10 / 5 / 2017

Committee Secretary
Rural and Regional Affairs and Transport References Committee
PO Box 6100
Parliament House
Canberra ACT 2600

Inquiry into the biosecurity risks associated with the importation of seafood and seafood products (including uncooked prawns and uncooked prawn meat) into Australia

Submission from the:

Contents

Executive summary

One of the aims of this submission is to give voice to the tens of thousands of Australian businesses dependent on imported seafood including prawns, and the millions of Australian diners who hope to (and are entitled to) enjoy prawns on a regular basis.

The current debate around the efficacy of border controls as the major biosecurity barrier to infectious diseases is extremely producer-centric. The debate is unbalanced given that the entire prawn aquaculture sector - farms and hatcheries - is comprised of about 30 relatively small enterprises and contributes less than 10% of Australia's domestic supply.

By contrast, there are some 40,000 Australian foodservice businesses that are likely to depend to some extent on imported prawns, along with hundreds of wholesale businesses, as well as millions of consumers who cannot afford, or do not have access to, local prawns on a regular basis.

Whilst Australian farmers receive considerable sympathetic attention from the media, politicians and public, based on the perception of 'feeding Australia', in the seafood industry it is importers who are doing the heavy lifting by supplying 75% or more of Australia's total seafood needs. Operating in extremely difficult conditions in foreign countries, in foreign cultures and under foreign laws, Australian importers have to compete with the rest of the world to secure sufficient and consistent supply to keep Australian businesses running 12 months of the year; to provide affordable options for the vast majority of consumers; and to close the 40% gap between the NH&MRC's recommended dietary intake of seafood and actual consumption.

This more holistic view raises questions of why the major biosecurity firewalls should not be more focussed on the farms, or in the immediate vicinity of farms, rather than applying conditions that add considerable costs to, restrict, and frequently disrupt, these tens of thousands of Australian businesses, mostly located thousands of kilometres from the nearest prawn farm.

It should be understood that Australian importers, wholesalers and foodservice outlets have all been victims of this biosecurity event, with many individual enterprises suffering financial losses measured in tens of thousands of dollars. Many people in these sectors have lost their jobs as a result. Although some importers have been implicated in breaches of biosecurity regulations, the vast majority of these businesses were not at fault. It should also be noted that when biosecurity costs are imposed on importers, those costs are being imposed on the Australian community.

Imported uncooked prawns are not an inherently dangerous food. They have been a part of the Australian diet for over 50 years, and last year earned Australian businesses $547 million – i.e. revenue less landed cost. Imported uncooked prawns ensure access and affordability to this category for the majority of Australian consumers; complement Australian production by keeping market channels open; and support the estimated 40,000 food outlets with year round supply.

All imported uncooked prawns are intended for human consumption only. They are imported fully processed (no heads or shells) eliminating all waste. They are labelled 'For Human Consumption - Not to be Used as Bait' or similar words.

All but a very small percentage of the 30,000 tonnes of prawns imported each year are correctly used as intended, for human consumption in foodservice outlets and homes. In 2016, about 0.1% leaked to bait use. (Estimate by Diggle 2017). Yet the main biosecurity focus and majority cost, has fallen on these market sectors.

Aquatic diseases are not the same as terrestrial diseases in benefiting from Australia's island geography. Australia is surrounded by aquatic disease pathways and border biosecurity should not be the primary safeguard - rather it should be part of a suite of biosecurity measures resulting in an acceptable level of protection (ALOP).

The import conditions resulting from the 2009 IRA would have been sufficient to ensure imported uncooked prawns remained a low risk to Australia's marine environment and fisheries - if they had been robustly enforced; and if they had been supplemented by pre-export testing.

There is no conclusive evidence that the IRA conditions failed or that the Logan River disease incursion was caused by imported prawns. Several pathways are suspected. The trade suspension resulted from the detection of elevated levels of infected prawns available for retail sale, and was implemented to achieve a return to ALOP as per the current IRA. Nor is there evidence that dedicated food service products such as marinades failed to ensure intended end-use - other than when approved by DAWR for use in retail stores. (That is, some products originally created for foodservice use only, were re-designed for retail use and were granted import permits.)

The 2009 IRA 'low risk' ALOP could have been reduced further, at little inconvenience to commerce, if DAWR had progressed multilateral or bilateral agreements on disease testing methods and standards to allow recognition of supplier nation PCR testing. This would have effectively screened prawns prior to export - an infinitely safer and more commercially acceptable approach than detecting disease and rejecting product in Australia.

Imported prawns are not a unique threat to any wild fisheries in Australia. Our wild fisheries share oceans that are contiguous with coastlines where WSSV and other exotic diseases occur, and are subject to potential incursion via numerous other aquatic and man-made pathways. The reaction of wild fisheries to endemic and exotic diseases is vastly less pronounced than animals contained in intensive farming operations, and establishment, epidemics or even clinical signs of infection in the wild are normally so limited as to be indiscernible.

By far the greatest risk to the establishment of crustacean diseases in wild fisheries and our marine environment is intensive prawn farming, where endemic disease outbreaks are common and consolidated, and exotic diseases can be escalated from low prevalence to epidemic (as just occurred) and spread to the environment.

Therefore the design, location and management of Australian prawn farms should be of priority interest to every stakeholder.

All prawns (native and imported) are potentially dangerous in the immediate vicinity of intensive prawn farm operations, if illegally used as bait, burley or aquatic feed.

If an ALOP of 'low risk' is not sufficient to ensure the safe operation of the approximately 30 intensive prawn farming operations (hatcheries and farms) in Australia, then that industry sector should implement local biosecurity management options, including appropriate infrastructure and management systems, in conjunction with other jurisdictions such as State governments, sufficient to reduce the risk further. The Federal government and Australian market sectors should not be carrying 'all the weight' on this biosecurity issue.

Any plan for the co-existence of imported prawns, local wild-caught prawns, and local prawn farms, must start with effective biosecurity at, and around, the farms - otherwise the multi-million dollar investment by the Australian community in border biosecurity, risks being rendered redundant by disease incursion from other pathways.

Australian prawn farms should be encouraged to implement at least the same standard of biosecurity and good practice as the prawn farms of our trading partners. Foreign governments have every right to complain that Australia is protecting prawn farms here with trade restrictions, while those farms have not increased output in a decade, and have not reached the same standard of biosecurity as many overseas farms that supply Australia. We believe this is a federal issue due to its implications for trade relations.

In our view the undue focus on border controls is setting the industry up for failure in the future. There are at least 35 viral, bacterial and other diseases impacting intensive prawn farming around the world. In due course, others will evolve - including here in Australia.

An over-reliance on border controls will inevitably lead to an endless procession of revised import risk analyses, revised import conditions, and further trade restrictions - with no guarantee that these diseases won't reach Australian prawn farms by other aquatic pathways. We reiterate that these are not terrestrial diseases - these are aquatic diseases and Australia is surrounded by water.

Whilst we have no issue with reasonable import controls to reduce risk to an acceptable level of protection (low risk), we cannot accept the premise that imported prawns are the only risk; that Australia can be protected from these diseases by border controls and ever increasing import restrictions to cover emerging diseases - while the same level of intensity is not required of State governments and local industry biosecurity.

When Paul Hogan threw another prawn/shrimp on the 'barbie' - it was a raw prawn, not cooked.

To restrict imports to cooked prawns only, as an expedient and cost-effective solution to this biosecurity challenge, is to misunderstand the Australian market entirely - including those diners who make up the majority of prawn consumers.

Limiting supply to pre-cooked prawns would deprive foodservice businesses of their capacity to apply their culinary skills to add value through cooking - the very activity that underpins their competitive advantage, their revenue and, some would argue, their purpose.

There is a real danger that this would also inflict a major degrading of the quality of prawn meals available to consumers and jeopardise the premise that prawns are inherently high quality food - a premise that all sectors rely on.

This in turn could lead to a slump in sales that would affect both local supply and imports - and the industry would find itself chasing growth downwards rather than upwards.

This situation cannot be easily offset by substituting Australian uncooked prawns as the volumes are simply not available to fill the gap - particularly in the desired species. Nor is the manufacturing base available to produce the complex processed products that are currently available from overseas, and which outlets depend on for convenience and efficient handling – especially not at affordable prices. There is not sufficient available volume of Australian prawns to significantly grow that manufacturing base.

Finally, more robust enforcement of federal biosecurity would be assisted by the existence of adequately resourced and empowered professional association(s) to encourage and guide best practice among seafood importers, as would closer engagement between DAWR (biosecurity) and the associations.

1 – Introduction

On 21 March 2017, the Senate referred the following matter to the Rural and Regional Affairs and Transport References Committee for inquiry and report by 22 June 2017

> ***The biosecurity risks associated with the importation of seafood and seafood products (including uncooked prawns and uncooked prawn meat) into Australia***
>
> ***Terms of reference***
>
> *a. Management of the emergency response and associated measures implemented to control the outbreak of White Spot Syndrome Virus;*
>
> *b. The effectiveness of biosecurity controls imposed on the importation of seafood and seafood products, including, but not limited to, uncooked prawns and prawn meat into Australia, including the import risk analysis process concluded in 2009 that led to these conditions being established;*
>
> *c. The adequacy of Commonwealth resourcing of biosecurity measures including Import Risk Assessments;*
>
> *d. The effectiveness of post-entry surveillance measures and "end use" import conditions for seafood products including, but not limited to, uncooked prawns and uncooked prawn meat into Australia, since the import conditions implemented in 2010 were put into place;*
>
> *e. The impact of the outbreak on Australia's wild and farm prawn sectors;*
>
> *f. The economic impact on Australian wholesalers and retailers;*
>
> *g. Domestic and foreign trade implications for Australian industries resulting from the suspension of importation of seafood and seafood products, including, but not limited to, uncooked prawns and uncooked prawn meat in Australia;*
>
> *h. Matters to be satisfied in the management of biosecurity risk before imports of seafood and seafood products, including, but not limited to, uncooked prawns and uncooked prawn meat into Australia could recommence;*
>
> *i. Any related matters.*

Brief History of Importing Seafood into Australia

Australia has been importing seafood for over 50 years. The trade began in response to market demand that could not be met by seasonal local production volumes, and seafood imports have since been increasingly needed to fill the gap in supply and demand, due primarily to the sustainability-based, supply limitations of wild Australian fisheries; the limited development of Australian aquaculture; and the large proportion of Australian seafood that is exported. At the domestic market end, there has been a long-term trend of a steady increase in per capita consumption of seafood as well as population growth. Cultural diversity in Australia has also created new demand patterns that Australian products have struggled to satisfy.

This shortfall in production sets seafood apart from most other major proteins, and is not widely understood by the Australian community, resulting in misconceptions about the need, and considerable misinformation about the acceptability of imported seafood.

For instance, imported seafood enjoys an enviable record in food safety with high standards observed in overseas production and processing facilities (usually certified to international best practice standards), and robust and transparent inspection at the Australian border. Post-border, the Ozfoodnet database of reportable illnesses and hospitalizations shows seafood (local and imported) to be among the safest foods we consume - despite regular ‘fake news’ to the contrary on social media videos and current affairs television programs.

Imported seafood underpinned the expansion of the seafood category in supermarkets, now so important to local sectors. As noted by Ruello in his report, A Study of The Composition, Value and Utilisation of Imported Seafood in Australia *(FRDC 2011); the obvious expansion of the supermarkets' seafood trade has only come about because of the continuity of supply from affordable frozen imports* (Ruello). In the past decade the growth in foodservice distribution of seafood has been similarly underpinned by seafood-based convenience products manufactured overseas that *offer the "Holy Trinity" of convenience, quality and value* (Ruello) due to technically advanced and affordable overseas product development and manufacturing that cannot be easily replicated in Australia.

