OPEN LETTER TO WES FORD, DIRECTOR, TASMANIAN EPA

SALMON AQUACULTURE IN MACQUARIE HARBOUR: REVIEW OF BIOMASS CONTROLS

Tasmanian Independent Science Council follow-up & recommendations: July 2022

Dear Mr Ford

We appreciated the opportunity to meet with senior members of the EPA Salmon Regulation Section several weeks ago to discuss our concerns about salmon biomass limits in Macquarie Harbour and provide this follow-up letter to clarify some of the points we discussed.

Based on the recently published (June 2022) biomass determination *Statement of Reasons*, we understand that the current arrangements have been extended for three months to 31 Aug 2022, and that the new limits will be written into Environmental Licenses. The extended Determination also indicates that a further reduction in biomass levels is anticipated and that a precautionary approach will be taken. We are supportive of this approach.

Furthermore, we are aware that considerable additional work is being done by IMAS to update previous FRDC surveys, in addition to the recently released IMAS review of the Macquarie Harbour Broadscale Environmental Monitoring Program (BEMP) data, and the Scottish Association for Marine Science (SAMS) review of the BEMP design itself. This additional information will provide important new data to support decision-making.

That said, we urge the following:

- If the draft decision is offered to industry for their consideration/feedback, that this draft decision also be made available to the wider community, along with the more recent survey results and studies. We would welcome an opportunity to review and provide feedback on this draft decision.
- This opportunity should be taken to review and modify the Macquarie Harbour Marine Farm Development Plan to incorporate new information and understanding so as to reduce impacts of future aquaculture operations on the Harbour.
- A clear timeline should be set to further review and refine biomass (or other) limits. Macquarie Harbour is a complex and highly variable system and scientific understanding of this system continues to evolve, as do the environmental factors that influence it such as water temperature and river flows. As such, scheduled data reviews/updates must be included to ensure that these are completed in a regular and rigorous manner, and do not drop off the radar.
- The new Determination should be based on Dissolved Inorganic Nitrogen (and/or feed) limits instead of (or in addition to) biomass, and should include both standing and annual limits. Seasonal limits may also be needed to reduce inputs so as to protect the system at times of greatest vulnerability (i.e. in spring/early summer).
- New Environmental Licenses should include both an updated BEMP, as well as a comprehensive monitoring program for the Maugean skate. These should be fully funded by industry as part of cost of business associated with aquaculture operations in the Harbour. Other gaps in monitoring & reporting – as outlined in our previous letter – should also be addressed and written into licenses.
- Further refinement of the CSIRO model should be implemented to better predict environmental conditions associated with different stocking levels and to support carrying capacity assessments.

- We are very concerned about possible manipulation of Gordon River flows to modify water quality conditions in the Harbour before robust modelling and monitoring systems are in place, particularly if this was to be used as a basis to maintain or increase salmon production. Given the highly variable and unpredictable nature of the harbour, this could be a high stakes gamble. In the event of a major recharge/low dissolved oxygen event, would the Hydro able or willing to release water, and would this in fact be effective? What if the Hydro needed to manage flows for other reasons, e.g. Basslink outage. Would the industry be willing or able to destock fish before fully grown, and could this be done at short notice?

In summary, the TISC urges the EPA to set more conservative limits on salmon production in Macquarie Harbour until and unless the issues raised above and in our letter of May 2022 have been addressed. In particular, clarity is needed regarding potential impacts of continued low oxygen levels on the endangered Maugean skate, including their reproductive success.

We hope this feedback will be considered as part of the EPA's review. Please contact us if we can be of further assistance.

Sincerely,

Distinguished Professor Jamie Kirkpatrick AM,

Chair of the Tasmanian Independent Science Council, on behalf of its members

Christine Coughanowr

Water Quality Scientist and TISC member

ABOUT THE TASMANIAN INDEPENDENT SCIENCE COUNCIL

The Tasmanian Independent Science Council is dedicated to science-based policy reform to ensure the long-term health of Tasmania's critical environments. We are composed of scientists and relevant professionals who are a source of independent, non-government advice.