From:	Bruny Is. Environment Network
To:	Tasmanian Salmon Study Secretariat
Cc:	Peter Droege; James Bunker; Rod Hartvigsen
Subject:	Submission to the Independent Salmon Study
Date:	Saturday, 4 July 2026 5:41:44 PM
Attachments:	20260704_BIEN_Submission_Salmon_study.pdf

Dear Dr Russell Reichelt and Dr Wendy Craik
Thank you for providing the opportunity to express our lived experience with the salmon industry here around Bruny Island.
We respectfully submit this submission for your consideration.

warmly

Daniel Sprod
Secretary - BIEN Inc
[redacted]
www.bien.org.au
Facebook

Bruny Island Environment Network Inc.
ABN 12 672 483 620
[redacted]
[redacted]
bien.org.au
bien.network@gmail.com

To the Independent Study of the Tasmanian Salmon Industry.

This submission is made on behalf of the Bruny Island Environment Network Inc. (BIEN) and the community of Bruny Island and the D'Entrecasteaux Channel. It draws on local observation, published scientific research, EPA data, and the lived experience of residents, fishers, and visitors who call these waters home.

We write not in opposition to aquaculture, but in support of an aquaculture that operates within ecological limits, with full transparency, and in genuine partnership with the communities that host it. The vision of Bruny BlueBioSphere—an island and its sea breathing as one, supporting regenerative industries, thriving wildlife, and human wellbeing—is our guiding frame.

This submission addresses the Study Topics most relevant to our region and our lived experience.

Topic #1: Environmental harm

- Deteriorating water quality evidenced by blooms of Nutrient Indicator Algae, affecting rocky reef and sea grass beds and all marine species
- Light Pollution affecting diurnal behaviour and activity including in humans
- Plastics pollution, micro and macro
- Waste disposal
- Climate impacts (from and on the industry)
- Off brand antibiotic use and over use- microbial resistance that has demonstrated negative health effects for humans

Topic #2: Environmental Values and Impacts

Plastics- both micro and macro entering the food chain through fish and birds, and water column constantly.

The Channel is not a Norwegian fjord—but it is being treated as one.

The D'Entrecasteaux Channel is a complex, island-studded waterway with limited flushing in many bays. It supports giant kelp forests, seagrass meadows, weedy sea dragons, handfish, abalone, and rock lobster. It is also the receiving water for multiple salmon leases operating at industrial scale.

The Norway experience documented by the Sunstone Institute and Guardian Australia demonstrates that open-pen salmon farming releases nutrients equivalent to the raw sewage of millions of people. Norway's 1.5 million tonnes of annual production releases 75,000 tonnes of nitrogen—equivalent to the untreated waste of 17.2 million people. Tasmania produces approximately 68,000 tonnes of salmon annually, roughly 4.3% of Norway's output, yet our nitrogen loading per tonne appears proportionally higher due to warmer waters, disease-driven feed inefficiencies, and extraordinary mortality rates.

The Australia Institute has calculated that Tasmanian salmon farming releases dissolved inorganic nitrogen equivalent to the treated sewage of 3 million people—six times the nutrient load of every sewage treatment plant in Tasmania combined. Macquarie Harbour alone receives nitrogen pollution equivalent to a city of half a million people, more than double Hobart's population.

In the Channel, we have documented:

- whole as well as bits of carcasses of farmed Atlantic Salmon washing up on Conneleys Beach and fat balls on Conneleys Beach, Mickeys Bay and Tinpot Bay, with the fat balls being particularly persistent following a catastrophic mass mortality event in February 2025
- sub contracted cleanup crews working for weeks to remove only the obvious bulk of the industrial pollution in these areas.
- pink algal sludge at Randalls Bay, Little Roaring Beach, and Little Taylors Bay on Bruny Island in January 2026
- dead sea cucumbers, octopuses, and crabs washing ashore coincident with these blooms

Norwegian research confirms:

- net-cleaning debris plumes can travel 5 kilometres, placing popular swimming beaches such as Coningham and Roaring Beach (2.5 km from pens) within the impact zone.
- A one-third decline in deep-water oxygen in Norway's Hardangerfjord between 1955 and 2024—a trajectory Macquarie Harbour appears to be following

The EPA's current monitoring framework—assessing benthic impacts at 35 metres from lease boundaries—is fundamentally inadequate. It does not capture water-column nutrient dispersal, far-field oxygen depletion, cumulative effects across multiple leases, or impacts on recreational and cultural values.

Recommendations:

- **Establish legally binding total maximum daily loads for nitrogen, phosphorus, and organic carbon for the Channel, Storm Bay, and Macquarie Harbour.**
- **Regulate farms on cumulative nutrient footprints, not isolated benthic scores.**
- **Require continuous water-quality monitoring with public real-time reporting.**

Topic #3: Health Impacts—Public Health, Ecosystem Health, Wildlife

Seal bombs, bean bags and the accidental trapping of sea birds such as gulls and terns- possible bio hazard component due to H1N1 as well as 'by-catch' of avian shorebirds as well as pelagic species.