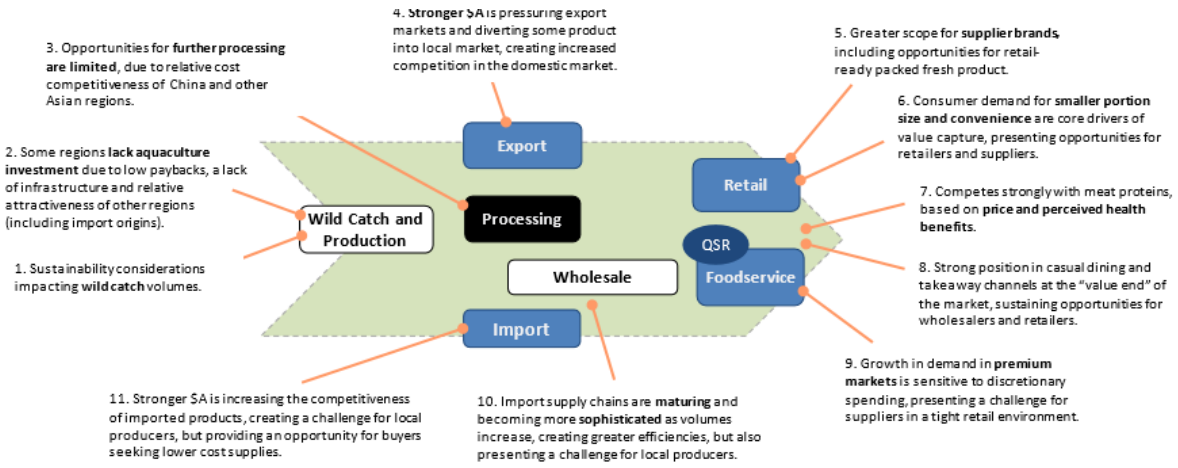


Figure 1.1. Seafood supply chain pressure points. (Extract from FoodMap – page 48)

Many companies that lead this trade (and in some cases pioneered it) include current icons of Australia's export and domestic seafood sectors including A Raptis & Sons (Brisbane Fish Market), Austral Fisheries, Kailis Bros, Angelakis Bros, Craig Mostyn & Co (now part of Mareterram Ltd) – all of which are, or have been, members of the Seafood Importers Association of Australia (SIAA). That is to say, a large part of the industry is integrated across all sectors - local production, exporting and importing.

In the past decade or so, however, many new importers have appeared. This has been partly driven by the global expansion of overseas suppliers, and by the diversification of Australian general food companies into the seafood category. Many of those new entrants are unknown to our Association.

Broader Benefits to Australia

The benefits of imported seafood to the Australian community and commerce are difficult to overstate. In a country where the average adult consumes 40% less seafood than recommended by the National Health and Medical Research Council's dietary guidelines; and *where only one third of consumers can afford to eat fresh local seafood regularly* (Ruello), imported seafood products provide affordable, safe, nutritious, convenient and highly varied alternatives to local seafood - particularly in the value-added product categories.

Government agencies too have not recognised the nutritional and economic contribution of the import sector because they traditionally have a strong export focus and see imports as a negative on the trade balance sheet. (Ruello).

Complement – Not Competition

Direct import competition is rarely a genuine problem for local producers, although it may be perceived as such. Throughout the supply chain, imported seafood generally complements local production, keeps marketing channels open, and paves the way for market development by providing much-needed volume and year-round consistency. Also, many domestic producers in a number of seafood sectors are highly dependent on exporting local seafood to overseas processors to manufacture products for re-importation back into the Australian market.

According to Ruello; *imports provide less competition than widely perceived while their critical role in maintaining Australia's supply of nutritious food, keeping seafood affordable and indeed on the menu in the mid to low price eateries, is not widely recognised.*

Importance of Imported Seafood to the Australian Economy

In 2016, Australia imported 250,000 t of seafood valued at first point of sale at $1.3 billion. Imported seafood is distributed to consumers through a complex network of channels involving several tiers of value-adders and re-sellers before reaching a diversity of outlets in retail and foodservice. Varying margins are taken at each exchange, contributing to the income of hundreds of businesses. At the final point of sale, tens of thousands of businesses are involved.

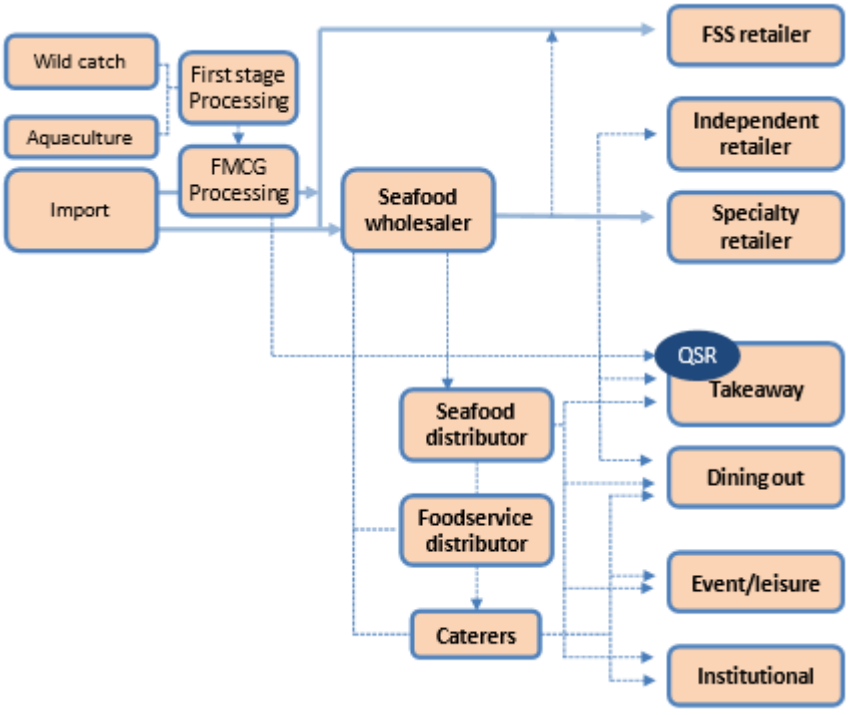


Figure 1.2. Processed seafood product channels to the consumer. (Extract from FoodMap page50)

To estimate the value of these imports at the final point of sale, the suggested multiplier (across all imported seafood and market outlets) is 3.5 (Ruello). So Australian businesses, in Australia, would have earned revenue of $4.5 billion from these imports in 2016.

Employment created by these imports was estimated by Ruello in 2011 at *as many as 14,000-21,000 jobs, making it bigger than the size of the entire domestic seafood production sector (wild and aquaculture*).

Importance of Imported Uncooked Prawns to the Australian Economy

Prawns are the main seafood category consumed by Australians, followed by Atlantic Salmon and canned Tuna. Imported uncooked prawns are the biggest category of prawns consumed. The majority of uncooked prawns are sold through foodservice outlets.

Uncooked prawns are particularly important to foodservice outlets, which rely on cooking raw ingredients to particular styles, recipes and 'on demand'. This can't be done with already-cooked prawns, nor can these meals be easily replaced by cooked prawn meals. Consumers seek uncooked prawns for home use for this same reason. When Paul Hogan threw another prawn/shrimp on the 'barbie' - it was a raw prawn, not cooked.

Whilst cooked prawns are most popular for celebrations at peak periods such Christmas and Easter, demand drops significantly for the remainder of the year. Uncooked prawns, on the other hand, provide the majority of volume for the consistent '12 months a year' trade to diners that underpins the foodservice industry and, to a lesser extent, retail.

In section 2(f) of this submission the value of this trade to the Australian economy is outlined in more detail.

Contribution to Australia's quality of life

Although the 2009 IRA specifically considered the loss of social amenity in rural areas in the event of a disease outbreak impacting farms, it astonishingly made no such consideration of a loss of social amenity by millions of Australians, especially in urban communities, deprived of a consistent supply of affordable prawns due to trade restrictions.

To further restrict imports to cooked prawns only, as an expedient and cost-effective solution to this biosecurity challenge, is to misunderstand the Australian market entirely - including those diners who make up the majority of prawn consumers.

Limiting supply to pre-cooked prawns would deprive foodservice businesses of their capacity to apply their culinary skills to add value through cooking - the very activity that underpins their competitive advantage, their revenue and, some would argue, their purpose.

There is a real danger that this would also inflict a major degrading of the quality of prawn meals available to consumers and jeopardise the premise that prawns are inherently high quality food - a premise that all sectors rely on.

This in turn could lead to a slump in sales that would affect both local supply and imports - and the industry would find itself chasing growth downwards rather than upwards.

This situation could not be easily offset by substituting Australian uncooked prawns as the volumes are simply not available to fill the gap - particularly in the desired species. Nor is the manufacturing base available to produce the processed products that are currently available from overseas, and which outlets depend on for convenience and efficient handling – especially not at affordable prices. There is not sufficient available volume of Australian prawns to significantly grow that manufacturing base.

2 – Responses to the specific Terms of Reference

a) Management of the emergency response and associated measures implemented to control the outbreak of White Spot Syndrome Virus

The financial losses to the Logan River prawn farms has been expressed in tens of millions of dollars. We believe the financial losses resulting from the trade suspension, across all the downstream sectors affected, will be in the hundreds of millions of dollars.

It is hard to describe this ten-fold escalation of costs imposed on Australian downstream sectors, as good management. Perhaps a better description is: making a bad situation much worse.

In brief, it is our view that any risk posed by imported prawns being used as bait near prawn farms was reduced substantially with the closure of the Logan River farms (and the Logan River to fishing) in early December 2016, and there was a subsequent window of opportunity to continue to reduce the volume of infected product found in retail stores, (particularly targeted product, i.e., from suspected importers, and in Queensland, thus limiting the task) and head off further overseas arrivals by giving notice to exporters, without wreaking the sort of financial damage that was later incurred.

We understand that the recent suspension of trade for raw prawns resulted **not** from the WSD outbreak (as the source has not been confirmed) but from the detection of higher-than-expected levels of WSSV infection in imported prawns available for retail sale around Australia and the risk it might pose. We understand that the situation may have been exacerbated by some importers evading testing (as advised in the 2009 prawn IRA and required under relevant regulations). We also understand that the evasion may have been facilitated by less than robust enforcement of the relevant biosecurity regulations.

As most focus has thus been on imported prawns, and these are primarily in the jurisdiction of DAWR, we believe this import focus unduly influenced the nature of the suspension, and particularly the way the extreme cost imposed on importers and downstream operators was considered 'acceptable'. As we understand it, DAWR has limited authority to deviate from legislation directing the management of biosecurity risks and incidents, even when those actions result in considerable financial loss to other sections of the Australian community - losses that may be avoided or mitigated in the context of a broader, or more holistic, assessment of the risk.

Whilst we understand that it is illegal to import or sell product showing clinical signs of infection, most importers (and certainly their downstream customers in Australia that are impacted by this) were operating within a specific assessment paradigm that had been overseen by DAWR for a decade. Effectively since the 9th of January 2017 the definition of what constitutes 'WSSV-free' prawns has changed with the introduction of more sensitive testing at AAHL. This additional testing requirement, rightly or wrongly, has changed the limit of detection. We learned from DAWR staff that; *this new AAHL test is very sensitive and it can detect very low levels of WSSV DNA in samples* (Ref; DAWR). It is unclear if this is testing viable DNA or non-viable fragments. No-one seems able to answer that question. Under these circumstances, we believe consideration should have been given to the release of this product, which has passed the standard OIE test at one of the previously authorised commercial laboratories, into the normal food service distribution channels where risk can be been controlled to 'extremely low'.

We also observe that risk can change rapidly as a result of subsequent events, but DAWR can be required to act on advice that is not current with those changes to risk.

