Senate Rural and Regional Affairs and Transport References Committee

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

For the attention of:

The Senate Rural and Regional Affairs and Transport References Committee

Committee Secretary
Senate Standing Committees on Rural and Regional Affairs and Transport
PO Box 6100
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INTRODUCTION

The Australian Council of Prawn Fisheries (ACPF) welcomes the opportunity to provide this submission to the Parliamentary Inquiry into the biosecurity risks associated with the importation of seafood and seafood products (including uncooked prawns and uncooked prawn meat) into Australia.

The Australian Council of Prawn Fisheries is the National peak industry body that represents Australia's wild catch prawn industry. The Council is comprised of regional, State, and Commonwealth wild-prawn fishing and marketing associations, and individual fishing companies around Australia. The Council represents and makes this submission on behalf of our members:

- Clarence River Fisherman's Co-op Ltd
- Gulf St Vincent Prawn Fishery
- Moreton Bay Seafood Industry Association Inc
- North Queensland Trawler Supplies
- Northern Prawn Fishery Industry Pty Ltd
- Professional Fisherman's Association Inc
- Queensland Seafood Industry Association
- Seafood Industry Victoria
- Shark Bay Prawn Trawler Operators Association Inc
- Spencer Gulf and West Coast Prawn Fishermen's Association Inc
- Queensland Seafood Marketers Association Inc
- South Australian Prawn Co-operative Ltd
- Austral Fisheries Pty Ltd
- MG Kailis Pty Ltd – Exmouth Gulf Prawn
- Murphy Operator P/L
- Raptis & Sons Pty Ltd

The ACPF notes the Terms of Reference for this Inquiry can be found at http://www.aph.gov.au/Parliamentary_Business/Committees/Senate/Rural_and_Regional_Affairs_and_Transport/Seafoodimportation/Terms_of_Reference

SUMMARY

The ACPF is gravely concerned about the numerous apparent failures in Australia's biosecurity system that has led to the incursion of White Spot Disease (WSD) into prawn farms beside the Logan River Queensland in December 2016, and the subsequent detection of White Spot Syndrome Virus (WSSV) in prawns from the Logan River (mainly Black Tigers - probably farm escapees), wild-catch prawns from inshore areas of Queensland's Moreton Bay, and in imported prawn products on sale in Australian supermarkets/retailers.

Australia's remote geographical location offers a degree of safety from exotic infectious diseases that are found in disease-infected countries around the world.

Before the December 2016 outbreak of WSD, the only detection of WSD previously recorded in Australia was in 2000 when three Darwin aquaculture facilities were found to be using imported green prawns as aquaculture feed. The prawns had been purchased from a Darwin wholesaler on the understanding that they were of Australian origin, in accordance with the facility's policy of feeding locally caught rather than imported prawns to reduce disease risks (Biosecurity Australia, 2009). As a consequence, these facilities were disinfected, but testing in Darwin Harbour revealed a small number of WSSV positive prawns and crabs, although no clinical signs of disease were evident. A month later, further testing returned no positive results.

Subsequently, in 2004 a comprehensive national survey of wild catch prawns (and other crustaceans) from 64 sites around Australia found no evidence of WSSV.

In December 2016, White Spot Disease (WSD) was confirmed in a prawn farm on the Logan River in south-east Queensland and, despite rapid chlorination and destocking of the farm, further outbreaks were progressively confirmed up to February 2017 on the six nearby prawn farms, all of which were subsequently treated and destocked. A number of White Spot Syndrome Virus (WSSV) infected prawns and crabs were also subsequently detected nearby in the wild near the Logan River and in Deception Bay. Whilst there are numerous potential sources of infection and the specific source of the 2016 WSD infection has not been categorically confirmed, evidence gathered and reported by Biosecurity Queensland in February 2017 and documented by the WSD Scenario Planning Advisory Panel (2017) indicates that the *likely* source of infection was the use of WSSV-infected imported prawns as recreational-fishing bait in the feeder canals to prawn farms.

The impacts of the WSD/WSSV outbreak have been far-reaching and dramatic across a range of sectors of the Australian seafood industry. The disease incursion has resulted in complete shutdown of approximately 30% of Australia's prawn farming production; restrictions imposed on commercial fishing activities - including a movement control zone– covering the Logan River, Moreton Bay, and the surrounding catchment; intra and inter-State restrictions on movement of green crustaceans from and/or through the movement control zone; a total ban on the importation of green prawn products from any WSSV-infected country (including Australian prawns processed offshore); market disruption; and increased costs to

industry of enhanced bio-security restrictions imposed in response to the WSD/WSSV outbreak. The outbreak has resulted in substantial financial losses across a range of industry sectors, has undermined consumer confidence in the safety and 'clean green' reputation of Australian prawns, and has called into question Government's ability to keep Australia's fisheries, farms and the aquatic environment free from exotic foreign disease through the current bio-security regime.

The ACPF notes that an Import Risk Assessment (IRA) for importation of green prawns was developed in 2009 and released for implementation in 2010. The purpose of the IRA was to inform the development of a risk-based biosecurity framework that would minimise the risk of disease incursions, in particular WSSV and Yellow Head Virus (YHV) from imported prawns to Australia.

It is clear that the controls implemented in response to the IRA were not appropriate for the documented high risk in that they:

1. were functionally insufficient to control the biosecurity risk
2. were prone to human failure/abuse and not properly implemented at each step; equating to a significant biosecurity breach exceeding the Acceptable Level Of Protection (ALOP)
3. did not contain prescribed post-border controls as are practiced for other commodities
4. allowed high risk uncooked prawns entry into a disease free environment via more than one pathway for an unknown period of time
5. did not provide for a transparent process of review and amendment to take account of new emerging risks

The ACPF recommends that the current bio-security regime for prawns and crustacea is reviewed as a matter of urgency. This process should include a review of (i) altered risks in currently identified pathways, (ii) the implementation of the bio-security framework, and (iii) importation protocols.

Outputs from the review must necessarily result in amendments to the current biosecurity regime and implementation protocols for importation of prawns that:

- are risk-management based, robust and enforceable
- are consistent with WTO principles and
- protect Australia's waterways, fisheries and prawn farms from risk of exotic foreign disease incursions as far as practical

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

ACPF's role in management of the WSD/WSSV outbreak has been high level, primarily related to providing the interface between government departments/agencies (State and Federal) and the national wild catch prawn industry. This has included;

- participation in the Queensland bio-security control response group,
- identification of needs and commissioning research to inform ACPF responses to various inquiries,
- provision of information to ACPF members on legislative amendments relating to import regulations and movement control orders between States, and
- ongoing consultation with ACPF members on all issues relating to impacts of the WSD/WSSV outbreaks.

The 'on ground' industry-based functions of dealing with the prawn farmers and local prawn fishers directly impacted by the incursions have been undertaken jointly by the Australian Prawn Farmers Association (APFA) representing the farmed prawn sector, the Queensland Seafood Industry Association (QSIA) and Moreton Bay Seafood Industry Association (MBSIA) representing the wild-catch prawn sector. It should be noted that both QSIA and MBSIA are members of the ACPF.

As such, ACPF cannot specifically comment on the 'on-ground' action taken in response to the WSD outbreaks on prawn farms and the detection of WSSV-positive prawns in the Logan River and Moreton Bay. However the Department of Agriculture and Fisheries Queensland) (Qld DAF), and more specifically Biosecurity Qld (BQ) have provided regular, comprehensive, and timely information to the ACPF about the initial and subsequent outbreaks of WSD in the farms and the detection of WSSV in prawns in the Logan River and Moreton Bay, the results of tests undertaken, and the actions proposed since the outbreak occurred in December 2016.

The ACPF notes that BQ responded appropriately with an eradication plan with the aim of returning Australia to freedom from WSSV. The eradication plan was according to the AQUAVETPLAN for WSD and as recommended by the WSD Scenario Planning Advisory Panel (2017). Implementation of the plan was via

- Detection and confirmation of infection. It is noted that it took 5-6 days from the time of samples provided to a positive test being issued and control orders given, in which time ponds were flushed to the wild.
- Identification of the nature and extent of the problem. (Note: it is reported that communication between farmers and Qld Biosecurity was problematic, which posed further risk to the wild fishery)
- Rapid selection and implementation of control measures. The decision to eradicate was made quickly and with the following plans in place:
    - implementation of a Biosecurity Control Program for the affected area. The Program began on 21 January 2017 and will continue until 31 December 2017.