Antibiotics, PFAS, and the contamination of wild fisheries.

The florfenicol crisis of 2025–26 exposed critical failures in regulation, transparency, and precaution.

The facts now on record:

- 2.7 tonnes of florfenicol was used at Huon Aquaculture's Zuidpool lease in the D'Entrecasteaux Channel between November 2025 and January 2026
- 553 kg was used at Tassal's Soldiers Point lease (MF110), Bruny Island, with treatments on 5 December 2025 and 4 January 2026—the latter during the peak Apollo Bay holiday period, with swimmers and families unaware
- Florfenicol was used 21 times across nine sites

- Traces were detected in wild abalone, urchins, and rock lobsters more than 10 kilometres from treated pens
- Residues remained above reportable limits more than two months after treatment ceased
- The total quantity used across eight of nine leases remains undisclosed to the public
- The reporting delay on Soldiers Point data was five months

Professor Mark Blaskovich of the University of Queensland has stated that florfenicol's close relationship to the human antibiotic chloramphenicol means resistance generated in marine bacteria can transfer to human pathogens. He notes that "in Australia, resistant infections actually lead to more deaths per year than car crashes."

The APVMA suspended the florfenicol permit in March 2026 due to "unacceptable risk." Wild-catch abalone and rock lobster fisheries were closed indefinitely as a precautionary measure. The Tasmanian Rock Lobster Council reported that the "entire wild-catch sector breathed a sigh of relief" when the permit was revoked.

Meanwhile, the Norwegian Institute of Marine Research has now confirmed PFAS contamination in the salmon feed supply chain, with levels in some salmon fillets exceeding safe intake thresholds for frequent consumers. This global feed pipeline connects Bruny pens to industrial pollution sources worldwide.

Despite 2.7 tonnes of antibiotics entering the Channel, 9,000 tonnes of salmon—approximately two million fish—still died between January and March 2026. The antibiotic did not prevent the mortality; it merely added a chemical burden to the environment.

Quality of life impacts, from noise and light pollution. The heart break of not being able to fish the channel, stopping a beloved past time as well as a protein supplement to Islanders and coastal people.

Recommendations:

- **Permanently prohibit open-water use of florfenicol and any antibiotic that threatens wild fisheries or human antimicrobial efficacy.**
- **Mandate real-time public reporting of all therapeutant use, with maximum 48-hour disclosure.**
- **Immediately test Tasmanian-farmed salmon and Channel waters for PFAS and publish results.**

Topic #4: Regulation and Compliance

A system that cannot locate its own data is not fit for purpose.

The current regulatory framework is fragmented across agencies with conflicting mandates, echoes the Norwegian "boiling frog syndrome" in which licensing proceeds on narrow metrics while wider ecological decline goes unmeasured.
This allows an industry operating in public waters to continue where regulatory controls are incomplete and under-resourced, and furthermore what regulatory controls are in place are largely reliant on self-reporting.

Critical failures documented:

- The EPA was unable to locate information on total florfenicol use when requested under Right to Information laws
- The EPA was unaware of where millions of dead salmon were being disposed after the 2025–26 summer mortality event
- The total antibiotic quantity released across eight of nine treated leases remains unknown to the regulator months after the permit was revoked
- Mortality disposal included shallow burials near inland water sources, with minimal environmental planning
- The five-month delay in releasing the Soldiers Point TRMP report occurred while Apollo Bay beachgoers swam in waters that had received 553 kg of antibiotic

A 2025 Norwegian Environment Agency audit found that nine out of ten land-based aquaculture facilities violated pollution regulations—weeks later, Norway proposed a complete regulatory overhaul. Tasmania should learn from this rather than repeat it.

An industry that operates in the ‘commons’ and with 'supposed' social license must operate openly and sustainably. The precautionary principle must be front and centre of the decision making matrix, not a reactive management protocol that requires something to go wrong before solutions are attempted.

Recommendations:

- **Consolidate aquaculture regulation under a single independent authority with a legislated objective of ecosystem protection. Require real-time, publicly accessible reporting of all discharges, therapeutant use, and mortality disposal.**
- **Establish a whistleblower protection framework for industry workers.**
- **Commission an independent audit of EPA resourcing, capability, and regulatory capture risk.**

Topic #6: Social and Cultural Benefits and Costs

The social licence has been withdrawn. The community knows why.

A CSIRO survey has confirmed that a majority of Tasmanians now view salmon aquaculture as "bad" or "very bad" for good governance and environmental sustainability. The Ad Standards Community Panel has upheld complaints against Salmon Tasmania for making false environmental claims in advertising. The industry's own peak body has been formally found to have misled the public.

