Darryl Cook, Director Finfish Compliance
Environment Protection Authority Tasmania
40 Elizabeth Street
Hobart TAS 7000

6 February 2026

Tasmanian Independent Science Council

Subject: Recommendation that the Environmental License (9959/5) for the Long Bay Marine Farming Lease (No. 55) should not be renewed

Dear Darryl,

We appreciate the opportunity to meet with you and your team on 28 January 2026 to discuss our concerns about the continuation of salmon farming at Lease 055 in Long Bay/ Port Arthur.

As requested, I attach a copy of our presentation, along with the detailed science review and nutrient loading analysis previously prepared by the TISC in 2023, and the more recent 2-page summary (2025) that was tabled at our meeting. To summarise our keys points:

- Long Bay is not a suitable location for finfish aquaculture due to the shallow, sheltered, poorly-flushed nature of the bay. This vulnerability has been compounded by the installation of a double row of salmon cages at the head of the bay, that further reduce water circulation.
- The bay is characterised by extensive seagrass meadows and fringing reef communities that provide important habitat and nursery areas for a range of species, including recreationally targeted seafood. This area is heavily used by recreational anglers.
- The initial high nutrient loading from the restocking of the lease, followed by continued emissions have resulted in chronic nuisance algal blooms that have substantially degraded this ecosystem. Despite an incremental reduction in production (~20%) associated with the EPA's 2023 nitrogen cap, the system has not recovered and is unlikely to do so without longer-term fallowing. The recent collapse of the seagrass beds in Stingaree Bay is particularly concerning and should not be discounted on the basis of 'natural variability'.
- Our nitrogen loading analysis for Long Bay has demonstrated that more than 90% of the bioavailable nitrogen load to the bay can be attributed directly to salmon farming. This bioavailable nitrogen pollution load would be equivalent to that from sewage generated by a town of more than 25,000 people. Furthermore, the salmon wastes are discharged to the bay during the period of highest risk (October to April).
- Increasing water temperatures will further exacerbate environmental degradation, and also directly affect fish welfare. As such, water temperatures should not be excluded as a matter for environmental regulation of salmon leases.

We have reviewed more than 20 studies and surveys of Long Bay undertaken by Tassal's consultants, the EPA and IMAS. While these include much useful information, a number of the studies have significant design flaws that preclude meaningful analysis, and in many cases the interpretation has been biased. For example, the baseline surveys and initial BEMP design did not include any monitoring sites in the poorly flushed northern areas of the Bay, and most of the reports do not provide any context as to the timing and magnitude of farming operations, making interpretation of impacts very difficult. Nonetheless, there are multiple examples within these studies that demonstrate impacts attributable to farming operations that extend well beyond the lease boundaries, e.g:

- Elevated total ammonia nitrogen (TAN) is frequently measured at PA-1, which is located well beyond the lease 35m compliance boundary (BEMP reports 2017/18 through 2023/24; EPA independent monitoring reports 2019 through 2023/24)

- The EPA monitoring reports, above, demonstrate that Chl*a* levels are often elevated adjacent to the lease and in the poorly flushed areas to the north, in contrast to areas to the south. This is particularly evident when the lease is stocked vs fallowed, as was documented in a targeted investigation before and after the de-stocking of the lease in 2021/22 (EPA, 2022).
- Episodes of very low DO and elevated chl*a*, have been documented by sensors installed by the EPA to the north of the lease. Both the magnitude and degree of variability are clearly higher during periods when the lease is stocked vs fallowed, demonstrating the impacts associated with salmon farming. (EPA, 2022)
- The EPA's independent monitoring reports are very difficult to follow because the data have not been graphed in a manner that can be readily interpreted; nor have the data been compiled for the multi-year monitoring period; or compared to the monitoring data reported by Tassal. Nonetheless, data for multiple parameters measured by the EPA are clearly outside of the annual and seasonal DGVs that were derived by the EPA for Long Bay, based on monitoring that was conducted prior to the lease being operational. As such, we would strongly disagree with the repeated conclusion in each report that the water quality results are '*akin to that of the baseline period on which the DGVs were derived*'. Furthermore, the broad attribution of nutrient inputs to multiple sources deflects attention (and responsibility) from aquaculture as the obvious primary source.
- Rapid Visual Assessment (RVA) surveys of reef communities show clear evidence of nutrient stress in reef areas adjacent to and to the north and west of the lease (IMAS, 2022, 2023; Tassal, 2025). The data for these surveys should not be averaged for sites at equal distances to the north and south of the lease, as this masks the impacts – which are far greater in the poorly flushed northern regions of the Bay.
- Severe and persistent fouling of seagrass beds in Stingaree Bay has been followed by the collapse of this community over the past 2 to 3 years (BEMP, 2023; BEMP, 2024). Recent site visits to this area in Dec 2025 and Jan 2026 confirmed the near total loss of this habitat, which appears to have been replaced by barren areas of sludge.

