



**Senate Standing Committee on Rural and
Regional Affairs and Transport**

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

**Submission by the
Queensland Seafood Industry Association**

12 May 2017

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Table of Contents

Terms of Reference	Contents	Pgs
	Forward	5
	Acknowledgements	6
	Abbreviations	7
	Commercial Seafood Industry Policy Issues	8
	About the Queensland Seafood Industry Association	9
A	Management of the emergency response and associated measures implemented to control the outbreak of White Spot Syndrome Virus	10
	A.1. Communication Breakdown	10-11
	A.2. Movement Restrictions	11-12
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	13
	B.1. How was WSSV introduced into South East Queensland	13-14
	B.2. The Federal Government were advised of the risks	14
	B.3. Department Failure	14-15
C	The adequacy of Commonwealth resourcing of biosecurity measures including Import Risk Assessments	16
	C.1. Seafood risk profile unacceptably high	16
	C.2. Import Risk Assessments	16-17
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	18
E	The impact of the outbreak on Australia's wild and farm prawn sectors	19
	E.1. WSD Outbreak Timing	19
	E.2. Regional Financial and Economic Scale	20
	E.3. Wild Fishery Enterprise Impacts	20-21
	E.4. Commercial Seafood Industry Structure	21-22
	E.5. Financial Impacts	22-23
F	The economic impact on Australian wholesalers and retailers	24
G	Domestic and foreign trade implications for Australian industries resulting from the suspension of importation of seafood and seafood	25

Terms of Reference	Contents	Pgs
	products, including, but not limited to, uncooked prawns and uncooked prawn meat in Australia	
	G.1. Domestic Trade Implications	25
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	26
I	Any related matters	27
	I.1. An Aquatic Emergency Animal Diseases Response Agreement: A Queensland Commercial Fishery Perspective	27-28
	I.2. Queensland Seafood Industry Representative Structure and link to an Aquatic Emergency Animal Diseases Response Agreement	28-30
	References	31
	Tables	
	1 Estimated GVP at risk in Moreton Bay due to WSD	21
	2 Wild-caught species by GVP in 2015	25
	Figures	
	1 Imported Prawn Quantities	16
	2 White Spot Disease Response: Movement Control Area	19
	3 Queensland Seafood Industry Structure	22
	Attachments	
	1 Movement Control Order 1_2016	
	2 Movement Control Order 2_2017	
	3 Letter to Minister Byrne_WSD_2016	
	4 Letter to Minister_WSD and Recreational Fishing_2017	
	5 Animal Biosecurity Secretariat_Biosecurity Australia_2017	

Forward

The Queensland Seafood Industry Association (QSIA) is pleased to be able to provide a submission to the Senate Standing Committee on Rural and Regional Affairs and Transport's inquiry into the biosecurity risks associated with the importation of seafood and seafood products (including uncooked prawns and uncooked prawn meat) into Australia.

The failure of the Australian biosecurity system was not caused by the Queensland seafood industry who did all they reasonably could do to prevent potential introduction of white spot syndrome virus (WSSV) amongst wild stocks by warning the authorities of the potential risks associated with the importation of green wild-catch seafood. The systemic failure occurred pre-border and post-border – outside of the scope of influence of the seafood industry but under the jurisdiction of government.

There are some 300 micro and small fishing related businesses across the Moreton Bay region impacted by WSSV. The commercial fishing businesses in the region are working in the Otter and Beam trawl and Mud and Blue Swimmer crab fisheries.

Through no fault of their own hundreds of business have had their domestic market changed and at least 20 businesses in the Logan River have had their incomes severely impacted since December 2016 and still no assistance from any level of government.

To try to make industry pay for a collective expensive insurance scheme after ignoring their concerns and the warnings they issued is reprehensible. Ten years ago, the Federal government about the risks of importing uncooked green prawns and yet our industry and our fisheries future was left exposed to WSSV.

This magnificent industry has been left out in the cold and based on the material cited in this submission. More importantly, the information provided by industry and scientific stakeholders suggests that the Federal government has breached its duty of care to industry.

Keith Harris

President
Queensland Seafood Industry Association

Acknowledgements

The development of this submission incorporated feedback and ideas developed across the Queensland seafood industry. On behalf of the QSIA, I would like to thank my Queensland colleagues for their feedback and ideas.

I would also like to thank my industry interstate colleagues for their insights and critical analysis of the submission.

This submission provides industry with an opportunity to highlight the issues raised by the detection of WSSV in the Moreton Bay region.

The systematic failures in Australian biosecurity arrangements as they relate to the seafood industry are clear. I hope this submission helps to rebuild the system for the benefit of the marine environment, industry and the hundreds of local commercial fishing businesses that are still enduring the impacts of WSSV.

