

# Public comment submission on the Otway Basin 3D Multi- client Marine Seismic Survey proposal



## Context

Friends of the Earth Melbourne is a broad based not for profit organisation with 50 years of experience advocating for environmental and social justice causes.

The No More Gas campaign maintains a focus on reducing the impact of fossil and other methane emissions on the climate, human health and the environment as a whole.

The author of this submission is the No More Gas campaigner for Friends of the Earth Melbourne and the primary author of the Community Gas Retirement Roadmap and the Get Off Gas pledge. Previously as the Renewables Not Gas program coordinator for Lock the Gate I coordinated with local governments in Victoria and NSW to take practical steps to decarbonise gas at a municipal level, in a campaign which ultimately succeeded in convincing the Victorian Government to ban new residential gas connections in the planning scheme. I have over 15 years' experience in a range of portfolios including climate, energy and waste both within state Parliamentary offices as well as in the not-for-profit sector. Prior to this I worked in corporate environmental management for small and large businesses.

Representing Friends of the Earth Melbourne, I have attended two briefings by TGS and SLR, with the second also attended by a representative of SLB. I write this submission on behalf of Friends of the Earth Melbourne.

I believe that I am a relevant person for the purposes of NOPSEMA's current consultation guidance and that Friends of the Earth Melbourne are a relevant stakeholder group.

I therefore thank you for the opportunity to provide public comment to this proposal.

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## Summary

This submission opposes the proposal based on the following considerations:

1. Insufficient mitigation plans to protect marine life through a whole of ecosystem lens
  - a. Lack of recognition of the potential impacts on some species
  - b. Shortcomings in ensuring the protection of marine mammals
  - c. Unacceptable impacts on the whole-of-ecosystem consequences of seismic activity
2. Incomplete information about environmental management and mitigation
3. Potential impacts on the health of the Bonney Upwelling marine ecosystem
4. Failures to consider this project in the context of existing pressures on marine ecosystems
5. Failures of adequacy in public consultation
6. Concerns about the compliance history of one or more of the proponents
  - a. Opacity about proponents and their roles
  - b. History of breaches by SLB/Schlumberger
  - c. Role of SLR as environmental managers of previous operations
7. Seismic blasting is unnecessary

## Insufficient mitigation plans to protect marine life through a whole of ecosystem lens

That the environment plan (EP) attached to this proposal lays out plans to mitigate damage to certain marine species implies that seismic blasting is an inherently dangerous activity for marine ecosystems. The proponents themselves acknowledge that it is impossible to prevent damage to ocean species when undertaking seismic blasting and acknowledge through their EP that there is further risk associated with vessel failures, at sea accidents and other potentialities that could result in fuel spill into the Southern Ocean. In our view the balance of risk to reward should be sufficient grounds to refuse this proposal.

## Lack of recognition of the potential impacts on some species

We note that there are mitigations contained in the environmental plan to reduce, but not realistically avoid, causing damage to whales during their migration and birthing periods. However we call attention to other important marine life which is unmentioned in the EP produced by SLR consulting.

The short finned eel receives no mention in the EP. Short finned eels travel have a slow growth rate and long life cycle (VFA 2022<sup>1</sup>) They swim ~3000km from freshwater rivers and lagoons in southern Victoria to breed in the Coral Sea to the South East of New Guinea before returning to Victoria. Eel fisheries are sufficiently critical to Victoria's Traditional Owners, our economy and an overall healthy ecosystem that the Victorian Government saw fit to update the Victorian Eel Fishery Management Plan in 2017 (VFA 2017<sup>2</sup>) such that it provides for:

- *Long term sustainability of eel resources;*
  - *Allow for sufficient adult eel escapement and recruitment thus stock sustainability;*

<sup>1</sup> <https://vfa.vic.gov.au/education/fish-species/short-finned-eel#:~:text=Prefers%20low%20drying%20swampy%20streams,ranges%20of%20about%20400%20m.>

