



Australian Government

Department of Agriculture

Senate Environment and Communications References Committee

**Inquiry into the finfish aquaculture industry in
Tasmania**

Submission from the Australian Government Department of
Agriculture

May 2015

Foreword

The Department of Agriculture (the department) welcomes the opportunity to provide a submission to the Senate Standing Environment and Communications References Committees' inquiry into the finfish aquaculture industry in Tasmania.

Introduction

Like many other countries with an advanced economy, Australia's consumer demand for seafood exceeds the supply from domestic production. Seafood demand in Australia has increased steadily over the last decade. In 2012-13 Australians each consumed an average of 15 kilograms (processed weight) of seafood per annum, compared with 13 kilograms in 2000-01.

Meanwhile, the combined volume of Australian fisheries and aquaculture production has been relatively stable over the recent decades, as lower production volumes from Australia's wild capture sector have been offset by strong growth in the volume of aquaculture production. The real value of Australian aquaculture production increased by around 30 per cent between 2004-05 and 2012-13, to around \$1 billion. This increase was largely due to the expansion of salmonid (salmon and trout) production. Farmed salmonids, almost entirely from Tasmania, became Australia's most valuable fisheries product in 2012-13, with a farm gate production value worth \$497 million.

While the capacity for growth in Australia's wild fisheries production is limited by the relatively low natural productivity of our marine waters and by strict management arrangements put in place to maintain fish stocks at sustainable levels, domestic aquaculture, including farmed salmonids has the potential to expand to help meet Australia's growing demand for seafood.

Recognising the potential for aquaculture, the Australian Government has committed to work with industry and state and the Northern Territory governments to develop a national aquaculture strategy. The strategy will encourage the growth of an efficient, innovative and sustainable domestic aquaculture industry and is to be released in the first half of 2016.

While the Department of Agriculture plays an important role in supporting aquaculture through national programmes for research, quarantine, aquatic animal health, export food safety, environmental management and market access and trade, primary responsibility for the day-to-day regulation of aquaculture rests with state and Northern Territory governments.

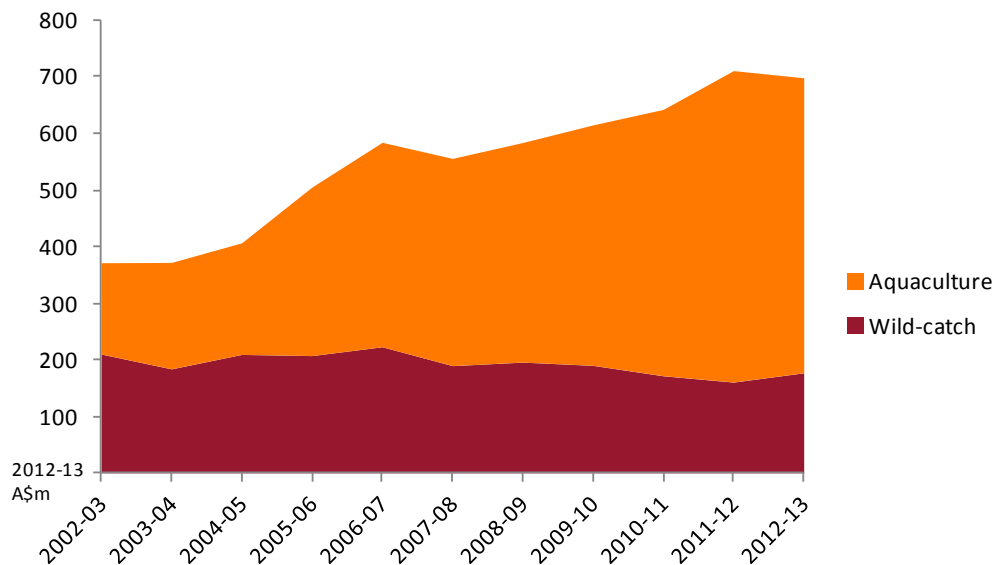
Responsibility for environmental regulation, including the approval of new aquaculture developments and ongoing monitoring and compliance, is shared between state and Northern Territory governments and the Australian Government Department of the Environment.

The Tasmanian finfish aquaculture industry

The gross value in real terms of Tasmanian fisheries production almost doubled during the past decade, increasing from \$370 million in 2002-03 to \$696 million in 2012-13 (in 2012-13 dollars).

