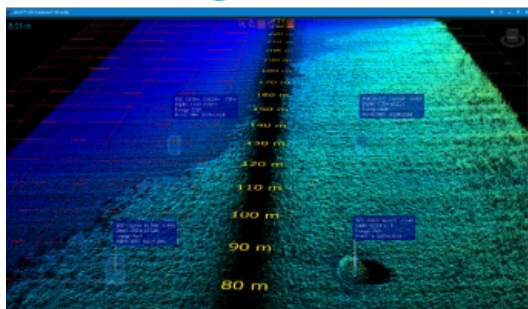


# BioSonics and Ping DSP Sonar Technologies Combine for Seagrass Surveys



Two sonar manufacturers from the Pacific Northwest (USA and Canada) have joined forces in a cooperative effort aimed at improving efficiencies in aquatic habitat mapping. Seattle-based BioSonics and Ping DSP, from Victoria, BC, recently conducted trials to evaluate the effectiveness of a Ping DSP 3D sidescan sonar combined with a BioSonics MX single-beam echosounder as a means for locating and quantifying seagrass beds.

The Ping DSP 3DSS-DX-450 provides wide-swath bathymetry data with full-water-column 3-dimensional backscatter imagery, while the BioSonics MX echosounder uses a focused, relatively narrow beam (90°) capable of penetrating the vegetation canopy and accurately locating the bottom beneath the plants. When deployed simultaneously, the hybrid 3D

sidescan/single beam system offers a unique combination of capabilities ideal for mapping and quantifying submerged aquatic vegetation. The Ping 3DSS provides qualitative information across large areas whereas the BioSonics single beam sonar provides quantitative subsampling across areas where plants are known to exist. With the Ping 3DSS, seagrass beds could be clearly visualised at distances over 50 metres on either side of the survey vessel. The edges of the grass patches could be located quickly and the researchers were able to navigate directly through the plant beds where the MX system was used to collect accurate height and density measurements of the vegetation.

The MX echosounder is a purpose-built aquatic habitat assessment system developed by BioSonics in 2012. BioSonics echosounder data is processed with specialized software called Visual Habitat to obtain plant height and density measurements as well as substrate classification. BioSonics developers are now looking at potential ways to adapt Visual Habitat software for Ping DSP sidescan data.

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<https://www.hydro-international.com/content/news/biosonics-and-ping-dsp-sonar-technologies-combine-for-seagrass-surveys>

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