- preparation of an Emergency Animal Disease Response Plan which has been approved by the Aquatic Consultative Committee on Emergency Animal Diseases (AqCCEAD)

- Attempts to prevent virus spread by controlling movements of stock and water within and between farms and other sites considered susceptible to infection AND maintenance of appropriate disease management practices and high standards of hygiene

The following plans were also put in place to facilitate industry and Government attempts at eradication:

- the declaration of a movement control order prohibiting the removal of decapod crustaceans and polychaete worms from the program area
- establishment of a surveillance program that began on 21 January 2017 and will continue until 19 January 2019

However controlling possible sources of disease spread after the bulk of the farmed prawns were infected required additional focus eg better control of recreational fishers and birds, and containing farmed stock from entering the wild.

It is vital that the eradication plan is followed in the two year “proof of freedom” period and include monitoring and the ban on all fishing for crustaceans in the control zone. If that is unsuccessful, the next and less desirable step would be to move to a containment plan as outlined by the WSD Scenario Planning Advisory Panel (2017).

Another significant issue affecting the nature of the response appears to be the uncertainty around the source of the infection. Diggles (2017) lists the possible source options as:

1. WSSV entered the Logan River via infected imported prawns being used as recreational-fishing bait/burley
2. WSSV was endemic in broodstock – vertical transmission through PLs
3. WSSV had been present in QLD waters for some time, or
4. WSSV entered in imported feed/products.

Evidence in hindsight rules out sources 2, 3 and 4. Evidence gathered and reported by BQ in February 2017 supports the likely source of infection to be the use of infected imported prawn by recreational fishers as bait in the feeder canals.

The ACPF recognises that there are sensitivities around compliance activities that were underway in early 2016 (Operation Cattai) to investigate alleged bio-security breaches in relation to the presence of WSSV in imported prawns. However, it is possible that, had information been made available regarding biosecurity breaches leading to WSSV infected prawns being imported, along with knowledge that WSSV-infected prawns sold at retail were being used as recreational-fishing bait, the disease pathways may have been closed much sooner.

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

The management of biosecurity risks associated with the importation of uncooked prawns into Australia is the responsibility of the Australian Government Department of Agriculture and Water Resources (the department).

In 2009, the department released a draft import risk analysis (IRA) of the importation of prawns and prawn products, inviting comments from stakeholders. The final IRA (Biosecurity Australia 2009) was released in early 2010.

Since implementation of strengthened entry conditions for uncooked prawn imports determined by the 2009 IRA, the department has recorded a number of infringements, including:

- inadvertent release by the department of a consignment of prawns, which tested positive to WSSV. This release was the subject of a review (Interim Inspector General of Biosecurity, 2010) and a number of recommendations were made to strengthen biosecurity.
- a number of consignments of uncooked prawns which were improperly or inadequately marinated, and therefore were reassigned to be either tested, cooked, re-exported, or destroyed.
- In late December 2016, the department found high levels of availability of WSSV-infected prawns to retail, and evidence that white spot-infected prawns were being used as bait by recreational fishermen on the Logan River.
- This led the Director of Biosecurity to suspend the importation of uncooked prawns, including Australian wild caught prawns processed offshore and reimported for sale on the domestic market, for a period of six months from 6 January 2017. Marinated prawns were also removed from the category of 'highly processed' prawns, which meant that their importation was also suspended.
- The failure in the biosecurity regime to prevent WSSV entering Australia is further demonstrated by advice to ACPF from the DAWR Prawn Liaison Officer on 3 March 2017 that stated 38 of 68 batches tested under the enhanced biosecurity regime were refused release due to detection of WSSV.

The 2016 WSD/WSSV outbreak would indicate that the 2009 IRA risks assessment and associated controls (including the overall bio-security regime developed in response to the 2009 IRA) are not appropriate for the documented high risk.

The risks identified during the development of the IRA have altered significantly since 2009, including the increased production of aquaculture

prawn from countries with WSSV and increased international trade of aquaculture prawns from those countries. As well, there is substantial evidence that the agreed risk management strategies have not been implemented as intended. Clearly this had led to a breakdown of the prawn importation bio-security regime and resulted in uncooked prawn biosecurity breaches. These events are the result of a combination of process, policy and resourcing weaknesses, outlined under Term of Reference c), that need to be addressed.

ACPF notes that the IRA conducted in 2009 determined that "the unrestricted risk associated with WSSV, TSV and YHV exceeds Australia's Acceptable Level of Protection (ALOP) and, therefore, risk management is deemed necessary".

After analysis of the risks of introducing high-risk diseases as at 2009, the IRA proposed each measure, or a combination of measures, that were deemed to reduce the overall risk to 'very low' or lower. The IRA recommendations from the Panel (referred to in Biosecurity Australia Advice 2010/11 Prawns and Prawn Imports) were believed to have addressed the risks. The effectiveness of those measures hinged on proper implementation and checking for the desired effect.

Table 1 (Attachment 1) outlines the IRA recommendations for biosecurity control imposed on the importation of uncooked prawns into Australia as a result of the 2009 IRA.

The recommendations focus on:

- The country of origin of the product and verification of it being disease free
- Product processing and labelling controls intended to deactivate any pathogens or circumvent disease pathway risks and
- Testing at the border

No post border controls were recommended.

Table 1 also provides evidence on the effectiveness (or lack thereof) of each of the biosecurity control options based on scientific research, records of work practices, and test results of product in the supply chain.

Figure 1 below outlines the 2009 IRA's recommended combination of acceptable control measures, rather than relying on one measure in isolation, on the assumption that a combination of measures would achieve an ALOP.

Similar importation breaches that have occurred in 2016 and led to the Logan River incident were documented in the 2009 IRA (Appendix 2 – 2000 Darwin WSSV incident). This should have alerted those involved in the 2009 IRA process that the same pathway could easily reoccur and would warrant tighter risk management strategies with fewer loop holes to achieve an ALOP.

Figure 1: IRA for Uncooked Prawn Protocol Options

Sourced from countries free of high risk diseases (chilled)
+
General health certification issued in the exporting country
+
Packaging marked 'for human consumption only' and 'not to be used as bait or feed for aquatic animals'

OR

Cooked in Competent Authority approved premises
+
Health certification issued in the exporting country

OR

Highly processed (head and shell off; breaded, marinated, etc)
+
General health certification issued in the exporting country
+
Packaging marked 'for human consumption only' and 'not to be used as bait or feed for aquatic animals'

OR

Head and shell off (frozen)
+
General health certification issued in the exporting country
+
Batch tested on arrival for WSSV & YHV
+
Packaging marked 'for human consumption only' and 'not to be used as bait or feed for aquatic animals'

ACPF notes the advice of Landos (2017) that the current IRA does not achieve an ALOP that is acceptable for other animal and plant products with lesser or comparable viral or fungal risks associated with the commodities. Landos states that the risk of disease introduction in other animal products (pork and chicken) was deemed so high that importation protocols are much more stringent and prevent potentially infected products getting into disease introduction pathways.

In hindsight, it is clear that the controls implemented in response to the IRA do not appear to be appropriate for the documented high risk in that they:

1. were functionally insufficient to control the biosecurity risk
2. were prone to human failure/abuse and not properly implemented at each step equating to a significant biosecurity breach exceeding the ALOP

3. did not contain prescribed post-border controls as are practiced for other commodities
4. allowed high risk uncooked prawns entry into a disease free environment via more than one pathway for an unknown period of time.

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

The reports of uncooked prawn biosecurity breaches indicate that these breaches are the result of significant process, policy and resourcing weaknesses that need to be addressed as follows:

Process:
The IRA process itself follows a robust logic but is prone to underrating potential risks at that point in time. Recommending a combination of risk laden protocols to achieve an ALOP is a flawed approach. A combination of underrated risks has translated into a faulty risk management system.