Finfish aquaculture production of farmed salmonids species, (predominantly Atlantic salmon) contributed to most of the growth in Tasmanian fisheries production, increasing from \$139 million to \$489 million in the same period (in 2012-13 dollars).

Real gross value of Tasmanian fisheries production, 2002–03 to 2012–13



Source: Stephan & Hobsbawn 2014

On average, farmed salmonids species accounted for 91 per cent of the total value of Tasmanian aquaculture production and 86 per cent of total volume, in the decade to 2012–13.

Tasmania accounted for around 98 per cent of total Australian salmonids production value in 2012–13 and 47 per cent of total Australian aquaculture production value.

Contribution of Tasmanian fisheries production to the value of all Australian fisheries production increased from 12 per cent in 2002–03 to 29 per cent in 2012–13 as a result of the significant increase of salmonids production.

Since 2003–04, the volume of salmonids production almost tripled; and with increasing prices the value of production increased at a faster rate.

Outlook

In 2015–16 the volume of Australian salmonids production is forecast to grow by 2300 tonnes, due in part to the planned industry expansion of salmonids production in Tasmania’s Macquarie Harbour. This follows a forecast expansion of production in 2014–15 of 3500 tonnes. The forecast increase in production in these years follows significant expansion of salmonids production over the decade to 2013–14, from 16 686 tonnes in 2003–04 to 41 615 tonnes in 2013–14. Almost all of this growth is a result of the expansion of salmon aquaculture farms in Tasmania.

Over the medium term salmon production is projected to continue to grow, reflecting an anticipated expansion of production to reach 61.4 thousand tonnes by 2019–20.

Trade

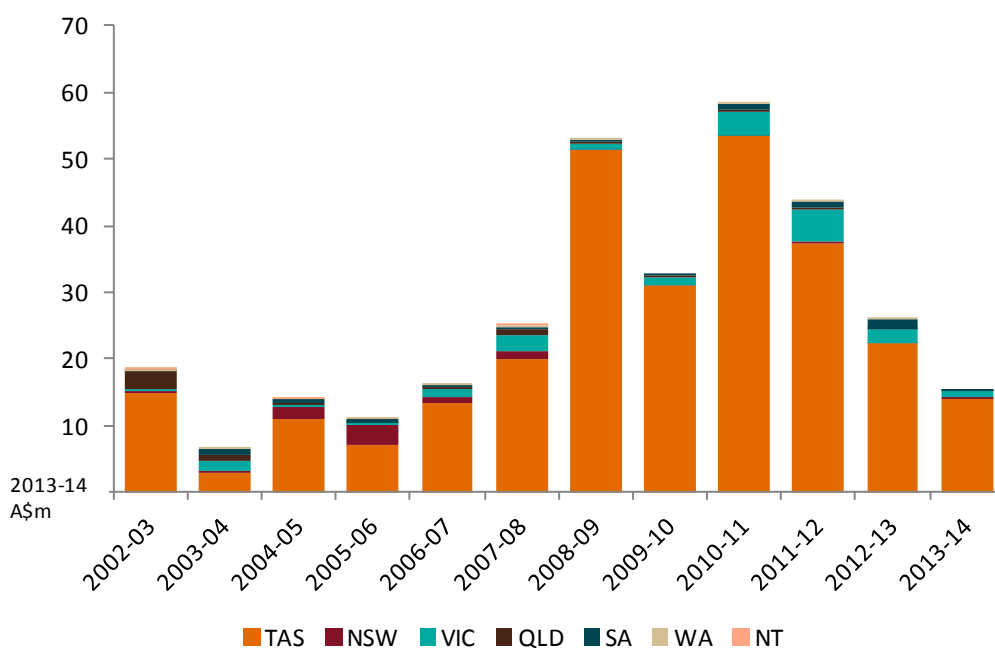
Tasmanian aquaculture salmonids are produced primarily for domestic consumption and do not contribute highly in the export market, making up only \$14 million of the total Tasmanian fisheries export value of \$114 million in 2013–14.

The main fisheries export products from Tasmania are abalone and rock lobster, which collectively accounted for around 84 per cent of the total value of Tasmania’s fisheries exports in 2013–14.

Nevertheless, on average 81 per cent of salmonids exports out of Australia over the last decade originated from Tasmania.

In line with rising projected salmonids production, the export of salmonids products is projected to increase over the medium term and reach \$47 million by 2019–20 (in 2014-15 dollars). This would represent 10 per cent of salmonids production in 2019–20, a rise from 4 per cent compared to 2013–14.