Risk management post the Logan river infection

It is easy to imagine that different management of the response (i.e. with a more holistic and balanced view of the risk, and one that was not made in isolation from events on the ground in Queensland) might have produced an outcome that achieved a similar reduction of the risk but that was far less financially devastating and chaotic.

For instance, it is difficult to accept that with the closure of the Logan River farms operationally due to the emergency biosecurity controls that began to be put in place four weeks before the trade suspension (i.e. isolating one third of the nation's operational farms) and the closure of the Logan and Albert Rivers to fishing, combined with extensive media coverage, that the risk of infection via anglers using imported prawns was not considerably lower than prior to the outbreak. We note that these farms were at a particular high risk being located on a popular angling river, and in close proximity to 3.5 million people. All of the remaining farms are more remotely located. It is hard to imagine that any action by DAWR in removing imported prawns from sale could be of the same magnitude as this closing the bait prawn pathway to these farms.

Products in Transit

This was a window of opportunity to phase down imports during a review period without the need for a full trade suspension. This window could have provided an opportunity to avert the arrival of the estimated 780 tonnes of uncooked prawns that were 'on the water' when the January 8 trade suspension was declared. Alternatively, it could also have been used subsequently for the more orderly disposal of that product through normal channels.

Instead, companies that had imported prawns with valid import permits (until they were suddenly suspended) were left with few options.

We note that the overly optimistic estimations by the Queensland Government that prawn farming might resume on the Logan River as early the second half of 2017, may have misled DAWR, when the reality is that the farms are not likely to re-open for a much longer period.

Recalls and Other 'Mopping Up'

It is also hard to see how the recall of prawn products on retail sale in cities outside Queensland could have been tangibly significant in reducing further risk. Whilst it is possible that anglers could purchase frozen prawns and travel thousands of kilometres with them to use as bait, it must be considered extremely low risk, particularly in light of the media coverage.

It is equally hard to see how dedicated foodservice products for sale in southern cities, and subject to management systems such as those in use by the major foodservice distribution companies, could tangibly contribute to further risk. We believe these management systems could have provided an acceptable level of confidence that the products would have gone to food service end-users, and ensured that any leakage to inappropriate use would have been extremely low to non-existent.

DAWR has advised us that in these cases the risk is irrelevant – the point being that it is illegal to import or sell WSSV infected product. However, we question the fairness of this. As mentioned above, most importers (and certainly their downstream customers in Australia that are also impacted by this) were operating within a paradigm that had been overseen by DAWR for a decade, resulting in the presumption that products approved by DAWR by granting import permits, were legally saleable. (This presumption excludes deliberate test evasion or other cheating). Further, the definition of 'WSSV infected' prawns changed with the introduction of enhanced testing by AAHL. Under these circumstances we believe consideration should have been given to the disposal of these prawns through normal food distribution channels where risk can be been controlled to 'very low or extremely low'.

Whilst the review of all uncooked prawn product classes is prudent, Australian businesses are now feeling the loss of several thousand tonnes of product that would otherwise be sold in Australia for an estimated $383 million over the six months of the suspension. This is now impacting directly on consumers with signs in restaurant windows and menus around the nation advising diners of the shortage of prawns - and consequent price rises.

Particularly troubling is the estimated 1,850 tonnes of uncooked prawns imported before the suspension (in some cases a year before) and held in inventory in Australia, and now subject to control

orders and testing. Some of that product had already tested clear in authorized labs and had been released from biosecurity control, and was then recalled. In almost all cases this product has been de-consolidated from containers, and in many cases sold to dozens (if not hundreds) of smaller companies downstream. Much of this will become the subject of litigation as the various parties decide whose ownership or responsibility it was at the time it was reassessed by DAWR. It is particularly aggravating for those parties caught up in this to see similar product, not under biosecurity control, openly sold. The ensuing market disruption has added considerably to the losses of those affected parties. Contracts have been broken, orders have not been met, payments have not been met, and the future viability of many companies is uncertain.

We estimate the landed value of this product at close to $30 million. We therefore estimate the value of this product at last point of sale at about $100 million. That is, 1,850 tonnes of high value food lost to the Australian community, and $100 million revenue lost to Australian businesses.

Inconsistent Rules

The evolving situation and management has resulted in inconsistent rules of trade. We note that whilst trade in imported prawns was suspended on January 8, Australian wild-caught prawns from our EEZ were not exempted from the suspension until February 3, yet were landed unchecked across our 12-mile biosecurity perimeter. We are not suggesting those prawns were a risk, but this delay does highlight the movement of local prawns around the nation during a disease epidemic.

Further, it was over a month before some State Governments closed state borders to the movement of prawns from southern Queensland.

On March 16, as a result of WSSV-infected animals being detected further afield, the WSSV movement control zone which has until then been limited to the Logan and Albert River, was extended from Caloundra to the NSW border. This then became an area in which WSSV was known to occur. Movement of prawns to outside the zone was prohibited (unless originating outside the zone and transiting in sealed bags.). At the same time, ALL prawn farms in the zone were non-operational. In our opinion, during this time the sale of imported prawns inside the zone posed no greater risk to prawn farming than local prawns (of which some were known to be WSSV affected). This is based on the fact that imported prawns are intended to be consumed by humans, they have head and shell removed (so no waste), and that - given the extensive media coverage warning anglers not to use prawns for bait - the likelihood of anglers using imported prawns (sourced inside the zone) in the vicinity of remaining operational prawn farms must be very low. Instead, we observed the incredible dichotomy of potentially WSSV-infected fresh and frozen local raw prawns being normally retailed to a community of 3.5 million people inside the zone - with no practically enforceable movement restrictions - whilst sealed containers of frozen, processed imported raw prawn products designed for food service use, were being ordered to be exported or destroyed at a cost of tens of millions of dollars to Australian businesses.

We understand that all the wild prawn testing carried out by Queensland Biosecurity to check the prevalence of WSSV around the Logan River and Moreton Bay since December 2016 was undertaken by Elizabeth Macarthur Agricultural Institute (EMAI) in NSW using the OIE method, yet negative results on imported prawns by EMAI (and the other previously authorized laboratories) are not accepted by DAWR and are referred to AAHL for more onerous testing.

Testing in Australia

The introduction of confirmatory testing at the Australian Animal Health Laboratory (AAHL) in Geelong has been one of the most controversial aspects of this incident.

The first point of contention is the relevance to disease transfer. We are not aware of any scientific evidence conclusively linking the detection of particles of DNA genome (or any extreme low level viral presence) to the transmission of WSSV - particularly outside experimental situations such as

direct injection or feeding trials. This absence of scientific basis was repeatedly confirmed by senior DAWR management (Robyn Martin and Tim Chapman) during the second Senate hearings. The only justification given for the reliance on AAHL confirmatory testing as the final arbiter is that it was 'precautionary'. There is no evidence that this testing contributed to reaching ALOP other than by prohibiting a large proportion of import trade. There is no evidence that normal screening by the previously authorised labs was less safe in the context of the overall risk.

The second point of contention involves the methodologies used by AAHL. By using a non-OIE "CSIRO" method in parallel with the accepted OIE method (in fact, relying on multiple parallel tests), and by relying on a range of up to 45 cycles on the PCR, AAHL ran a very great risk of introducing statistical error, false positives and subjective determinations into their results. It is therefore hard to see how this so-called 'gold standard' was, in practice, useful other than to prohibit import entry.

The third point of contention was the lack of transparency, and the logistical and management consequences of the confirmatory testing. Some importers who had a long history of no failures at any of the three previously authorized labs, suddenly found their product testing positive - perplexing them and their foreign suppliers. Initially AAHL could not handle the number of test requests and the waiting period increased from an estimated two days to ten days or more (imposing enormous holding costs, and creating unprecedented logistics difficulties for importers and cold stores). Consequently, this pattern of failures did not emerge for some time and meant importers could not make informed decisions about what to do with product being landed: to immediately re-export, or to hold and test incurring additional costs.

The fact that AAHL would not release information about its enhanced testing methodologies meant that importers could not replicate that testing overseas, and thus had no standard by which to understand how their product was being assessed, and no indication of how future consignments would test on arrival. That AAHL would not release raw data on which positive/negative assessments were made, which importers required to make claims against their foreign suppliers, further aggravated the situation. This lack of transparency by AAHL deprived businesses of any indication of whether future business with Australia was possible at a time when they needed to make important decisions about retaining staff, and future cash flow needs.

During this period, the following list of complaints about AAHL was made to our Association:

- Insufficient separation between DAWR (the regulator) and AAHL (a government owned commercial laboratory).
- Inconsistency in that DAWR/AAHL would trust the other labs on positives but not on negatives.
- Using non-OIE methods and procedures.
- Using an additional CSIRO method not validated by any authority.
- Tests not relevant to infectivity of prawns. (There is no science linking the detection of ultra small particles of WSSV DNA genome to the potential transmission of the disease.
- AAHL was not screening, which is not within the IRA framework (low-risk, not no risk).
- Not providing accurate methodology to foreign exporters and importers, to allow confirmation or pre-export testing.
- Not providing raw data (on which a Positive/Negative result is declared) for claims against foreign exporters.
- Not providing that raw data for potential re-assessment of the AAHL/DAWR decisions.
- Not allowing testing of samples from held shipments to be done in WSSV reference labs overseas. (AAHL later agreed to release samples for alternative testing but said it would not change its position on any test).
- Has (at the time of writing) refused to discuss all this with the other accredited labs.

The Limitations of Testing

This controversy highlights the undue focus on testing as the main reliance on biosecurity. The fact is, testing is only as good as the sampling regime allows it to be. As it is impossible to test every prawn on arrival, some degree of risk will remain regardless of the depth of testing and the number of samples taken. Therefore a balance needs to be struck between risk and restriction. The conclusion reached in the 2009 IRA of 'low'-risk but not 'no risk', was correct in being the most affective balance. This can be restored via the previous process of authorized laboratory screening at the same (or close to the same) level of efficacy.

The importance of this statement can only be fully appreciated in the context of understanding the other pathways. For instance, of the roughly 30,000 tonnes of prawns imported into Australia annually, only two infected prawns were actually discovered in the possession of anglers in proximity to the Logan River prawn farms in a December 2016 survey by Queensland Biosecurity field officers (Diggle's 2017). It would be impossible to eliminate this low level of local risk with federal border controls and random testing - or even a total trade prohibition, given the existence of numerous other pathways including the acquisition of brood stock from ocean waters in northern Australia; natural incursion from the migration or drift of carrier crustaceans, and ballast water - to name a few. Those risks must be addressed by state governments and prawn farms at a local level.

In our view the undue focus on border controls is setting DAWR up for failure in the future. As mentioned before, there are at least 35 viral, bacterial and other diseases impacting intensive prawn farming around the world. In due course, others will evolve - including here in Australia.

An over-reliance on border controls would inevitably lead to an endless procession of revised import risk analyses, revised import conditions, and further trade restrictions - with no guarantee that these diseases won't reach here by other pathways. We reiterate that these are not terrestrial diseases - these are aquatic diseases and Australia is surrounded by water.

Whilst we have no issue with reasonable import controls to reduce risk to an acceptable level of protection (low risk), we cannot accept the premise that imported prawns are the only risk; that Australia can be protected from these diseases by border controls and ever increasing import restrictions to cover emerging diseases - while the same level of intensity is not required of State governments and local industry biosecurity.