An IRA review process is triggered when *"a variation in established policy is desirable because pests or diseases, or the likelihood and consequences of entry, establishment or spread of the pests or diseases could differ significantly from those previously assessed"*. However, there appears to have been no effective pathway to trigger a review of risks other than a high profile failure like the 2016 Logan river prawn-farming disaster (akin to closing the gate after the horse has bolted). The IRA review trigger process needs urgent refinement.

Policy:
The importation policies seem to be so convoluted for uncooked prawns from WSSV infected countries, compared to other proteins, that their enforcement is ripe for failure. It is understood that an IRA must not be trade prohibitive however, with so many weak points and loopholes available, it is not surprising that a biosecurity breach has occurred.

Resourcing:
The most telling evidence of lack of resourcing is the failure of border testing. When border surveillance increased, the detection rate of positive containers increased from less than 15% to over 50%. Landos (2017) reports resulting evidence of over 65% of WSSV positive product in the marketplace.

Landos (2017) also provides anecdotal evidence of border surveillance measures that point to lack of enforcement resources at the border:

> *1) Containers leaving port and biosecurity control prior to results being received.*
>
> *2) Containers being opened prior to Border Officials arriving to collect samples for testing*

3) Samples for testing not being collected first hand by Government officers

4) Samples being sent from overseas, prior to packing container

5) Empty boxes included in container, to fill with "WSSV" negative samples on arrival

6) Illegal packing of uncooked product within containers of cooked product

7) Illegal branding of product as processed, when it is in fact unprocessed

8) Washing off marinade /breading and re-packaging

9) Different coloured straps on cartons

Resources are also required to implement post-border surveillance such as those recommended to the Interim Inspector-General's report into the pork trade in 2013 including:

- regular reviews and staff visits to confirm country claims of freedom from disease
- establishment of a random inspection regime *and*
- unannounced audits of importers facilities

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.

The recommendations in the 2009 IRA, that were implemented as conditions in 2010, included pre-border and border measures as outlined previously in Figure 1. These include stipulations about "end use". The conditions did not include post-entry surveillance measures.

The effectiveness of the "end use" import conditions to manage biosecurity risk is documented in Table 1. The end use import condition requires that uncooked imported prawns must be labelled with *'for human consumption only'* and *'not to be used as bait or feed for aquatic animals'*.

In sampling uncooked imported prawns from retail outlets, Landos (2017) reported numerous cases where prawns were not labelled according to the import conditions and/or any labelling on the packaging was sometimes too obscure to be noticed. This was supported by Dr Barry O'Sullivan, Sunfish Qld in a media statement in February 2017. O'Sullivan also stated that "Recreational fishers wouldn't deliberately go and try to spread white spot", that education and additional enforcement was not the answer, but that the only feasible solution to control risk was to stop the pathway of the product to the public.

Landos (2017) recommends more effective post entry surveillance such as unannounced audits of importer's facilities. This would help to act as a disincentive for practices anecdotally reported such as the removal of additives from 'highly processed' prawns and product substitution.

A more effective 'fail safe' method of managing biosecurity risk would be to reduce the dependence on post-entry surveillance as a line of defence. Altering the definition of a 'highly processed prawn' would prevent border testing loopholes and reduce the risk of diseased product entering the aquatic environment. Post entry surveillance, such as audits, require better resourcing with much greater onus placed on the importer. Post entry surveillance is a vital tool in managing substitution and other health issues. However post entry surveillance should never be treated as a panacea to failure to implement complex pre-border and border import conditions.

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

The WSD outbreak resulted in significant operational and financial impacts on prawn farmers, commercial fishes, processors, importers and related industries[1]. This submission deals *primarily* with impacts on commercial wild catch sector fishers/businesses[2].

The WSD incursion required the implementation by Queensland Department of Agriculture and Fisheries (QDAF) of eradication procedures and a biosecurity control program aimed at eradication to prevent the spread of disease. Specific measures that impacted commercial fishers include:

- an initial ban on commercial fishing in the Logan River, resulting in loss of catch/income
- implementation of a 'movement control zone' and movement control orders, which restricted movement of green prawns out of the movement control zone, resulting in loss of markets/sales
- subsequent extension of the movement control zone to include Moreton Bay, further exacerbating market impacts
- decontamination procedures for commercial fishing vessels wishing to leave the movement control zone
- restrictions on movement of green crustaceans products caught within the movement control zone within Australia - both intra and inter State, resulting in loss of markets/income
- cessation of trade in prawn bait between Queensland and other states

[1] eg the food service sector
[2] also relies on the submission from the Queensland Seafood Industry Alliance (QSIA) to elucidate on specific impacts on wild catch prawn and crab fishers in the Logan River and Moreton Bay.

The movement control orders and restrictions on intra and interstate trade of green crustaceans caught within the movement control zone were understandably implemented to reduce the risks of spreading to wildlife and other species. These other species sustain commercial fisheries, such as crabs, rock lobster, and Moreton Bay Bugs[3]. However, the financial and market impacts that ensued should not be underestimated.

Restrictions on movement of green crustaceans caught within the movement control zone has caused significant market disruption, including shortages of supply in some markets and over-supply in others. Considerable price elasticity has resulted from those restrictions. Whilst the impacts are difficult to quantify without targeted market research and analysis, anecdotal reports indicate that prices for prawns and crabs caught in the movement control zone have slumped to as low as $5 per kg, due to the inability to sell these products into traditional southern and western Australian markets, and negative perceptions from consumers that the product is diseased. Conversely, the food service sector anecdotally reports price increases of up to 50% for green prawns as a result of supply shortages.

The current market implications will be further exacerbated should there be detections of WSSV in prawns outside of the current movement control zone, which will require an expansion of the zone.

Notwithstanding the impacts, ACPF recommends that Government and all sectors of industry continue to work toward the aim of declaring Australian WSSV free again in the future by following the eradication path in place. Whilst the eradication and control measures have incurred serious financial losses to fishers, successful eradication of WSSV will provide the best long term outcome for Australian wild caught prawn fisheries.

f) The economic impact on Australian wholesalers and retailers.

The ACPF does not offer comment on this TOR but refers the Inquiry to work compiled by the FRDC in their submission on this TOR.

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.

The ACPF provides comment as three specific issues relating to this TOR as follows:

[3] eg Department of Fisheries Western Australia (2017) advised: 'We are moving quickly to reduce the risk of the virus spreading here, by restricting the import of all live or uncooked prawns, or parts of prawns and polychaete worms, from Queensland'.

1) Implications for Australian prawns processed offshore for re-importation to Australia

The ban on importation of green prawns imposed by the government on 7 January 2017 also negatively impacted producers of Australian prawns that are processed offshore and reimported for sale on the Australian domestic market. Impacts included;

- restrictions on movement and sale of product,
- increased administrative requirements/ cost,
- and increased storage and interest charges, *and*
- increased biosecurity requirements/ inspection costs.

For one such company alone, the importation ban meant:

- 60,000kg of raw material destined for export to Vietnam for processing was not able to be sent due to the inability to reimport the product
- Increased cold storage costs
- Increased interest costs due to lack of sales income
- 50,000kg of finished and raw material already in Vietnam when ban was effected had to be sold at a loss
- 3 containers shipped back prior to 8 January incurred additional costs due to enhanced import regulations
- 60,000kg of finished product already here in Australia that had passed original testing for WSD in quarantine held until additional testing completed

It is estimated that, for the above entity alone, approximately 160,000 kg of lost sales resulted from the import ban in place on Australian prawns processed offshore for re-importation to Australia between January and May 2017. Ongoing new (additional) import clearance costs are also being incurred due to enhanced bio-security inspection requirements[4] implemented in response to the WSD outbreak.

2) Foreign Trade Implications

The ACPF recognises that foreign trade is a complex area. International trading partners react in very different ways to trade restrictions - the Australian government is best placed to determine the potential risks to trade for seafood and other commodities associated with the current import ban on green prawns.