Eric Perez

Chief Executive Officer
Queensland Seafood Industry Association

Abbreviations

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
ACPF	Australian Council of Prawn Fisheries
AEADRA	Aquatic Emergency Animal Diseases Response Agreement
AHA	Animal Health Australia
ALOP	Acceptable Level of Protection
APFA	Australian Prawn Farmers Association
BQ	Biosecurity Queensland
CFA	Commonwealth Fisheries Association
DAWR	Department of Agriculture and Water Resources
EAD	Emergency Animal Disease
EADRA	Emergency Animal Diseases Response Agreement
ECCIN	East Coast Crabfishers Industry Network
FRDC	Fisheries Research and Development Corporation
GoCCFA	Gulf of Carpentaria Commercial Fishermans Association
GVP	Gross Value of Production
IGB	Inspector-General of Biosecurity
IRA	Import Risk Assessment
MBSIA	Moreton Bay Seafood Industry Association
NPF	Northern Prawn Fishery Inc
NSWSIC	New South Wales Seafood Industry Council
NTSC	Northern Territory Seafood Council
PPA	Pear Producers Association
QSIA	Queensland Seafood Industry Association
QSMA	Queensland Seafood Marketers Association
SIC	Seafood Industry Council
TSIC	Tasmanian Seafood Industry Council
TFP	The Fishermans Portal
WAFIC	Western Australian Fisheries Industry Council
Wildcatch Fisheries SA	Wildcatch Fisheries South Australia
WSD	White Spot Disease
WSSV	White Spot Syndrome Virus

Commercial Seafood Industry Policy Issues

Policy Issues	Content	Pgs
1	The introduction of WSSV into South East Queensland is a fundamental failure of the Australian biosecurity system producing catastrophic impacts from prawn mortality on Logan River prawn farms and business disruption to wild-catch seafood produces from subsequent disease-containment measures. The commercial (wild catch) fishing business directly and indirectly impacted by this failure deserve compensation from the Federal Government for their department's gross mismanagement of these biosecurity risks.	10
2	Biosecurity communication processes need to improve to ensure the focus of the Australian biosecurity network is: <ul style="list-style-type: none">• the protection of the long-term health of the marine environment;• the protection of the commercial seafood industry; and• to avoid damage and disruption of domestic seafood markets.	11
3	Biosecurity arrangements at the State and Federal levels, as they relate to recreational fishing, need to impose stricter controls on the movement of seafood after a disease outbreak.	12
4	That the Federal Government undertake a full review of biosecurity arrangements as they relate to imported seafood product.	14
5	The IRA for prawns and crustacea need to be reviewed.	17
6	Based on the risks posed by imported, uncooked green prawn, all imported prawn products need to be cooked.	26
7	The export and re-importation of Australian green product to other countries should continue with safeguards in place to stop substitution and cross-contamination.	26
8	The wild catch sector should not sign up to an agreement against something that: <ul style="list-style-type: none">• industry does not own; and• industry cannot see, quantify or assess.	28
9	The key issue is the risk of imported product (spreading like WSD), and the respective legislation of government that allows trade and then impacts an industry through that trade.	28
10	To the detriment of commercial fishers Government appears to believe 1/3 Federal, 1/3 State and 1/3 Industry funding split is a fair split of responsibility for an emergency animal disease response. This is certainly not the view of industry.	28
11	It is impossible for the fishing industry as a whole to develop and aquatic EADRA given the variation in species, jurisdictions and geographical spread. Discussions between national seafood industry groups and government should continue.	28

About the Queensland Seafood Industry Association

QSIA is the peak body for the commercial fishing industry in Queensland. The association is funded by voluntary membership fees, research projects and government grants.

QSIA provides a link between industry and the State and Federal governments, non-government organisations, and other industry bodies. The QSIA Board is advised by commercial fishing committees (in the crab, net, line and trawl fisheries) whose members possess decades of industry experience.

The prime responsibility of the QSIA is to facilitate and act on behalf of industry on a whole range of issues including fisheries management, marine planning, fisheries legislation and management plans, licensing and access, native title, research and development, media statements, and positive industry promotion.

Term of Reference A

Management of the emergency response and associated measures implemented to control the outbreak of white spot syndrome virus.

A.1. Communication Breakdown

The sequence of events leading to the outbreak of WSSV and white spot disease (WSD) into the wild harvest fishery in the Logan River and later Moreton Bay seems to have been preventable. Evidence for this statement has been cited by Diggles (2017b) in a recent paper examining the disease outbreak on prawn farms in the Logan River region.

Communication between different levels of government with respect to issues like biosecurity are critical when disease incursions take place. Diggles (2017b, p.40) states that there was a breakdown of communication at the international border, noting:

In view of the situation at the international border with quarantine breakdowns involving uncooked prawn commodities, preparedness and heightened surveillance for exotic diseases could have been facilitated if Federal authorities had communicated the increased risk to state authorities.

This finding raises the following question – Why did Federal authorities delay communicating the increased risk profile for imported, uncooked prawn?

The initial movement control order in the Logan River initially impacted approximately twenty commercial seafood businesses in the beam trawl and crab fisheries. Industry's hope was that the Biosecurity Queensland (BQ) eradication processes might have contained the virus. This process was critically undermined if, as argued by Diggles (2017b, p.40) BQ were not alerted to a potential of increased risk of a virus incursion in South East Queensland. Diggles (2017b, p.40) stated:

Decisions made at the earliest stages of an incursion response may have significant impacts on the ultimate outcomes and chances of eventual eradication success. A rule of thumb may be (unless proven otherwise) to imagine or assume the worst case scenario and attempt to cater for it, while hoping for the best.

Policy Issue 1

The introduction of WSSV into South East Queensland is a fundamental failure of the Australian biosecurity system producing catastrophic impacts from prawn mortality on Logan River prawn farms and business disruption to wild-catch seafood produces from subsequent disease-containment measures. The commercial (wild catch) fishing business directly and indirectly impacted by this failure deserve compensation from the Federal Government for their department's gross mismanagement of these biosecurity risks.

**Policy
Issue 2**

Biosecurity communication processes need to improve to ensure the focus of the Australian biosecurity network is:

- the protection of the long-term health of the marine environment;
- the protection of the commercial seafood industry; and
- to avoid damage and disruption of domestic seafood markets.