<sup>2</sup> [https://vfa.vic.gov.au/\\_data/assets/word\\_doc/0011/342767/Victorian-Eel-Fishery-Management-Plan-2017-with-VFA-cover\\_SIGNED.docx](https://vfa.vic.gov.au/_data/assets/word_doc/0011/342767/Victorian-Eel-Fishery-Management-Plan-2017-with-VFA-cover_SIGNED.docx)

- *Ensure that the harvest is kept within limits that are consistent with the long term sustainability of the fishery;*
- *Allow fishing for eels in a manner that has minimal ecological impact; and*
- *Minimise biosecurity risks from imported product.*
- *Equitable resource access and use;*
  - *Maintain, and where possible improve, access to the fishery for recreational, commercial (including culture) and indigenous interests, taking existing regulations and legislation relating to access in inland and coastal waters into account; and*
  - *Promote an efficient and effective eel culture sector.*
- *Cost effective and participatory management;*
  - *Enable participation by fishers and other relevant stakeholders in fisheries management, taking account of the respective responsibilities of government and fishers; and*
  - *Ensure that the management of the fishery and the provision of associated services are efficient, effective and responsive.*
- *Improving economic viability of the fishery;*
  - *Encourage a profitable and viable commercial eel fishery that can support industry growth.*

We are concerned that the EP as released contains no consideration of the possible impacts on Victorian short finned or other eel populations nor the extent to which operations may breach the intent of the Victorian Eel Fishery Management Plan, the *Fisheries Act* or the *Fisheries Regulations* of Victoria. In recognition of this omission we wonder the extent to which the eel fishing industry or the Minister for Fishing and Boating, the Hon. Sonya Kilkenny have been consulted by the proponents.

Similarly we are not satisfied that smaller “larder” species such as krill, zooplankton or sea snails are adequately considered in the EP. Assessment of impacts on krill ignore the full life cycle of this keystone animal, specifically the slow, months long journey they make from the bottom of the ocean up towards the water surface from time of laying towards their maturity. The report instead refers to their shallow water swarming periods. We are unsure whether this is a genuine error or a deliberate oversight, however in reading the EP we have found several similar selective recognitions of marine behaviours.

For example, the EP itself (p. 358) acknowledges that there is insufficient data on the foraging habits of the Pygmy Blue Whale in the Southern Ocean and relies upon data sourced from the Californian coastline. Again, this type of extrapolation exists throughout the document, confirming that TGS, SLB and their environmental consultants SLR simply do not know enough about the whole of ecosystem behaviours typical of the Southern Ocean and are therefore not qualified to assess the impacts of this proposal.

### Shortcomings in ensuring the protection of marine mammals

We are informed that measures have been considered to minimise – and not eliminate entirely – the anticipated impacts on marine mammals. The proponents tell us that they will gradually increase the sonic blasts over a 30 minute period to the full ~220db volume to “give the whales a chance to escape”. However, this is only where a whale is detected. SLR inform us that whale detection will be undertaken through visual spotting from the ship deck and in aerial surveys and addition to background noise monitoring between the 10 second blasts of the airguns. Visual spotting will only take place during daylight hours and given the depths at which whales can dive and the periods of

time they can spend under water, away from easy visual detection we consider that these evasive measures are inadequate.

### Unacceptable impacts on the whole-of-ecosystem; consequences of seismic activity

We note that the EP recognises that seismic blasting, including the continuous lighting on board the ship, will impact migratory birds flight paths. This is particularly true for the critically endangered orange bellied parrot, on their return from the South Australian and West Victorian coastline to Tasmania in October – when TGS and SLB intend to commence operations (Birdlife Australia 2023<sup>3</sup>). Despite this, we could find no mention of orange bellied parrots in the EP.

We are informed by fishers on King Island and local to Apollo Bay that following seismic blasting in 2019, an entire year class of pelagic fish did not appear. Unfortunately there is no comprehensive science to validate the anecdotal evidence of professional fishers.

We refer to the precautionary principle in S.391 of the *Environment Protection and Biodiversity Conservation Act 1999 (Cth)*<sup>4</sup>, which states:

*...lack of full scientific certainty should not be used as a reason for postponing a measure to prevent degradation of the environment where there are threats of serious or irreversible environmental damage.*

This applies equally to controlled actions, and for the Minister when considering the granting of a permit.

