

OF HYDROACOUSTIC TECHNOLOGY IN THE PERUVIAN SEA AND EFFECT ON BIODIVERSITY

Noise levels generated in the Peruvian marine environment resulting from the application of hydroacoustic technology in the development of civil anthropogenic activities are aimed to the rational use of fishery resources, exploitation of minerals (oil and gas exploration), infrastructure construction and maritime traffic. Main applications are: Fishery resources surveying, began in Peru (IMARPE) since the early 1970s, with the beginning of scientific sounders (120 and 38 kHz) and echointegration to estimate biomass of fish stocks; such as anchovy, sardine, horse mackerel, mackerel, hake, etc for a rational exploitation. Actually, multifrequencies scientific sounders (18, 38, 50, 70, 120, 200 and 333 kHz) are used to estimate biomass of fisheries resources. 3D seismic operations are performed frequently in the Peruvian sea. While it is true that considerations are taken to make shots and no harm marine mammals. However, the results show damage in the zooplankton, which showed deterioration in their morphological structure. Other kind use of hydroacoustic is measurements about transmission and loss propagation of sound considering two scenarios: a) noise generated by the marine environment, b) noise generated by a sound source activated by a trigger. For measuring sound intensities were used hydrophones and using the model Bellhop.

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