It is ACPF's view that it is unlikely that Australia's international trading partners will impose trade barriers (other than additional administrative/traceability requirements) on Australian prawn exports in

[4] eg containers must have seals intact until DAWR inspectors are present, 3 inspectors to be present for full unload of each container

response to the WSD/WSSV incursion in South East Queensland. Until recently Australia was one of only two countries that enjoyed WSSV-free status, and the vast majority of its prawns are from waters that do not contain known WSSV.

However there is a potential reputational risk to the 'clean green' status of Australian wild catch fisheries of the WSD incursion. This may negatively impact on both price of and demand for Australian wild catch prawns on the international market as a result of the WSD/WSSSV incursion. Many of our wild catch prawn fisheries/producers have significant investments in science-based fishery management regimes, independent third party certification schemes and marketing initiatives. These investments underpin Australia's image of sustainable, clean green prawn production. The failure of the bio-security regime to protect Australia from WSD/WSSV infection has the potential to undermine those investments.

3) Domestic Trade Implications

Clearly the importation ban on green prawns is impacting the domestic market, particularly the food service sector which has previously relied heavily on imported green prawns. The import ban has resulted in a reduction of supply of green prawns in the market place.

Whilst the impacts are difficult to quantify without targeted market research and analysis, the food service sector anecdotally reports price increases of up to 50% for green prawns as a result of supply shortages. The current shortages of supply can in part be attributed to the ban on imported green prawns.

There is some expectation that rationalisation in the market will occur over the next few months which will resolve the current shortages and supply/price pressures. This could occur either through a shift to on-shore processing of Australian prawns, loosening of the current restrictions on the import of green prawn, or a combination of both. ACPF notes that increased use of Australian prawns by the food service sector could provide positive benefits to wild catch fishers and would be consistent with the objectives of the 'Love Australian Prawns' campaign.

The potential reputational risk to the 'clean green' status of Australian wild catch fisheries resulting from the WSD/WSSSV incursion is also a risk to our domestic market. The word 'disease' (regardless of whether it is a risk to human health) often results in changes in consumer behavior. Consumers may shift to other food sources, and/or change purchasing patterns in response to human health concerns and/or price elasticity. This is evidenced by the anecdotal reports of a discernable downturn in prawn sales in South East Queensland (the location of the WSD incursion) compared to prawn sales further north at Easter 2017.

Such changes in consumer behavior would indicate that the failure of the bio-security regime to protect Australia from WSD/WSSV infection is undermining industry's investments in science-based fishery management regimes,

independent third party certification schemes and marketing initiatives such as the Love Australian Prawns' campaign, which underpin our image of sustainable, clean green prawn production.

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

Noting that the 2009 IRA documented evidence of similar disease introduction pathway into Darwin in 2000 as has occurred into the Logan River in 2016, Biosecurity Australia cannot simply allow 'more of the same' to continue with an undertaking to "do better next time".

Biosecurity Australia **must** redress the failure of the current biosecurity system to protect Australia from disease and develop a more robust approach to future bio-security which will protect Australian waterways, fisheries and farms from disease incursions.

On Farm Biosecurity:
Prawn farming is a component of Australian prawn production and supply. However prawn farming also poses some biosecurity risk to the wild caught sector. Intensive farming is a known disease vector and proximity of prawn farms to wild prawn populations requires careful biosecurity management by prawn farming businesses. ACPF supports recommendations made by Stephens (2017) and the WSD Scenario Planning Advisory Panel (2017) for the farmed prawn sector to resource new infrastructure and better practices to improve on-farm bio-security to mitigate risks to wild catch crustacean populations of disease.

Prawn Imports:
The ACPF is not opposed to importation of prawns provided the necessary bio-security safeguards are in place to protect our domestic fisheries and prawn farms from disease risk.

To this end, the Inquiry should note that somewhere between 1000 and 1200 tonnes of Australian prawns are being re-processed offshore and re-imported to Australia as headless and/ or meat and cutlet products per annum. Australian wild catch prawns processed offshore and reimported to Australia for sale on the Australian domestic market have been subject to testing on re-entry since 2009[5]

An analysis of all samples tested for disease pathogens and results of testing on all reimported wild catch prawns was undertaken by Koopman (2017) and

[5] With the exception of 1 processing factory in Thailand which received an exemption by Govt to future testing in August 2015 (Ref: https://www.legislation.gov.au/Details/F2017L00168)

contained in Attachment 2[6]. The results of this analysis show that, of approximately 5300 prawns from 410 batches tested over the past 5 years, there are no positive results for WSSV or YHV. These results confirm that Australian prawns are a low disease pathway risk.

Australian prawns processed offshore and reimported to Australia as headless green product were initially caught up in the import ban on green prawns which came into effect on 7 January 2017. An amendment was made on 3 May to allow re-importation of Australian green headless prawn products, subject to departmental approval and certain certification and traceability requirements being met, and the products being subject to the enhanced testing requirements introduced in January 2017 on re-entry to Australia.

The ACPF supports this amendment on the basis that:

1) with the exception of a very small number of prawns taken from a very small area in South East Qld (currently subject to a formal bio-security Movement Control Order) Australian wild caught prawns are considered to be WSV-free
2) the fact that 100% of tests on >5000 Australian prawns processed offshore and reimported to Australia over at least the last 5 years have proved negative for WSSV and YH would indicate that this category is a very low bio-security disease path risk

Biosecurity Review:

The ACPF recommends that the current bio-security regime for prawns and crustacea is reviewed as a matter of urgency. This process should include a review of (i) altered risks in currently identified pathways, (ii) the implementation of the bio-security framework, and (iii) importation protocols. Consideration should cover but not be limited to:

- Prawn and crustacean diseases that have emerged since 2009 and methods to proactively include emerging diseases in importation protocols rather than responding retrospectively
- The increase in both the production of farmed prawns from countries with WSSV and international trade of farmed prawns from countries with WSSV increasing Australia's disease exposure
- Changing consumer behaviours when purchasing and using green imported prawns (eg for bait) increasing the risk of disease along pathways previously underrated
- The definition of a 'highly processed prawn' given the evidence that such processing does not deactivate disease, provides a loophole to

[6] a small number of samples included in the NPF data were from wild caught prawns from Queensland East Coast Trawl and wild caught prawns from overseas fisheries, however all tests results were negative

avoid border testing, and does not prevent product diversion from this pathway to the aquatic environment

- Pre-border surveillance measures to ensure the sanitary status of the exporting country given the importance of country of origin in biosecurity measures
- Proficiency test of the laboratories used to assess the status of import products to ensure a consistent approach is being undertaken to reduce risks
- Post-border biosecurity control measures to strengthen disincentives for product substitution and mis-labelling that place greater onus on importing entities to adhere to biosecurity regulations
- Recognition that, based on 100% of negative tests results for WSSV and YHV in NATA-approved laboratories over the past 5 years, Australian prawns processed overseas and reimported for sale on the Australian domestic market are a low-risk disease pathway but must be subject to the same level of biosecurity scrutiny as other prawn imports to ensure there are no product substitution or cross-contamination risks
- Options to improve on-farm bio-security to mitigate disease risks to wild-catch crustacean populations (Refer Stephens 2017)
- The need for an agreed process and timeline for amending the biosecurity protocols and/or the IRA if and when risk ratings change and/or new risks emerge

Outputs from the review must necessarily result in amendments to the current biosecurity regime and implementation protocols for importation of prawns that are risk-management based, robust and enforceable, consistent with WTO principles and protect Australia's waterways, fisheries and prawn farms from exotic disease incursion as far as practical.

i) Any related matters.

The ACPF makes the following additional comments in relation to policies and investments that impact on WSD/WSSV and other potential disease management and disease preparedness:

Emergency (Aquatic) Animal Disease Response Agreement:
ACPF has acted as an observer in the Animal Health Australia/DAWR-led process to develop an agreement outlining how industry and governments should manage and pay for responses to pest and disease outbreaks. The EADRA is seen as the formalisation of disease response that is already in place for other agriculture sectors eg meat, pork. It is in ACPF's interest to ensure that the wild catch prawn industry is represented in EADRA discussions and that the risks and benefits to the wild catch sector are fully explored.

