu.io), a national-scale, real-time water monitoring startup outfitting Annapolis with low-cost sensors and software. The data collected will track and measure flooding to inform emergency management on broad resilience strategies.

The project is a result of an initiative to bring together land, air, and water science. The goal is to learn how best to build resilience and create predictive models for more frequent and more intense flooding events.

“The health of the Chesapeake Bay is vital to the health of the Maryland economy but our coastal communities face increasing flood risks as sea levels rise,” said Dr. Timothy Canty, associate professor in the Department of Atmospheric Science and director of the Maryland Marine Estuarine Environmental Sciences graduate program at the University of Maryland. “This project is the first step in providing the state with a larger network of water level monitors to help better allocate resources, prioritizing assistance for communities facing the most imminent risks.”

“This is one of many projects that Hohonu is servicing on the east coast of the United States”, said Dr. Brian Glazer, Hohonu Founder/CEO. “We are working to provide solutions for a growing demand for real-time data in flood monitoring as we see increased frequency and intensity of storms and flooding. Just this year, our sensors have monitored three named storms and over 50 distinct flood events across our 80 east coast locations.”

Hohonu plans to deploy up to 20 sensors in locations around the Chesapeake Bay that will provide vital information for the Annapolis City Dock. It will also help coastal communities, including Maryland's capital city, to plan for future flood protection projects.

“Annapolis is ground zero for coastal flooding,” said Matthew Fleming, Executive Director for the Resilience Authority of Annapolis and Anne Arundel County. “Through this initiative, the City will not only receive real-time, hyper-local data streams on water levels, but will have the opportunity to work alongside Dr. Canty and University experts on the development of decision support tools critical for emergency response and resilience planning”.

Adding to the growing sensor network will also provide better resolution in the data and understanding across the state and entire U.S. eastern seaboard on flood frequency and impact. Annapolis is leading the way nationally with the preeminent historic coastal city plans by responding to an impending threat and adopting a proactive resiliency strategy.

The City of Annapolis has roughly two dozen miles of coastline, nearly all of it vulnerable to the impacts of sea level rise. Gathering data at different locations around the City and around the Bay will help inform City planners of critical resiliency needs.

“During rush hour Wednesday April 24th, the City experienced a high tide that was 5 inches higher than had been predicted the day before.,” said Burr Vogel, Director of Public Works for the City of Annapolis. “The unexpected flooding closed traffic on the Spa Creek bridge, creating major traffic problems throughout the city. Our flood barriers would have prevented this closure if they had been in place, but we didn’t have accurate data to help us help our residents. This project is arriving at just the right time.”

About the Organizations

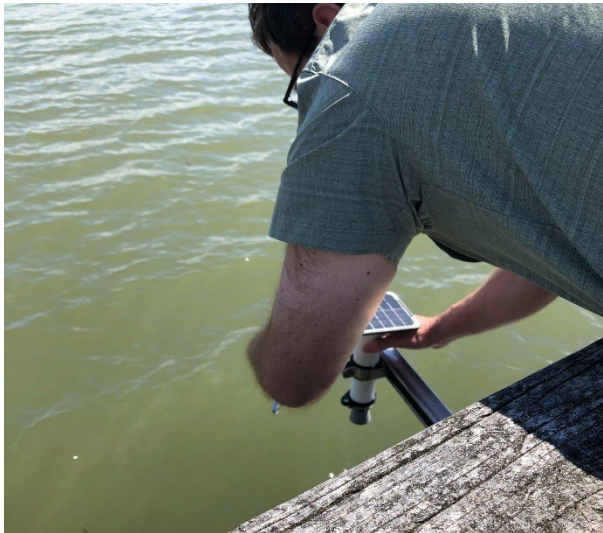
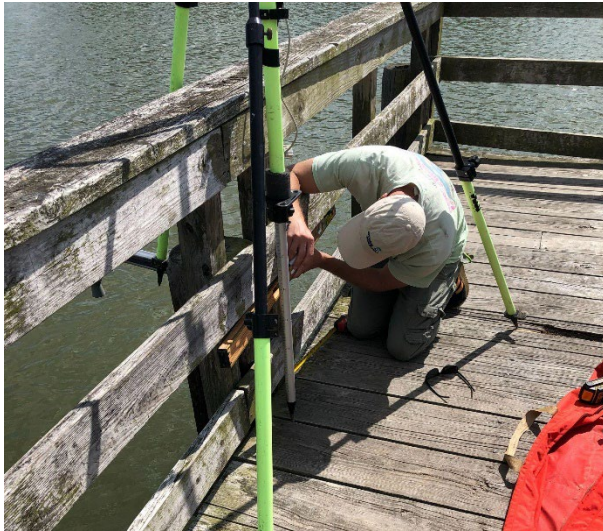
[Hohonu](#) is a public-private company that provides national-scale real-time water monitoring through sensors and software. From academic researchers to underserved communities, Hohonu is on a mission to democratize access to rigorous data for everyone who needs it. To date, Hohonu has over 1.8 million hours of water monitoring across 120 locations and 15 states.

The [University of Maryland](#), College Park is a public land-grant research university in College Park, Maryland. Founded in 1856, UMD is the flagship institution of the University System of Maryland.

[The Resilience Authority of Annapolis and Anne Arundel County](#) was formed through legislative statute in 2021. As the first multi-jurisdictional resiliency authority in the United States, the Resilience Authority

of Annapolis and Anne Arundel County seeks to provide an efficient and effective mechanism for planning, funding, and completing infrastructure projects that mitigate current and anticipated effects of climate change.

Photos



Clockwise from the left: Daniel Weirauch, Woods Hole Group, surveying for Hohonu sensor installation. Group photo: Beth Groth, Charles County Government, Climate Resilience and Sustainability Office, Tim Canty, Associate Professor and Director, Marine Estuarine Environmental Sciences, Noelani Brockett, Charles County Government office of Climate Resilience, and Micahel Maddox, Stakeholder Coordinator and Project Manager. Tim Canty tightens the Hohonu sensor in place.

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