## Abstract Submitted for the NES11 Meeting of The American Physical Society

Possible impact of global warming and ocean acidification on underwater sound in northern oceans: another perfect storm DAVID BROWNING, University of Rhode Island — The greatest ocean pH change, which will result in lower low frequency sound attenuation, is predicted for higher latitudes. Here shallow sound channel axies exist, allowing the impact on sound to be seen sooner and also more extensively since the principal propagation paths will be near the surface. However, at the same time, higher wind speeds and greater ice breakup, as well as increased ship traffic, could result in higher noise levels. Marine mammals in this environment may have, on one hand, improving communication conditions but also the possibility of increased background noise.

David Browning University of Rhode Island

Date submitted: 24 Feb 2011 Electronic form version 1.4