

Mr Stuart Wright Inquiry Secretary Legislative Council Fin Fish Farming Inquiry Parliament House Hobart

By Email: finfish@parliament.tas.gov.au

14 November 2019

Dear Mr Wright,

This is a submission to the above Legislative Council Inquiry. The Bob Brown Foundation Inc. is dedicated to protection of the natural environment. The Foundation has for a long time been extremely concerned with the sprawling growth of the fish farming industry and the attendant impact on the environment, seen and unseen. Our concerns traverse the impacts on endangered species, the deposition of pollutants onto the sea floor and in the water column and the production of waste and noise to the detriment of local communities and the marine environment.

The Foundation took a particular interest in the proposal and eventual approval for fin fish farming in Oakhampton Bay near Triabunna. The Foundation was of the view that the site was not suitable and would never be suitable for fin fish farming. We were concerned about its proximity to Maria Island, the special bird species that inhabit Mercury Passage and surrounds and, in particular, the possible impact of industrial salmon farming operations on cetaceans.

In mid-2017, the Commonwealth Department of the Environment effectively compelled Tassal to refer the proposal for salmon farming at Okehampton Bay to the Department for assessment under the *Environment Protection and Bio-diversity Conservation Act* 1999. With great reluctance, Tassal made that referral.

Once the referral was publicised the Foundation together with the owner of what was once the Gunns Woodchip Mill, Triabunna Investments Pty Ltd, and Spring Bay Mill (a tourist venture operator on the old woodchip mill site), made a submission in response to the referral.

At the point in time that the matter was referred to the Commonwealth, Tassal noted in its referral documentation that there were whales such as the Southern Right Whale and the

Bob Brown Foundation Inc. PO Box 4586, Hobart Tasmania 7000 Humpback Whale inhabiting the area. It noted the Southern Right Whale was likely to breed within the area which was under examination. Having noted that, Tassal dismissed the concern, concluding any prospect of significant impact to be low and asserted there would be no impact.

The consultant engaged by the Commonwealth to assess the project was critical of Tassal's assessment, noting that the initial referral information "did not provide adequate information on potential impacts and mitigation strategies".

Tassal's assertion that the proposed project presented no risk to the endangered Southern Right Whale originated from a company with large resources at its disposal to analyse, measure and assess environment impacts. Its assessment of the possible impacts upon the Southern Right Whale was grossly understated and was misleading.

The Department of the Environment received submissions in response to the referral, including a submission from Macquarie University. The submission is enclosed. The authors took issue with all Tassal's conclusions about whales and pointed out that because of the endangered status of the Southern Right Whale, the loss of one single animal would have a significant impact on the entire species. This conclusion was adopted by GHD engaged by the Commonwealth Department to assess Tassal's referral information. It was also adopted by the Minister's delegate.

Ultimately, GHD was able to identify what it regarded as suitable mitigation measures, but only once the level of threat was correctly assessed. Tassal did not undertake any or any adequate assessment.

What is set out above is but one instance of information presented in the assessment process that is misleading with the objective of presenting the environmental impacts of the proposal as entirely benign, when that was not the case at all.

Neither the Commonwealth nor the State regulators should have to double check the assertions made by Tassal. Companies such as Tassal need to be answerable for minimising the environmental impacts of their proposals, whether this occurs as a result of negligence or because it is intentional. This applies not just to cetaceans, to all aspects of assessment of impact.

Yours faithfully,

Bland browne

Roland Browne President

Bob Brown Foundation Inc. PO Box 4586, Hobart Tasmania 7000

Bob Brown Foundation Inc. PO Box 4586, Hobart Tasmania 7000



MACQUARIE University

Professor Rob Harcourt Professor of Marine Ecology Department of Biological Sciences MACQUARIE UNIVERSITY NSW 2109 AUSTRALIA Phone +61 (0)2 9850 7970 Email robert.harcourt@mg.edu.au

14 June 2017

Proposed Tassal Leasehold- Tasmania Referral: <u>2017/7954</u> TASSAL OPERATIONS PTY. LTD./Aquaculture/Zone 4 (Okehampton Bay) of the Great Oyster Bay & Mercury Passage Marine Farming Development Plan/Tasmania/Tassal Finfish Aquaculture at Okehampton Bay, Tasmania

SYDNEY · AUSTRALIA

We note with concern the following proposal for an Aquaculture Development in Okehampton Bay, Tasmania. We raise concerns in regard to the claims by Tassal regarding potential impacts on the southern right whale *Eubalaena australis* (EPBC Vulnerable) and in particular on the remnant southeastern population (Carroll et al 2011, 2016).

