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Chairperson, Marine Farming Planning Review Panel Marine Farming Branch Department of Primary Industries, Parks, Water and Environment GPO Box 44 Hobart TAS 7001

Uploaded online

Dear Mr Midgley,

Submission on Draft Amendment No.5 to Tasman Peninsula and Norfolk Bay Marine Farming Development Plan 2005

The Environmental Defenders Office (Tasmania) Inc (*EDO Tasmania*) is a non-profit, community-based legal service specialising in environmental and planning law. We have a long-standing interest in best practice assessment and regulation of aquaculture.

On Saturday 18 November 2017, the Department of Primary Industries, Parks, Water and Environment (*DPIPWE*) invited submissions addressing of Tassal's *Draft Amendment no.* 5 (the *Draft Amendment*) to the *Tasman Peninsula and Norfolk Bay Marine Farming Development Plan* (the *MFDP*). The Draft Amendment was advertised together with Huon Aquaculture's *Draft amendment no.* 3 to the Storm Bay off Trumpeter Bay North Bruny Island Marine Farming Development Plan; and Petuna's *Draft Storm Bay North Marine Farming Development Plan*. All three plans comprise the industry's proposed expansion into oceanic waters of Storm Bay (the *Storm Bay expansion*).

In response to the Government's Draft Sustainable Industry Growth Plan, EDO Tasmania expressed general support for moving Tasmanian salmon farms from estuarine into oceanic environments. However, that support is predicated on there being adequate regulatory controls in place to protect the environment, as well as sufficient environmental baseline studies and modelling to demonstrate that the oceanic marine farming activities will not have significant or irreversible environmental consequences.

EDO Tasmania considers that any expansion of marine farming to oceanic areas should be balanced by the appropriate protection of important marine areas.

We note that between 2006 and 2008 the then-Resource Planning and Development Commission undertook a comprehensive review of the proposed Bruny Bioregion and made a series of recommendations about marine protected areas (*MPA*).¹ The Government is yet to implement all of the Commission's MPA recommendations.

¹ Resource Planning and Development Commission (2008) Inquiry into the establishment of marine protected areas within the Bruny Bioregion: Final Recommendations Report

We understand that the creation of MPA is not within the jurisdiction of the Marine Farming Planning Review Panel (the *Panel*). However, we urge the Panel to note the outstanding MPA recommendations in its report on the Draft Amendment, particularly in light of the other areas in Storm Bay that Government has earmarked for potential salmon farming expansion.²

In the context of these general remarks, we make the **following** detailed comments on the Draft Amendment and associated environmental impact statement (the *EIS*).

Impacts on Giant Kelp forests

The EIS notes that there are stands of *Environment Protection and Biodiversity Conservation* Act 1999 (*EPBC Act*) listed Giant Kelp Marine Forests of South East Australia (*Giant Kelp forests*) that may potentially be impacted by the new zone proposed in the Draft Amendment.

Tassal notes (at p.147 of the EIS) that "studies undertaken locally suggest that the complex nature of the structure and function of macroalgal assemblages makes it difficult to discern any direct influence of aquaculture", and that additional research is currently being undertaken to "determine the specific environmental conditions that might adversely impact macroalgal reef systems, including potential broadscale effects from soluble nutrient emissions on the structure and function of natural marine macroalgal assemblages."

Tassal states that there will be mandatory biannual monitoring of Giant Kelp forests in the vicinity of its proposed new zone. It submits that this monitoring program, combined with three-year a staged approach to stocking the lease, will be sufficient to ensure there is a low risk of adverse impacts on the endangered community. However, the EIS does not indicate what, if any, are acceptable levels of nutrient enrichment before acute and/or chronic impacts are likely to be experienced by the Giant Kelp forests.

In light of the uncertain state of the science, and the fact that Giant Kelp forests are already under threat by climate change,³ we recommend that the Panel take a precautionary approach to the approval of the proposed new zone. We suggest the Panel do this by amending the MFDP to impose specific Management Controls that:

- require Tassal to develop and implement a monitoring program for the Giant Kelp forests in the vicinity of its proposed new zone;
- limit TPDNO (to less than the proposed maximum) for a period of at least three years or until an evaluation of the monitoring of the Giant Kelp forests has been undertaken by a suitably qualified person and that person considers there to be no evidence of salmon farming-related adverse impacts on the monitored locations;
- clearly prescribe any adaptive management measures that should be implemented if adverse impacts from salmon farming are observed at any of the Giant Kelp forest monitoring locations.

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² DPIPWE (2017) Sustainable Industry Growth Plan for the Salmon Industry at pp.12-13.

³ Climate change is noted in the EIS (p.170) as having the potential to change the availability of nutrients to Giant Kelp forests.

