

The Senate

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Rural and Regional Affairs  
and Transport  
References Committee

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

Interim report

June 2017

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## Abbreviations

AAA	Advanced Analytical Australia
AAHL	Australian Animal Health Laboratory
ALOP	Appropriate Level of Protection
APFA	Australian Prawn Farmers Association
Aquatic CCEAD	Aquatic Consultative Committee on Emergency Animal Diseases [AqCCEAD]
AQIS	Australian Quarantine and Inspection Service
AQUAVETPLAN	Australian Aquatic Veterinary Emergency Plan
BA	Biosecurity Australia
Beale review	One Biosecurity: A Working Partnership. The Independent Review of Australia's Quarantine and Biosecurity Arrangement (September 2008)
BIMS	Biosecurity Incident Management System
Biosecurity Act	<i>Biosecurity Act 2015</i> (Cwlth)
BIRA	Biosecurity Import Risk Analysis
CCEAD	Consultative Committee for Emergency Animal Diseases
Committee	Rural and Regional Affairs and Transport References Committee
CVO	Chief Veterinary Officer
DAWR	Department of Agriculture and Water Resources
EAD response plan	Emergency Animal Disease response plan
EMAI	Elizabeth Macarthur Agricultural Institute
FRDC	Fisheries Research and Development Corporation
IGAB	Intergovernmental Agreement on Biosecurity
IGB	Inspector-General of Biosecurity
IMT	Incident Management Team

IRA	Generic Import Risk Analysis Report for Prawns and Prawn Products (2009)
Legislation committee	Rural and Regional Affairs and Transport Legislation Committee
NBC	National Biosecurity Committee
OIE	World Organisation for Animal Health ( <i>Office International des Epizooties</i> )
PCR	Polymerase chain reaction
QDAF	Queensland Department of Agriculture and Fisheries
QSIA	Queensland Seafood Industry Association
SPS	Sanitary and Phytosanitary
SPS Agreement	Agreement on the Application of Sanitary and Phytosanitary Measures (1994)
WSD	White spot disease
WSSV	White spot syndrome virus
WTO	World Trade Organisation
YHV	Yellowhead virus



# Chapter 1

## Introduction and background

1.1 On 21 March 2017 the Senate referred the following matters to the Rural and Regional Affairs and Transport References Committee (committee) for inquiry and report by 22 June 2017:

The biosecurity risks associated with the importation of seafood and seafood products (including uncooked prawns and uncooked prawn meat) into Australia, with specific reference to:

- (a) management of the emergency response and associated measures implemented to control the outbreak of White Spot Syndrome Virus;
- (b) the effectiveness of biosecurity controls imposed on the importation of seafood and seafood products, including, but not limited to, uncooked prawns and prawn meat into Australia, including the import risk analysis process concluded in 2009 that led to these conditions being established;
- (c) the adequacy of Commonwealth resourcing of biosecurity measures including Import Risk Assessments;
- (d) the effectiveness of post-entry surveillance measures and 'end use' import conditions for seafood products including, but not limited to, uncooked prawns and uncooked prawn meat into Australia, since the import conditions implemented in 2010 were put into place;
- (e) the impact of the outbreak on Australia's wild and farm prawn sectors;
- (f) the economic impact on Australian wholesalers and retailers;
- (g) domestic and foreign trade implications for Australian industries resulting from the suspension of importation of seafood and seafood products, including, but not limited to, uncooked prawns and uncooked prawn meat in Australia;
- (h) matters to be satisfied in the management of biosecurity risk before imports of seafood and seafood products, including, but not limited to, uncooked prawns and uncooked prawn meat into Australia could recommence; and
- (i) any related matters.<sup>1</sup>

### Conduct of the inquiry

1.2 The inquiry was publicly advertised online, including on the committee's website. The committee also invited submissions from a number of organisations and individuals with interests and expertise in the seafood industry, particularly in relation to prawns.

