

**FOR IMMEDIATE RELEASE**



**June 13, 2011**

**Northwest Research Team Successfully Deploy Submersible Echosounder at Renewable Energy Site**

*BioSonics DT-X SUB monitors marine life in Puget Sound*

Seattle - The University of Washington, working with NOAA's Northwest Fisheries Science Center (NWFSC), recently retrieved a BioSonics DT-X SUB split beam echosounder after a 1-month deployment in northern Admiralty Inlet, WA. The study location is a proposed Snohomish Public Utility District tidal energy demonstration project site. The BioSonics DTX-SUB is an autonomous scientific echosounder packaged in a subsea pressure housing with integrated power management and data storage systems. "When it's down there, collecting data, it's completely self-contained. There's no line to the surface, no signal to the surface. It's entirely contained in just what you see here," said Jim Thomson, Oceanographer with the University of Washington. The DT-X SUB is being used to detect, categorize, and enumerate pelagic fish, invertebrate, and marine mammal species at the proposed site. The intent is to allow marine hydrokinetic (MHK) site and device developers to install tidal turbines in suitable locations while minimizing behavioral effects on aquatic organisms.

After programming the echosounder configuration and duty cycle at the surface, the echosounder was deployed to the sea floor affixed to a Seaspider tripod instrument mount. The programmable DT-X SUB system automatically collected and logged water column backscatter data from split beam transducers throughout the month long deployment. The scientific echosounder was programmed to collect data every other hour in a 10% operational duty cycle, alternating between pinging and sleep modes. This duty cycle maximized temporal coverage and extended battery



life for the duration of the deployment. **DT-X SUB and other remote sensors affixed to Seaspider tripod**  
Last week, the system was retrieved using acoustic releases and the data files were downloaded for processing of fish abundance, distribution, and behavior information.

BioSonics has considerable experience in providing submerged, cabled observatory echosounder systems as well as fully-automated hydroacoustic monitoring systems. The DT-X SUB was developed based on this experience and further advancement of BioSonics automated echosounder technology. The DT-X SUB is now commercially available to be used by national and international institutions as a quantitative remote sensing instrument.

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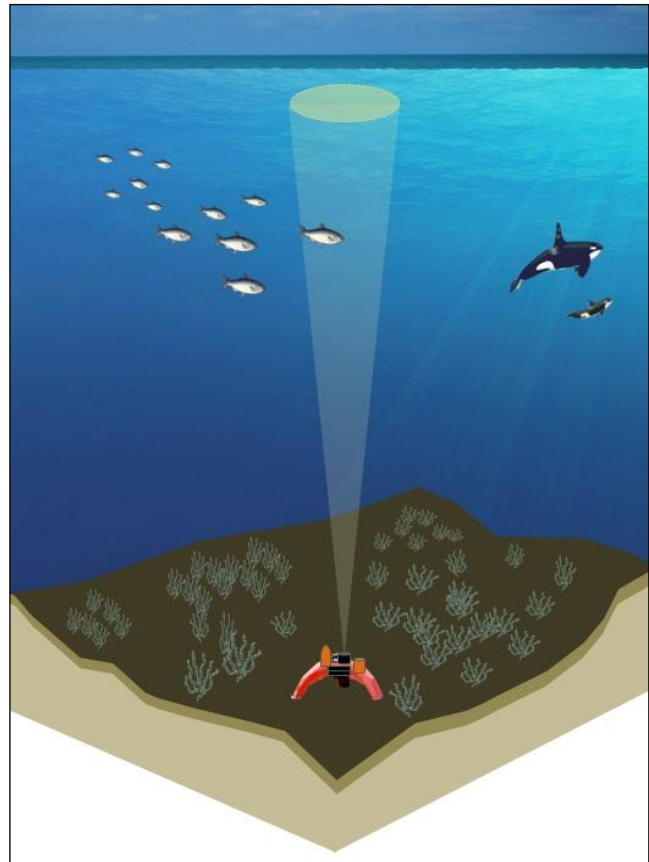


**About UW School of Aquatic & Fishery Sciences**

The breadth and scope of SAFS encompasses programs for undergraduate and graduate teaching, research and service in basic and applied aquatic sciences with an emphasis on fisheries management and aquatic resource conservation. Faculty, staff and students have access to myriad aquatic habitats and rich biological resources, and they are involved in interdisciplinary partnerships with other academic programs, as well as public and private organizations and environmental and regulatory agencies ([www.fish.washington.edu](http://www.fish.washington.edu)).

**About NWFSC**

The Northwest Fisheries Science Center studies living marine resources (e.g., salmon, groundfish, and killer whales) and their habitats in the Northeast Pacific Ocean-primarily off the coasts of Washington and Oregon and in freshwater rivers and streams in Washington, Oregon, Idaho, and Montana. The Center's 500 scientists and staff seeks to better understand living marine resources and their ecosystems to assist resource managers in making sound decisions that build sustainable fisheries, recover endangered and threatened species, and sustain healthy ecosystems, and reduce human health risks ([www.nwfsc.noaa.gov](http://www.nwfsc.noaa.gov)).



Conceptual drawing of DT-X SUB monitoring from the seafloor

**About BioSonics**

BioSonics is a manufacturing, consulting, and firm specializing in the application of hydroacoustic (sonar) technology for monitoring and assessment of aquatic biological resources. For over thirty years, BioSonics scientific echosounders have been used in oceans, lakes, and rivers for accurate assessment of fish abundance, distribution and behavior. BioSonics offers a complete range of technical services to meet the each client's goals and requirements. Survey design, installation, data collection, environmental monitoring, data processing, analysis and reporting are our specialties ([www.biosonicsinc.com](http://www.biosonicsinc.com)).

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