TPDNO cap and staged approach to expansion

In providing an overview of the proposed Storm Bay Developments, the Department of Primary Industries, Parks, Water and Environment (**DPIPWE**) states:

The companies have aspirations for a total production from Storm Bay of 80,000 tonnes per annum. In recognition that robust scientific information is not currently available to predict the environmental effects of this level of production, the potential environmental effects of a combined level of production of approximately 40,000 tonnes per annum are being considered in the environmental impact statements that support these planning processes.⁴

In the absence of sufficient scientific information to support the full extent of the industry's proposed expansion of marine farming into Storm Bay, EDO Tasmania is supportive of the proposed staged approach to expansion (see our further comments below regarding staging). The imposition of a Total Permissible Dissolved Nitrogen Output (*TPDNO*) cap on all finfish marine farming in Storm Bay is a sensible mechanism to limit the environmental effects and rates of expansion.

As the Draft Amendment and associated EIS addresses the proposed expansion of marine farming in Storm Bay up to a total biomass production of 40,000 tonnes per year, we submit that a TPDNO cap to reflect this limit should, at the very least, be included as a specific amendment to the Management Controls found in Section 3.2 of Amendment no.4 to the MFDP. Otherwise, we consider it inappropriate for the Panel to approve the Draft Amendment as the underlying MFDP currently sets no limits on total biomass and/or TPDNO.⁵

While it may be the usual practice to impose TPDNO limits as conditions of marine farming licences under the *Living Marine Resources Management Act 1995*, we consider that it is more logical for the cap to be imposed in the MFDP. This is because many planning issues arise from the intensification of marine farming which will not necessarily be addressed statutory decision-makers through separate legislative assessment processes.

If the Panel considers that no TPDNO cap should be imposed in the MFDP, then we seek clarification as to:

- the "separate assessment process" that will apply to the industry expansion beyond 40,000 tonnes up to 80,000 tonnes total production; and
- the level of public consultation that will be required to be undertaken in relation to the expansion;⁷ and
- how all the related planning issues will be taken into account by the relevant decisionmaker.

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⁴ Accessed on the DPIPWE website at http://dpipwe.tas.gov.au/sea-fishing-aquaculture/marine-farming-aquaculture/marine-farming-development-plans/marine-farm-planning-proposals on 16 January 2018.

⁵ Albeit previously the MFDP did have a biomass cap for zones 14A, 14B and 14C – see Special Management Control 13.14.9 of Amendment no.2 to the MFDP.

⁷ We note that there is no requirement that applications for or amendments to marine farming licences under the LMRM Act be publically notified, and that it is presently unclear in what circumstances amendments to environmental licences issued for finfish farms under the *Environmental Management and Pollution Control Act* 1994 (*EMPCA*) will be required to be publically notified.

Marine debris

The Government has committed to enforcing a "zero tolerance" approach to marine debris arising from salmon farms in its *Sustainable Industry Growth Plan for the Salmon Industry* (the *Growth Plan*). The Growth Plan indicates that this zero tolerance approach will be facilitated through the establishment of deadlines for adoption of best practice tracking technologies and other "simple identification" techniques.

In the EIS (at p.196), Tassal says that it will have a Marine Operations Waste Management Plan and Waste Management Policy in place to "target zero waste entering the marine environment." The EIS identified ropes and feed pipes as "primary concerns", however other than the installation of sealed bins on vessels and marine debris clean-ups, Tassal proposes no specific measures to implement the "zero tolerance" strategy.

In order to implement the aspirations in the Growth Plan and Tassal's commitment to zero waste in its EIS, we submit that the Panel should impose specific Management Controls in section 3.7 of the MFDP requiring Tassal to:

- Use rope that can be clearly identified as originating from leases within the MFDP zones;
- Ensure that its name has been stamped or otherwise marked on equipment used within the zones;
- Install GPS trackers on substantial pieces of equipment that have the potential to break free from the lease, such as feed pipes.

Noise

In its EIS (from p.220), Tassal has considered the impacts of noise it generates on onshore residents in the vicinity of its proposed zones and transport routes, and states that it must comply with regulatory limits imposed by the EPA. We note that in the absence of noise limits imposed as specific conditions on the proponent's environmental licence, there are no legally enforceable limits or guidelines on noise emitted by marine farming operations. ⁸ This has the potential to render Management Control 3.13.2 of the MFPD meaningless.

We therefore urge the Panel to confirm that the EPA intends to impose noise limits on the environmental licence for this MFDP area and that those limits will extend to vessels travelling to and from the MFDP area. The Panel should then either delete Management Control 3.13.2 or, if no noise limits are to be imposed on the environmental licence, amend it to reflect the EPA recommended limits that were modelled by Tassal in the EIS.

We note that industrial marine noise can also significantly impact on a variety of marine fauna (particularly marine mammals that rely on echolocation for migration and feeding). Given the intensity of marine farming activities proposed at the MFDP area, and the fact that it is located within known migratory routes of a number of threatened marine mammals, we recommend that the Panel consider imposing a requirement that an environmental baseline be established for aquatic noise at locations within the MFDP area, and at suitable compliance locations. These studies may then be used to inform the development of appropriate mitigation measures to protect marine fauna from significant impacts from salmon farming activities.