The aquaculture industry has primarily been involved in the EADRA process as the sector has ownership of and ability to eradicate diseased stock in the event of disease. Whilst the prawn farm sector has varying ability to control external impacts and disease introduction pathways, the ability to control the outcome is much stronger than for the wild caught sector where there is limited, if any, ability to control what occurs in the marine environment.

Unlike farming, fisheries are a common property resource. Fishers are granted a 'right to fish' in certain waters – they don't own the marine resource and don't have any tenure over waters in which they fish. It is government's role to ensure that fisheries are managed sustainably and protected from exotic disease incursion by the government's biosecurity regime.

ACPF has voiced significant concerns around the benefits and costs attributed to the sector around disease control. To ensure these concerns are taken into account, the ACPF intends to engage as an EADRA participant, rather than as an observer, going forward.

Disease preparedness:
ACPF supports efforts to prepare the wild sector for potential WSSV spread via extension and response manuals which will include ramifications for recreational sector responsibilities. ACPF acknowledges the lead roles of QB and QSIA to deliver prototypes for use in Queensland which can be rolled out nationally.

Profiling trace metals for Australian prawns:
Traceability systems can play an important part in improving bio-security outcomes. The ACPF, with APFA, approved industry R&D investment in a project to investigate the use of trace element profiles to substantiate provenance for the Australian prawn industry (FRDC project 2016/221).

Both sectors recognise the need to develop a rapid and robust scientific method to verify compliance and ensure product integrity, including food safety, truth in labelling, and traceability. The trace metal authentication methods used by other primary production industries represent a possible opportunity to prove provenance of Australian wild caught and farmed prawns versus non-Australian product.

It is intended that the piloted method will be legally enforceable, be developed in consultation with enforcement agencies and the supply chain, and be operational by 2018. This capability is intended as an industry-driven tool to drive change for improved traceability through the supply chain.

End

REFERENCES

Biosecurity Australia (2009) Generic Import Risk Analysis Report for Prawns and Prawn Products. Biosecurity Australia, Canberra, Australia

Department of Agriculture (2013), Disease strategy: White spot disease (Version 2.0). In: Australian Aquatic Veterinary Emergency Plan (AQUAVETPLAN), Australian Government Department of Agriculture, Canberra, ACT

Diggles BK (2017). "Field observations and assessment of the response to an outbreak of White Spot Disease (WSD) in Black Tiger Prawns (Penaeus monodon) farmed on the Logan River in November 2016. FRDC project 2016/064 2017

Interim Inspector General of Biosecurity (2010), An examination of what caused a consignment of imported raw peeled prawns that tested positive for White Spot Syndrome Virus (WSSV) to be mistakenly released into Australia by the Biosecurity Services Group (BSG), Department of Agriculture, Fisheries and Forestry, Australia

Koopman (2017) FRDC Project “Collation of white spot syndrome virus testing from wild-catch re-imported prawns” 28 April 2017

Landos (2017) "Assessing compliance and efficacy of import conditions for uncooked prawn in relation to White Spot Syndrome Virus (WSSV)" for Australian Prawn Farmers Association, FRDC project 2016/066 (2017)

Stephens (2017) “A Plan for the Prawn Farming Industry’s Initial Response to the White Spot Disease Incident in Summer 2016-17. FRDC project 2016-266 Canberra 2017

WSD Scenario Planning Advisory Panel (2017) “White Spot Disease of Prawns; Queensland Response 2016-17; Scenario Planning Advisory Panel Report” for the Queensland Government, through the Department of Agriculture and Fisheries

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Table 1 Evidence of Effectiveness of Biosecurity Controls

Control point	2010 importation biosecurity control options (from 2009 IRA)	Effectiveness evidence
Pre-border	Sourced from countries or zones determined to the satisfaction of Australian government authorities to be free of white spot syndrome virus (WSSV), yellowhead virus (YHV), and Taura syndrome virus (TSV), and in addition, necrotising hepatopancreatitis bacterium (NHPB) if the product is not frozen (i.e. the product is chilled)	The 2009 IRA documented that WSSV survives freezing, as is further documented by Landos 2017), but the importation pathway was still allowed as an option. The disease risks assessed in 2009 are not static, are not current in 2017 and new forms of aquatic diseases emerge over time. Diggles (2017) and Landos (2017) report that the list of serious and emerging prawn diseases has expanded since the 2009 IRA to include such diseases as Acute hepatopancreatic necrosis disease (AHPND, formerly known as EMS), Yellowhead Virus -1 (YHV1), and Enterocytozoon hepatopenaei (EHP) as well as those retained for Risk Assessment. The likelihood of emergence of new aquatic diseases did not translate into more a cautious set of risk management options. Australia is a disease free zone. Approximately 5000 samples of Australia prawn products which have been processed overseas and reimported for sale on the domestic market have been tested for disease pathogens (including WSSV and YHV) in the past 5 years alone. None of these samples have returned positive results for WSSV or YH - Koopman (2017).
Pre-border	General health certification (to accompany each shipment of imported prawns) issued by the relevant Competent Authority in the exporting country, attesting that the prawns had been inspected, processed and graded in premises approved by and under the control of the Competent Authority, were free from visible lesions	It is assumed that General health certificates accompany each consignment but the integrity of those is in serious question: Landos (2017) provides evidence of product substitution, packages unmarked with country of origin and under-reporting of disease incursions in exporting countries.

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	associated with infectious disease and are fit for human consumption	
Pre-border	Highly processed, that is with the head and shell removed (the last shell segment and tail fans permitted) and coated for human consumption as follows: - breaded (crumbed) or battered, or - marinated to a minimum standard, or - processed into dumpling, spring roll, samosa, roll, ball or dimsum-type product,	Diggles (2017) provided evidence that full processing (removal of parts of the body) of green prawn products only reduces viral load by around half, which is not at all sufficient to prevent establishment of infections in susceptible species if there is failure to accurately detect and reject test-positive commodities at the border. Breading and other processes aimed to stop the pathway for use as recreational bait and to avoid border testing have not been sufficient. Evidence suggests that these treatments can be washed off and were applied to avoid testing at the border
Pre-border	Uncooked prawns imported for human consumption that are not considered to be highly processed be marked with the words 'for human consumption only' and 'not to be used as bait or feed for aquatic animals'.	Landos (2017) states that numerous uncooked and unprocessed imported prawn products were purchased from delicatessen windows which contained no such labelling, in addition to some pre-packed frozen commodities. Landos (2017) stated that this marks a rapid increase in purchasing behaviour of recreational anglers, thereby altering the volumes of "human consumption" product being diverted into bait use. Stephens (2017) reported that the *2002 National Survey of Bait and Berley Use by Recreational Fishers* commissioned by Biosecurity Australia across 8,000 Australian households found 6.8 percent of recreational used prawns sold for human consumption as bait. A 2007 *Follow-up Survey Focusing on Prawns/Shrimp* found there was a significant increase in the number of fishers using prawns sold for human consumption as bait/berley. Kewagama Research 2007 report suggests that labelling would make little difference to angler's diversion of these products into use as bait. The survey recorded 85.6% of angling respondents had no awareness of this regulatory requirement.
At-border	Cooked in premises approved by and under the	This option has not been taken as the preferred biosecurity

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or Post-border	control of an appropriate Competent Authority to a minimum time and temperature standard where all the protein in the prawn meat is coagulated and no uncooked meat remains	control for uncooked prawns
Pre-border AND At-border	Have had the head and shell removed (the last shell segment and tail fans permitted) and each batch tested on arrival in Australia and found to be free of WSSV and YHV: testing is based on the polymerase chain reaction (PCR) tests in the current version of the World Organisation for Animal Health (OIE) Manual of Diagnostic Tests for Aquatic Animals or equivalent, and a sampling regimen that would provide 95% confidence of detecting the agent if present at 5% prevalence.	Removal of body parts does not sufficiently reduce risk of disease infection if there is biosecurity failure to accurately detect and reject test-positive commodities at the border The fact that product from countries which have not declared freedom from WSSV could be released for retail sale following the return of negative test results from sampling undertaken by border officers left the risk management strategy wide open for failure. These potential failures are documented at “Importation issues that may have contributed to high rates of WSSV test-positive prawns in retail samples” on page 60 of Landos (2017) report. WSSV-infected frozen green prawns have travelled through border quarantine, at least in part due to attempts by some importers to evade detection by mislabelling high risk commodities and substituting known WSSV-free prawns for testing (Ref: Atkin 2017). Landos (2017) reports results that the level of positive imported commodities detected at retail was ~86.7% by qPCR (or ~65.7% using a more conservative measure) were still test-positive. These results are suggestive of a gross failure to accurately detect and reject positive commodities at the border, or illegal actions circumventing the border controls.