1.3 The committee has received a number of submissions, and these will continue to be considered by the committee as it progresses its inquiry. To date, the committee

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1 *Journals of the Senate* No. 32, 21 March 2017, pp. 1106-1107.

has held two public hearings, in Canberra on 28 March 2017 and in Brisbane on 10 April 2017.

## Background

### *What is white spot disease?*

1.4 White spot disease (WSD) is caused by the white spot syndrome virus (WSSV), which is the most serious viral pathogen of cultured prawns. It is a highly virulent virus that can spread quickly and cause up to 100 per cent mortality in farmed prawns, within two to seven days of infection.<sup>2</sup> There are currently no available treatments for WSD.<sup>3</sup>

1.5 WSSV has a wide decapod host range, including marine and freshwater prawns, crabs and crayfish, with all prawn species imported into Australia susceptible to infection.<sup>4</sup>

1.6 Mud crabs and blue swimmer crabs entering prawn farming ponds via intake water can carry high levels of the virus, without showing any outward clinical signs. WSSV may also be found in insect larvae, all lifecycle stages of *Polychaete* worms (which prawns feed on), and water and sediment.<sup>5</sup>

1.7 All prawn life stages are susceptible to infection, from eggs to broodstock. WSSV is spread through the movement of infected animals or contaminated water. The virus can be transmitted horizontally to healthy prawns and other crustaceans through ingestion<sup>6</sup> or immersion.<sup>7</sup> It can also be transferred vertically, that is, the eggs of an infected female prawn will also be infected with the virus.<sup>8</sup>

1.8 Birds feeding on infected animals can also contribute to the spread of the disease by collecting and dropping moribund or dead prawns into unaffected areas.<sup>9</sup>

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2 Department of Agriculture and Water Resources, *Report into the cause of white spot syndrome virus outbreak in the Logan River area of Queensland – December 2016*, May 2017, p. 5.

3 Ron Glanville, Peter Neville and Peter Walker, Scenario Planning Advisory Panel, *Report on White Spot Disease of Prawns, Queensland Response, 2016-17*, February 2017, p. 5.

4 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, pp. 111-112.

5 Department of Agriculture, *Australian Aquatic Veterinary Diseases Emergency Plan (AQUAVETPLAN)*, Disease strategy: White spot disease (Version 2.0), 2013, p. 26.

6 Through the consumption of infected tissue by cannibalism or by predation.

7 The OIE *Manual of Diagnostic Tests for Aquatic Animals* notes that outside a host, WSSV is viable for at least 30 days at 30°C in seawater under laboratory conditions, and is viable in ponds for at least 3 to 4 days.

8 Department of Agriculture and Water Resources, *Report into the cause of white spot syndrome virus outbreak in the Logan River area of Queensland – December 2016*, May 2017, p. 6.

9 Department of Agriculture, *Australian Aquatic Veterinary Diseases Emergency Plan (AQUAVETPLAN)*, Disease strategy: White spot disease (Version 2.0), 2013, p. 26.

1.9 According to the World Organisation for Animal Health (OIE), the infection (WSSV) does not always lead to the disease (WSD). With regard to environmental factors that may contribute to an outbreak, the OIE has stated that:

Disease outbreaks may be induced by stressors, such as rapid changes in salinity. Water temperature has a profound effect on disease expression, with average water temperatures of between 18 and 30°C being conducive to WSD outbreaks.<sup>10</sup>

### ***Signs and symptoms***

1.10 Prawns with WSD may have a loose shell with numerous white spots (0.5-3.0 mm in diameter) on the inside surface of the shell and a pink to red discolouration. As these spots are not always present, and similar spots can be produced by bacterial shell disease, high alkalinity and stress, they are not considered a reliable sign for preliminary diagnosis of this disease. Other signs to look for in identifying WSD include:

- a loose shell (carapace);
- cessation of feeding;
- lethargy;
- unusual mortality;
- prawns coming to the edge or water surface; and
- prawns demonstrating unusual swimming patterns.<sup>11</sup>

