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Salmon Tasmania Supplementary Submission

Requests for Reconsideration of Referral Decision:

Marine Farming Expansion, Macquarie Harbour, Tasmania

(EPBC 2012/6406)

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1 Introduction

(a) We refer to the current reconsideration by you of the decision made under section 75 of the *Environment Protection and Biodiversity Conservation Act 1999* (the ***EPBC Act***) by the then Federal Minister that the proposed expansion of marine farming operations in Macquarie Harbour (EPBC Act referral No 2012/6406) was not a controlled action, provided it is taken in the particular manner specified in the decision (***NCA-PM Decision***).

(b) On 2 February 2024, Salmon Tasmania provided its submission on behalf of its members, responding to the reconsideration requests made by the Tasmanian branch of The Australia Institute (***The Australia Institute***), Fitzgerald and Browne Lawyers on behalf of the Bob Brown Foundation Inc (***BB Foundation***) and the Environmental Defenders Office on behalf of the Australian Marine Conservation Society and Humane Society International Australia (together, ***AMCS/HSI***).

(c) This document provides additional information, new data regarding key environmental indicators including dissolved oxygen (***DO***) levels, and new initiatives being undertaken by the industry to supplement and further support Salmon Tasmania's submission and request that you confirm the existing NCA-PM Decision.

2 Improved Dissolved Oxygen, Ammonia and Nitrate levels in Macquarie Harbour

(a) Data collected in Macquarie Harbour as part of the monthly Broadscale Environmental Monitoring Program (***MHBEMP***) reveals an improvement in DO levels at all harbour depths when compared to the 10-year average.

(b) Improvements to average ammonia and nitrate levels at 20m depth have also been recorded in recent months.

(c) A technical report prepared by Marine Solutions in April 2024 (***Annexure A***), shows an improvement in DO levels at 21m to the harbour floor, when compared to levels for the same period in 2023, and relative to the mean average for the same period 10 years ago.

(d) This trend is consistent for the majority of monitoring locations within Macquarie Harbour, including southern and western monitoring locations further from the mouth of the harbour where DO levels are naturally lower due to distance from ocean water influence.

(e) The increase in DO levels at depth is coupled with an observed reduction in the yearly average levels of ammonia and nitrate at 20m depth, when compared to 2012.

(f) This data demonstrates a significant improvement in the environmental conditions in the harbour when compared to previous periods, rather than a degradation.

(g) June 2024 has already seen several large oceanic recharge events in Macquarie Harbour, and it is strongly recommended that IMAS provide an independent overview of the magnitude of these events to understand their impact on overall oxygen levels in the harbour system.

3 Progress of Macquarie Harbour Oxygenation Project (MHOP)

(a) The $6 million MHOP trial that seeks to test the effectiveness of engineering solutions to increase oxygen levels in Macquarie Harbour, commenced in late 2023, has seen positive initial results.

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(b) Currently, the trial has been injecting 3000kg of oxygen daily into a nominated deepwater section in Macquarie Harbour.

(c) There have been no unfavourable environmental responses observed as a result of the trial, and the radiating sensor network around the injection site is reporting elevated levels of DO at the recorded location.

(d) The total injection capability of the barge is 5000kg of oxygen daily, meaning there is still great potential for increased injection rates and benefits from the MHOP to be realised.

(e) These initial results demonstrate the real potential to improve conditions within the harbour through engineered solutions that will assist in reducing the impacts of the various natural and anthropomorphic inputs affecting the environmental conditions and DO levels at depth in Macquarie Harbour.

4 Additional industry initiatives

(a) In addition to the MHOP project, the industry has invested in further initiatives to support the collection of key environmental data in Macquarie Harbour and to ensure the viability of the Maugean Skate population.

(b) This includes the recent purchasing and upgrading of the only tidal monitoring station on the west coast of Tasmania, the Strahan Tide Gauge, and a joint research initiative with IMAS and a third party to develop a research and implementation plan to determine the viability of Bathurst Harbour as a future alternative habitat for skate bred in captivity.

(c) These initiatives are indicative of the industry's commitment to working with key scientific bodies to ensure reliable data is available to provide an accurate picture of the conditions within Macquarie Harbour and better understand the impact of both natural and human inputs on the harbour environment.

(d) This support goes beyond the requirements imposed on the industry under any environmental legislation and demonstrates the industry's dedication to being a responsible corporate citizen.

4.2 Strahan Tide Gauge

(a) As the only tidal data collection station on the western coast of the state, the Strahan Tide Gauge provides critical data to develop and calibrate modelling to ensure it is responsive to tidal fluctuations.

(b) A significant investment has been made by Salmon Tasmania to purchase, upgrade and refurbish the gauge to ensure accurate data is available to scientific organisations such as CSIRO, allowing CSIRO to reactivate the oxygen transport and biogeochemical model for the Macquarie Harbour system.

(c) It is unknown how the Hydro and CSIRO work is progressing, or indeed if it has even started. This was one of the three recommendations the Federal Government issued, along with the captive breeding program and the MHOP.

(d) This tidal data is also critical in assessing the impact of freshwater inflows from surrounding dams into Macquarie Harbour, which are a key factor for environmental conditions within the harbour.

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(e) In order to support the ongoing collection of this data, Salmon Tasmania has also agreed to fund the ongoing maintenance of the gauge to ensure its long-term operation.

4.3 Research into Bathurst Harbour as an alternative habitat

(a) In September 2023, the Federal Government announced a $2.1million captive breeding program to establish an 'insurance population' of Maugean Skate.

(b) To support the captive breeding program efforts and safeguard future skate populations, Salmon Tasmania has committed to undertake research to understand the habitual preferences of the skate, and in turn, determine the viability of Bathurst Harbour as a location in which captively bred skate may be released in the future.

(c) This research has never been undertaken before and is integral to ensuring the long-term success of the captive breeding program by securing suitable habitats for future skate populations.

(d) Industry is calling for a broader range assessment for the skate outside of Macquarie Harbour to verify local reports of it being caught in various other locations. These reports are supported by the fact that the species is currently thriving in full marine conditions in the captive breeding program being conducted at IMAS in Taroona.