A.2. Movement Restrictions

QSIA remains concerned that the response from BQ was compromised by the almost unrestricted movement of recreational fishing in the initial movement control area. This is also continuing to be the case in the expanded movement control area in Moreton Bay. Diggles (2017b, p.40) noted that restricting the movement of people and animals is critical noting:

Restricting activities of people and movements of animals in the control zone surrounding affected farms is important (mentioned in relation to unrestricted movements of recreational fishers in the inlet canals for at least one week after WSSV was known to be present, and failure to erect signage advising no movements of crustaceans for more than 3 weeks). Enforcement is necessary and useful for preventing movements of potentially infected animals and materials, as well as for gathering information, as shown by the subsequent detections of recreational fishers using WSSV positive imported prawns as bait near the infected farms.

On 14 December 2016, QSIA wrote to Minister Byrne asking¹, ‘that there is no take of any seafood (fish, crabs or prawns) by either commercial or recreational fishers under the movement control order issued by Biosecurity Queensland’. The government more for political than policy reasons chose not to completely close down fishing activity in the Logan River closure area but could have done so.

It is clear that the State government allowed business as usual for recreational fishing groups rather than take the broader, strategic view of restricting the movement of seafood from the Logan River movement control area.

Additional correspondence was sent to Minister Byrne on 27 February 2017 again seeking action on recreational take. QSIA posed questions that are still relevant under current circumstances²:

- What is the rationale that allows recreational fishing to continue when WSD remains a risk to crustacean stocks?
- Does Department of Agriculture and Fisheries³ and/or BQ have the boating and fisheries staff to monitor recreational fishers in the movement control area?
- What is the government’s long-term priority – continued recreational fishing or ensuring that WSD has been eliminated from the Logan River which is to the benefit of all users of the marine environment?

¹ Please refer to **Attachment 3**.

² Please refer to **Attachment 4**.

³ Queensland fisheries management agency.

**Policy
Issue 3**

Biosecurity arrangements at the State and Federal levels, as they relate to recreational fishing, need to impose stricter controls on the movement of seafood after a disease outbreak.

Term of Reference 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.

B.1. How was WSSV introduced into South East Queensland

The origin of WSSV may never be known but there has been speculation about its source. However, this does not mean that some pathways are more likely than others to be the source of disease entering Australia. Potential sources of WSSV that have been discounted⁴:

The apparent absence of WSSV in crustaceans sampled from the Brisbane River to date, despite intensive sampling (DAF QLD 2017) suggests that the pathway of entry into the Logan River and/or Moreton Bay was not likely to be via introduction by ballast water discharge or biofouling of shipping at the Port of Brisbane. Nor does it appear likely that the virus was introduced via infected broodstock prawns or aquaculture feed (Diggles 2017b). The fact that WSD has never been reported in prawn farms on the Logan River prior to November 2016 suggests that WSSV was not present in the Logan River prior to when the last prawns of the 2015/16 season were harvested, which was sometime around April 2016. This suggests that sometime between April 2016 and November 2016, WSSV was introduced into the Logan River system. In the absence of prawn farming elsewhere in Moreton Bay (and its associated active and intensive disease surveillance), it is impossible to determine the timing of introduction of WSSV into other parts of northern Moreton Bay (e.g. Redcliffe, Deception Bay).

The irregular distribution of WSSV at multiple sites in the Logan River and in Moreton bay regions is consistent with multiple introductions via recreational use of imported prawns as bait and burley. Dr Diggles argued that⁵, 'there is a strong possibility that the disease incursions in the Logan River and Moreton Bay were caused by use of imported uncooked prawns as bait or burley by recreational anglers'.

The more disturbing element of Dr Diggle's findings are the factors he identifies including⁶:

- Despite biosecurity protocols requiring testing of 100% of shipments of frozen green prawns imported into Australia there is evidence that WSSV-infected frozen green prawns were transiting through border quarantine resulting in >85-86% of imported green prawns sold at the retail counter at supermarkets in Australia in November/December 2016 being WSSV positive⁷;

⁴ Diggles 2017b, p.7.

⁵ Diggles 2017b, pp.7-8.

⁶ Ibid.

⁷ Future Fisheries Veterinary Services 2017. FRDC 2016-066 – Assessing compliance and efficacy of import conditions for uncooked prawn in relation to WSSV.

- Viable WSSV has been recovered from crustacean tissues (including commodity prawns) frozen at both -20 and -70°C after months to several years storage and used to successfully infect susceptible crustaceans;
- Viral loads of between 10^8 - 10^{10} viral copy units/g tissue typically occur in infected imported green prawns;
- Removal of the head section does not reduce WSSV viral load on a per weight basis, as viral load in prawns is similar in either heads (49% of total virus) or tails (51% of total virus); and
- The evidence that the number of recreational anglers fishing with imported green prawns purchased as seafood from supermarkets was increasing in the early 2000s.

The use of uncooked imported prawns as bait has become a common practice amongst recreational fishers and supported by the sale of imported prawn amongst some retail supply chains. This uncontrolled activity provides a direct pathway for introduction of large quantities of WSSV into our waterways in multiple locations.