We note also that there are several aspects of the current EL that enable both compliance and environmental harm at the same time. For example, the choice of a water quality compliance site at PA-2 is too far from the lease to be influenced by bioavailable pollutants (such as TAN) discharged from the site, and the use of a rolling annual median is inappropriate as a means to regulate seasonal operations.

In summary, based on the scientific weight-of-evidence, together with the precautionary principle, we strongly believe that the Environmental License (EL) for the Long Bay finfish lease should not be extended beyond the current harvest, and that the Marine Farm Development Plan for this region should be modified accordingly to exclude finfish aquaculture as a permissible use in Long Bay.

Given that Long Bay is arguably the worst-sited lease in Tasmania, we also oppose the continued use of this lease on the basis that it has been 'grandfathered'. This is a good example of a situation where 'continuous improvement' should not be the standard response, as this simply justifies the delay of a difficult decision by enabling minor, incremental changes that do not address the fundamental problem.

We encourage the EPA to take a stronger position on this matter and see this situation as an important case study of how to deal with leases that are currently unsustainable, or are predicted to become so in the future. The EPA's decision about Long Bay is being closely scrutinised and how it is resolved will be seen as a reflection of the EPA's credibility and independence.

As we briefly touched on at the meeting, an alternative approach could potentially be to set the TPDNO to zero for several years and require Tassal to remove the infrastructure and monitor recovery. Should Tassal wish to re-occupy the lease – this would require clear evidence of full recovery, along with detailed investigations and modelling to present a case as to how finfish farming could be undertaken in a genuinely sustainable manner in Long Bay. See attached example of how this might be structured, using a Nature Positive approach.

Please let us know if we can provide any further information.

Sincerely,

Christine Coughanowr, Co-chair of the Tasmanian Independent Science Council

Cc Catherine Murdoch, Kate Berry, Raymond Bannister, Sam Kruimink

Attachments:

- TISC 2023, Long Bay Science Review
- TISC 2025, Long Bay Science Review: update and synthesis
- TISC 2026, Powerpoint Presentation to the EPA
- Nature Positive Alternative Pathway

REFERENCES

Aquenal Pty Ltd, 2020. Tasman Annual Broadscale Monitoring Report 2019/20. Produced for Tassal

Aquenal Pty Ltd, 2021. Tasman Annual Broadscale Monitoring Report 2020/21. Produced for Tassal

Aquenal Pty Ltd, 2022. Tasman Annual Broadscale Monitoring Report 2021/22. Produced for Tassal

Aquenal Pty Ltd, 2023. Tasman Annual Broadscale Monitoring Report 2022/23. Produced for Tassal

Aquenal Pty Ltd, 2024. Tasman Annual Broadscale Monitoring Report 2023/24. Produced for Tassal

Aquenal, 2024. Rapid Visual Assessment of Rocky Reef Assemblages in Port Arthur in 2024. Produced for Tassal

EPA Tasmania, 2020. Port Arthur Water Quality Observations 2019, EPA Tasmania, Hobart, Tasmania.

EPA Tasmania, 2021. Water Quality monitoring results for Port Arthur area, October 2020 to March 2021, EPA, Hobart, Tasmania.

EPA Tasmania, 2022. Water Quality monitoring results for Port Arthur area, October 2021 to May 2022, EPA, Hobart, Tasmania.

EPA Tasmania, 2023. Water Quality monitoring results for Port Arthur area, August 2022 to May 2023, EPA, Hobart, Tasmania.

EPA Tasmania, 2024. Water Quality monitoring results for Port Arthur area, July 2023 to June 2024, EPA, Hobart, Tasmania.

EPA Tasmania, 2022. Port Arthur Nutrient Survey

EPA Tasmania, 2023. Fluorometry as a tool for assessing impacts of finfish aquaculture.

White C, M Hartog, M Brasier & J Ross, 2022. Rapid visual assessment of rocky reef assemblages in Port Arthur. IMAS Report prepared for Tasmanian EPA.

*These reports can be accessed on the Tas EPA website **here**