



The Australian Workers' Union, Tasmania Branch

**Submissions on the Regulation of The Tasmanian Fin-
Fish Aquaculture Industry**

**Senate Environment and Communications Reference
Committee**

About the AWU

The AWU is a registered trade union under the Fair Work Act 2009.

The Union represents workers in a number of resource and minerals processing industries in Tasmania, and has exclusive coverage for workers in the aquaculture industry, including fish farms and fish processing plants.

The Union represents workers in each of the three major fin-fish companies:

Tassal

Huon Aquaculture

Petuna Seafoods

It also has coverage in related operations, including

Van Diemen Aquaculture

Saltas

It is on the board of Seafood Training Tasmania (formerly the Seafood Industry Training Board)

AN ENVIRONMENTAL INQUIRY?

The AWU welcomes the opportunity to make a submission before this Senate Inquiry, but in doing so expresses its deep concern that the motivation for holding the inquiry is suspect.

The Inquiry purports to be concerned with environmental issues surrounding fish farms. Comments in support of the Inquiry reflect a concern with operations in Macquarie Harbour, as a result of emails from two of the operators to the State government which argued in favour of deferring any further expansion in the harbour for the time being.

This concern has now expanded to become an Inquiry into “the sustainability, impacts and regulation” of all fish farm operations in Tasmanian waters.

The AWU is concerned that these various expressions of concern hides a political motive to this inquiry which is to attempt to tarnish the reputation of the salmonoid industry, which unchecked will be used to mount a full scale attack on the existing operations and future development of the industry in Tasmania.

Reference has been made to leaked reports and emails, which infers some form of cover-up or deception is at foot. Yet just the opposite is true.

A full monitoring program conducted by independent operators has been operating for many years, and the results provided directly to the state government (DPIPWE). Industry has also engaged fully with government in providing details of its monitoring and its operations. Information is made

available on company websites¹ and company reports². These reports actually suggest a total openness in industry's dealings with government and government has been properly engaged in the process.

The AWU has witnessed a number of previous attempts to attack the industry from those in the conservation movement and from the leadership of the Greens political party.

When the industry was considering expansion in Macquarie Harbour in 2012, the conservation movement (in particular the Wilderness Society³, and Environment Tasmania in conjunction with a group that calls itself the Tasmanian Aquaculture Reform Alliance⁴) argued against that expansion on the basis of a suggested threatened species, (the Maugean Skate) and of likely impacts on the Tasmanian Wilderness World Heritage Area (WWHA). Neither of these concerns have any real substance. Both of these claims were disputed at the time, and both remain disputed.

Concerns have also been expressed regarding dissolved oxygen levels in the Harbour. It is a legitimate concern, and monitoring has shown an ongoing variability in dissolved oxygen levels, particularly in the lower waters of the

¹ See eg <http://dashboard.huonaqua.com.au/>

² See eg <http://www.tassal.com.au/sustainability/our-sustainability-reports/#our-sustainability-reports>

³ *Wilderness Society 23 Oct 2012 Proposed fish farm explosion threatens World Heritage area - See more at: <http://www.wilderness.org.au/articles/proposed-fish-farm-explosion-threatens-world-heritage-area#sthash.3bk2ohxc.dpuf>*

⁴ See eg *Tasmanian Times 30 May 2012 Government Ignores Science, Community and Environment on Fish Farms.*

harbour (see later). It is thought that this variability is a natural phenomenon, since these changes have fluctuated over the period of the monitoring period, and indeed have been recovering to former background levels. Industry has operated using an adaptive management process to ensure the variability is not exacerbated by the operations of fish farms.

The industry has been totally transparent in regard to its operations, and needs to be in order to maintain independent external certification. TASSAL produces an annual sustainability report, and Huon Aquaculture has a real time data presentation on its website.

The Union has serious concerns that negative comments and allegations put before this inquiry, even if unproven or eventually disproved, will be used by any detractors to damage the reputation of the industry, and cause significant anxiety and disquiet amongst our members and their communities.