Real gross value of Australian salmonids exports, 2002–03 to 2012–13



Biosecurity

The Department of Agriculture helps people and goods move in and out of Australia while managing the risks to the environment and animal, plant and human health. The department is able to achieve this balance by using intelligence-led and risk-based intervention underpinned by the *Quarantine Act 1908* and its subordinate legislation such as the Quarantine Proclamation 1998 (Commonwealth quarantine legislation).

In the past concerns around the impact of marine aquaculture on the surrounding environment have been raised. These concerns have included the use of imported products in aquaculture operations (such as for fish feed), biofouling associated with the movement and cleaning of aquaculture infrastructure and the risk of disease transmission between wild and farmed populations. The department, along with state and territory governments, have rules and regulations in place to minimise the chances of these occurring and/or impacting on the marine environment.

Imports

Under Commonwealth quarantine legislation, biosecurity risks associated with imported commodities—such as feed for fish and farming equipment—are managed with a range of measures. An import risk analysis may be used to assess risks and identify risk management measures. Until the risks have been assessed, the importation of live broodstock and genetic material for aquaculture is not permitted under Commonwealth quarantine legislation.

The Department of Agriculture works collaboratively with the states and territory governments to ensure that biosecurity risks are appropriately managed. Commonwealth quarantine legislation operates concurrently with state and territory quarantine legislation, including the management arrangements in Tasmania.

State and territory governments play a vital role in the quarantine continuum. The Department of Agriculture and state and territory governments work in partnership to address regional differences in pest and disease status and risk within Australia, and to develop appropriate sanitary and phytosanitary measures to account for those differences. Australia's partnership approach to quarantine is supported by a formal Memorandum of Understanding that provides for consultation between the Australian Government and the state and territory governments.

Biofouling

In November 2013 the Department of Agriculture, on behalf of the Marine Pest Sectoral Committee, published the *National biofouling management guidelines for the aquaculture industry*. These guidelines provide recommended approaches for the control of biofouling to minimise the spread of exotic species associated with moving aquaculture stock and equipment. These guidelines provide practical management options that can:

- reduce the risk of marine pest infestations and the possible translocation of a marine pest
- reduce the costs associated with managing an incursion or with quarantine measures if a marine pest is discovered.

The guidelines are available from the publications page of the marine pest website at marinepests.gov.au/marine_pests/publications.

The *Anti-fouling and in-water cleaning guidelines* recommend conditions for in-water cleaning of biofouling on vessels and moveable structures in Australia and New Zealand. The operation of the guidelines following their first 12 months of operation was recently reviewed by relevant government agencies and state and territory jurisdictions. The Department of Agriculture sought input from the aquaculture industry about the applicability of the guidelines to the aquaculture sector. The Department was advised that anti-fouling paints are no longer used on moveable aquaculture structures and biofouling is generally acquired from the local area. On this basis, it was proposed and agreed by relevant jurisdictions and agencies that moveable aquaculture structures (including those used in finfish aquaculture operations in Tasmania) be removed from the guidelines. An out of session paper noting this change is currently being considered by the Agriculture Senior Officials Committee out-of-session.

Disease transmission

Diseases can be transmitted between populations of farmed and wild fish. All infectious diseases of salmon originate from wild fish, and in Tasmania, there are several known cases of disease transfer from wild fish to farmed fish. However, there are no known instances of disease transfer from farmed salmon to wild fish populations in Tasmania, although this is thought to have occurred in other countries. The risk of disease transfer between farmed and wild fish in Australia is greatly reduced because salmon are not native. This is different to the northern hemisphere where salmon are a native species.

Biosecurity measures can reduce transmission of diseases, and are used by salmon farmers in Tasmania to reduce risk of transmission of diseases within farms and between salmon farming areas.

The Tasmanian Government is responsible for the management of aquatic animal health within its jurisdiction.

Chemical use

The use of agriculture and veterinary (agvet) chemicals by Australian aquaculture industries is essential to support effective disease and environmental management as well as animal welfare. Examples of chemicals used include antibiotics, vaccines, hormones to induce spawning and for production of female stock, anaesthetics and biocides to control fouling on equipment.

The use of agvet chemicals, including those for aquaculture, are regulated by the Australian Pesticides and Veterinary Medicines Authority (APVMA). The APVMA conducts rigorous independent scientific assessments of the potential risks the chemicals pose to the environment, as well as to human health, occupational health and safety, and trade in products associated with the use of these chemicals.

