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For Immediate Release

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Title: University of Rhode Island Students Retrieve ADCP at Bourne Tidal Test Site

Photo 1



Caption: L-R BTTS Site Manager C. Eben Franks, URI crew: Soroush Kouhi, Chris Small, Sandra Deeb, Jesse Moore

Photo 2



Caption: ADCP Popped to surface for retrieval at BTTS in Cape Cod Canal

Photo 3



Caption: Soroush Kouhi listening to the Teledyne ADCP chirping at the boat ramp.

Photo 4



Caption: URI and MRECo crew installing water level sensor atop the BTTS Platform.

As part of a research project, entitled, "Assessment of the Tidal Energy at a Demonstration Site: Cape Cod Canal, MA, URI doctoral student, Soroush Kouhi and three URI Ocean Engineering students went out to the Bourne Tidal Test Site Friday Jan. 19, 2018 to retrieve the Acoustic Doppler Current Profiler (ADCP) that was deployed one month ago to take water column velocity data. The data will be analyzed to show what the water velocities were for 30 days. The high resolution data will be correlated to result in a projected energy power output. Determining projected power output for a tidal testing area is important because when device developers install their own turbines at the BTTS, they can compare data from their turbine to the actual energy output recorded by the URI team. Of course every turbine is different but all designers hope to top or match their previous power output results.

The Teledyne ADCP is enshrouded in a bottom mount frame – called a Trawl Resistant Bottom Mount - that is very rugged and is easy to deploy and recover. It was simply placed overboard, fell to the seafloor, was tethered to the BTTS structure and left to collect data for the past month. As with anything that enters the challenging marine environment, the ADCP was seen being buffeted by the currents and the ice floes that move by with the current. Mercifully its buoyancy bladder deployed on target and it floated to the surface for retrieval. “Now we have the hard work to do. We have to get all the data, analyze and process it and determine next steps. This will take a month or so” said Kouhi.

While out there, the team lead by MRECo’s BTTS Site Manager C. Eben Franks installed is a downward looking sea surface level sensor that will correlate tidal heights with the water velocities recorded underwater by the ADCP. All of this data will be combined to further characterize the water flow environment at the BTTS.

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