POSITION IN THE SECTOR.

There are three major companies that operate in Tasmanian waters. The relative size of each company within the industry, and the relevance of Macquarie Harbour to their operations, are shown in the following Table. The figures are derived from conversations with the companies and are approximate.

	Percentage in Industry	Relevance of Macq Hbr
Tassal	55%	30%
Huon	35%	20%
Petuna	10%	95%

It is obvious from this table that any move to reduce or to close down operations in Macquarie Harbour will have a significant adverse effect on the viability of these companies.

INDUSTRY CERTIFICATION

All human activity has some environmental footprint.

It is also true of aquaculture. The sustainability of each fish farm is totally dependent on the maintenance of water quality in which the companies operate. The essential issue is to ensure that that footprint is managed and minimised.

The Union notes that every company operates to the highest environmental standards, and that their operations have been endorsed by international auditing processes. From the company's websites, it can be readily observed that the companies are conscious of their environmental footprint, and are following a process of continuous improvement to ensure the effect is minimised. For example:

From the Tassal website:

Tassal is very pleased to have achieved full Aquaculture Stewardship Council (ASC) certification across its entire operation. A global first for any salmon company.

ASC certification is the highest standard for responsibly farmed seafood in the world and provides consumers with an assurance they are purchasing seafood from farms that manage their impacts on the environment and communities to this high standard.

The ASC Salmon Standard provides guidelines for responsible aquaculture companies to manage their business in a way that will minimise negative impacts on the environment and society.

The ASC programme promotes industry best practice to minimise the environmental and social footprint of commercial aquaculture.

From the Huon Aquaculture website:

Huon was the first salmon producer in Australia to achieve the internationally recognised Global G.A.P. certification.

We feel it is important to challenge ourselves and have the internal discipline to meet the very high standards set by Global G.A.P.

The Global G.A.P. Integrated Farm Assurance Standard – Aquaculture Version 4 – is a pre-farm gate standard that covers the whole production

process of the certified product from the hatchery until the point of harvest and packing.

The Global G.A.P standard not only audits Huon's operations but also those of companies that supply us which means that there is a rigorous and thorough understanding of the entire process of farming and growing salmon.

An independent Institute of Marine and Antarctic Studies (IMAS) broad scale environmental monitoring program report recently found that our farms in the Huon and Channel are having "no significant or adverse environmental effects (on) the water quality or sediments" – Colin Buxton, IMAS Director.

Our fish are the best indicator of environmental health and if we fail to respect this, then we won't be able to grow superior and sought after salmon

Each of our sites operate within a licence agreement specific to that area. Whilst controls on different sites may vary the general indicators for environmental compliance within, and on the borders of lease areas are as follows:

- *There must be no significant visual, chemical or biological impacts extending 35 metres from the boundary of the lease area, as specified in our marine farming licence.*
- *Environmental monitoring must be done in the lease area, 35 metres outside the boundary of the marine farming lease area and at any comparison sites in accordance with the requirements specified in our marine farming licence.*

New developments in farming technology and practices will further reduce our impact on the marine environment.

Our new pens, feeding systems and lease locations will all contribute to better outcomes for our fish and the marine environment.

EMPLOYMENT and ECONOMIC ISSUES

Over 1600 people are employed directly in the industry, mainly in rural and regional areas. It would be fair to say that employment on the farms is mainly male, and employment in the processing factories is mainly female. A detailed staff profile is provided in TASSAL's latest Sustainability Report (see e.g. p45) on employment levels within that company, and that employment is similar throughout the industry.

The Industry supports a well-qualified workforce. Staff are well trained in a wide variety of farm and factory skills, and the industry training body

Seafood Training Tasmania (STT) plays a major role in ensuring adequate training standards are met. The Union understands STT will be providing its own submission to the Inquiry, which will provide further detail on courses. (see Seafood Training's latest Annual Report for further details)

According to the TSGA, the industry has a turnover in excess of \$1.1b and provides a \$600m boost to the State's GSP. The Union is aware that the TSGA has commissioned a report from KPMG to consider the broader economic issues and is content to leave the presentation of such data to them.