⁸ The Environmental and Pollution Control (Miscellaneous Noise) Regulations 2016 set no limits for marine farming noise.

Wildlife interactions

We commend Tassal for committing to the minimisation of seal interactions through the use of its K-grid pens in the proposed new zone, and for making available information on wildlife interactions and deaths on its Annual Sustainability Reports and ASC dashboard on its website.

Consistent with the Government's commitment that operators should halt all long-distance seal relocations from salmon farms, we recommend that the Panel consider imposing the following Management Controls on all the Storm Bay MFDPs:

- no seal relocations from MFDP areas are permitted;
- Lessees must implement best practice environmental management techniques to ensure that wildlife interactions with marine farming equipment and operations are minimised.

Climate Change

Experts agree that the waters of south-eastern Australia, and particularly eastern Tasmania, are experiencing warmer temperatures induced by climate change. These warmer waters may have a variety of impacts on marine farming operations, for example, necessitating the increased use of fresh water for bathing, therapeutants and/or antibiotics to combat the increased incidence of disease. Climate change is also likely to affect some of the variables (such as the current, temperature and biological productivity of waters) in the hydrodynamic and DEPOMOD modelling used to forecast the environmental impacts of marine farming within the MFDP area and the greater Storm Bay.

In deciding whether to approve the Draft Amendment, we ask the Panel to consider whether the modelling referred to in the EIS demonstrates that marine farming in the MFDP area is sustainable in forecast climate change scenarios. If the modelling referred to in the EIS does not address likely climate change scenarios, then we suggest that the Panel impose a Management Control requiring Tassal to engage a suitably qualified expert to undertake this modelling before the commencement of salmon farming in the MFDP area.

General comments

■ EDO Tasmania is supportive of the establishment of a Broadscale Environmental Monitoring Program (BEMP) in Storm Bay to ensure that the cumulative effects of the expansion of marine farming in the Bay are monitored, and to validate the biogeochemical and hydrodynamic modelling undertaken to support the expansion. We note that the IMAS evaluation of BEMP data for the Huon Estuary and D'Entrecasteaux Channel was hampered by a lack of baseline data for key parameters in certain locations. We therefore recommend that the Panel impose a Management

⁹ DPIPWE (2017) Sustainable Industry Growth Plan for the Salmon Industry at p.2.

¹⁰ Hobday, A. J., Hartog, J, Middleton, J. F., Teixeira, C. E. Luick, J. Matear, R., Condie, S. (2011). Understanding the biophysical implications of climate change in the southeast: Modelling of physical drivers and future changes. FRDC report 2009/056; and Fisheries Research and Development Corporation. El Nemo South East Australia Fact Sheet: Climate Change. Impact on SE Australian Atlantic Salmon Aquaculture. (2012). Accessed at: http://www.frdc.com.au/knowledge/Factsheets/FisheriesVic.Salmon4.pdf on 15 September 2016.

¹¹ Some of these climate change impacts have been addressed by Tassal in its EIS (from p.200).

¹² Stephen Battaglene, Pheroze Jungalwalla, Barbara Nowak, Zoe Doubleday (2011). "Atlantic Salmon, individual species assessment", In: Pecl GT, Doubleday Z, Ward T, Clarke S, Day J, Dixon C, Frusher S, Gibbs P, Hobday A, Hutchinson N, Jennings S, Jones K, Li X, Spooner D, and Stoklosa R. *Risk Assessment of Impacts of Climate Change for Key Marine Species in South Eastern Australia*. Fisheries Research and Development Corporation, Project 2009/070.

Control which required that salmon farming not commence until environmental baseline data for all the key parameters identified by EPA/IMAS/CSIRO for the BEMP has been obtained.

- In the EIS there is no mention of the quantity of the freshwater required to treat the fish in the MFDP area for amoebic gill disease. Given the scale of the marine farming activities that the Tassal aspires to for the MFDP area, we consider that the omission of this information from the EIS is a noteworthy oversight.
- EDO Tasmania is supportive of the proposed amendments to the Section 3 of the MFDP to bring the management controls into line with controls in Huon Aquaculture's Storm Bay off Trumpeter Bay North Bruny Island Marine Farming Development Plan.
- The Government has committed to the establishment of an independent web portal, hosted by IMAS, to provide access to relevant salmon farming environmental and production data.¹³ We encourage the Panel to consider whether there are any amendments that should be made to the Management Controls in Section 3.4 of Amendment no.1 to the MFDP in order to facilitate the provision of environmental monitoring data to IMAS.
- Finally, to allow for ease of reference for the community, operators, and regulators, we request that the Panel direct the planning authority compile all the relevant the management controls for this MFDP into a single document.

Thank you for the opportunity to make this submission. We would welcome the opportunity to respond to any questions the Panel may have in relation to the issues raised in this submission.

Yours sincerely,

Environmental Defenders Office

Per:

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Lawyer

¹³ DPIPWE (2017) Sustainable Industry Growth Plan for the Salmon Industry at p.21.