

CASE STUDY

PROJECT: ENVIRONMENTAL IMPACT ASSESSMENT - OFFSHORE
LOCATION: MISURATA, LIBYA
VALUE: \$260,000 US

BACKGROUND

The underlying objective of the project was to undertake baseline investigations and an assessment of impacts associated with seismic survey activity.

A feature of seismic surveys undertaken during oil exploration is the use of airguns to identify geological structures and sedimentary layers.



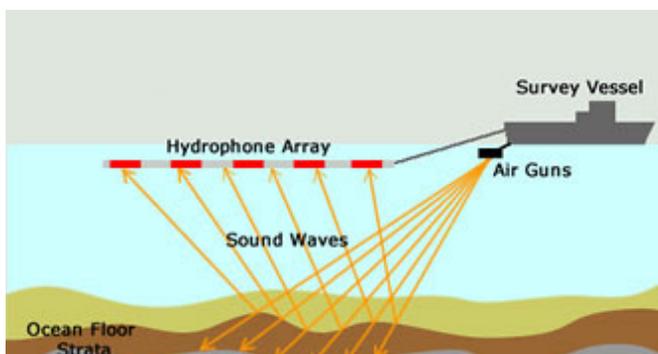
The airguns work within the frequency range of 0-120Hz, and, because of this the sounds overlap with the frequency range used by a wide variety of whales and dolphins to both communicate and navigate.

As a consequence, seismic survey activity can impact both marine mammals and pelagic fish species and can induce long term behavioural changes in migration and feeding distribution.

SCOPE OF WORK

In association with our Libyan partners, Harrison Group were contracted to undertake an offshore EIA and pre-seismic survey.

The baseline study used a combination of certified marine mammal observers and a Passive acoustic monitoring system (based on a hydrophone array) to locate, identify, and quantify the abundance of cetaceans (whales and dolphins) in the 100x100km oil exploration block.



Oceanographic conditions were verified through profiling of the water column across the survey area and comparative secondary satellite data.



Socio-economic impacts associated with the distribution and composition of fishing effort were assessed on the basis of physical surveys.

Interviews were undertaken in all vessel landing points and data relating to offshore tuna fisheries acquired from the International Commission for the Conservation of Atlantic Tuna (ICCAT) and other recent assessments of vessel movements in Libyan Waters.



Mitigation of impacts was proposed on the basis of the Joint Nature Conservation Commission (JNCC) guidelines for marine mammal conservation and the provisions of the MARPOL 73/78 Convention (the International Convention for the Prevention of Pollution from Ships).

OUTCOME

All work was carried out within agreed time scales and to the satisfaction of our client.