ATTACHMENT 2

Collation of white spot syndrome virus testing from wild-caught re-imported prawns

Matt Koopman

28/4/2017

ATTACHMENT 2

Collation of white spot syndrome virus testing from wild-caught re-imported prawns
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In submitting this report, the researcher has agreed to FRDC publishing this material in its edited form.

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Introduction

White Spot Disease (WSD) was observed on an Australian prawn farms on 22nd November 2016, and officially diagnosed for the first time on 1 December 2016 (Stephens, 2017[7]). During December and January, the disease spread through a number of prawn farms along the Logan River, Queensland. This detection had a wide range of implications affecting aquaculture, wild harvest and recreational sectors, importation of raw prawns and the bait trade. There is potential for long-term effect from a loss of confidence of consumers of Australian seafood, a lack of confidence in investment in the industry, and expensive capital improvements to enhance biosecurity of all Australian prawn farms (Stephens, 2017[7]).

Wild caught prawns that are re-imported into Australia are required to be tested for white spot syndrome virus, the virus that causes WSD. Examination of these data could reveal if any positive test results have been recoded to date.

Methods

Advanced Analytical Australia Pty Ltd undertakes routine testing for the largest re-importers of wild-caught prawns in Australia. Raw white spot syndrome virus (WSSV) testing results data since 1 January 2012 were requested from them, and consent for release of the data was provided by three prawn companies. The data was extracted from the Laboratory Information Management System (LIMS) on 27 April 2017, and provided on the same day. Results of yellow head virus (YHV) were also provided and presented here.

Data were check for obvious errors, resulting in the change of the year of testing of one batch of WSSV test results and one batch of YHV test results from the obviously erroneous 2105 to 2015 (the correct year was obvious given the date of other batches from the same consignment). Data from each company were pooled. Each company was contacted to request the original source of wild caught prawns. The fisheries from which prawns were caught were identified for two of the companies (either the Northern Prawn Fishery (NPF), or the Spencer Gulf Prawn Fishery (SGPF)), however the third could not distinguish between testing results of re-imported prawns from the NPF and from wild caught prawns caught either in the East Coast Otter Trawl Fishery or overseas. The company did confirm however that the majority of re-imported prawns were caught in the NPF (industry contact, pers. comm.).

The number of samples from each fisher are shown in Figure 1, noting that a small number of samples included in the NPF data were from wild caught prawns from east coast Queensland and wild caught prawns from overseas fisheries. All data provided are presented, aggregated by fishery and either by

[7] Stephens, L. Seafood CRC, 2017, A Plan for the Prawn Farming Industry's Initial Response to the White Spot Disease Incident in Summer 2016-17. Canberra 2017

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month (

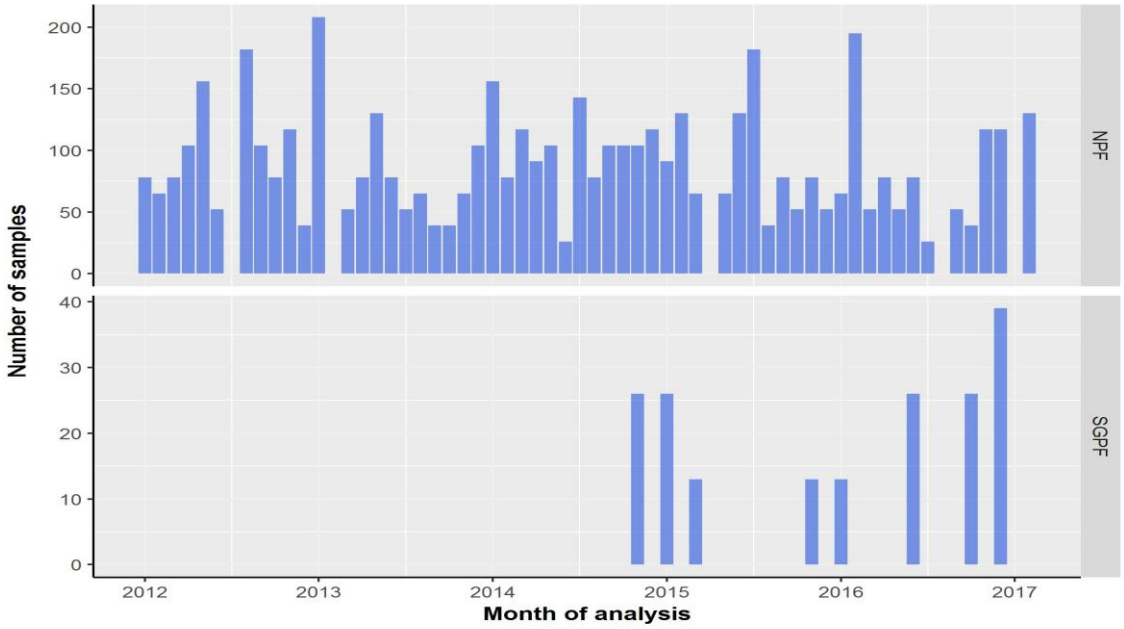

Figure **2**–Figure 5) or year (Table 1 and Table 2). "Number of samples" refers to the number of individual test results, which in the data provides were grouped into what I have called "Batches" of thirteen samples.

Results

There were no positive WSSV or WHV test results in the data provided by Advanced Analytical Australia Pty Ltd, which represents testing of wild caught prawns that were re-imported into Australia by three different companies (

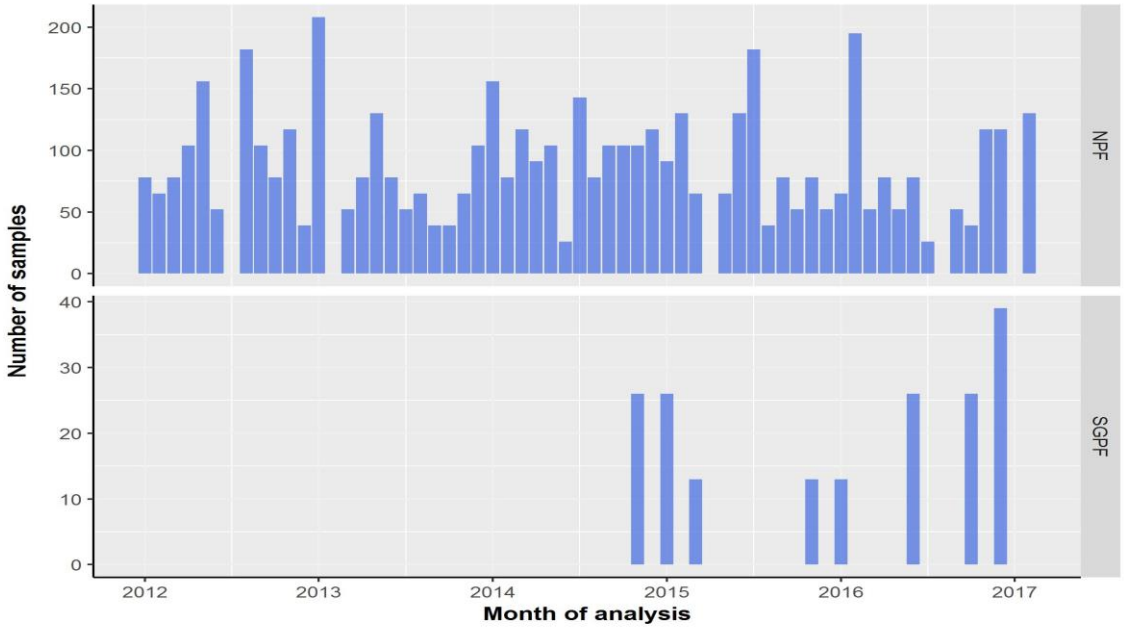

Figure **2**–Figure 5 and Table 1 and Table 2).