Notes for concern

Tassal Claim:

There will be no significant impacts to the Southern Right Whale under the proposed action. The Southern Right Whale is currently listed as endangered under both the EPBCA and TSPA because they have undergone a severe reduction in numbers as a result of commercial whaling activities in the 19th and 20th centuries. There has been recent evidence of some population increase in southern Australian waters, however the current abundance is well below the estimated historic abundance. Southern Right Whales only occur in the Southern Hemisphere – they have a circumpolar distribution between $16^{\circ}S$ and $65^{\circ}S$. Southern Right Whales from Australian populations probably forage between about $40^{\circ}S$ and $65^{\circ}S$, generally south of Australia. In the region of the Sub-tropical Front $(41^{\circ}-44^{\circ}S)$ they mainly consume copepods, while at higher latitudes (south of 50^{\circ}S) krill is the main prey item.

The migratory paths between calving and feeding areas are not well understood. Calving usually takes place in sheltered coastal waters of southern Australia in the winter months. Nursery grounds are occupied from May to October in shallow coastal waters, and there is an increasing incidence of female whales giving birth and nursing calves in southern Tasmanian waters in recent years. Female Southern Right Whales exhibit strong calving site fidelity, generally returning to the same location to give birth and nurse offspring (Department of Sustainability et al. 2012).

While Southern Right Whales have been sighted in south eastern Tasmanian coastal waters and estuaries, there have been no recorded negative interactions between Southern Right Whales and Tassal's current marine farming operations.

Key potential threats to the species from activities associated with the proposed amendment may include:

• entanglement

• vessel disturbance, including noise pollution

www.mq.edu.au





Professor Rob Harcourt Professor of Marine Ecology Department of Biological Sciences MACQUARIE UNIVERSITY NSW 2109 AUSTRALIA Phone +61 (0)2 9850 7970 Email <u>robert.harcourt@mq.edu.au</u>

habitat modification

Entanglement (ropes and marine debris)

Entanglements in Australian waters primarily come from commercial fishery equipment and marine debris. In the Protected Matters Report, Southern Right Whales are the only cetacean where breeding is likely to occur within 5 km of the proposed amendment. Despite the increased presence of this species in recent years in southern Tasmanian coastal waters, it is considered unlikely that this species will be affected by the proposed action. Interactions between Southern Right Whales and Tassal marine farming activities have not been recorded previously, despite their known occasional presence in these waters. It is considered unlikely that the proposed action will result in the entanglement of Southern Right Whales. Nevertheless, Tassal will monitor for their presence and report the incidence of Southern Right Whales to the DPIPWE as they are observed during the course of marine farming operations.

SYDNEY-AUSTRALIA

Response

Based on historical sightings for Southern right whales in this region, plus IWC catch data i.e. data aggregated to quarter degree grid in current study suggests this is a potential hotspot for entanglement (Tulloch, and Harcourt unpublished data). Entanglement is one of the major causes of anthropogenic mortality in right whales (Kemper et al 2008). Therefore, we cannot support the statement that *it is considered unlikely that the proposed action will result in the entanglement of Southern Right Whales*, we believe it requires further investigation.

Vessel disturbance, including noise pollution

Vessel disturbance can occur in the form of collisions or by disrupting the behaviour of animals. Southern Right Whales appear to be the primary whale species involved in vessel collisions in the southern hemisphere. Vessel collision can lead to mortality or significant injury. Southern Right Whales are naturally conspicuous by virtue of their size. Rosenbaum (2014) highlights the need for further research into the potential anthropogenic effects of industrial activities (i.e. hydrocarbon production and exploration, shipping traffic and fisheries) on whales and other cetaceans and suggests the development of nationally and regionally relevant policies and targeted mitigation measures to prevent the potential for impacts at the individual and population level. Tassal proposes to monitor for the presence of this species and will reduce or halt vessel or marine farming activities if whales are sighted within 500 m of the proposed lease. Marine farming operations involve significant movement of vessels ranging in size from outboard dinghies to large feed delivery and harvest vessels. The nature of the waters around the proposed development are considered to be somewhat exposed, yet sheltered enough to allow Southern Right Whales to be observed in nearby waters should they be present. There are no recorded interactions between Southern Right Whales and marine farming activities in the Eastern Farming Zone, hence it is considered highly unlikely that the proposed development will result in any collisions with or disturbance of Southern Right Whales that may inhabit or transit through the waters surrounding the proposed West of Wedge development. Tassal will adhere to the



Professor Rob Harcourt Professor of Marine Ecology Department of Biological Sciences MACQUARIE UNIVERSITY NSW 2109 AUSTRALIA Phone +61 (0)2 9850 7970 Email <u>robert.harcourt@mg.edu.au</u>

DPIPWE whale and dolphin viewing guidelines when in transit should a whale be present in the area.