B.2. The Federal Government were advised of the risks

QSIA warned the Federal Government regarding the risk of uncooked prawns. This view was highlighted by one of the world's most pre-eminent institutions in shrimp disease research, Professor Donald V Lightner⁸ who noted:

I view imported commodity shrimp/prawns as a significant and high risk to shrimp aquaculture, to aquatic ecosystems and to fisheries. My lab has published a number of papers to fill in knowledge gaps identified in government risk assessments. My lab and others have confirmed the frozen commodity shrimp/prawn products are anything but safe commodities. The awareness is increasing that there are direct pathways for disease introduction to wild or farmed shrimp/prawns with imported infected shrimp/prawns being used as bait or as waste from value added reprocessing of these products.

This advice was made available to the Federal Government and seems to have been ignored; the consequence of which has been the introduction of WSSV into Australia.

Policy Issue 4	That the Federal Government undertake a full review of biosecurity arrangements as they relate to imported seafood product.
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B.3. Department Failure

Evidence provided by Ms Raelene Vivian, First Assistant Secretary⁹, Compliance Division of the Department of Agriculture and Water Resources (DAWR) to the Senate Rural and Regional Affairs and Transport Legislation Committee stated that officers themselves were supposed to select cartons of prawns to sample and in some cases, they were being handed the carton:

⁸ QSIA correspondence to Animal Biosecurity Secretariat, Biosecurity Australia, 19 February 2007, pg.2, please refer to **Attachment 5**.

⁹ Hansard 28 February 2017, p.128, Senate Rural and Regional Affairs and Transport Legislation Committee.

Ms Vivian: We certainly looked at what our officers were doing, along with what the importer and the suppliers were doing. What I would say is out of the investigation we did discover early on that some of our officers were not following their work procedures. I am not going to the integrity of the officer. What we discovered at times is when they turned up to the premises where the frozen prawns were being held their instructions were to go in and select the sample but we discovered in some cases they were being handed the sample.

Ms Vivian's response clearly states that some importers engaged in illegal conduct which should have triggered more questions around:

- How often (over how many years) was sample substitution taking place?
- What were the implications for border control?
- Was the behaviour typical of import businesses or a symptom of a few rogue import businesses?

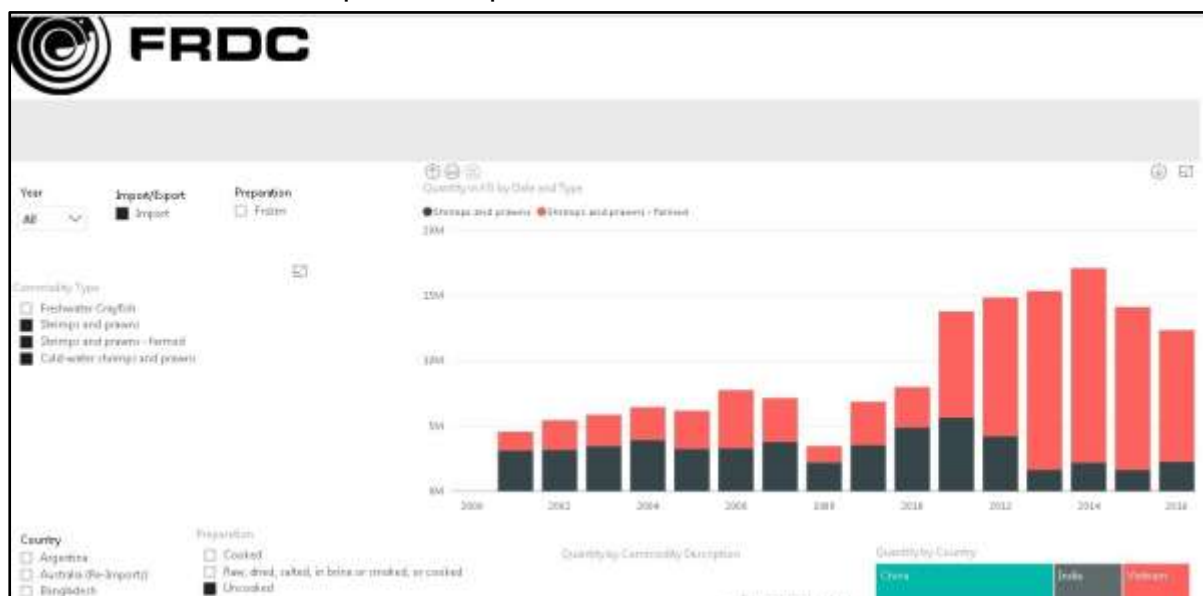
Term of Reference C

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

C.1. Seafood risk profile unacceptably high

The Commonwealth's use of a testing program for imported uncooked prawns has posed a higher risk for the Australian wild catch sector requiring greater enforcement in terms of biosecurity at the international border and post-border¹⁰.

Figure 1.
 Quantities of uncooked prawns imported between 2001-2016



Source: FRDC 2017¹¹.

With the increase in uncooked prawn imports as highlighted by the Fisheries Research and Development Corporation (FRDC) data highlighted in Figure 1, did the Commonwealth ensure that tests were updated during the increase in the volume of trade in uncooked prawns?

C.2. Import Risk Assessments

QSIA supports the view of the Australian Council of Prawn Fisheries (ACPF) that the IRA is inadequate. The ACPF noted the following deficiencies¹²:

- The IRA was functionally insufficient to control the biosecurity risk.
- Sanitary processes (testing) 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).

¹⁰ Diggles 2017a, pg.12.

¹¹ FRDC (2017). Australian Seafood Trade Database. <http://frdc.com.au/trade/Pages/Crustacean-Full.aspx>

¹² ACPF 2017, pg.4.