Communication of Test Results

Soon after the suspension began, some results on shipments referred to AAHL for confirmatory testing began to emerge. About two-thirds of batches were re-assessed from negative to positive. (The average has since shifted to about one-third.) The first results were initially reported in the media as indicating that two-thirds of **all** imported uncooked prawns were infected, but this interpretation is not correct. A batch test sample is comprised of 65 prawns (13 x 5) and if only one prawn is assessed as positive, the entire batch is assessed as positive. So the prevalence could be as low as one in 65 (about 1.5%). Of course, equally, every prawn could test positive. However, given that these prawns had already tested negative by the OIE method at a previously authorized laboratory, it is not overly optimistic to suggest that the prevalence would be lower rather than higher. In fact, it is very possible that only one prawn in 130 (a sample of 65 at each laboratory) might have tested positive, making the prevalence about 0.7%. Without debating the likelihood of these scenarios, it is clear that the tests indicated a prevalence of much lower than two-thirds. Our Association pointed this out to DAWR and received a reply that it had been passed on to DAWR media but we are not aware that this was ever publicly corrected. There is no doubt that the perception created by this misinterpretation of test results drove some of the priority to purge imported prawns during the suspension period, and overly weighted focus on the bait prawn pathway at the expense of further consideration of other pathways.

Performance of DAWR Management and Staff

There is no doubt that the sudden announcement of the trade suspension caught everybody off-guard including DAWR. It's clear that many staff members were on Christmas holiday-related leave, or due for leave. It's also clear that additional staff had to be inducted into certain critical areas of the department to cope with the workloads that followed.

We were pleased that two teleconferences with industry groups were arranged within the first week to explain what would happen in more detail. What was disappointing is that this was a one-way process. There was no forum in which industry could consult with the Department to have any input into how things might have been better handled, especially in terms of logistics, with the same outcome for DAWR.

However, from the outset DAWR was dealing with individual companies, which resulted in the perception that individual solutions were being developed. That in turn added to tensions in a highly competitive marketplace.

We are not sure if DAWR foresaw the various domino effects that resulted from some of their directives, but we strongly suspect that many of these impacts were underestimated. For instance, the initial advice to importers (and customs brokers) about delays in inspections and testing were in the order of two days, when in fact the actual delays were ten days to two weeks. This affected commercial decisions involving many millions of dollars of product, and resulted in costs, that might have otherwise been mitigated, of tens of thousands of dollars (per business) in demurrage, cold storage, transport and electricity, as well impacts on sales contracts, staff and cash flows.

In some cases, cold stores were unable to accommodate arrivals, and even outside sites to 'park' containers (requiring power and 24 hour security) in approved facilities could not be found.

Staff Experience

It also became clear that many staff, particularly inspectors, were new to the job - having been recently inducted to the positions to cope with the expanding workloads. Not only were multiple inspectors (paid for by importers) required for a single container, they were frequently being monitored for work performance by more senior staff. This led to additional delays that might have been averted if experienced staff had been available.

The issue of experienced staff (or lack of) goes back to the subject of engagement with the associations. We are told by older members that in past decades the Department did seek assistance from the associations in training inspectors (particularly with product identification) and in helping Policy and Compliance staff better understand the potential issues faced by importers, and the potential for cheating. This engagement/assistance scenario is not a case of putting the 'fox in charge of the hen house' - rather it addresses issues of experience and expertise with field staff, and potentially makes the Department at all levels (including permit approval) more savvy, or streetwise, about irregularities.

General Communication

The appointment of prawn liaison officers to deal with enquiries, and to forward Determinations and other information to stakeholders, was a very significant improvement to the situation.

Not Just Prawns

It should be noted that the trade suspension impacted on a wide range of products beyond just prawns. Consignments are frequently comprised of numerous products, of which those named in the suspension might be a small proportion. For instance there might be 50 cartons of prawns in a container of 1,500 cartons of other food products - yet the entire container would be delayed for up to two weeks for inspection. This caused enormous problems for importers and their Australian customers - especially as these were being landed in the peak season for seafood: between Christmas and Easter.

b) The effectiveness of biosecurity controls imposed on the importation of seafood and seafood products, including, but not limited to, uncooked prawns and prawn meat into Australia, including the import risk analysis process concluded in 2009 that led to these conditions being established;

Border Controls

At the time of writing this submission, there is no confirmation that imported prawns were responsible for the white spot outbreak on the Logan River. Such confirmation may not be possible. We do nevertheless recognise that the irresponsible or illegal use of imported prawns as bait or burley is a recognised pathway.

However, it is essential that all other pathways be thoroughly considered in this Senate inquiry, to lower the risk of future disease incursions and subsequent financial losses across all sectors.

Aquatic diseases are not the same as terrestrial diseases in benefiting from Australia's island geography. Australia is surrounded by aquatic disease pathways, and border biosecurity should not be the primary safeguard - rather it should be part of a suite of biosecurity measures resulting in an acceptable level of protection.

There are at least 35 viral, bacterial and other diseases impacting intensive prawn farming around the world. Many are predicted to arrive in Australia by various pathways in the future.

Those pathways include (but are not limited to):

- Imported uncooked prawns;
- Low-prevalence incursion and/or establishment in Australia from natural migration or drift of infected crustaceans (at all life stages) from oceans to our north where the diseases are prevalent;
- Broodstock obtained from northern waters;
- Prawn fishing in our northern EEZ;
- Illegal foreign fishing in our northern EEZ;
- Ballast water and bio-fouling;
- Aquaculture feed and probiotics.
- Prohibited imports including aquarium species (e.g. freshwater crayfish), prawn broodstock, and food. These could involve passenger arrivals and products posted to Australia from ‘on-line’ sources.

The 2009 IRA of Prawn and Prawn Products addressed imported prawn pathways - to the exclusion of all other risks. This has created a perception that imported prawns are the **only** pathway; that trade restrictions are the **only** remedy; and that Australia was otherwise safe from this disease. Hence, in our opinion, less attention has been paid to on-farm and other local biosecurity controls and complementary State regulations, and to addressing other pathways, than was prudent.

These comments are not intended to deflect the risk from imported prawns, but to provide balance in assessing the overall future risks to Australian producers and the Australian market (community).

To put this is perspective, all but a very small percentage of the 30,000 tonnes of prawns imported each year are correctly used as intended, for human consumption in foodservice outlets and homes. About 0.1% leaked to bait use. (Estimate by Diggle 2017). Yet the primary biosecurity focus and majority cost, has fallen on these market sectors.

We reiterate our opinion that effective disease mitigation should not be reliant on border inspections as the primary hazard control, and should not be the exclusive responsibility of importers and their Australian customers - nor of consumers. Due to the existence of numerous other disease pathways, and the rapidly changing circumstances of prawns farming and the constant emergence of new diseases (endemic and exotic) and pathways, effective mitigation can only be achieved in tandem with effective controls by State jurisdictions and at enterprise level on the farms.

In our view, the import conditions resulting from the 2009 IRA would have been sufficient to ensure imported uncooked prawns remained a low risk to Australia's marine environment and fisheries - if they had been robustly enforced, and supplemented by pre-export testing. There is no conclusive evidence that the IRA conditions, as intended, failed or that the Logan River disease incursion was caused by imported prawns. Several pathways are suspected. The trade suspension resulted from the detection of elevated levels of infected prawns available for retail sale due to unlawful activity, and was implemented to achieve a return to ALOP as per the current IRA. Nor is there evidence that dedicated food service products (e.g. marinades) failed to ensure intended end-use - other than when approved by DAWR for use in retail stores. That is, when some products originally created for foodservice use only, were re-designed for retail use and were granted import permits.

The 2009 IRA 'low risk' ALOP could have been reduced further, at little inconvenience to commerce, if DAWR had progressed multilateral or bilateral agreements on disease testing to allow recognition of offshore PCR testing. This would have effectively screened prawns prior to export - an infinitely safer and commercially acceptable approach than detecting disease and rejecting product in Australia.

The Scope of Risk

Imported prawns are not a unique threat to any wild fisheries in Australia (ref: Determinations by DAWR). Our wild fisheries share oceans that are contiguous with coastlines where WSSV and other exotic diseases occur, and are subject to potential incursion via numerous other aquatic and man-made pathways. The reaction of wild fisheries to endemic and exotic diseases is vastly less pronounced than animals contained in intensive farming operations, and establishment or epidemics in the wild are normally so limited as to be indiscernible.

In general, WSSV outbreaks are rarely observed in wild prawn populations. Prawns in the wild that are affected by WSSV are considered likely to be eaten by non-susceptible predators, which reduces the risk of spread of the disease. The prevalence of WSSV can vary due to seasonal factors but is generally considered low. Biosecurity (Suspended Goods—Uncooked Prawns) Amendment (Exceptions) Determination 2017 - 3 February 2017. Schedule 2.

By far the greatest risk to the establishment of crustacean diseases in wild fisheries is intensive prawn farming, where endemic disease outbreaks are common and consolidated, and exotic diseases can be escalated from low prevalence to epidemic (as just occurred) and spread to the environment. Therefore the design, location and management of prawn farms should be of priority interest to every stakeholder.

All prawns (native and imported) are potentially dangerous in the immediate vicinity of intensive prawn farm operations, if illegally used as bait, burley or aquatic feed.

If an ALOP of 'low risk' is not sufficient to ensure the safe operation of the approximately 30 intensive prawn farming operations (hatcheries and farms) in Australia, then that industry sector should implement local biosecurity management options, including appropriate design, infrastructure and management systems, in conjunction with other jurisdictions such as State governments, sufficient to reduce the risk further. The Federal government and Australian market sectors should not be carrying 'all the weight' on this biosecurity issue.

Any plan for the co-existence of imported prawns, local wild-caught prawns, and local prawn farms, must start with effective biosecurity at, and around, the farms - otherwise the multi-million dollar investment by the Australian community in border biosecurity, risks being rendered redundant by disease incursion from other pathways.

Australian prawn farms should be encouraged to implement at least the same standard of biosecurity and good practice as the prawn farms of our trading partners. Foreign governments have every right to complain that Australia is protecting prawn farms here with trade restrictions, while those farms have not increased output in a decade, and have not implemented the same standard of biosecurity as many overseas farms. We believe this is a federal issue due to its implications for trade relations.

Whilst prawn farmers have been complaining about the perceived risk from imported prawns, they appear to have had little success in convincing State jurisdictions to control fishing in close proximity to farms, or in regulating additional (recommended) protections such as making it illegal to use imported prawns as feed for aquatic animals kept in research facilities or public aquaria. The SIAA has not been oblivious to the risks to our industry posed by invasive prawn diseases. In 2005 the Association supported a voluntary prohibition on the importation of small, uncooked prawns that, at the time, were believed to be the preferred size for anglers. Between 2005 and 2008 the Association actively participated in the Import Risk Analysis process by bringing together international scientists including biosecurity expert, Prof Roger Morris (NZ) and internationally acclaimed prawn epidemiologist, Prof Tim Flegel (Thailand) among others for several face-to-face forums with (then) Biosecurity Australia. Whilst the Association opposed some conditions that were subsequently imposed, it participated in these extremely complicated scientific debates fairly, and in good faith, relying on expert advice from both sides of the debate.

In 2007 a delegation from the Association made an official visit to a prawn farm near Brisbane to hear concerns about the use of imported prawns as bait. A record from that visit shows that the Association took those concerns seriously, including the proximity of anglers. However, the control of fishing in proximity to prawn farms was clearly a matter in the State jurisdiction. The subsequent IRA addressed their other main concern by prohibiting whole uncooked prawns.

In 2010 the Association (supported by the Thai government) took the then President of the Australian Prawn Farmers Association, and the then President of the National Aquaculture Council, to Thailand specifically to observe disease mitigation strategies and infrastructure on Thai prawn farms. Whilst the objective of the trade mission was to demonstrate the high standard of prawn farming there, the participants had the opportunity to see how the Thais managed disease, and increased volume, in a country where WSSV is endemic. It is difficult for us to judge the extent to which any of this was subsequently replicated in Australia - other than to say we have not observed any of the same major biosecurity infrastructure on Australian prawn farms.

This was one of at least half a dozen similar trade missions we have taken to Thailand and Vietnam so that participants including buyers, chefs, media and government regulators could observe for themselves, and comment on, the standard of overseas farming and processing. The high standard of biosecurity infrastructure and management, in particular, has been a feature of these missions - a level that very noticeably exceeds that in Australia.