RELATIONSHIP WITH INDUSTRY

The industry operates from various sites around Tasmania.

Hatcheries are sited in the Huon, Upper Derwent, South Esk and Macquarie river catchments.

Sea cage fish farms operate in the Channel and Huon areas south of Hobart, the Tasman Peninsula, in Macquarie Harbour on the West Coast, and in the Tamar River

Processing plants are at Dover, Huonville, Margate, Georgetown, Parramatta Creek, and Devonport

The Union is acutely aware that these regional and rural communities rely on industries such as the salmonoid industry, and it is concerned to ensure

ill-informed environmental attacks that engulfed the forest industry and put many good people out of work are not repeated here.

Over the years, Tasmania has been fortunate to have developed a brand of both quality and difference, and the industry has played a large part in supporting and developing that brand. An attack on the industry will be seen to be an attack on the broader brand.

The AWU has worked with industry throughout its development, and wishes to place on record the healthy working relationship that has developed over that period of time. We have witnessed enormous change in the management of the industry, from an industry based on sheltered waters to that which now operates in more open water, from an industry that used copper antifouling product on its nets to a new net product that requires far less antifouling activity, from an industry with a new product in the market to one with an established and accepted product, branded and unique.

In particular we have witnessed the adoption of an adaptive management approach to managing issues as they arise, and the Union has supported that approach.

The Union has worked closely with its membership over this period of time. At no time has any member approached the Union expressing issues of

environmental concern, except for a number of safety concerns regarding seal attacks.

RECENT EVENTS

It would appear that recent events in Macquarie Harbour have triggered this Inquiry.

It is well-known that Macquarie Harbour is a body of water that has an upper layer of brackish water and a lower layer of heavier salt water. The salt water horizon is affected by the volume of fresh water pouring into the harbour, in that the greater the volume of fresh water the less the ability of the salt water horizon to be refreshed from the ocean.

The monitoring program over the last few years has shown a lower level of dissolved oxygen in the lower layer. Critics of the industry have tried to explain the lessening of oxygen in the lower layer as being a result of the activities of fish farms.

The deoxygenation of the brackish bottom water is a natural phenomenon. It appears throughout the harbour from time to time and it is suggested as being a legacy of river discharge. Over the last few years, in response to the carbon credits policy of the Federal government, Hydro Tasmania has been operating its west coast dams to maximise the gain from carbon credits. This would cause a lessening of the salt layer.

A report on dissolved oxygen levels in Macquarie Harbour was commissioned in 2014 by a working group, comprising the CSIRO, IMAS, DPIPW, the three companies and Hydro Tasmania. This report which was leaked was an internal report to the working group, and shows that there had been a decrease in oxygen levels in the lower water layer throughout the harbour over time but that it was variable.

Oxygen levels have increased in recent times. The Union is of the view that the issue is complex and the data would suggest that factors other than fish farms are playing a significant role.

A storm surge recently occurred in Macquarie Harbour and killed a number of fish on the Petuna site. There have been a number of ill-informed comments regarding this incident, all suggesting some blame lies with the industry. It doesn't, and this view has been supported by the director of the EPA. The following is from the ABC News website of 22 May 2015.

Environment Protection Authority (EPA) is monitoring the situation closely but director Wes Ford said he was not concerned about the fish farming practices at the site.

"I'm satisfied with what's happening in the harbour at the moment in relation to the levels of oxygen," he said.

"And I'm satisfied with the management of the harbour is appropriately being operated by the secretary of the department.

"This event wasn't predictable in the circumstances, the event is not related to the fishing or the fish farming activity, it's related to the storm event."

A rush of salt water entering the harbour forced the less salty brackish water to the surface. The brackish bottom water had less oxygen than the salt water above, and a rapid displacement of that water caused a change in the oxygen balance at the surface. The event did not involve sediment or nutrient load in any way, shape or form.