### ***White spot disease outbreaks***

1.11 A serious disease outbreak can occur when WSSV is first introduced to an area. Serious outbreaks of WSD were common in Asia in the mid-1990s and in South America in the late 1990s.<sup>12</sup> In 2011-12, new outbreaks of WSSV in farmed prawns occurred in Saudi Arabia, Mozambique and Madagascar, with genetic testing revealing that all three outbreaks were likely due to environmental factors. The Department of Agriculture and Water Resources (DAWR) reported that 'WSSV is known to transfer between the natural environment and farmed prawn populations in most parts of the world'.<sup>13</sup>

1.12 In 2009, the *Generic Import Risk Analysis Report for Prawns and Prawn Products* (IRA) found that if WSSV took hold in Australia, it would 'be expected to cause serious prawn aquaculture production losses, causing significant impacts to

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10 OIE (World Organisation for Animal Health), *Manual of Diagnostic Tests for Aquatic Animals*, 2016, Chapter 2.2.7.

11 Department of Agriculture, Fisheries and Forestry, *Aquatic Animal Diseases Significant to Australia: Identification Field Guide 4th Edition*, August 2012, p. 232.

12 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, pp. 111-112.

13 Department of Agriculture and Water Resources, *Report into the cause of white spot syndrome virus outbreak in the Logan River area of Queensland – December 2016*, May 2017, p. 5.

multiple regional prawn farming areas in multiple States/Territories', and that 'once established in wild crustacean populations, eradication is unlikely'.<sup>14</sup>

1.13 In response to questions from the committee, DAWR confirmed that the prawn population does not have any level of immunity to WSSV. Therefore, a single virus could, in theory, be sufficient to cause a WSD outbreak. However, Dr Robyn Martin, Acting Australian Chief Veterinary Officer and Assistant Secretary, DAWR noted that:

there are a lot of factors that have to happen. You have to have the appropriate infectious dose. That has to be eaten and be able to replicate, and that cycle has to then be eaten by other crustaceans. So you have to have a whole series of events occur to get an infection going.<sup>15</sup>

1.14 As to the question of how WSSV reached Australia, DAWR identified a number of potential import pathways. These include 'contaminated import feed, probiotics, contaminated equipment, overseas visitors, poor on-farm biosecurity practices, and brook stock, as well as imported uncooked prawns used as bait'.<sup>16</sup>

## **White spot disease in Australia**

### *Historical context*

1.15 WSSV is exotic to Australia.<sup>17</sup> Prior to the current outbreak, Australia was one of the few countries in the world with a prawn-farming industry that was free of WSD.<sup>18</sup>

1.16 On the detection of prawns showing gross signs of WSSV in a Brisbane restaurant in late 1999, the Consultative Committee for Emergency Animal Diseases (CCEAD) recommended that an active surveillance program be undertaken. In August 2000, the Queensland Department of Primary Industries and CSIRO Livestock Industries conducted a survey of Australian farmed prawns to determine the presence

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14 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 117.

15 Dr Robyn Martin, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 10.

16 Department of Agriculture and Water Resources, *Media Statement: Department's action on imported prawns*, 10 February 2017, <http://www.agriculture.gov.au/about/media-centre/media-releases/dept-action-white-spot> (accessed 23 March 2017).

17 Department of Agriculture, Fisheries and Forestry, *Aquatic Animal Diseases Significant to Australia: Identification Field Guide 4th Edition*, August 2012, p. 233; Biosecurity (Suspended Goods – Uncooked Prawns) Determination 2017, p. 1.

The Department of Agriculture has noted that an exotic animal disease is a disease affecting animals that 'does not normally occur in Australia' (Disease strategy: White spot disease (Version 2.0), *Australian Aquatic Veterinary Emergency Plan (AQUAVETPLAN)*, 2013, p. 61).

18 Department of Agriculture, Disease strategy: White spot disease (Version 2.0), *Australian Aquatic Veterinary Emergency Plan (AQUAVETPLAN)*, 2013, p. 9; Queensland Department of Agriculture and Fisheries, *White spot disease information*, 2017.

of WSSV within the industry. No evidence of WSSV was found in any of the samples and the industry was shown to be free of the virus.<sup>19</sup>

1.17 Following a November 2000 incident in Darwin, another national survey was conducted on the recommendation of the CCEAD. This survey was designed to supplement the previous survey by focussing on wild crustaceans. It was conducted using a two-stage sampling regime and all samples were tested by the polymerase chain reaction (PCR) tests recommended by the OIE.