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

QSIA also supports the idea that the failure of the IRA is a result of a combination of process, policy and resourcing weaknesses that need to be addressed¹³. This failure has led to varying financial impacts to almost 300 commercial fishing businesses in Moreton Bay.

From a policy perspective, it seems the facilitation of trade has trumped the protection of Australian commercial fisheries. Helen Jenkins, Executive Officer, Australian Prawn Farmers Association (APFA) stated that the IRA has failed the Australian seafood industry by stating¹⁴:

Back in 2009 when the prawn import risk analysis was finalised, APFA lobbied against what industry perceived to be a flawed assessment and disagreed with the methodology and science used to justify the IRA as weak and an ineffective tool, allowing the facilitation of trade rather than the protection of Australia and its industries from a disease incursion. APFA highlighted that the biggest disease risk pathway for an Australian incursion then was from green imported prawns easily purchased at retailers and used as bait by recreational fishers.

**Policy
Issue 5**

The IRA for prawns and crustacea need to be reviewed.

¹³ ACPF 2017, pg.8.

¹⁴ APFA 2017, pg.1.

Term of Reference 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 post-entry surveillance of imported product is sub-standard and is part of the overall failure of the biosecurity system as it relates to¹⁵:

Supermarkets source of WSSV positive imported prawns

- Despite biosecurity protocols requiring testing of 100% of shipments of frozen green prawns imported into Australia, WSSV-infected frozen green prawns were transiting through border quarantine resulting in >50-73.6% of imported green prawns sold at the retail counter at supermarkets in Australia in November/December 2016 being WSSV positive.

Limited testing increased risk of WSSV entering wild caught fisheries

- There was no testing required for other risky products like marinated or breaded prawns or soft shelled crabs, all of which have similar risks of containing viable WSSV given the large host range of the virus, which affects all decapod crustaceans.

Underestimation of risk

- Federal biosecurity authorities have not only underestimated risk and failed to deliver an effective testing program, they also have no control over end use once these risky products clear quarantine and/or are sold by retail stores.

Imported product commonly used as bait and burley

- It is well known that recreational anglers commonly use supermarket bought seafood (including prawns) for bait and burley.

Limited to no education of recreational anglers of risk

- Anglers assume that whatever is sold in supermarkets is safe to eat and use however they see fit, and the activity of using imported seafood as bait is not illegal.

¹⁵ Diggles 2017a, pp.13-14.

Term of Reference E

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

E.1. WSD Outbreak Timing

Since the first positive recording of the disease in early December 2016, the outbreak has had a direct financial and economic impact on prawn farms and wild fishers (prawn and crab fishers only) in the Logan River Region and southern Moreton Bay. The outbreak occurred at a time when farmers and fishers were nearing their 2016-17 seasonal productivity peak, with expectations to service the forthcoming summer's seafood demand at optimum prices.

Figure 2
White Spot Disease Response: Movement Control Area



Source: DAF 2017.

E.2. Regional Financial and Economic Scale

The Logan Region is a significant contributor to national crustacean seafood supply and the initial movement control order has led to financial impacts on Logan River beam trawl and crab fishers.

The emergence of WSD continues to create complex social and economic impacts on farmers, fishers, their communities and supply chain partners. This complexity drives financial impacts, direct and indirect that are still evolving. The seafood product supply chains from the region are:

- **Wild Catch Prawns:** ~30 tonnes of wild catch prawns are harvested annually from the Logan River and related estuary in the southern Moreton Bay. The main species (Banana, Bay, Greasyback, and School Prawns) are harvested by beam trawling at a landed value of \$250,000 per year. This harvest serves regional fresh seafood markets (~15%), and recreational and commercial fishing bait markets (~85%).
- **Wild Catch Crabs:** ~200 tonnes of wild catch crabs are harvested annually from the Logan River and related estuary in the southern Moreton Bay. The main species (Mud, and Blue swimmer crabs) are harvested with an aggregate live landed value of \$2-3 million, subject to seasonal market conditions in the main fresh seafood markets of Brisbane and Sydney.

Logan River region commercial fishers schedule their live and fresh seafood harvests to meet peak summer consumer demand. All wild crabbers target the three festival periods when Australians increasingly seek out seafood – Christmas, Chinese New Year, and Easter.

Commercial fishing enterprises must now face difficult facts about today's financial position, as well as complex strategic choices to optimise tomorrow's investment returns. At the date of this report WSD decontamination measures on farms are complete, but WSD eradication and "disease free status" are remote aspirations.

Determining the extent of the WSD virus's distribution across the regional inshore wild fishery is still a work in progress. If the disease is not proven to be eradicated in two years, the regulatory and financial imposts of control and containment of the disease are very onerous for Moreton Bay fishers, and ultimately for crustacean producers across Australia.

Precise financial impacts are still plaguing commercial fishers. Commercial fishing businesses are often mixed family enterprises. Some commercial fishers also have operational interests in multiple harvest licences, or are part-time employees in a separate local industry.

E.3. Wild Fishery Enterprise Impacts

The Table 1 summarises the already impacted (i.e. Logan Region) and the "at risk" wild fisheries elsewhere in the bay and Brisbane River, by species, harvest volume (#

or kg) and gross value of production (GVP)¹⁶. The data is drawn from the Queensland Department of Agriculture and Fisheries, and presents average volumes and values over the last three years.

The data indicates that the total commercial wild fishery gross value of production (“impacted” and “at risk”) across the whole extended control zone is in the order of \$20.5 million per annum.

