



Australian Marine Conservation Society

## Protecting Australia's marine life from seismic blasting

Help protect our oceans and the endangered blue whales and southern right whales that call these waters home.

Join us in taking action to end seismic blasting now!



Australian Marine Conservation Society

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## Iconic southern waters

Australia's south-east oceans are home to some of the most unique and ecologically rich marine life on the planet.

Within these waters, majestic blue whales, southern right whales, whale sharks, sea turtles and southern bluefin tuna live alongside threatened kelp forests and the fragile deep-sea corals of the Great Southern Reef.

The convergence of three oceans – the Pacific, Indian and Southern Oceans – creates an upwelling of deep, nutrient-rich water that provides a turbocharged life support system for marine life in the region. Plankton and krill are plentiful, resulting in rich feeding grounds for whales, dolphins, seals and seabirds.



**A cool hotspot of biodiversity:** About 85% of fish, 95% of molluscs (like squid and nudibranchs), 90% of echinoderms (like starfish and sea urchins) and 65% of seaweeds that call Australia's south-east oceans home are found nowhere else on Earth<sup>1</sup>. If we lose them here, they vanish forever.

Unfortunately, this rich marine life is under threat. Right now, the offshore oil and gas industry has plans to use destructive seismic blasting to expand into these biodiverse waters. Seismic blasting puts our iconic south-east oceans and marine life at risk.

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## What is seismic blasting?

Seismic blasting surveys involve towing multiple lines of air cannons behind a vessel. Each air cannon fires loud underwater explosions every 10-15 seconds, day and night, 7 days a week, for hundreds of days at a time. The blasts can reach up to 250 decibels, a sound so loud it can be detected underwater between 150 - 2000 kilometres away<sup>2</sup>. For context, standing 25 metres away from a jet as it takes off only registers about 150 decibels, enough to burst human eardrums<sup>3</sup>.

## Known impacts

Worryingly little research has been conducted into the impacts of seismic blasting on marine life. What we do know is cause for deep concern. Seismic blasting has been connected to temporary and permanent hearing loss, habitat abandonment, mating and feeding disruption, beach strandings and possible death in marine mammals like whales<sup>4</sup>. It also triggers widespread death in plankton and krill<sup>5</sup>, likely kills scallops by compromising their immune systems<sup>6</sup> and can irreversibly damage the organs of lobsters<sup>7</sup>. Despite the mounting evidence of the harm to marine life caused by seismic blasting, the federal government is still approving new proposals to blast large expanses of Australia's oceans.

**Whales driven out:** A 2019 study in the North Atlantic found baleen whales – a group including the blue whales and southern right whales living in Australia's south-east oceans – were sighted 88% less often during active seismic blasting surveys<sup>8</sup>.

**Greenwashing carbon pollution:** Seismic blasting is also how companies identify locations for offshore Carbon Capture and Storage (CCS), a process that pumps greenhouse gas pollution under the seabed. CCS allows fossil fuel producers to claim offsets of their carbon emissions and continue extracting fossil fuels, exacerbating the climate crisis and delaying the desperately needed shift to renewable energy.



Map is not to exact scale and is subject to change.

## A threat of seismic proportions

Two major seismic blasting projects are currently being proposed in our oceans between Tasmania and Victoria.

**TGS/SLB-Schlumberger's Proposal:** The first proposal, led by TGS and SLB-Schlumberger, plans to begin one of the largest ever seismic blasting projects in Australia's south-east oceans. Spanning 45,000 square kilometers, the proposed blasting zone covers an area almost the size of Tasmania.

The massive proposal includes zones that are recognised as Biologically Important Areas, critical habitat and foraging areas for endangered blue whales, southern right whales and Australian sea lions. It also includes parts of the Zeehan Marine Park, an area off the north-west coast of Tasmania that should be a refuge for marine life.

**CGG's Proposal:** Another company, CGG, is proposing to conduct seismic blasting off the

Victorian coast near Warrnambool and the Apollo Marine Park. The seismic blasting, if allowed, will be over calving grounds for the southern right whale and blue whale feeding grounds. It would also negatively impact dolphins, sea lions, lobsters and fish species in the area.

## The problem: Special Prospecting Authorities

Both projects are applying to conduct harmful seismic blasting using a permit called a Special Prospecting Authority (SPA). These permits sidestep the usual application process, allowing seismic blasting companies to go for fast, cheap permits to explore for oil and gas in our oceans, including inside marine parks and other critical habitat for threatened species. Abolishing SPAs would immediately close this secretive pathway that leads to some of the most damaging seismic blasting in Australia's oceans.