

## Seismic Testing in the Great Australia Bight

Environmental groups across Australia recently celebrated a delay to conduct seismic testing for gas and oil in the Great Australian Bight. They believe the technique used to detect gas and oil would hurt the environment and negatively impact the country's most productive fishery although.

"The main concerns include more fossil fuel investment, weak regulation, and the potential for an oil spill, devastating our 'Great Southern Reef.'" A Norwegian energy company, Equinor are proposing a deepwater oil well more than two kilometres deep and 370 kilometres offshore.

A report prepared by Australia Institute said, "Such deep water testing increases environmental risks. Specialised ultra-deepwater equipment would be required to produce oil in the Bight and one of the world's worst oil disasters, the Deepwater Horizon oil spill in the Gulf of Mexico, occurred in water of similar depth."

Greens Senator Sarah Hanson-Young, said 'the delay has been welcomed and applauded, their next step is ensuring than no drilling can ever take place in the Great Australian Bight., If you say yes to seismic testing, if you let seismic testing happen, it's only a few steps aware from ruining the Great Australian Bight with big oil."

Rebecca Dunlop, who was involved in the IOGP-backed research on humpback whales, said there was not enough data to know how southern right whales would respond to seismic testing.

"The southern right whale may hate seismic [noise] and avoid it completely, we just don't know. Until you have the research, we're just making stuff up, basically."

But focusing on the immediate response of whales to seismic blasting does not show the whole picture, according to Rob McCauley from Curtin University.

Larger animals show some resilience to testing, but as body size shrinks, seismic blasts can become more lethal.

Associate Professor McCauley used a seismic source to test mortality on krill — a key food source for southern right whales.

"There was about a threefold increase in death after the seismic had gone through," he said.

"There was one group — Nyctiphanes — a type of krill, they were all dead. They're an important food source for quite a few animals all along the southern coast."

Wiping out adult krill means there will be less recruitment to the population in following years, according to Dr McCauley, and subsequently less food for whales.

**Sound travels about five times faster through water than air, and whales in particular use sound as a means of long-distance communication.**

**Blue whales call at around 180 decibels, and can hear each other from hundreds of kilometres away.**

Seismic testing uses airguns to pump out a series of blasts up to 240 decibels, and can cause major disruptions to marine life, according to Nathaniel Pelle from Greenpeace.

**"Seismic testing is listed as a threat to marine species all over the world," he said.**

**"Seismic testing, in terms of noise in the ocean, there's nothing louder at all. It's life-threatening if you disrupt a whale's ability to navigate — if it can't find its pod, if a calf can't find its mother, it's at risk."**