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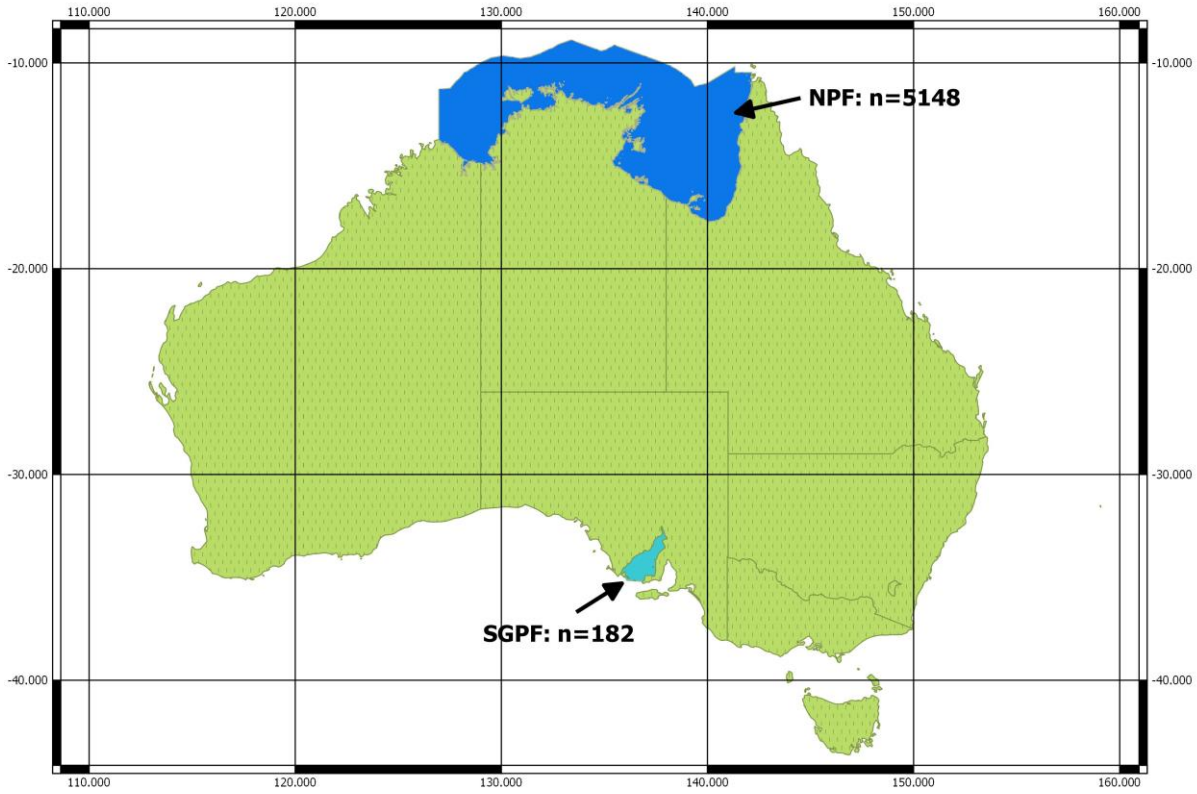

Figure 1. Number of samples tested for WSSV and YHV from the NPF and SGPF since January 2012. Note: (1) no samples that tested positive; (2) a small number of samples included in the NPF data were from wild caught prawns from east coast Queensland and wild caught prawns from overseas fisheries, however all tests results were negative.

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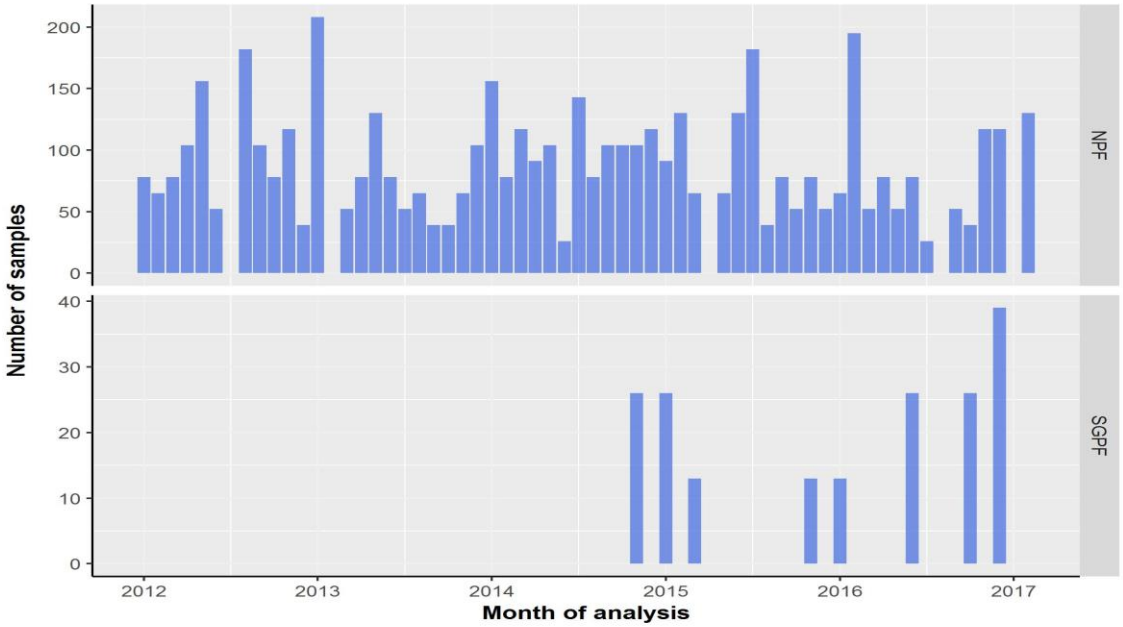

Figure 2. Number of re-imported wild catch prawn samples tested, and number of negative result for WSSV by month since January 2012. Note: (1) no samples that tested positive; (2) a small number of samples included in the NPF data were from wild caught prawns from east coast Queensland and wild caught prawns from overseas fisheries, however all tests results were negative.

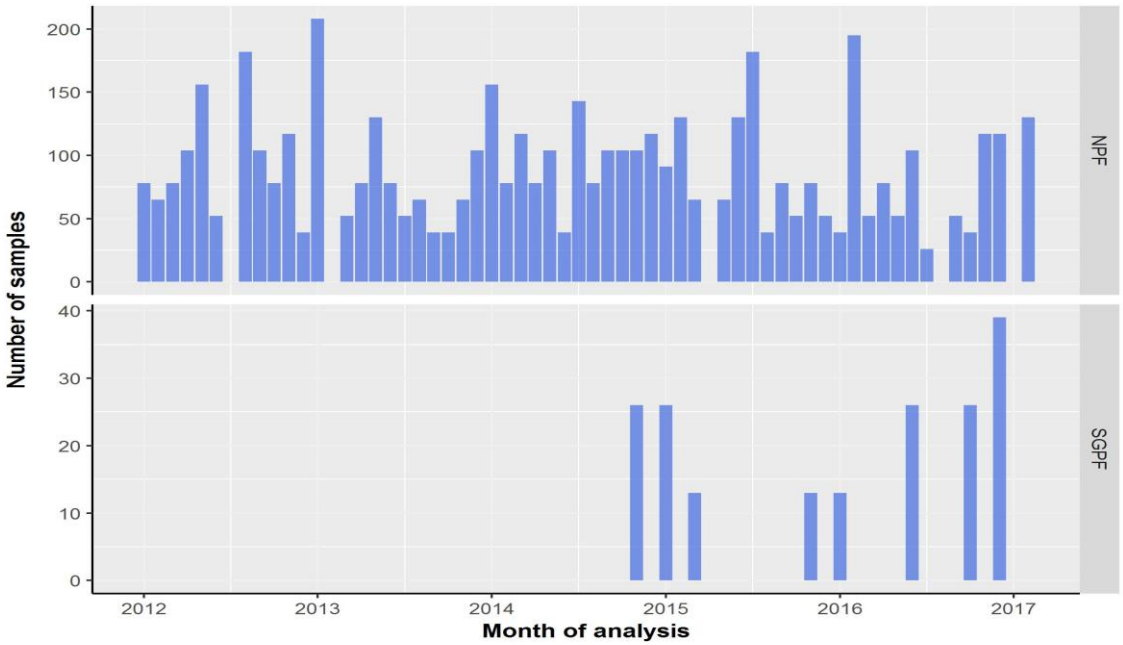

Figure 3. Number of re-imported wild catch prawn samples tested, and number of negative result for YHV by month since January 2012. Note: (1) no samples that tested positive; (2) a small number of samples included in the NPF data were from wild caught prawns from east coast Queensland and wild caught prawns from overseas fisheries, however all tests results were negative.