Notable on these farms was the extensive use of closed-water systems (as opposed to flow through or semi-closed systems widely used in Australia), wheel and foot baths for biosecurity hygiene, 24 hour security, visitor ID and declarations regarding previous farm visits, the use of predator fences to block crab and other crustacean vectors, and bird strings - among other protections. In some cases, the farms are completely enclosed. Whilst these are undoubtedly more expensive to adopt in Australia, they are the price of global standard biosecurity.

We emphasise that our trading partners have been transparent about the strengths and weaknesses of disease control in their countries. They acknowledge that WSD has not been eradicated and is extant there but that they have learned to mitigate the incidence of outbreaks through on-farm biosecurity controls, to manage the outbreaks that do occur, and to still increase production volumes year on year.





Figures outlining bio-secure prawn farms in overseas developing countries

Several large enterprises have invested in 'bio-secure farms' using advanced technology and high infrastructure investment to exclude disease, with varying success. In some producing areas, there is the high likelihood of no WSSV, or extremely low prevalence of WSSV, in particular zones or compartments. So the opportunity exists to procure prawns with some assurance that the WSSV risk is low. Hence some importers have had a long record of no test failures, or few test failures. The point here is that the volume of WSSV-infected product being exported can be controlled – i.e. vastly reduced, if not totally eliminated. So our trading partners are already providing a large part of the solution.

Failure to Implement Pre-export Testing

Combined with the above, pre-export PCR testing could have provided an acceptable level of protection to Australia - even before imported prawns were consigned. Clearly it is in everyone's best interest if prawns leave the country of origin, free of disease. PCR testing can provide an effective screen, even if

methodologies need to be homogenised to accommodate slight variations from country to country. We refer to screening, not mere detection of viral genome particles.

Frankly, this should have been implemented ten years ago and in our opinion was not pursued energetically enough by DAWR. We are aware of some of the issues faced by both DAWR and foreign governments in achieving this; and of the efforts made - particularly by Thailand. Our Association tried several times to accelerate this process in direct negotiation with the Thai Department of Fisheries, and with (then) Biosecurity Australia, but was unsuccessful.

In this regard DAWR has failed our trading partners and the spirit of cooperative trade, and failed Australian businesses (producers and retailers) impacted by the WSSV outbreak. By not progressing the certification/authorisation of offshore laboratories to do disease testing for Australia - widely discussed following the 2007 IRA but only partially followed up in subsequent years - DAWR effectively closed that door, and pushed foreign suppliers and importers into less satisfactory solutions such as dedicated end-use products like marinades or highly processed value added products, to meet demand. This is despite constant lobbying by foreign governments, and our Association, to recognise offshore testing capability.

This specific failure to authorise pre-export testing facilities, methodologies and chain-of-custody arrangements has frequently been referred to internationally as a non-tariff trade barrier, and the implication that supplier nations are not capable of operating to agreed laboratory standards is offensive. (We note that DAWR was able to recognise competent authority certified chain-of-custody for Australian prawns processed in offshore factories, within several weeks of the trade suspension.)

The final step in this process would have been compliance testing by authorised screening labs on arrival in Australia. Although that might have been potentially circumvented by illegal evasion of testing, the total viral load entering Australia in the first place would have been significantly lower. In any case, more robust inspection and sampling could have eliminated that evasion.

Lack of Robust Enforcement

Although our Association has no specific information regarding this other then what has been provided to the Senate hearings to date, there appears to have been a failure by DAWR to robustly enforce biosecurity conditions in relation to opening containers, the inspection of contents, and the taking of samples for testing.

There is little we can say about this other than to reiterate that we fully support seals intact inspection of containers on arrival, the inspection of contents, and the correct procedures for obtaining samples.

It should be understood that Australian importers, wholesalers and foodservice outlets have all been victims of this biosecurity event - with many individual enterprises suffering catastrophic financial losses. People in these sectors have lost their jobs. Although a small number (based on what we have been told by DAWR) of importers have been implicated in breaches of biosecurity regulations, the vast majority of these businesses were not at fault.

Imprudent Variation in the Approval of Dedicated End-Use Products

To help reach ALOP after the 2009 IRA, products such as marinades were designed to provide a greater level of confidence that prawns would be used as intended in foodservice outlets (that is, consumed); would be difficult for anglers to access; and would be less appealing as bait. (It is a reasonable assumption that products that are consumed are not a risk.) Supporting this were minimum standards for the type and percentage of ingredients used, verified by manufacturers declaration and photos.

However, there appears to have been some ‘drift’ in the granting of import permits for some of these products by approving retail sizes and packaging that compromised the intended foodservice end use.

The assumption by most industry members was that DAWR must have calculated that any leakage from intended use from this would be minimal and not affect ALOP.

It should be noted that marinades have been controversial (with industry) from the outset of their introduction because of issues to do with correct net weight and labelling descriptions. When Senator Bill Heffernan produced marinated prawns in Parliament, our recollection is that it was to do with that issue - not biosecurity risk. (He visited our office, at our request, and was provided with samples of marinades.)

We are not clear about the extent to which marinades were actually implicated in misuse by anglers. Despite vocal concerns about 'washing off' by some producers and their supporters, it is hard to imagine that a marinated product would be the first choice of anyone intending misuse when better-suited products (e.g. un-marinated meat and cutlets) were available. In other words, we are not sure that marinating was not successful in ensuring correct end use - particularly in foodservice sizes and packaging. In this case, we believe more research into the suitability of marinades as an effective end-use strategy is warranted rather than simply dismissing them on the basis of conjecture.

Products Must Be Fit For Purpose

The Association has expressed an on-going concern that some processed products (including marinades) have not been 'fit for purpose' and both the Association an individual members have provided information to DAWR about this. We believe 'fit for purpose' is a reasonable condition of entry for all products, including highly processed prawns, and we fully support this test at the border.

The Responsibility of Prawn Farms

We reiterate that import conditions and restrictions should not be the only layer of protection given the numerous pathways for disease incursion that exist - many of which cannot be effectively blocked; and given the continual emergence of new or variant diseases from prawn farming here and around the world.

We estimate the additional direct costs and loss of business (bourne by the Australian community) resulting from 2009 IRA at $200 million over the past decade. We estimate direct costs and loss of business resulting from the current trade suspension (bourne by the Australian community) currently at $100 million, and rising. We believe the Australian community is entitled to ask what it has gotten in return for this $300 million involuntary investment in the biosecurity of 22 prawn farms?
For instance:

- have these farms increased output volume to replace imports during this period of 'subsidised' biosecurity protection? The answer is no. Volume output is roughly the same as ten years ago, meeting less than 10% of demand.
- are these farms more biosecure due to import restrictions? The answer is obviously no, as there has just been a WSD epidemic across seven farms. Clearly the farms have not invested in the biosecurity infrastucture, including farm design (many are flow-thru or semi-closed rather than closed water systems) and management systems needed to prevent and manage serious disease events. This is not simply our opinion - this statement is consistent with advice given to the prawn farmers by biosecurity experts advising them on recovery and future phases.

As traders and wholesalers we acknlowledge that we are not generally experts in prawn farming technology. However, we do invest several hundred million dollars annually in the output of prawn farms (including Australian) and are very much an integral part of the global aquaculture industry. We also spend a considerable amount of time visiting prawn farms overseas - observing production standards, innovation and technologies, and understanding the underlying culture. In particular, we

observe differences between Australian and overseas farms and farming practices. As a result, we ask these questions:

- have Australian farms, and the hatcheries that service them, paid sufficient attention to other disease pathways such as the likelihood of low-prevalence exotic disease in Australian waters posing a direct risk to some farms, and to the acquisition of brood stock?
- is broodstock acquired in Bonaparte Gulf, the Gulf of Carpentaria and Torres Strait, tested as robustly as is prudent given the known risks associated with the vertical pathway?
- is secondary testing conducted prior to the distribution of P/Ls (baby prawns) to grow-out farms?
- is **every** broodstock prawn (peliopod) tested; and at the same rigour as imported prawns?
- have Australian waters been adequately surveyed for exotic diseases to ensure broodstock can be safely acquired from this source? (Whilst there may be an explanation that we are not aware of, it concerns us that a recent FRDC-funded survey of disease risk off Australia's northern coasts seemed to indicate a deliberate avoidence of testing by those sourcing broodstock there - *... specific requirements from some hatcheries that samples could only be provided on the condition that they not be tested for exotic viruses such as WSSV. For these reasons, not all samples collected for potential use in the project and listed in Table 1 were tested.* Viral presence, prevalence and disease management in wild populations of the Australian Black Tiger prawn (Penaeus monodon) FRDC Project No 2013/036

None of this is intended to deflect from the possibility that the source of the infection was inapproprite use of of imported prawns as bait. What we want to ensure is that the investment in border biosecurity by importers and the Australian community is not made redundant by another disease epidemic caused by another pathway.

To close this subject, we cannot emphasise enough our amazement at the access available to recreational fishers (and general public) to such close proximity to the Logan River farms, when the biosecurity risk was so well known to industry and State government regulators. Closing this part of the bait prawn pathway was unquestionably outside the influence of importers yet it appears that it could have been manifestly effective in blocking an incursion from that source.

c) The adequacy of Commonwealth resourcing of biosecurity measures including Import Risk Assessments

Aquatic biosecurity is not the same as land based biosecurity; the marine border simply cannot be patrolled and managed in the same way a land-based border can;

This is clearly highlighted in a recent submission by FRDC to the IGAB (Inter-governmental Agreement on Biosecurity) review. In that submission they noted that;

It has long been understood that introduced aquatic species have the potential to dominate marine and freshwater communities, significantly impacting on recreational and commercial activities.

It is estimated that around 250 introduced marine species have been discovered in Australian waters and there is every reason to believe that more will be discovered in coming years. These pests include plants and animals, and range from microscopic algae through to large species of seaweed, jellyfish, shellfish, crabs and starfish. Exotic marine species invade Australian waters in a number of ways, but the majority of introductions appear to be related to ***ballast water*** *– used to give un-laden commercial ships stability and pumped out when they are loaded – and* ***hull fouling.***

See: http://www.marinepests.gov.au/Pages/default.aspx

It is known that some of these exotic species that establish in Australian waters can bring with them their own array of infectious agents, including viruses, bacteria, parasites and fungi. That is why back in 2005, the Australian Government and most states and territories signed an intergovernmental agreement to develop a national system for preventing and managing marine pest incursions. Given

the growth in marine shipping in recent years, which is predicted to grow even more rapidly over the next 2 decades, the biosecurity risk from ballast water is expected to be on the increase not decrease.

Next to ballast water there is also Australia's ***ornamental aquarium trade****. More than 2000 exotic species of marine and freshwater finfish, crustaceans, molluscs and plants are traded in this industry. It is quoted that about 200 licensed fish breeders, catchers and importers supply a network of wholesalers that service almost 900 pet shops and specialist aquarium outlets. Previous studies have suggested that about 34 exotic freshwater species have established populations in Australia and very little is known of the most effective management and control options for these species or their long-term impact on aquatic ecosystems and habitats. Ornamental fish also have the potential to harbour a range of infectious organisms, again, some of which have a broad host range (http://frdc.com.au/knowledge/publications/fish/Pages/21-4_articles/26-darker-side-of-exoticornamental-fish.aspx).*

So clearly managing marine-based pests is a complex topic with many different avenues for potential infection. Other pathways could potentially include broodstock and aquaculture feed. In the 2009 Prawn IRA, we note that the following was identified; *The IRA team notes that there may be other potential pathways by which disease agents associated with imported prawns may be introduced into Australia, such as via ballast water discharge or hull fouling or import of other aquatic animal commodities such as crabs.* ***Consideration of such pathways is outside the scope of this risk assessment.***

Also, the IRA flagged; *The dispersal of pathogenic agents can occur via several pathways. In wild prawns, pathogenic agents are typically dispersed by the* ***movement of live hosts, including during natural migration****. The* ***movement of infected broodstock*** *to hatcheries, and of* ***infected larvae*** *from hatcheries to grow-out ponds, has also facilitated national and international spread of pathogenic agents.*

Imported prawns may be used as feed for live crustaceans, including to condition hatchery broodstock and as feed for aquatic animals kept in research facilities or public aquaria.