### Incomplete information about environmental management and mitigation

In a consultation briefing on the morning of 10 August, the day before the public comment deadline for this project, SLR were still unable to provide details of aerial surveys to detect whales. We were told that these surveys would be intermittent although not told why except that it would be “unfeasible”. We argue that we are unable to comment adequately on a proposal that is incomplete in detail including the argument for the feasibility or otherwise of aerial whale detection.

Additionally without consideration of key species including the orange bellied parrot and short fin eels we believe that the EP is unfit for purpose and fails to inform the community, NOPSEMA or the Resources Minister adequately to inform decision making

### Potential impacts on the health of the Bonney Upwelling marine ecosystem

The Bonney Upwelling is the foundational food source for much of the Southern Ocean. We believe that in previous operations in 2019 Schlumberger conducted seismic blasting over the Bonney Upwelling in direct breach of controls imposed by NOPSEMA.

Therefore we expected greater consideration of the unique role of this ecosystem feature in the EP. We were disappointed to see modelling funded by industry lobby group The Australian Petroleum Production and Exploration Association (APPEA) and based on observations of zooplankton and krill

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<sup>3</sup> <https://birdlife.org.au/bird-profiles/orange-bellied-parrot/>

<sup>4</sup> [http://www.austlii.edu.au/cgi-bin/sinodisp/au/legis/cth/consol\\_act/epabca1999588/s391.html#:~:text=\(2\)%20The%20precautionary%20principle%20is,serious%20or%20irreversible%20environmental%20damage.](http://www.austlii.edu.au/cgi-bin/sinodisp/au/legis/cth/consol_act/epabca1999588/s391.html#:~:text=(2)%20The%20precautionary%20principle%20is,serious%20or%20irreversible%20environmental%20damage.)

movements on the North West Shelf – an entirely different ocean system some 3,500kms to the north of the OA.

We reject the highly selective modelling used in the EP as failing to inform community, NOPSEMA or the relevant Minister in assessing the likely impacts of this proposal.

## Failure to consider this project in the context of existing pressures on marine ecosystems

We understand that climate change is not a consideration for the purpose of this project or its environmental plan despite climate impacts directly affecting marine ecosystems. Average surface ocean temperatures reached record highs on 31 July 2023 of 20.96°C (The Copernicus Program 2023<sup>5</sup>). These events directly impact the strength of ocean currents. This fact is not reflected in modelling relied upon in the EP.

Increased surface ocean temperatures present their own challenges for marine species. Rising sea levels of 4.5mm per year have been observed in the period between 2013-2021 (United Nations 2023<sup>6</sup>). This is linked to marine habitat and accordingly biodiversity loss. These events do not occur in a vacuum and compel us to consider very seriously any activities which are likely to place additional stress on marine environments.

Consideration of this must point to the conclusion that the production of additional fossil fuels such as gas and oil are unacceptable in the current global climate. Therefore while we acknowledge that this is specifically exempted as a consideration for the approval of seismic blasting projects in the hunt for new oil and gas reserves we argue that this is contrary to appropriate consideration of marine health and best environmental outcomes.

## Failures of adequacy in public consultation

Having attended two separate consultation meetings I have observed concerning shortcomings in information provided – such as the lack of detail about aerial sighting for whales – and failures to answer questions when put by attendees.

This coupled with the failure to consider some marine species such as orange bellied parrots or short finned eels points to significant failures of consultation, particularly with the Victorian commercial eel industry. In fact, it is interesting to note that the only mention of eels in the EP is in relation to consultation with the Eastern Maar and Gunditj Mirring Traditional Owners who raised concerns about impact on eels, which the Summary of Feedback from Relevant Persons register (Appendix K, pp 58 & 59) states are covered in the EP and yet I can see no mention of this. Am I missing something?

