From:	janet berry
To:	Tasmanian Salmon Study Secretariat
Subject:	Veterinary submission for Salmon Industry Independent Study
Date:	Saturday, 4 July 2026 3:32:56 PM
Attachments:	Submission_Salmon Industry Tasmania_July 2026.docx

Dear Sir/Madam
Please find attached a submission for the Tasmanian Salmon Industry Independent Study, prepared and presented by the Australian Veterinary Environmental Association (AVEA).

AEVA is in the process of transitioning from Vets for Climate Action and full details, including contact information, are in the process of development.

I am sending this submission on behalf of AVEA and you can contact me if you need to.

Janet Berry PhD BVMS
[redacted]

Janet Berry

For the sake of my grandchildren and all young people,

I have written a story about the changing and deteriorating climate.



Find out more on my website:

https://janetberryisnow.com



AVEA is an initiative of Veterinarians for Climate Action Ltd ABN 16 636 944 191

4 July 2026
Tasmanian Government
By email: salmonstudy@tas.gov.au

Submission to**: The Tasmanian Salmon Industry Independent Study**[1]

The Australian Veterinary Environmental Alliance (AVEA) brings veterinarians together to work collaboratively on climate, sustainability and biodiversity. Our work builds on the One Health principle[2], recognising that human, animal and environmental health are linked and interdependent.

AVEA welcomes the opportunity to provide a submission to the Tasmanian Salmon Industry Independent Study.

Introduction
Since its beginnings in the 1980s, the salmon farming industry in Tasmania has grown until, by 2025, there were 47 active licences across the state[3]. The Tasmanian Government tells us that the State has the most valuable salmon industry in Australia, supplying over 90 per cent of Australian Atlantic salmon production. It has become an important contributor to the State economy with a value of over $1 billion[4].

In parallel with the significant growth of the industry, the Tasmanian Government must recognise its responsibility to care for the sustainability of the environment, biodiversity and the community as a whole.

Environmental Impacts
In recent years, there have been concerning reports of contamination of the environment due to salmon farming practices with many consequences.

Salmon farming has well documented impacts on the ecology and survival of aquatic life in the vicinity of the farms. This is caused in part by heavy nutrient loads, deoxygenation of water and dead-zones on the sea floor beneath the floating enclosures[5].

[1] Salmon Industry Study | Tasmanian Government
[2] One health
[3] How many salmon farms are there in Tasmania — and who owns them? - ABC News
[4] Salmon Farming | Department of Natural Resources and Environment Tasmania
[5] Influence of Florfenicol Treatments on Marine-Sediment Microbiomes: A Metagenomic Study of Bacterial Communities in Proximity to Salmon Aquaculture in Southern Chile

In Macquarie Harbour, salmon farming is contributing to the risk for the Harbour's World Heritage value and the extinction of the Maugean skate.

The Maugean skate (*Zearaja maugeana*) is listed as endangered under both Tasmania's Threatened Species Protection Act 1995 and the Environment Protection and Biodiversity Conservation Act 1999[6]. Macquarie Harbour is the Maugean skate's only viable remaining habitat and critically low dissolved oxygen levels driven by intensive salmon farming, climate change, and hydroelectric dam operations that restrict natural river flows are bringing the skate close to extinction.

Current environmental legislation and enforcement is proving inadequate in providing a sustainable future for the environment and biodiversity in the vicinity of salmon farming.

Disease outbreaks in farmed salmon

Mass die-offs have occurred in salmon farms across the State in recent times, as the industry faced a widespread disease outbreak caused by *Rickettsia* bacteria[7]. This obviously raises questions concerning the care of the salmon being kept in fish pens, the epidemiology of the disease outbreak and the control of the disease by the industry.

Salmon carcases and 'chunks' from the fish pens have washed up on beaches. Emergency solutions had to be approved for the disposal of vast quantities of dead fish. Salmon carcases were placed in shallow graves in various places in the State. Another solution was to process the carcases to create material that was spread on farmland as a form of fertiliser[8].

Antibiotic resistance

The antibiotic florfenicol has been used to treat and contain the bacterial disease in the salmon. And in 2026, the antibiotic has been detected in Tasmanian waters more than 10 kilometres away from the closest salmon farming operation using it[9].

Florfenicol is the most widely used antibiotic in aquaculture globally. Research has been conducted into the contamination of the environment with the antibiotic, the development of resistant genes in bacteria and how that resistance moves and spreads. Bacterial resistance can enter the human food chain through contaminated fish, environmental water exposure or direct contact by farm workers[10].

Antimicrobial resistance is a major public health emergency in Australia, driven by high rates of antibiotic prescribing. The newly established Australian Centre for Disease Control (CDC) reported a concerning 25% increase in cases of critical antibiotic resistance in 2024, emphasizing the urgent need for better medication stewardship[11].

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[6] Maugean Skate | Department of Natural Resources and Environment Tasmania

[7] Thousands of salmon dying in Tasmania as industry grapples with disease, antibiotics and 'chunks' washing ashore - ABC News

[8] Shallow burials, landfill: Where tonnes of Tasmania's dead salmon went - ABC News

[9] Salmon farm antibiotics found in native Tasmanian species kilometres away - ABC News

[10] Florfenicol in aquaculture: environmental fate of residues and dissemination of antimicrobial resistance genes | Animal Diseases | Springer Nature Link

[11] National snapshot of antimicrobial resistance and use released | Australian Centre for Disease Control

Recommendations

AVEA asks the Independent Study of the Tasmanian Salmon Industry to consider the following recommendations related to the health and welfare of the salmon, the use of antibiotics and issues relating to One Health.

1. Salmon farming in Tasmania's Macquarie Harbour should be comprehensively re-assessed under national environment law to ensure a sustainable future for the Maugean skate. Current environmental legislation and enforcement is currently inadequate to provide a sustainable future for the industry and the environment.

2. The Tasmanian Animal Welfare Act 1993[12] applies to any live vertebrate animal other than a human being. And that includes fish. The salmon companies need to recognise their Duty of Care under the Act and to take all reasonable measures to ensure the health and welfare of the farmed fish.

3. Legislation and regulatory control regarding the use of antibiotics by salmon farms needs to ensure minimal harm - to the environment, biodiversity, human and animal health.

4. Vaccine development is urgently required to prevent disease in farmed salmon and reduce the use of antibiotics.

5. The threat of antimicrobial resistance resulting from salmon farms needs to be acknowledged by the government and the salmon companies in Tasmania. Research is urgently required into the consequences of antibiotic use in the salmon farms, and the impact on the marine ecosystem in the vicinity of the farms. The antimicrobial resistance resulting from the use of Florfenicol to treat bacterial infections in Tasmanian salmon farms and the resistance of organisms in the environment must be revealed. This work may need to be permitted by legislation under the remit of NRM. It should certainly be funded by the salmon farming industry.

6. The work concerning antimicrobial resistance in Tasmania needs to be conducted in collaboration with the Australian CDC. Information needs to be shared with those concerned with human health and animal health, in order to minimise the overall development of antibiotic resistance in Australia.

Yours sincerely
Australian Veterinary Environmental Alliance
AVEA is an initiative of Veterinarians for Climate Action
Website: Vets for Climate Action

[12] View - Tasmanian Legislation Online