Uncooked prawns are known to form significant components of broodstock conditioning diets.

Although the volume of imported prawns used in these ways would be very small, it represents a direct and potentially significant pathway by which crustaceans in hatcheries, research facilities and public aquaria could become exposed to a pathogenic agent of concern.

There is also potential for whole prawns imported for human consumption to be used as feed for large adult prawns held in farm grow-out ponds until maturation. Such practices represent a significant pathway for the potential exposure of farmed prawns

And; *The potential also exists for recreational bait-use to lead to direct exposure of farmed crustaceans through fishing in farm inlet channels. Although a potentially significant exposure pathway,* ***the IRA team considered the risks associated with such practices would be limited*** *as much of this bait is likely to be taken by non-susceptible finfish species.*

Taking all this important information into account, in the Association's view the current (IRA-based) biosecurity controls for managing WSSV look purely at the importation of food (prawns) when all these other maritime / aquatic risk pathways, as outlined above, also clearly exist. These other risk pathways were specifically **not** assessed during the development of the IRA and appear to be continually ignored to date. Placing all the focus on just one of the potential transmission pathways seems, in our view, illogical.

Then with regard to this one specific pathway, imported prawns, the current biosecurity regime, in our view, unfairly puts all the control focus on just one step in the supply chain - the at-border inspection process. We expect that post the Logan river incident that DAWR will be undertaking a review of the IRA. We would like to see this process look at ALL the risk pathways, not just food importation, and to look at which are the relevant points in the supply chain to apply necessary controls rather than focusing on just one potential pathway and placing almost all the control effort on just one point in the supply chain.

d) The effectiveness of post-entry surveillance measures and "end use" import conditions for seafood products including, but not limited to, uncooked prawns and uncooked prawn meat into Australia, since the import conditions implemented in 2010 were put into place

Firstly, we refer you to our comments already made in sections 2a - c.

Failure of other jurisdictions to act

We reiterate our belief that, with robust enforcement and pre-export PCR testing, the import conditions derived from the current IRA (introduced as interim conditions in 2007) would have been sufficient to provide an acceptable level of protection for Australia against disease transmission from imported prawns. That is - 'low risk', not 'no risk'.

In practice, what developed after the 2009 IRA was an over-reliance on border controls at the expense of adequate attention to other remedies and to hazard control points in other recognised pathways, that could have been more effective (and more cost effective). From our perspective all the emphasis, cost and liability has been on imports.

This is particularly noticeable in what appears to be a lack of co-operation from other jurisdications. For instance, the 2009 IRA considered the potential use of imported prawns as aquaculture feed and concluded that this was a risk - contributing to the subsequent import restictions. The Association and other industry stakeholders were advised that if the Queensland Government would legislate regulations to make the use of imported prawns as aquaculture feed illegal, it would affect the ALOP and prompt a review of the conditions. Subsequent approaches to the Queensland Government failed to garner any support for this, and ten years later this simple, prudent action has still not been regulated. We can only conclude that accepting this risk pathway was (is) more politically advantageous than a possible consequent reduction in the need for import restrictions.

We also note that, despite a decade of complaints by prawn farmers that anglers were using imported prawns as bait in the vicinity of their farms, the Queensland Government was unable, or unwilling, to regulate to control this. We have since learned that anglers were fishing as close as the farm inlets and drainage channels - yet no effective control could be found to prevent this. We find this extraordinary given the tens of millions of dollars in costs imposed on importers (and eventually consumers) by testing every shipment of uncooked imported prawns arriving anywhere in Australia.

We note that the Diggles review estimated that of the 31,000 t of imported prawn imports, 41 t might have been diverted to bait; and in a January 2017 survey of recreational fishers conducted in the vicinity of the Logan River farms, where six groups were found using imported prawns, two infected prawns were found. Surely the most effective intervention to block this relatively small volume of prawns that might become high risk exposure, is best addressed where the exposure volume is lowest.

Biosecurity Exclusion Zones

Given the enormous fnancial cost to the Australian community in maintaining border protection for prawn farming, we find it astounding that strategies for local biosecurity protection such as those applied to friut fly (eg Sunraysia fruit fly biosecurity exclusion zone) have not been put in place under agreement with State governments.

Effectiveness of end-use Import Conditions

Traceability systems are widely used to mitigate food safety risks, and many large importing and wholesale distribution companies have international certifications covering these systems, including audit capability. They must also comply with the Food Standards Code. We find it incredible that end-user declarations and traceability systems are recognised by FSANZ as an effective tool to protect human life but are not accepted as a biosecurity tool.

We believe these management systems can provide an acceptable level of confidence that the products covered will be used as intended, and ensure that any leakage to inappropriate use would be extremely low to non-existent. (This acknowledges that nothing can stop individuals from deconstructing products for inappropriate use). It is hard to see how dedicated foodservice products for sale thousands of kilometres from prawn farms and subject to management systems such as those described, could tangibly contribute to risk.

We acknowledge that not all companies have this level of traceability. However, we see no reason why the use of traceability systems to mitigate risk should not be available to those companies that can provide evidence that their systems can meet end-use conditions. This would be consistent with the approval of chain of custody systems that now apply to factories processing Australian prawns overseas for re-import to Australia.

Dedicated end-use products

As stated previously, products such as marinades were designed to provide a greater level of confidence that prawns would be used as intended. We are not clear about the extent to which marinades were actually implicated in misuse by anglers in the Logan River outbreak. Therefore we are not sure that marinating was not succesful in ensuring correct end use - particularly in foodservice sizes and packaging, and in conjunction withtraceability systems as outlined above. We believe more research into the suitability of marinades and traceability systems, as an effective end-use strategy, is warranted rather than simply dismissing them on the basis of conjecture.

e) The impact of the outbreak on Australia's wild and farm prawn sectors

Imported prawns are not a unique threat to any wild fisheries in Australia. Our wild fisheries share oceans that are contiguous with coastlines where WSSV and other exotic diseases occur, and are subject to potential incursion via numerous other aquatic and man-made pathways.

The reaction of wild fisheries to endemic and exotic diseases is vastly less pronounced than animals contained in intensive farming operations, and establishment, epidemics or even clinical signs of infection in the wild are normally so limited as to be indiscernible.

In general, WSSV outbreaks are rarely observed in wild prawn populations. Prawns in the wild that are affected by WSSV are considered likely to be eaten by non-susceptible predators, which reduces the risk of spread of the disease. The prevalence of WSSV can vary due to seasonal factors but is generally considered low. Biosecurity (Suspended Goods—Uncooked Prawns) Amendment (Exceptions) Determination 2017 - 3 February 2017. Schedule 2.

f) The economic impact on Australian wholesalers and retailers

Goods in Transit

Following the January 9 commencement of the trade suspension, we understand about 780 tonnes of uncooked prawns that were in transit were detained and subject to enhanced inspection and testing at AAHL. About two-thirds of these imports were subsequently voluntarily re-exported or subject to re-export, cook or destroy directions.

The cost to importers firstly must include direct cost of complying with enhanced inspection and testing, subsequent redirections as above, plus additional demurrage, cold storage, transport and electricity, as well impacts on sales contracts, staff and cash flows. Based on anecdotal estimates from individual companies affected, we estimate an aggregate direct cost of this of several million dollars. It is difficult to estimate losses to importers of purchase value, given the variability of terms and subsequent negotiations with suppliers, and resale options. Again, based on anecdotal estimates from individual companies affected, we estimate a further aggregate loss of several million dollars.

We estimate the landed value of the product re-exported (that is, the value had it been sold in Australia) at $8 - $10 million. Therefore, the loss of revenue to Australian businesses in the downstream supply chain (by applying the 3.5 multiplier) was about **$30 million.**

Goods in Inventory

According to DAWR, the volume of prawns already (in inventory) in Australia and subject to biosecurity control orders and enhanced testing was 1,850 tonnes.

We estimate the landed value of this product at close to $24 million. It is not clear at this time what percentage of this product will be rejected for sale in Australia but the potential lost revenue to downstream Australian businesses is in the order of **$83 million**.

As some of this product has ben held for months waiting for inspection and testing, direct costs in cold storage and additional handling will be significant – probably exceeding **$20 million**.

As mentioned previously, this is particularly troubling as much of this product has been de-consolidated from containers, and in many cases sold to dozens (if not hundreds) of smaller companies downstream. Much of this will become the subject of litigation as the various parties decide whose ownership or responsibility it was at the time it was reassessed by DAWR. There are further ramifications for the businesses involved, in broken contracts, unfilled orders, withholding of payments, and threat to their future viability.

Trade Suspension - Loss of Business

We estimate the loss of revenue at final sale, of the several thousand tonnes of product that would otherwise be sold in Australia over the six months of the trade suspension, at almost **$400 million**. This is now impacting directly on restaurants and consumers with shortages and consequent price rises.

In addition, there will be on-going loss of business and profitability as foreign exporters (many of whom have lost millions of dollars in this incident - catastrophic losses in their countries) readjust their long-term relationships with Australia. Indeed, Australian importers will certainly find the 'rest of the world' a more difficult and expensive place to do business with in future. Whilst some Australian producers might delight in that, it will be a cost imposed on all Australians, going forward.

Case Studies

The following are four brief case studies based on broad estimates provided confidentially by three member and one non-member companies. The purpose here is to provide an insight into the devastating individual impact of the trade suspension and related measures on relative small Australian importer/wholesale companies. It is likely that between 40 and 50 companies have had similar experiences.

Company A	
Annual turnover	$13 million
Number of employees	12
Normal annual value of raw prawn revenue including highly processed	$9 million
Direct costs applicable to forced re-export	$50,000
Direct costs applicable to enhanced inspection and testing (including delays, demurrage, power, cold storage, labour, etc.)	$50,000
Direct costs applicable to 'secure as directed' hold/test on existing inventory / losses	$26,000
Direct costs applicable to enhanced inspection of highly processed	Included
Lost business due to suspension of trade from Jan 9	$5 million
Job losses	3
On-going increase in annual costs	Unknown

Company B	
Annual turnover	$30 million
Number of employees	23
Normal annual value of raw prawn revenue including highly processed	$3.5 million
Direct costs applicable to forced re-export	Nil (so far)
Direct costs applicable to enhanced inspection and testing (including delays, demurrage, power, cold storage, labour, etc.)	$5,000
Direct costs applicable to 'secure as directed' hold/test on existing inventory / losses	$300,000
Direct costs applicable to enhanced inspection of highly processed	$3,500
Lost business due to suspension of trade from Jan 9	$1.5 million
Job losses	0
On-going increase in annual costs	Unknown

Company C	
Annual turnover	$19 million
Number of employees	10
Normal annual value of raw prawn revenue including highly processed	$11 million
Direct costs applicable to forced re-export	Nil (so far)
Direct costs applicable to enhanced inspection and testing (including delays, demurrage, power, cold storage, labour, etc.)	$96,000
Direct costs applicable to 'secure as directed' hold/test on existing inventory / losses	Included in above
Direct costs applicable to enhanced inspection of highly processed	Included in above
Lost business due to suspension of trade from Jan 9	$2.1 million
Job losses	1
On-going increase in annual costs	Unknown
Average extra costs not recoverable $9,000-$12,000 per 40ft FCL	

Company D	
Annual turnover	$10.5 million
Number of employees	4
Normal annual value of raw prawn revenue including highly processed	$8.4 million
Direct costs applicable to forced re-export	$21,500
Direct costs applicable to enhanced inspection and testing (including delays, demurrage, power, cold storage, labour, etc.)	$83,800
Direct costs applicable to 'secure as directed' hold/test on existing inventory / losses	$5,100
Direct costs applicable to enhanced inspection of highly processed	$8,650
Lost business due to suspension of trade from Jan 9	$5 million
Job losses	2
On-going increase in annual costs	Unknown
3 shipments re-exported and subject to negotiation with supplier	*$920,000*

Anecdotal information about costs

The following is typical feedback in relation to inspection procedures and costs since the suspension commenced, to demonstrate the financial havoc being suffered by importers and cold storage facilities that, in some cases, appears to be punitive.

