

CRE Brasil Responds to Ian Boyd on UNEP Noise Report

We first want to thank Dr. Boyd for his thoughtful and helpful reply to CRE Brasil's comments on the UNEP Marine Noise Report. Unlike some environmental NGOs, CRE Brasil posts all comments it receives, whether or not they agree with our position. We also want to thank UNEP for allowing us the opportunity to comment on the Noise Report. UNEP has always striven to be a science based organization. We hope that our comments will help UNEP achieve this goal.

We also emphasize that our comments are focused on marine sound from seismic oil and gas operations, and not on other sound sources such as sonar. Seismic is our primary concern because offshore oil and gas is so important to the well being of Brasil, and to other countries as well.

Our Response has two parts: first, points on which we apparently agree with Dr. Boyd; second, points on which we apparently disagree.

Where We Agree

- Oil and gas seismic should be regulated by the appropriate government entity, as it has been for years in the United States by NOAA/NMFS and BOEM (formerly MMS).
- Seismic as regulated by nations like the U.S. is unlikely to cause physical injury to marine mammals.
- Despite years of study, there are no studies showing that seismic as regulated by nations like the U.S. causes population level effects to marine mammals.
- The initial Marine Noise Report by the CBD working group is biased.

This bias greatly concerns CRE Brasil. We do not know who prepared the initial Report, but it is biased against oil and gas seismic. We concluded that it was necessary for someone to present the other side to this story. It is for this reason that we contacted UNEP. We are most appreciative of UNEP's response to our concerns.

Where We Disagree

Dr. Boyd apparently argues that more study is needed because additional research may show that seismic causes adverse behavioral effects on marine mammals which may rise to population-level effects. He argues that a behavioral effects

“response threshold of 135 dB possibly exposes very large numbers of species and individuals to disturbance because the radius of effect around an operation like a seismic survey could be as much as 50 km. It is also almost impossible to mitigate for this effect

and PAM and visual observation, as currently deployed by seismic vessels, is ineffective.”

With regard to PAMGUARD, Dr. Boyd now argues that “seeing it as a panacea that will resolve the potential conflicts between marine life and seismic exploration is highly inaccurate and should be strongly discouraged. PAMGUARD is a tool that has clear limitations.”

In support of his arguments Dr. Boyd cites *Beaked Whales Respond to Simulated and Actual Navy Sonar*, Tyack, Boyd, *et al.* (2011), <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0017009>.

In response to his arguments, we concede that anything is possible, and it’s hard to prove a negative. However, CRE Brasil’s comments on the UNEP report emphasize that studies in areas of intense oil and gas activity (*e.g.*, the U.S. Gulf of Mexico) show no population-level effects on the marine mammals there. The U.S. oil and gas activity has been and is subject to seismic mitigation requirements. Despite years and millions of dollars worth of study, Dr. Boyd has not cited a single study showing any population level effects from seismic conducted in accordance with those mitigation requirements. By contrast, CRE Brasil’s comments cite studies which show **NO** effects.

We also point out that there are many known threats to marine mammals: *e.g.*, bycatch and ship strikes. We believe that scarce regulatory, academic and industry resources would be better spent on these real and very serious threats.

We also believe that some environmental NGOs use the ‘*need more study*’ argument to further their actual goal which is stopping oil and gas exploration and production.

We don’t see what Tyack, Boyd *et al.* (2011) has to do with the seismic issue. That report only discusses sonar. It does not address oil and gas seismic. We note, however, that the reported study did use PAM.

We do not believe that PAM in general or PAMGUARD in particular is a “panacea,” but they are useful tools which should be employed to help protect marine mammals from anthropogenic sound. We agree with Dr. Boyd’s own previous statements:

“PAMGUARD helps industry workers to locate sea mammals efficiently and protect them from noise disturbance.

Marine mammals are affected by activities like piling, using air guns for oil and gas seismic surveys, or military and commercial uses of sonar. Workers usually avoid this by looking out for whales or dolphins. If any sea mammal is spotted, work may have to stop. But passive acoustic monitoring (PAM) surveys are more efficient, because they spot animals under water by listening for their distinctive sounds.

‘Making it open access means everyone who uses it can help to expand and improve it.

It's a way of tapping into the research community's intellectual resources and encouraging development that's available to all,' says Ian Boyd, director of SMRU.”
<http://sid.nerc.ac.uk/details.aspx?id=107&cookieConsent=A>

We once again thank Dr. Boyd for his reply, and we will publish any additional comments he might have.

We also encourage other stakeholders to present their views.