



MEDIA RELEASE

Media Release 29 September 2023

Science and industry to partner on Macquarie Harbour initiative

The Tasmanian salmon aquaculture industry will partner with the Australian Government's Fisheries Research & Development Corporation (FRDC), in a major initiative to stimulate dissolved oxygen levels in Macquarie Harbour.

The Institute for Marine and Antarctic Studies (IMAS) will lead the scientific evaluation program to assess the efficacy and environmental response to the oxygenation. This evaluation will be critical in assessing the feasibility and scalability of the system.

The Macquarie Harbour Oxygenation Program (MHOP) is planned to begin this summer and run over two years in a Tasmania-first trial of engineering solutions to enhance oxygen levels in a major waterway.

Salmon Tasmania CEO, Luke Martin, said the project could cost up to \$6 million over the next twoyears and represented the industry's major contribution to the Maugean Skate Conservation Recovery Plan, and would further elevate the sustainability principles underpinning aquaculture in the harbour.

"The salmon industry has been operating out of Macquarie Harbour for 37 years and the people who work in this industry care deeply about the marine environment they live and work within every day," Mr Martin said.

"The industry has been raising concerns about the decline in the Maugean Skate for some time and funded much of the research into the species.

'It's important to recognise there are a range of factors influencing the oxygen levels in the Harbour and the decline of the skate, which is widely accepted as now extinct in Bathurst Harbour where there is obviously no aquaculture.

'The industry has also more than halved its biomass levels in Macquarie Harbour since 2017, and this has had no apparent impact on the dissolved oxygen levels in the water system. Clearly the issues are far more complex than simply removing the salmon.

Mr Martin said the Australian Government had recently announced funding for the establishment of a captive breeding program, as recommended by its Species Conservation Task Force.

"We will now take the lead in the second priority outlined by that Task Force: an initiative to directly improve the oxygen levels in the harbour to support the Skate and further offset the impact of our operations on the marine environment," Mr Martin said.









The research team will place a barge on Macquarie Harbour with pumps that draw water from the sea at depth. Highly concentrated micro and nano bubbles of oxygen will be injected into that water, before releasing it back into the deeper water sections of the Harbour, elevating its dissolved oxygen levels through passive diffusion and natural mixing.

"This technology is used successfully in marine environments all over the world, including in a major project running over the past twenty years to support Perth's Swan River estuary.

"Our objective is to trial this technology in Macquarie Harbour over the next two summers to test whether it could form part of a long-term strategy to improve the Macquarie Harbour environment for the Skate, while responding to the challenge of warming waters and other climatic factors.

"At a minimum, we aim to offset the total oxygen drawdown of our own salmon aquaculture activities in the Harbour, and further reduce the impact of our operations on the environment," Mr Martin said.

"IMAS scientists will independently design the trial. It will be implemented, where appropriate, collaboratively with the salmon industry on the West Coast.

"The results of the trial will be transparently made available to the public and stakeholders, including the EPA and the Australian government.

Mr Martin said the MHOP was a sensible, practical, and science-based response to managing the risks around the Skate, in contrast to alarmist calls to remove aquaculture from the Harbour.

"It is only because the industry is in the harbour, we can resource and activate a major response like this using proven technology to improve the marine environment for the Skate.

'The only thing removing the aquaculture from the Harbour is certain to achieve is the total and unacceptable devastation of the West Coast community, with economic shockwaves and the loss of hundreds of jobs right across Northern and North-West Tasmania. With no surety this would make any difference for the Skate.

'These oxygenation projects are proven to work in other marine environments, and is potentially a long-term solution to improve the harbour for the skate, and secure the economic lifeblood of a number of communities.

'We can strike a balance here between conservation outcomes, and the economic and social wellbeing of regional Tasmania, and the industry is determined to lead this path.

Mr Martin said assuming necessary permits and approvals are issued over coming weeks, the MHOP will be operating on Macquarie Harbour by Christmas.'

Stuart Harris - Communications Director

Salmon Tasmania M: 0448 259 354

E: stuart@salmontas.au