Table 1.
Estimated GVP at risk in Moreton Bay due to WSD

Fishery	# Active licences	Catch	GVP	Market price \$/unit	Format
Beachworm	17	231,059 (*)	\$346,589	\$1.50	Green
Bloodworm	24	314,561 (*)	\$471,842	\$1.50	Green
Yabby	14	1,024,622 (*)	\$133,201	\$0.13	Green
Mud Crab	72	148,000 (kg)	\$2,960,000	\$20	Green
Blue Swimmer Crab	68	246,000 (kg)	\$2,460,000	\$10	Cooked + Green
Otter Trawl**	73	774,530 (kg)	\$13,167,010	\$17	Cooked 80% (mostly for human consumption)
Beam Trawl***	23	181,757 (kg)	\$908,785	\$5	Green 80% (mostly to bait)
Estimated GVP at risk			\$20,447,426		

Notes: * Number of Beachworms, Bloodworms and Yabbies. ** Otter trawl target Banana, Tiger, Bay, Eastern King and Endeavour prawns. *** Beam Trawl target Greasy Back, Bay, Banana and School prawns.

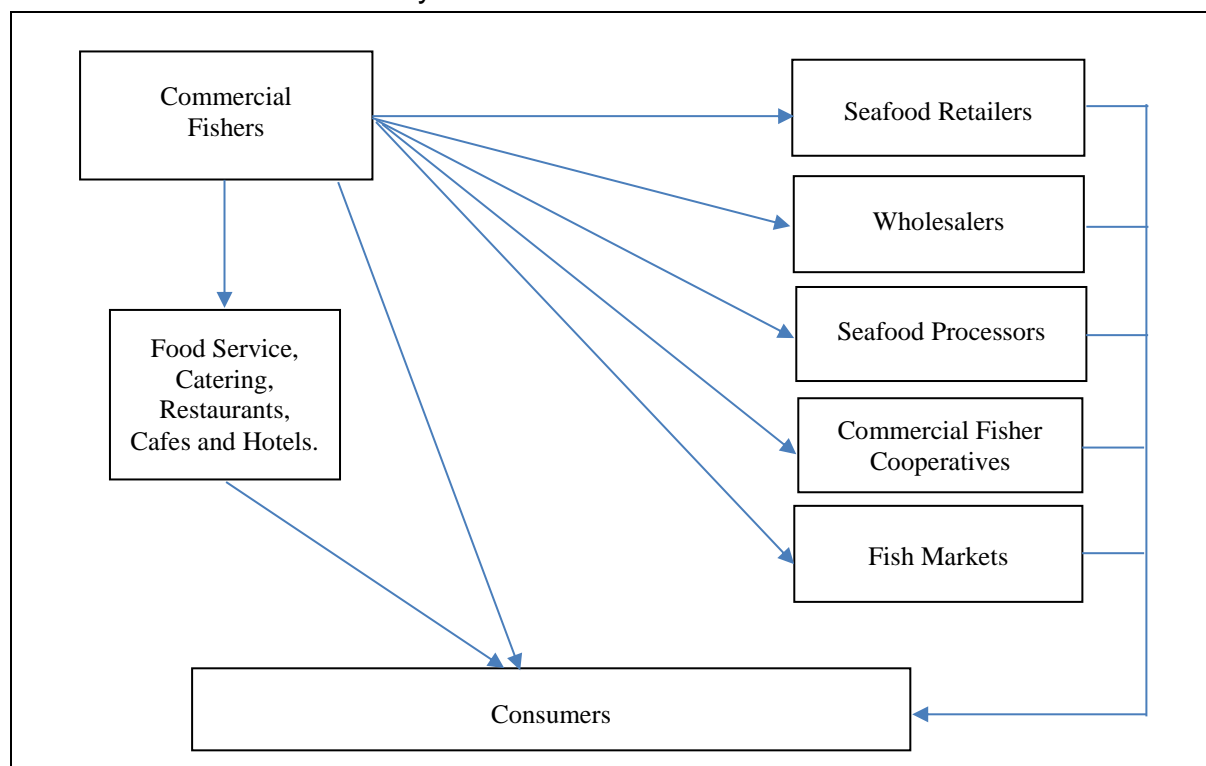
Source: Department of Agriculture and Fisheries – Fisheries Statistics.

E.4. Commercial Seafood Industry Structure

The introduction of WSD has required changes to how commercial fishers interact with the seafood supply chain. Figure 3 provides a basic overview of the connections between the commercial fishers in Moreton Bay and other businesses across the Australian seafood supply chains.

¹⁶ The GVP is calculated by multiplying the weight of production by the landed unit value. The landed unit value is defined as the beach price for fish species caught in wild-catch fisheries and the farmgate price for fisheries and aquaculture products produced in aquaculture establishments. These prices broadly reflect the unit prices that fishers receive for their catch or that aquaculture farmers receive for their production. The unit landed value does not include any margins associated with the marketing (including freight) and services added when fisheries and aquaculture production are processed and on-sold. The use of landed value (beach price) in deriving GVP common across jurisdictions. This definition of GVP was sourced from the Australian fisheries and Aquaculture Statistics 2016, pg.14.

Figure 3.
Queensland Seafood Industry Structure and Links



Source: Adapted from “Australian Seafood Market Structure” market conceptualisations developed by Ruello 2008 and Spencer and Kneebone 2007.

The economic activity generated by the commercial seafood sector has been addressed in the main body of this submission. It is important to reinforce this message; at each node of commercial activity depicted in Figure 3 there is an income stream generated.

