Dr. Jennifer L. Miksis-Olds is the Director of the Center for Acoustics Research & Education and Research Professor at the University of New Hampshire. Dr. Miksis-Olds was the Vice-Chair of the Board of Trustees for the Consortium for Ocean Leadership (2020-2021). She is a member of the Scientific Committee of the International Quiet Ocean Experiment Program and serves as a Scientific Advisor to the Sound and Marine Life Joint Industry Programme. Dr. Miksis-Olds was the recipient of an Office of Naval Research Young Investigator Program award in 2011 and the Presidential Early Career Award in Science and Engineering in 2013. She is a Fellow of the Acoustical Society of America. Her primary research interests are patterns and trends in ocean soundscapes, animal behavior and communication, and the impact of environmental change on marine life. Dr. Miksis-Olds received a A.B. cum laude in Biology from Harvard University, M.S. in Biology from the University of Massachusetts Dartmouth, and Ph.D. from the University of Rhode Island. She was a member of the 2011 NRC panel - Evaluation of the Drakes Bay Oyster Company Special Use Permit, and she is currently chairing the NRC panel on Ocean Acoustics Education and Expertise.

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**Two Pieces of the Same Puzzle: Active and PASSIVE Acoustics for Cross-Trophic
Marine Ecosystem Monitoring**

Acoustics play a central role in our interactions with others and with the environment. Passive listening to the ocean acoustic landscape, or ocean soundscape, informs us about biotic (sounds produced by animals), abiotic (wind, waves, precipitation), and anthropogenic (shipping, pile driving) processes from tectonic plate movement to ecosystem status and health. Passive acoustic monitoring (PAM) of sound generated and utilized by marine life has dramatically increased worldwide to enhance understanding of ecosystem dynamics. Here we discuss the concept of the underwater soundscape in terms of a measured physical property that can be selectively decomposed and visualized to gain a greater understanding of the sources and environmental dynamics contributing to and shaping the temporal and spatial patterns of the measured sound. New software for processing soundscape data into standardized data products will be demonstrated and available for participants to process their own data. The MANTA (Making Ambient Noise Trends Accessible) software combines contemporary processing guidelines into a freely available, standalone program without the need to code in Matlab or Python.