In this incident the company did not lose all its fish. It lost around 3.7% of its fish⁵. No other company was affected, as their sites lie some distance further into the harbor, and the storm surge had less effect.

Media reports and comments suggested the event to be concerning for the wellbeing of the harbour. The comments were wildly exaggerated.

⁵ See Mercury 22 May 2015

SPECIFIC COMMENTS ADDRESSING THE TERMS OF REFERENCE

a. Adequacy of data on waterway health.

The collection of data on waterway health began in the mid 1900's. The CSIRO and IMAS have a strong history and record of achievement in developing monitoring programs and models to best characterise the health of the waterways, particularly in south east Tasmania, and evaluating the level of impact to marine ecosystems from fish farm emissions. An example of this research is the Aquafin CRC Study (2008) that undertook a *“whole-of-ecosystem assessment of environmental issues for salmonoid aquaculture”*.

There are also two independent companies involved with monitoring water quality around fish farms, being Aquenel in the south and ADS in Macquarie Harbour.

Each of these monitoring companies provide their findings in the first instance to DPIPWE, who assess the data before providing it to the fish-farm companies. These monitoring companies are independent of the fish-farm companies.

The companies also carry out their own monitoring, and those results are also sent through to DPIPWE.

There has been a broad-scale environmental monitoring program operating in the south (BEMP) since 2009, and in Macquarie Harbour since 2013 (MHEMP). In fact data has been collected since 2011.

These programs conform to all compliance requirements laid down by DPIPWE. Over the years there has been a need to adapt and change the programs as circumstances keep changing.

The Union has noted that recently IMAS, under the guidance of Dr Catriona Macleod, and with the support of the industry, was successful in sourcing funding from the FRDC to run a 3 year program to analyse the “farfield” effect of the industry.

IMAS would appear to have a solid base from which to conduct its research, and will be considering all those matters that the Senate Inquiry has suggested it is concerned about.

- b. Impact on waterway health, including threatened and endangered species.

Generally speaking, the impact of fish farms on waterway health in the Channel and the Huon has not been a matter that has been raised with us. Farm management is such that any build-up of detritus under the

cages is managed responsibly and cages inshore are moved around to ensure that the area beneath is left fallow and allowed to recover.

- c. The adequacy of current environmental planning and regulatory mechanisms.

The Union has no issue with this.

It notes the pre-eminent role of DPIPW in managing the fishery, and the role of an independent Marine Farming Review Panel to consider changes and amendments to lease areas. Advice available to the Union is that monitoring of water quality is carried out on a regular basis by independent monitoring companies, and the results sent through to DPIPW for analysis. Any issues raised from such a program are immediately addressed by a process of adaptive management.

- d. The interaction of state and federal laws and regulations

The management of the industry is regulated by two State acts, being the Living Marine Resources Management Act (LRMA) and the Marine Farming Planning Act (MFPA).

All marine farming operations must be licensed under the LRMA. Each licence includes environmental conditions specific to that licence to ensure that the marine farming operation is sustainable and does not have an unacceptable impact on the marine environment.

The MFPA establishes a mechanism for the development and approval of marine farming development plans, which allocate zones for marine farming and lease areas within these zones. These plans document mandatory management controls for each planning area,

The Commonwealth involvement is through the EPBC Act, which is concerned with the World Heritage Area, and threatened and endangered species.

The Union believes this is a state matter and can and should be managed by State authorities.

Farm management is really a province of the state authorities, and it would be appropriate for the two governments to enter into a bilateral agreement to ensure this remains so.,

e. The economic impacts and employment profile of the industry

The industry employs directly over 1600 people in hatcheries, farms, processing plants and office and sales staff. The industry generates revenue in excess of \$1.1b and provides a \$600m boost to the State's GSP. In a small economy with limited regional employment aquaculture and its related activities generate economic activity which benefits regional areas where there is limited alternatives and none which can replace that activity in the short to medium term if at all.

f. Any other relevant matters

Nil