

# Tuskfish Angler Seismic Survey



---

**Project**  
Tuskfish Angler Seismic Survey

**Location**  
Bass Strait

**Client**  
Esso Australia

**Start Date**  
August 2002

**End Date**  
May 2003

---

Seismic surveys are used to map subsurface geology and are commonly done by the oil and gas industry offshore using vessels that tow energy sources colloquially referred to as 'airguns'. These sources generate a pressure wave, which can be heard and there is concern that it may impact on marine mammals, particularly whales and dolphins, that depend to a large degree on sound for socialising, prey-detection and possibly navigation.

In 2000, the Federal government issued guidelines that have since commonly been applied as particular manner under the *Environment Protection and Biodiversity Conservation Act 1999*. This gives legal weight to certain prescriptions. Under the *Commonwealth Petroleum (Submerged Lands)(Management of Environment) Regulations 1999* operators are also required to produce an Environment Plan and undertake measures to test environmental performance. This includes recording noise output and monitoring impacts on whales and dolphins.

Esso Australia commissioned AES to produce approval documents and management plans for the project, which took three months to implement and covered a range of depths. A baseline aerial survey indicated the presence of sperm whales, which are potentially more vulnerable to impacts than other species of large whale and were a focus of mitigation measures. AES was also asked to develop and test the efficacy of existing Passive Acoustic Monitoring (PAM) equipment for detection and whether this could be used effectively for impact-mitigation. This was the first trial where the equipment was deployed off the main seismic vessel and combined expertise from leading experts in the UK and the US.