A big problem for us is the length of time taken to book an inspection and get a date and number of inspectors required. Inspection cost portion is $200 per hour per inspector - minimum 2 hours. We are unable to schedule other inward containers until date and time is known. All we are given is AM/PM. Morning containers arrive at 5.30am. If Inspectors are late then extra costs are involved. ($35 per hour x 2 staff) and we are unable to start other containers. If late start in PM, containers go into overtime. Demurrage cost of up to $400 per container per day is additional.

Different methods of inspection is causing massive disruption to our storage service. Last Friday we had an inspection on a 40ft FCL- 1,500 cartons. Only one product line was highly value added prawns to be sampled but the officers chose to inspect all cartons. They instructed that NO stock could be put away until every carton inspected. To hold $150,000 of stock without freezing for ¾ hours is ridiculous! The previous week inspectors allowed us to put stock away immediately after the samples drawn.

Some officers insist that all stock be palletised with batch codes facing outwards and stock to be sorted in batch codes. This increases handling costs by 100%.

Our biggest loss occurs because we are a public cold store, we are holding a large amount of stock because of the departments HOLD instruction, and cannot accept new containers for our regular Cold Store customers because of space restriction.

*We have had $120,000 of Australian wild caught prawns on hold since all "imported" raw prawns were held in cold stores 17th Feb 2017. These prawns are wild caught Australian King prawns, processed in Thailand in an AQIS approved facility. They arrived in Australia in April **2016** ! They passed WSSV testing in April 2016 ! (And were released by AQIS). It took 2 months before they were re-inspected & sent for testing! (10th April 2017). We are still waiting for test results / release !!! So they have been held for almost 3 months.*

We had 40,000 retail packs individually inspected by a team of inspectors because the dot matrix printer skipped a beat and they said they could not tell if the production date was 2016 or 2018 on 38 packets (which were confiscated). The choice was to do this or re-export. The cost was over $10,000.

Broader Impact on the Australian Economy

In this section we outline the importance of imported uncooked prawns to the Australian economy.

The following tables 2f1 and 2f2 and figures 2f1 and 2f2 (see below) outline the value of the imported prawn sector. They show that taking into account the multiplier effect, that is the first sale value to the final sale price (as described by Ruello - 2011) the value of the imported prawn sector is more than $766 million, having come down from $1.2 billion in 2014.

Table 2f.1. Value of the imported uncooked prawn sector – at imported 'farm gate' price

Year	Category	Imported Value ($)	Weight(kg)
2016	raw prawn (not cold-water, not preserved or highly processed)	139,252,339	10,887,070
2015	raw prawn (not cold-water, not preserved or highly processed)	193,410,315	14,228,949
2014	raw prawn (not cold-water, not preserved or highly processed)	247,697,407	17,194,551
2016	prepared and preserved - not airtight (marinades)	79,629,552	6,745,862
2015	prepared and preserved - not airtight (marinades)	86,761,965	6,864,023
2014	prepared and preserved - not airtight (marinades)	95,785,271	7,329,197

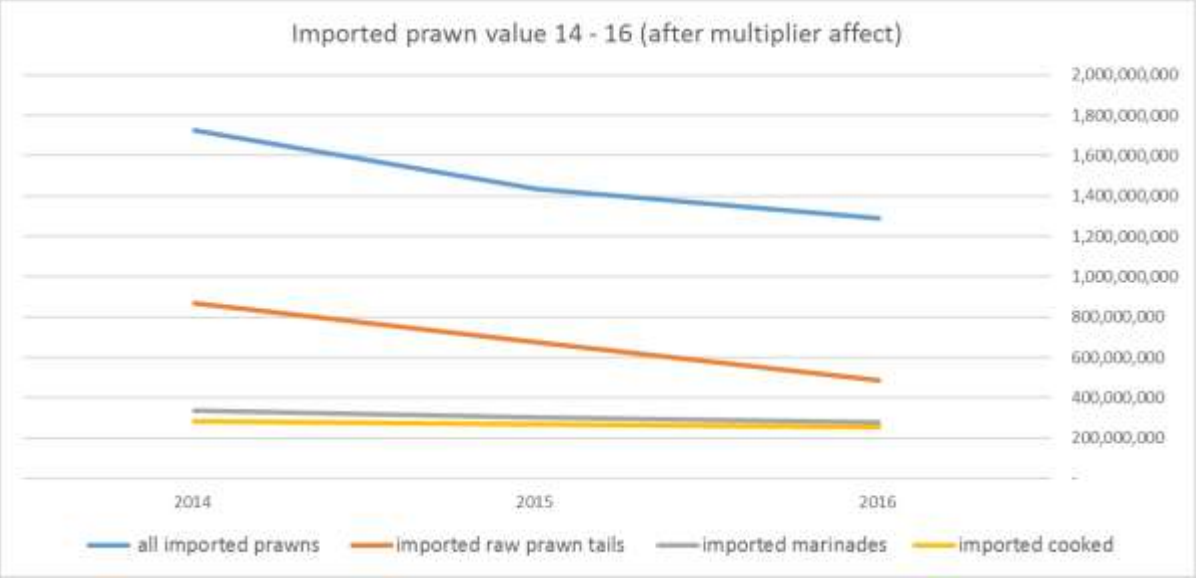
The following table shows the same data after applying the 3.5 multiplier defined in Ruello (2011) for imported prawns (not canned).

Table 2f.2. Value of the imported uncooked prawn sector to the Australian Economy.

Year	Category	Value to the Australian Economy ($)	Weight(kg)
2016	raw prawn (not cold-water, not preserved or highly processed)	487,383,187	10,887,070
2015	raw prawn (not cold-water, not preserved or highly processed)	676,936,103	14,228,949
2014	raw prawn (not cold-water, not preserved or highly processed)	866,940,925	17,194,551
2016	prepared and preserved - not airtight (marinades)	278,703,432	6,745,862
2015	prepared and preserved - not airtight (marinades)	303,666,878	6,864,023
2014	prepared and preserved - not airtight (marinades)	335,248,449	7,329,197

This table is graphically represented below on figure 2f1. The data shows the **overall** value of the imported prawn sector and the recent decline that has been occurring.

Figure 2f1. Value of the imported prawn sector to the Australian Economy.



The international macro-economic aspects regarding the global prawn trade are also relevant here. The FAO in the 2016 SOFIA report outline that - *After being the most-traded seafood product for decades, shrimp (prawns) now ranks second in value terms. Shrimps and prawn are mainly produced in developing countries, and much of this production enters international trade. However as economic conditions improve, growing domestic demand in these countries is leading to lower exports.*

In recent years, although global farmed shrimp production has increased, major producing countries, in particular in Asia, have experienced a decline in output because of shrimp disease. However, in 2015, for the first time since 2012, farmed shrimp production recovered in Thailand, a major producer and exporter. Global shrimp prices have fallen significantly year-on-year, although in 2014 they reached record highs. In the first half of 2015, shrimp prices plummeted by 15–20 percent compared with the first half of 2014, as a result of the supply and demand disparity in the United States of America, the EU and Japan. Lower prices have hit export revenues and negatively affected margins for producers in many developing regions.

So what we see in this Australian imported prawn trade data is symptomatic of the prevailing world conditions in terms of the international prawn trade. Generally weaker economic conditions in developed countries are seeing consumers trading down slightly from more expensive items to cheaper items, including prawn products.

This has been exacerbated in Australia by the substantial weakening of the Australian dollar against many of our major supplier nations in recent years, and supply shortages due to production issues in Asia and strong consumer demand from China.

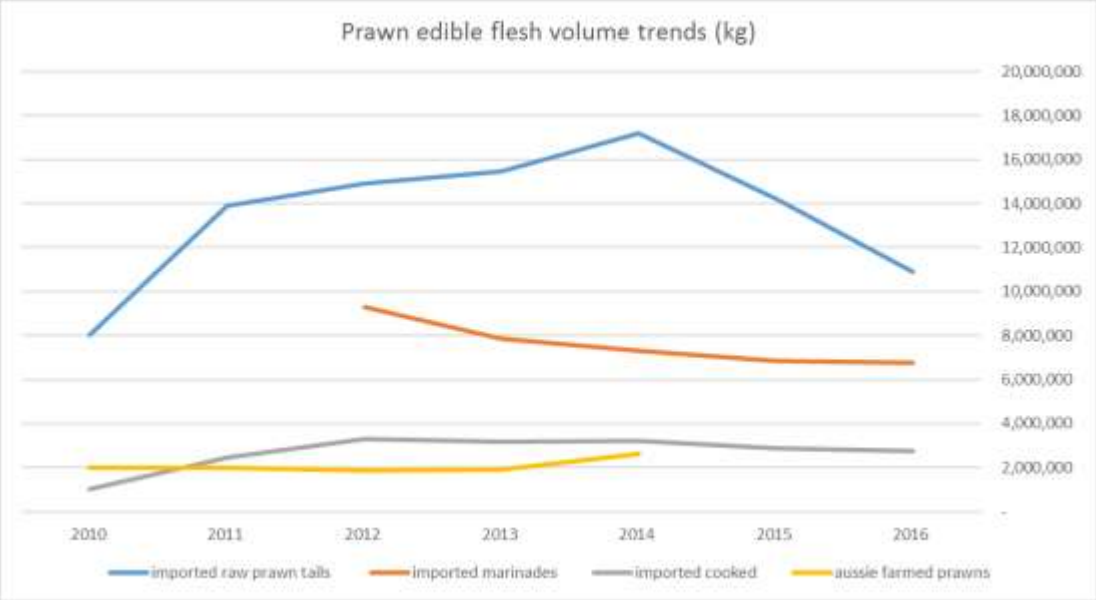
This trend is particularly apparent in the changing style of value-added prawn products being imported to meet this change in consumer demand or buying patterns.

In stark contrast, the effect of increasing trade restrictions and compliance costs on imports is not matching this demand trend – rather it is driving prices up, making prawns (and to some extent all seafood) increasingly unaffordable for the majority of Australian consumers.

So in terms of procurement, foreign trade is becoming increasingly difficult for Australian seafood importers, while at the same time Australian consumers are seeking more affordable seafood products, or switching to other protein categories.

The following graph looks at imported prawn volumes (not just the suspended classes), by category, and the volume of farmed Australian prawns. All volumes are converted into edible flesh weight using the process described in Ruello (2011).

Figure 2f2. Prawn edible flesh volumes in recent years, by category.



We believe that these figures speak for themselves and demonstrate the value to the Australian economy of the imported prawn sector. In 2016 the 'added value', that is the estimated final sale price minus the imported product cost is in the order of $900 million having come down from $1.2 billion in 2014. Thus, the Australian supply chain is adding in the order of $1billion of added value per year purely from imported prawns, let alone all the other imported seafood commodities.

Ruello in his 2011 report points out that about 70% of the seafood post-harvest employment, somewhere between 14,000 - 21,000 jobs could be attributed to the imported seafood sector. Looking at 2005/6 ABS data Ruello concluded that these imports provided more jobs than the Australian fishing and aquaculture sectors combined.

g) Domestic and foreign trade implications for Australian industries resulting from the suspension of importation of seafood and seafood products, including, but not limited to, uncooked prawns and uncooked prawn meat in Australia

Australia's main trading partners in seafood are New Zealand, China, Vietnam and Thailand although there are significant imports from many nations including the USA, Canada, Great Britain, Norway, Argentina, South Africa, Malaysia, India and the Pacific Islands.