The costs to Bruny Island communities include:

- Loss of amenity: noise from industrial well boats operating at night near residential areas, with complaints dismissed as "within limits"
- Beach pollution: documented salmon fat, carcasses, algal sludge, plastics and industrial rubbish washing up daily on recreational beaches
- Psychological stress: residents report losing sleep, dealing with uncertainty about water safety, and feeling powerless against international corporations operating in public waterways
- Cultural harm: Palawa sea country has been industrialised without free, prior, and informed consent, and without Indigenous co-management structures

- Economic contamination: the indefinite closure of wild-catch abalone fisheries due to antibiotic residues directly harms the sector that markets Tasmania's clean, premium seafood brand

The employment argument offered by industry requires scrutiny. Current data shows 1,840 permanent and 513 casual workers across the three major companies. Casualisation is increasing while permanent employment at Tassal has declined. The economic benefit must be weighed against the cost to wild fisheries, tourism, property values, and the public health burden of antimicrobial resistance.

Recommendations:

- **Establish a community benefit fund, paid by industry levies, to support marine restoration, citizen science, and community amenity improvements.**
- **Mandate free, prior, and informed consent processes for new and renewed leases, with genuine Indigenous co-management.**
- **Require night-time noise limits that reflect actual sleep disturbance, not industrial convenience.**

Topic #7: Public Health

- Questionable claims with zero proof that salmon aquaculture can 'feed the world'
- Questionable claims that industrial produced Atlantic Salmon is 'healthy'
- Atlantic salmon is genetically modified, fed with a variety of modified and novel feed, and profalactically and regularly treated with antibiotics
- Antibiotic accumulation in public waterways including on land fresh water, as well as other commercial fisheries and wild fish stocks.

Topic #8: Innovation and Regenerative Alternatives

The future is already in the water at Birchs Bay.

Bruny Island Seafarms, inspired by the global GreenWave movement, has placed its first pilot regenerative seafarm in the water at Birchs Bay. This project grows mussels, oysters, scallops, and seaweeds—species that require no feed inputs, filter the water, sequester carbon, and create habitat. It represents a model of aquaculture that improves the environment it occupies rather than degrading it.

This is the direction the Study should champion. Regenerative aquaculture can provide employment for coastal communities while restoring marine health. It aligns with the vision of Bruny BlueBioSphere – an island and its sea functioning as one living system.

Other innovations demanding support include:

- Closed-containment and land-based recirculating aquaculture systems (RAS) that capture all waste
- Waste collection curtain technology for existing marine pens
- Vaccine development and selective breeding for disease resistance, reducing antibiotic dependence
- Feed formulations that eliminate wild fish inputs and PFAS contamination risks

- Urchin roe industries that turn a pest species into an economic resource while restoring kelp forests

Recommendations:

- **The Tasmanian Government should establish a Regenerative Aquaculture Transition Fund, redirecting a portion of industry levies toward grants, concessional loans, and technical support for zero-pollution aquaculture.**
- **Streamline approvals for proven restorative systems.**
- **Set a target date by which all aquaculture in Tasmanian waters must achieve net-zero nutrient discharge.**

Topic #9: Benchmarking Against Global Best Practice

Tasmania is falling behind. This is our opportunity to lead.

Comparative analysis with Norway, Scotland, Canada, and New Zealand reveals common failures and emerging solutions. Norway's Vestland county has rejected all pending applications for increased production or new aquaculture sites to protect collapsing fjord ecosystems. Scotland has introduced stricter sea lice reporting. New Zealand is investing heavily in land-based RAS.

Tasmania has the opportunity to leapfrog these incremental reforms and set a new global standard: an aquaculture industry that operates within scientifically determined ecological limits, with full public transparency, zero antibiotic discharge, and a regulated transition pathway toward closed-containment and regenerative systems.

This should include first nation's representatives community environmental groups and independent science advisory groups.

The Bruny BlueBioSphere vision is not anti-industry. It is pro-future. It asks that the sea be treated not as a disposal medium but as a living partner, and that the communities who host aquaculture be treated not as obstacles but as co-stewards.

Recommendation

- **The Study should recommend that Tasmania adopt a statutory goal of "net-positive" aquaculture by 2040—an industry that demonstrably leaves marine ecosystems healthier than it found them. This should be benchmarked against international jurisdictions and reported annually to Parliament.**

Summary of Recommendations

1. Legally binding nutrient budgets for all aquaculture receiving waters
2. Permanent ban on open-water florfenicol and related antibiotics
3. Real-time, public reporting of all therapeutant use, discharges, and mortalities (max 48-hour delay)
4. Mandatory PFAS testing of farmed salmon and receiving waters
5. Independent, consolidated regulatory authority with ecosystem protection mandate
6. Community benefit fund from industry levies for marine restoration and amenity
7. Indigenous co-management and free, prior, informed consent for all leases
8. Regenerative Aquaculture Transition Fund with 2040 net-positive target
9. Streamlined approvals for closed-containment and zero-input systems
10. Citizen science program integrated with official monitoring

We promote BIEN's vision of Bruny BlueBioSphere as a way of safeguarding our marine environs. This Study has the opportunity to support our local efforts. We urge the Panel to recommend the measures that will allow Tasmania's marine environment—and the communities, industries, and wildlife that depend on it—to flourish for generations to come.

This submission is made by BIEN.org.au on behalf of the Bruny Island community. For further information or to discuss any of the matters raised, please contact us.



James Bunker - Convenor
Bruny Island Environment Network Inc

Saturday 4 July 2026