E.5. Financial Impacts

The December 2016 discovery of WSD resulted in immediate closure of Logan River and estuary waters to commercial crustacean (prawn and crab) fishers. Independent and confidential consultation with all individual fishers and families has commenced.

Operational and financial data is now being gathered from fishers, their accountants, state agencies that hold and manage confidential log book data, supply chain partners, and local input and service companies. Detailed estimates of direct financial costs and broader economic impacts are not yet available, and are expected to be clarified between May and June 2017.

For licensed commercial inshore trawl and crab fishers in the Logan River and Moreton Bay region WSD has resulted in the following operational and industry impacts:

- Elimination of green markets amongst seafood retailers, wholesalers, fish markets, cooperatives and food service industry.
- The closure of bait supply, wholesale and related supply chain enterprises and related forward commitments.

- The standing down and idle mooring of some vessels and equipment.
- The movement of their effort (i.e. vessel, equipment, captains and deck hands, infrastructure, fishery access rights) to another part of Moreton Bay, the Brisbane River or elsewhere. These new fishery locations and costs (e.g. mooring and infrastructure access costs, extra fuel and on-water man-hours) are now being mapped and financial impacts estimated.
- Additional costs incurred to chlorinate vessels, freezers, wholesale facilities, and equipment at the request of biosecurity regulators.
- The decision by fishery families to bring forward retirement from the industry, and early sale or disposal of vessels and fishing rights and equipment.
- Loss and destruction of all bait prawn inventory by retail and wholesale businesses.

Term of Reference F

The economic impact on Australian wholesalers and retailers.

QSIA cannot provide definitive comment on the impacts of WSD on retail and wholesale seafood businesses.

The QSMA has indicated it will provide its own submission to the inquiry and will add another dimension to the impacts of WSD.

Term of Reference 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.

G.1. Domestic Trade Implications

Once WSSV was introduced into South East Queensland other States (e.g. Western Australia), moved to protect themselves by implementing controls on movements of uncooked crustaceans and other WSSV carriers from the area to try to prevent WSSV incursions into their own waters¹⁷.

The Department of Fisheries Western Australia noted¹⁸, ‘unless tested and certified free of WSD, none of these products from the wild, farmed or processed in Queensland can be imported into Western Australia for human consumption or bait’. This reaction eliminates the live market trade from Queensland prawns and crabs. Under the *Animal Diseases and Animal Pests (Emergency Outbreaks) Act 1991* the New South Wales Government places restriction on the importation into New South Wales of any uncooked decapod crustaceans or polychaete worms.

It is understandable that any state would move to protect their crustacean fisheries as the national crustacean fisheries GVP are valued at over \$991 million.

Table 2.
Wild-caught species by GVP in 2015

	Prawn (\$m)	Rock Lobster and Lobster (\$m)	Crabs (\$m)	Other Crustaceans (\$m)
NSW	19.0	12.0	-	9.0
VIC	-	24.0	-	5.0
QLD	63.0	-	29.0	18.0
SA	36.0	125.0	-	15.0
WA	37.0	386.0	-	7.0
TAS	-	89.0	-	5.0
NT	-	-	5.0	0.2
Commonwealth	107.0	-	-	-
Totals	262.0	636.0	34.0	59.2
Grand Total	991.2			

Source: Current Australian fisheries and aquaculture statistics¹⁹.

¹⁷ Department of Fisheries Western Australia 2017 noted: ‘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’.

¹⁸ Ibid.

¹⁹ DAWR and ABARES 2016, pgs. 26, 30, 33, 37, 41, 44, 48 and 50.

Term of Reference 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 damage to the failure of the biosecurity system as it relates to uncooked, green prawn imports is that there is no acceptance of uncooked domestic product from the WSSV movement control area. QSIA made this point in its submission to the Inspector-General of Biosecurity's (IGB) review of the circumstances leading to the 2017 suspension of uncooked prawn imports into Australia and the biosecurity considerations relevant to future trade in uncooked prawns.

QSIA made the following statements in its submission to the IGB review²⁰:

- QSIA does not oppose the importation of seafood into Australia but does support calls for more stringent biosecurity safeguards for imported product. The focus of biosecurity, as always, needs to be on the protection of domestic wild harvest and, aquaculture sectors in Australia.
- QSIA is not opposed to the export and re-importation of Australian green product to other countries given the majority of Australian prawn stocks are white spot free. There is of course the need to ensure there are safeguards in place to stop substitution and cross-contamination.

Policy Issue 6	Based on the risks posed by imported, uncooked green prawn, all imported prawn products need to be cooked.
Policy Issue 7	The export and re-importation of Australian green product to other countries should continue with safeguards in place to stop substitution and cross-contamination.

²⁰ QSIA submission to the IGB review April 2017, p.11.

Term of Reference I

Any related matters.

I.1. An Aquatic Emergency Animal Diseases Response Agreement: A Queensland Commercial Fishery Perspective

According to Animal Health Australia (AHA)²¹, an Emergency Animal Diseases Response Agreement (EADRA) is a contractual arrangement signed in 2002 that brings together the Australian, State and Territory Governments and livestock industry groups to respond to emergency animal disease (EAD) incursions.

The EADRA covers 66 categorised animal diseases and 23 signatories to a deed (governments and industry bodies). The main benefit of the Agreement is the ability to respond quickly and effectively to an EAD incident²².

QSIA understands that the ACPF has acted as an observer in the AHA/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 (e.g. meat and pork). Commercial seafood industry bodies interests are currently represented by the National Seafood Industry Alliance (NSIA) with respect to EADRA discussions and requests/asks/insists that the risks and benefits to the wild catch sector are fully discussed.