China, Vietnam and Japan are also the biggest markets for Australia's seafood exports.

These countries are also significant importers of other important Australian commodities such as live cattle, beef, wheat, cotton and coal. Australia has much to gain from these trading relationships.

As well as providing healthy nutritious seafood into Australians diets these imported seafood products have been strongly assisting the economic wellbeing of the, mostly developing country, exporting nations. The FAO in their 2016 SOFIA report outlined that in 2014, seafood exports of developing countries were valued at US$80 billion (globally) and their fishery net-export revenues (exports minus imports) reached US$42 billion, higher than all other agricultural commodities (such as meat, tobacco, rice and sugar) combined. They further explain that fishery industries of developing countries rely

heavily on developed countries both as outlets for their exports and as suppliers of their imports for local consumption (mainly low-priced small pelagics).

Table 2g.1. Value of the imported prawn sector – at imported 'farm gate' price

Year	Category	Imported Value ($)	Weight(kg)
2016	all prawn imports	368,608,213	30,317,644
2015	all prawn imports	409,370,129	31,432,638
2014	all prawn imports	492,911,056	36,638,841

In many countries such as Vietnam and Thailand, where there is a long history of trading with Australia, and strong business relationships between companies and individuals, the Australian market (although small in comparison to other western nations) is extremely important to local communities and enterprises. In many cases, modernization and advancement in these industries have been supported by Australian aid programs in recognition of their contribution to Australia's food needs. Conversely, disruption to this trade can have catastrophic impacts in these countries.

"In 2015, Australia imported uncooked prawns from Viet Nam with a value of over USD 41 million. This volume might turn out to be an insignificant figure for a developed country but it is as much as the total annual income of thousands of farmers in developing countries like Viet Nam". ***Deputy Minister Tran Quoc Khanh***

Australia must recognize its vulnerability in maintaining access to this supply. Although we produce a generous trade surplus in some food commodities, it is unlikely that Australia will ever be self-sufficient in seafood (and certainly not in the next few decades) so we are considerably reliant on our trading partners to maintain even a partially adequate fulfilment of our seafood dietary and commercial needs.

In a global market of ever-increasing competition for seafood, our existing channels of supply should not be taken for granted - rather they should be nurtured and where possible 'lined in concrete' with goodwill and support. If this requires adjustment in our local industries, that adjustment should be properly and impartially considered, from broad economic and social perspectives, to maximize Australia's food security going forward.

h) Matters to be satisfied in the management of biosecurity risk before imports of seafood and seafood products, including, but not limited to, uncooked prawns and uncooked prawn meat into Australia could recommence

The 2009 IRA assessed that an ALOP of low risk would provide the best balance between biosecurity protection and restraint on international trade. (Nevertheless, the restraints were severe, with a complete prohibition on the importation of whole uncooked prawns, and shell-on headless prawns, and testing of every batch of imported uncooked prawns for WSSV and YHD. These restraints have probably cost the Australian community in the order of $200 million over the past decade, in lost business.)

Apart from considerable conjecture about the source of the Logan River infection, and similar conjecture about low-prevalence establishment 'hot-spots' due to imported prawns being used as bait, we have not seen any solid evidence that the low risk ALOP was not satisfactory. This is particularly relevant in the context of numerous other pathways, and numerous other potential diseases.

We understand that the low risk status was revised (to a higher risk) due to illegal activity by some importers and the detection of higher than expected levels of imported prawns available for retail sale,

and that the subsequent trade suspension was aimed at restoring that low level status by removing infected product from sale, intercepting and screening new arrivals after January 8, and suspending further imports pending review of all the relevant product classes. Given that this process will be completed by the end of the suspension period, we see no evidence-based reason why the 2009 IRA conditions, as intended, should not be restored and trade recommence.

It is a reasonable assumption that, with the experience of this event, DAWR will have increased its capacity to deliver the robust inspection and testing required to ensure low risk.

In addition, DAWR appears to be working towards an agreed standard for WSSV testing that will restore the capacity of the previously authorized laboratories to conduct meaningful screening, and that can be replicated (with confidence) by overseas laboratories for pre-export testing.

We have seen no evidence that dedicated end-user products such as marinades designed for foodservice use were any less effective than anticipated, despite conjecture about their capacity to be used inappropriately. From what we have heard from DAWR, and the Senate hearings to date, it seems the elevated risk of the bait prawn pathway was from illegal evasion of testing - not the deconstruction of highly processed products.

However, we share the broad concern of many in the industry that products should be 'fit for purpose'. In that regard we note the enhanced inspection of highly processed products (at considerable cost to importers). Therefore, we make the reasonable assumption that DAWR now has the capacity to correctly assess and inspect products as 'fit for purpose'.

We reiterate the existing requirements that all imported uncooked prawns are intended for human consumption only. They are imported fully processed (no heads or shells) eliminating all waste. They are labelled 'For Human Consumption - Not to be Used as Bait' or similar words.

We note that all but a very small percentage of the 30,000 tonnes of prawns imported each year are correctly used as intended, for human consumption in foodservice outlets and homes. In 2016, about 0.1% leaked to bait use. (Estimate by Diggle 2017).

So a considerable effort is already underway at the border (at considerable cost to the community) to mitigate the potential for WSSV transmission from imported prawns.

In addition to the blunt instrument of these border controls, that impose equal costs on the 99.9% of prawns that are not a risk, additional options are available to State governments to further reduce localised risk.

Finally, we note that prawn farmers have been advised by international experts to upgrade their biosecurity.

Given the accumulated impact of all these factors, we believe trade can be safely recommenced at the end of the suspension period.

i) any related matters.

Better engagement with importers

According to a recent statement by Minister Joyce, there are over 16,000 individuals or entities importing food into Australia. We estimate (but have no access to supporting information) that several hundred individuals or entities may have imported seafood over the past decade.

Our Association, which has 12 member companies at the time of writing, has no capacity or statutory power to regulate or control any aspect of seafood importing. We have, however, lobbied consistently for greater regulation of the sector, and for some empowerment by government for us to act in an advisory or educational capacity as a relevant professional organization - to no avail. (We do provide a 'sounding board' for consultation by the government from time to time.)

Whilst we might hold different opinions about the cost effectiveness of certain biosecurity controls, we have never condoned illegal activity of any sort. We consider any such activity as anti-competitive and not in the short-term commercial interests of our members, nor in the long-term interest of our sector - as has been demonstrated by this very costly trade suspension.

The Association has no authority, nor the capacity, to investigate any suspected illegal activity that members may be aware of. However, we have actively encouraged member companies to report - anonymously or confidentially - suspected illegal activities to the relevant departments.

Association Trying to 'Go It Alone'

Within our capacity, however, we have sought to address general concerns about the level of commercial expertise, experience and good practice in the importing sector, and to discourage non-regulated anti-competitive malpractice.

Notwithstanding our plenary comments about the important role importers play in providing the bulk of Australia's seafood and with little national recognition, we understand this is a two-edged sword. Apart from the large, well-branded companies (many being iconic Australian brand companies), and members of the two professional associations (Food and Beverage Importers Association and the Seafood Importers Association of Australasia), most seafood importers are relatively unknown - even within the industry. This is because almost anyone can be a food importer. Basically put: if you bring less than 10 kg of food into Australia you are a passenger; if you bring more than 10 kg of food into Australia you are an importer.

Over the past decade or more, the SIAA has tried to apply remedies such as recruiting more importers to the Association, and developing membership rules and voluntary codes of practice. Throughout 2015 and 2016 the Association initiated two comprehensive 'Strategic Change' projects (managed by Ridge Partners - Brisbane) to engage with as many seafood importers as we could identify, to encourage them to build and join a stronger Association.

In November 2015, the Association sponsored a national summit of seafood importers that recognised impediments and risks to our sector and agreed to create a new entity with stronger governance and membership rules, and with (ultimately) more financial support. DAWR (Imported Food Inspection Scheme - but not biosecurity) was one of three organisations that presented at this summit. The outcomes of that summit were being implemented at the time of the white spot outbreak and trade suspension - albeit slowly due to our extremely limited resources. The entire process, costing over $100,000, has been paid for by the dozen or so core members of the Association.

At the roughly same time, Australia's production sectors received a government grant of $500,000 to assist them develop a peak body. (It is premature at this time to suggest that the two bodies could in some way merge despite a large overlap in common interest - but it is certainly an aspiration that we have discussed.)

In 2016, the Association undertook a research project, co-funded by the Fisheries Research and Development Corporation, to investigate the possibility of an Australian Standard for imported

seafood. The purpose of this was to explore a benchmark for good practice across a range of attributes that might be described as representing 'responsible sourcing', and potentially identifying companies (through an accreditation scheme) that met or exceeded that benchmark. One purpose of this was to provide the basis for an independent 'fit and proper person' test for people or entities importing seafood, or their products, for the information of buyers or the community. It was also hoped that we could build on this to further engage with government on reform and improvement of the sector. The project is now completed and the draft report is with stakeholders for comment.

Unfortunately, it is unlikely that any of the Association projects can continue for the time being without government support, given the extraordinary financial damage done to our members by the trade suspension, and by the lack of empowerment for the Association to assist members (and prospective members) in situations such as this incident, undermining the incentive for them to join.

However, we maintain that government support for a professional association to advise and educate seafood importers could make a tangible difference to Australia's biosecurity (and food safety) integrity going forward, as would genuine functional engagement with relevant departments. (We should add that such engagement with elements of DAWR does exist in relation to food safety but has been notably lacking with biosecurity until after this incident.)

It should be clear in hindsight that a strong professional association - better informed and empowered by government to provide elements of independent self-regulation complementary to the government regulatory system (such as via Standards), and the capacity to reach out to new and small importers in particular with information and education; and with closer engagement with DAWR in regard to malpractice, might have been more effective in heading off the circumstances leading up to the trade suspension.

3 - Concluding comments

This submission to the Senate Inquiry has tried to put a more holistic perspective on this biosecurity incident, and to take into consideration the views of, and impacts on, the broader Australian community - not just one industry sector. It looks realistically at Australia's position in a global market and subject to global conditions.

In 2007, importers argued that an otherwise achievable target of 50,000 tonnes total domestic supply would not be reached as a result of the trade restrictions on imported prawns implemented at that time. That forecast proved to be correct, and it has taken another ten years to achieve that target - primarily by growth in imports alone. Importers currently argue that Australia could have, without restrictions, by now become a 100,000 tonne market if the sectors had co-operated on supply and promotion, adding another $2 billion to the Australian economy.

Instead, the thrust of local promotion has been Aussie versus imports (highlighted in country of origin labelling campaigns and government subsidised promotions), and with the current trade suspension and associated financial losses, loss of business confidence, and overseas supplier disenchantment (in an otherwise competitive world market) it seems this target is doomed to another decade of declining, then slowly recovering, growth - at a time when $2 billion would be a particularly valuable contribution to the Australian economy.

This prediction isn't carved in stone.

We believe there is an opportunity for prawn farming, wild prawn harvesting, and prawn imports to co-exist (as they do elsewhere in the world), with some compromise across each sector. The challenges involved in achieving this are significant, and will require both cultural and financial adjustment, supported by science-based regulatory and R&D regimes, an absence of parochial politics, and perhaps a higher degree of understanding and goodwill than we have experienced so far.

However, the rewards of this cooperative co-existence could be high for everyone.

4 –Acknowledgements

This submission was prepared for SIAA by Norman Grant (Executive Chairman) and Mark Boulter (Technical Consultant) with information provided by SIAA members.