## Concerns about the compliance history of one or more of the proponents

### Opacity about proponents and their roles

When asked directly we were not informed:

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<sup>5</sup> <https://climate.copernicus.eu/global-sea-surface-temperature-reaches-record-high>

<sup>6</sup> <https://www.un.org/en/climatechange/science/climate-issues/ocean-impacts#:~:text=Loss%20of%20marine%20biodiversity&text=Today%2C%20widespread%20changes%20have%20been,the%20water%20could%20be%20cooler.>

- Why the original primary proponent, SLB (then Schlumberger) has handed over the lead to data analysis company TGS whose name appears on the EP despite the .
- What role SLB will play in this project
- Why SLB is barely referenced in the EP until the oil spill management plan.
- Why, if this area is, as reported on p. 672 of the EP, very similar to areas previously blasted by SLB in 2020, there is any benefit to blasting around 3 years later.

### History of breaches by SLB/Schlumberger

We are aware that Schlumberger has a poor history of compliance globally. In 2015 they received the largest ever corporate criminal fine handed down by a US court for sanctions violations in trade with Sudan and Iran (Guardian 2015<sup>7</sup>). They have been the subject of petitions in Ithaca for regulatory noncompliance at five sites in the state of New York (Ithaca Journal, 2004). Most pertinently for this project Schlumberger were named in Senate Estimates as being under investigation for possible criminal breaches (Parliament of Australia 2022<sup>8</sup>). We do not know if this relates to allegations of seismic operations over the chemical munitions dump near King Island (Department of Defence, Australian Government 2018<sup>9</sup>) or seismic blasting over the Bonney Upwelling in 2019.

We do know that shortly after the revelations in Senate Estimates in November 2022 Schlumberger rebranded as SLB and TGS, their data analyst partners, took the lead for the project described in this EP.

None of the above assures a well informed community that this project is in responsible hands.

### Role of SLR as environmental managers of previous operations

We have confirmation from Dan Govier of SLR consulting during their consultation meeting on 22 March 2023 that they were the environmental consultants for Schlumberger during their 2019 seismic blasting operations. If there are questions over environmental compliance for those operations we would consider that the community can have no confidence that SLR are an appropriate company to safeguard the environmental impacts of this project.

### Seismic blasting is unnecessary

The Senate Inquiry Making waves: the impact of seismic testing on fisheries and the marine environment (Parliament of Australia 2021<sup>10</sup>) handed down 19 recommendations with a view to minimise and better understand the impact of seismic blasting. None of these have been implemented to date with the exception of recommendation 18 following a decision in the Federal Court last year that consultation undertaken by Santos with the Tiwi Islands communities was inadequate.

<sup>7</sup> <https://www.theguardian.com/environment/2015/may/18/where-there-is-oil-and-gas-there-is-schlumberger>

<sup>8</sup>

<https://parlinfo.aph.gov.au/parlInfo/search/display/display.w3p;db=COMMITTEES;id=committees%2Festimate%2F26274%2F0012;query=Id%3A%22committees%2Festimate%2F26274%2F0008%22>

<sup>9</sup> <https://www.hydro.gov.au/n2m/dumping/chemical.pdf>

<sup>10</sup>

[https://www.aph.gov.au/Parliamentary\\_Business/Committees/Senate/Environment\\_and\\_Communications/SeismicTesting/Report](https://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Environment_and_Communications/SeismicTesting/Report)

We point to alternative marine vibroseis technology which is capable of mapping the geophysics of beneath the ocean floor with considerably lower impact than seismic air guns (Matthews et. al. 2021<sup>11</sup>).

Ultimately we argue that the Otway Basin has been subject to repeated seismic operations over previous years and respectfully request that NOPSEMA refuse approval for this project in line with recommendation 3:

*The committee recommends that the National Offshore Petroleum Safety and Environmental Management Authority take into consideration the extent of seismic activities in a title area to date, and as proposed in an environment plan, to mitigate the potential for unknown impacts to marine animals and the marine environment as a result of the survey.*

On behalf of Friends of the Earth Melbourne I thank NOPSEMA for the opportunity to submit during this public comment period. I am available to discuss this submission on request.

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<sup>11</sup> <https://www.mdpi.com/2077-1312/9/1/12>