QSIA also understands that 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. 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.

The benefits and costs of developing an aquatic emergency animal diseases response agreement (aquatic EADRA) are not clear. Commercial fishers pay for a right to access a Crown resource, and are cost recovered (through licence fees) for the resource to be managed and protected sustainably.

It should be understood that wild harvest fisheries, industry's rights as they relate to the marine resource can be summarised as:

- Commercial fishers do not have tenure they have a right to fish – a right to go fishing, it is not a guarantee of being able to catch fish.
- Commercial fishers therefore do not 'own' the marine resource.

²¹ AHA manages the EADRA, a contractual arrangement between Australia's governments and industry groups to collectively reduce the risk of disease incursions and manage a response if an outbreak occurs. see the [AHA](#) website.

²² Ibid.

The QSIA understand that this aspect alone has seen considerable lengthy discussions between the NSIA and government about how a funding agreement should or should not be developed and there is a long way to go to agree this.

All EADRAs are an insurance scheme, and whether you join depends heavily on the annual premium versus the risk.

Policy Issue 8	The wild catch sector should not sign up to an agreement against something that: <ul style="list-style-type: none">• industry does not own; and• industry cannot see, quantify or assess.
Policy Issue 9	The key issue is the risk of imported product (spreading like WSD), and the respective legislation of government that allows trade and then impacts an industry through that trade.
Policy Issue 10	To the detriment of commercial fishers Government appears to believe 1/3 Federal, 1/3 State and 1/3 Industry funding split is a fair split of responsibility for an EAD response. This is certainly not the view of industry.
Policy Issue 11	It is impossible for the fishing industry as a whole to develop and aquatic EADRA given the variation in species, jurisdictions and geographical spread. Discussions between national seafood industry groups and government should continue.

I.2. Queensland Seafood Industry Representative Structure and link to an Aquatic Emergency Animal Diseases Response Agreement

The Queensland seafood industry is represented by a number of representative groups including:

- QSIA.
- QSMA.
- Moreton Bay Seafood Industry Association (MBSIA).
- Gulf of Carpentaria Commercial Fishermen Association (GoCCFA).
- The Fishermen Portal (TFP).
- East Coast Crabfishers Industry Network (ECCIN).

Some groups have a State-wide membership (e.g. QSIA, QSMA and TFP); some are regionally focussed (e.g. GoCCFA and MBSIA). There are businesses in the pre-and post-harvest sectors of industry that are not affiliated to any group.

The key dynamics of membership in Queensland commercial fisheries associations:

- Membership to any Queensland fisheries organisation is voluntary; and
- Each industry group relies on a mix of voluntary membership fees, research projects, Local, State or Federal government grants.

Each representative group engages in policy and legislative issues as they present themselves or provide submissions to government reviews. Collaboration amongst these groups varies depending on the fishery issue.

Current industry discussions regarding biosecurity matters is limited given that biosecurity policy discussions take place primarily amongst government agencies²³. QSIA understands that there is a clear split in responsibilities for biosecurity²⁴:

- The management of pre-and post-border import arrangements are managed by the Federal Government; and
- The management of post-border biosecurity issues rests with State governments.

The role of industry and government as they relate to biosecurity was identified in the Senate Standing Committees on Rural and Regional Affairs and Transport's public hearings held in Brisbane. The issue of not having an aquatic EADRA was raised at the public hearing²⁵:

Senator O'SULLIVAN: So let us explore why it cannot be advanced, and let me do this quickly. Would it be that you have at least three and perhaps four organisations who would have to agree on the terms and conditions for you to enter into the deed?

Senator O'SULLIVAN: Mr Perez, I am afraid you cannot leave anything at the doorstep of government in relation to this, in my view, and I think you need to get on with it urgently to bring the relevant stakeholders in your industry at least to agree on what your response is going to be to an offer from the state government that may or may not include adequate compensation to your industry members.

For the reasons outlined in section I.1 in policy issues 8 through 11 developing an aquatic EADRA is not suited to the context and structure of industry operations. At each linkage point there will be various views on establishing an aquatic EADRA, and given there is no aquatic EADRA suggests the deed is not an offer that is in the best interests of industry and is geared only to reduce the costs of biosecurity threats for government.

The introduction of WSSV was not the outcome of any industry failure. The inability to develop an aquatic EADRA stems from a resistance to pay for a mythical clean up after failure of the national biosecurity system. The reality is that once WSSV is in the

²³ The Commonwealth has responsibility for risk management measures pre-border and at the Australian border and associated compliance and enforcement. Council of Australian Governments (COAG) – Intergovernmental Agreement on Biosecurity.

²⁴ Ibid.

²⁵ Senate Standing Committees on Rural and Regional Affairs and Transport – Public Hearing 10 April 2017, p.25.

natural environment there is very little that can be done – except to shut down and restrict fishing activities so that it does not spread.

Do government really expect industry to pay for a process that simply shuts them down? Additionally, it is not practical to detect the introduction of disease into natural populations and the associated impact on the stock size, because it is impossible to see the scale of mortality. In the WSSV case, it was infection of prawn farms that allowed clear detection of the existence of the virus in Australia, through dramatic mortality of prawns in ponds.

It is not clear whether the subsequent trace detections of the virus in the natural environment would have otherwise been noticed. Certainly, such detection close to the farms was largely a result of infection overflow from the farms, rather than an indication of the level of pre-existing background infestation.

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