The APVMA regulates chemicals up to, and including, the point of retail sale. The states and territories are responsible for use after this through control-of-use legislation. Residue monitoring and environmental management issues relating to the use of agvet chemicals are also primarily the responsibility of state and territory governments.

The APVMA also assesses and approves mandatory product labelling. Registered products must be used according to the approved label instructions unless the applicable state or territory regulator allows 'off-label' use.

Some producers, particularly in speciality or emerging industries (such as aquaculture), have difficulty gaining access to the agvet chemicals they need. This is because sometimes chemical companies consider that the potential returns (sales) are not sufficient given the effort and cost of seeking APVMA registration. This is known as the 'minor use problem'. In these cases, access may occasionally still be permitted if the use is an allowed off-label use in a producer's particular state or territory. Otherwise, producers can apply for a minor use permit from the APVMA. Veterinarians, through their prescribing rights, can also recommend the off-label use of a veterinary medicine for aquaculture, as permitted under the jurisdiction in which they operate.

The Department of Agriculture continues to consult with the aquaculture industry on options for improving agvet chemical regulation and ways to improve access to chemicals. As part of the Australian Government's commitment to ease the regulatory burden imposed on Australian businesses, the agriculture portfolio is undertaking a number of regulatory reform initiatives in three key areas:

1. through legislation — repealing re-approval and re-registration of chemical provisions
2. developing measures to improve the efficiency of agvet chemical regulation
3. improving access to agvet chemicals for producers, in particular minor uses through a collaborative forum.

In addition, the government has committed \$8 million to improving access to minor use chemicals for farmers to allow a greater number of these chemicals to be registered.

Research and development

The Australian Government recognises that research, development and extension (RD&E) is a significant contributor to making Australia's fishing and aquaculture industries into what they are today – world-leading, productive and innovative industries. Quality and timely fisheries research is essential to enable decision makers to meet the daily challenges and opportunities faced by fisheries sectors. Australia's research framework meets this demand through the provision of integrated scientific and economic advice coordinated across the Commonwealth, states and territories.

The Fisheries Research and Development Corporation (FRDC) is charged with investing in priority research and development within the fishing industry, meeting the government's national and rural research priorities and pursuing the adoption of that research and development.

Commonwealth fishing concession holders are required to contribute to the FRDC's funding base through mandatory fishing industry research levies. The research component of these levies is calculated to be 0.25 per cent of the gross value of production of Commonwealth fisheries. Similarly, each state and territory voluntarily contributes up to 0.25 per cent of the gross value of production of their respective fishing and aquaculture industries (including finfish aquaculture).

The Australian Government provides a matching contribution of up to 0.25 per cent of the total Australian fisheries and aquaculture gross value of production, in accordance with the *Primary Industries and Energy Research and Development Act 1989*. A further 0.5 percent of the gross value of production of the total Australian fisheries and aquaculture gross value of production is contributed by the Australian Government in recognition of the public ownership of the fish resources in Australia's marine and aquatic environment.

The Australian Government, through the FRDC, invests in priority research across the commercial, aquaculture and recreational fishing sectors. Industry sectors that provide significant contribution and have mechanisms to prioritise, plan and manage RD&E may enter into an Industry Partnership Agreement (IPA) with the FRDC. An IPA provides the industry sector the ability to plan and manage research, in close partnership with the FRDC, relevant to its plans and priorities. The agreement provides more certainty and flexibility for the industry sector in the development and submission of applications against this plan. The agreement also provides the ability to present applications for consideration by the FRDC through the annual competitive round or where requested at any board

meeting or by the Executive Director at any time if the budget is equal to or less than the Executive Directors delegation limit.

The Tasmanian Salmon industry currently has an IPA with the FRDC. This allows for priorities and applications to be developed and assessed specific to the Atlantic Salmon Industry. Projects that have been funded under the IPA include research on Amoebic Gill Disease and its management, the development of a vaccine centre of excellence, breeding resistance to AGD, understanding benthic interactions, ecology of key benthic species and managing ecosystem interactions. Research has also been conducted on adaptation options for the industry for changing environmental conditions such as water temperature, salinity and oceanographic flows.

References

ABARES, 2015, Agricultural commodities. March Quarter 2015.

Stephan, M & Hobsbawn, P 2014, *Australian fisheries and aquaculture statistics 2013*, ABARES Fisheries Research and Development Corporation project 2010/208, Canberra, November.