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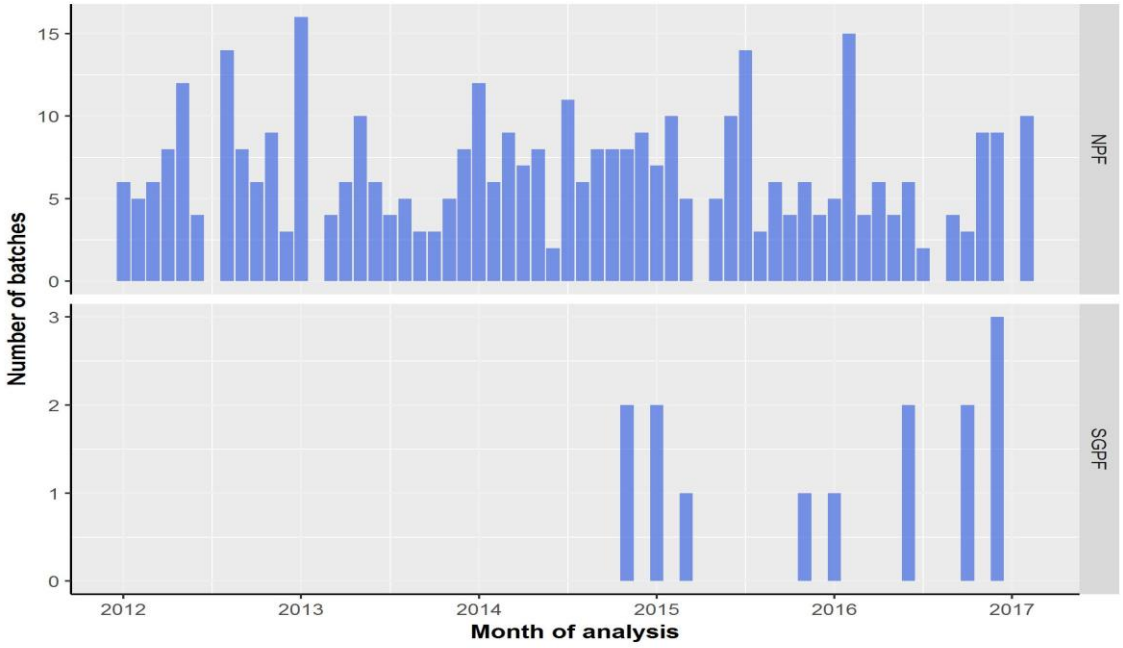

Figure 4. Number batches of re-imported wild catch prawn samples tested, and number of batches that returned a negative result for WSSV by month since January 2012. Note: (1) no samples that tested positive; (2) a small number of samples included in the NPF data were from wild caught prawns from east coast Queensland and wild caught prawns from overseas fisheries, however all tests results were negative.

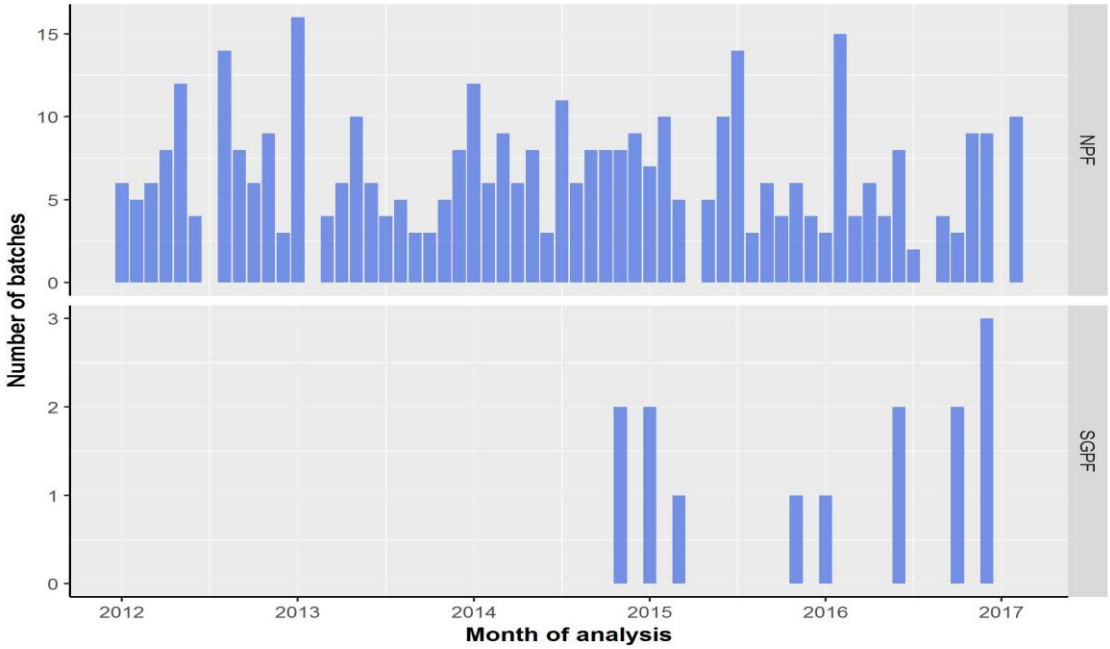

Figure 5. Number batches of re-imported wild catch prawn samples tested, and number of batches that returned a negative result for YHV by month since January 2012. Note: (1) no samples that tested positive; (2) a small number of samples included in the NPF data were from wild caught prawns from east coast Queensland and wild caught prawns from overseas fisheries, however all tests results were negative.

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Table 1. Results of samples tested for WSSV and YHV in re-imported wild catch prawns from the NPF and SGPF since January 2012. Note: (1) no samples that tested positive; (2) a small number of samples included in the NPF data were from wild caught prawns from east coast Queensland and wild caught prawns from overseas fisheries, however all tests results were negative.

Fishery	NPF				SGPF			
Test	WSSV		YHV		WSSV		YHV	
Result	Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive
2012	1053	0	1053	0				
2013	910	0	910	0				
2014	1222	0	1222	0	26	0	26	0
2015	962	0	962	0	52	0	52	0
2016	871	0	871	0	104	0	104	0
2017	130	0	130	0				
Total	**5148**	**0**	**5148**	**0**	**182**	**0**	**182**	**0**

Table 2. Number of re-imported prawns batches that tested negative to WSSV and YHV from the NPF and SGPF since January 2012. Note: (1) there were no samples that tested positive; (2) a small number of samples included in the NPF data were from wild caught prawns from east coast Queensland and wild caught prawns from overseas fisheries, however all tests results were negative.

Fishery	NPF				SGPF			
Test	WSSV		YHV		WSSV		YHV	
Result	Negative	Positive	Negative	Positive	Negative	Positive	Negative	Positive
2012	81	0	81	0				
2013	70	0	70	0				
2014	94	0	94	0	2	0	2	0
2015	74	0	74	0	4	0	4	0
2016	67	0	67	0	8	0	8	0
2017	10	0	10	0				
Total	**396**	**0**	**396**	**0**	**14**	**0**	**14**	**0**