Response

The proponents acknowledge that southern right whales are involved in majority of collisions in Southern Hemisphere, but then state they are naturally conspicuous, which seems to be used as an argument for why it will not be an issue for the increased vessel traffic associated with this lease.

The logging behavior, low profile and minimal surface activity (unless engaged in social interactions) makes these whales incredibly difficult to detect, particularly in waters that are not typically calm and clear. Even in Moreton Bay where Southern right whales are rarely seen there has been a confirmed boat strike fatality

http://www.brisbanetimes.com.au/queensland/whale-dead-after-horror-boat-strike-20140817-1051nm.html

and a similar, though unconfirmed, Southern right whales strike death occurred in Cape Jervis in South Australia in 2001.

These incidents and the high rate of shipstrike of these species elsewhere in the southern hemisphere and of the congeneric North Atlantic right whale (*E. glacialis*) (Kraus et al 2005) strongly support our contention that the low detectability of these animals makes them vulnerable to ship strike , including increased vessel traffic associated with this project. We acknowledge the intent to monitor for individuals, but weare concerned that detection of individuals, especially by untrained marine mammal observers would be effective in mitigating against vessel strike. As supported by the Southern Right Whale Recovery Plan, loss of a single individual of this small population would be significant and is not unlikely given the location of the proposed development in an area of historical and current use by these whales.

Habitat modification

Habitat modification through the development of infrastructure such as ports, marinas, aquaculture facilities, and ocean/marine energy production facilities could lead to the physical displacement of Southern Right Whales from their preferred (breeding) habitats or disruption to normal behaviour. Animals may also encounter chemical pollution in the form of sewage and industrial discharges, run off from onshore activities, and accidental spills. In their feeding grounds they are most at risk from bio-accumulation of human-made chemicals such as organochlorines. The proposed action is not likely to have any impact on and will not have a significant impact on the Southern Right Whale.

Response

The proponent has failed to acknowledge the potential for cumulative impacts associated with this development. Assertions regarding "no impact" appear based on the fact they have not been documented in other TASSAL leases, which a) assumes location of all leases are equal and b) doesn't consider likelihood given absolute low numbers. We do not know what is slowing the

www.ing.edu.au



MACQUARIE University Professor Rob Harcourt Professor of Marine Ecology Department of Biological Sciences MACQUARIE UNIVERSITY NSW 2109 AUSTRALIA Phone +61 (0)2 9850 7970 Email <u>robert.harcourt@mg.edu.au</u>

recovery of the South East Southern right whale population, but most likely a combination of anthropogenic impacts including habitat modification and potential exclusion from safe calving areas are contributing factors, and under the precautionary principle this needs further clarification and quantification.

References:

Carroll, E., Patenaude, N., Alexander, A., Steel, D., Harcourt, R., Childerhouse, S., ... & Baker, C. S. (2011). Population structure and individual movement of southern right whales around New Zealand and Australia. *Marine Ecology Progress Series*, 432, 257-268.

Carroll, E. L., Baker, C. S., Watson, M., Alderman, R., Bannister, J., Gaggiotti, O. E., ... & Harcourt, R. (2015). Cultural traditions across a migratory network shape the genetic structure of southern right whales around Australia and New Zealand. *Scientific reports*, 5, 16182.

Kemper, C., Coughran, D., Warneke, R., Pirzl, R., Watson, M., Gales, R., & Gibbs, S. (2008). Southern right whale (Eubalaena australis) mortalities and human interactions in Australia, 1950-2006. *Journal of Cetacean Research and Management*, 10(1), 1-8.

Kraus, S. D., Brown, M. W., Caswell, H., Clark, C. W., Fujiwara, M., Hamilton, P. K., ... & McLellan, W. A. (2005). North Atlantic right whales in crisis. *Science*, 309(5734), 561-562.

The

Rob Harcourt Professor of Marine Ecology

Vanessa Pirotta PhD candidate

Viv Tulloch Post-Doctoral Fellow

www.mq.edu.au