1.18 Of the 3051 samples tested from 64 sites throughout Australia, no mortalities, clinical signs of the disease or evidence of WSSV was detected. The results of the survey supported the case that Australia's crustacean populations were free of WSSV.<sup>20</sup>

### ***Recent incidents and investigations***

1.19 At a Senate Estimates hearing on 28 February 2017, the Rural and Regional Affairs and Transport Legislation Committee (legislation committee) was advised that DAWR had 'investigated and responded to a number of incidences of non-compliance with prawn import requirements' since the incident in Darwin in 2000, including:

- an investigation in 2006 which uncovered illegal importation of prawn feed by three prawn farmers in NSW and Queensland;
- an investigation in 2013 into possible washing or mislabelling of marinated prawns after independent testing detected WSD in prawns for sale at retail outlets; and
- an investigation in 2016 into non-compliant behaviour by importers of prawns and prawn product, known as Operation Cattai.<sup>21</sup>

## **Outbreak of WSD in the Logan River and Moreton Bay areas**

### ***Logan River***

1.20 On 22 November 2016, prawns at an aquaculture farm located on the Logan River in South East Queensland were observed displaying unusual behaviour. Prawn samples were submitted to the Queensland Biosecurity Sciences Laboratory for testing.<sup>22</sup>

1.21 On 30 November 2016 initial testing indicated that the samples provided were positive for WSSV. Further testing was undertaken by the Australian Animal Health

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19 Animal Health Australia, Aquatic Animal Health, Quarterly Report for 1 July to 30 September 2000, *Animal Health Surveillance Quarterly*, 2000, Volume 5, Issue 3, pp. 6-7.

20 East, I., Black, P., McColl, K., Hodgson, R. and Bernoth, E., Survey for the presence of White Spot Syndrome Virus in Australian crustaceans, *Australian Veterinary Journal*, Volume 82, No. 4, 2004, pp. 236-240.

21 Ms Lyn O'Connell, Deputy Secretary, *Estimates Hansard*, 28 February 2017, p. 81. Operation Cattai is discussed further in Chapter 3 of this report.

22 Department of Agriculture and Water Resources, *Report into the cause of white spot syndrome virus outbreak in the Logan River area of Queensland – December 2016*, May 2017, p. 5.

Laboratory (AAHL) in Geelong and, on 1 December 2016, a case of WSD in prawns was confirmed. The farm with detected WSD was placed under government movement control orders, to restrict the further movement of any infected product. However, the disease spread to other farms within the Logan River area and, by 13 February 2017, a seventh and final property was confirmed as infected with WSD.<sup>23</sup>

1.22 Immediately following the outbreak, five prawn farming families in Logan River were forced to close their farms and most hatcheries, with a total loss of stock in all growout ponds, stock in most hatcheries, and stock in breeding programs that supply some hatcheries.<sup>24</sup>

1.23 Mr Alistair Dick from the Australian Prawn Farmers Association (APFA) stated that the WSD outbreak on affected farms had caused severe personal hardship and incurred around \$40 million in direct losses.<sup>25</sup> APFA provided a breakdown of those costs (determined from farm records), as set out in the following table.<sup>26</sup>

**Table 1.1: Costs of WSD outbreak to Logan River prawn farmers**

Cost of raising the 2016-17 crop which either died or was destroyed	\$8.1 million
Value of lost hatchery and breeding stock	\$5 million
Cost of new biosecurity infrastructure to recommence farming	\$12.6 million
Cost of shutting down for another season	\$11.9 million

1.24 The APFA described the prawn farming industry in the Logan River area as being in a state of flux. The jobs of 122 people employed by the affected farms are at risk due to uncertainty on whether or not they will be able to farm this season.<sup>27</sup>

23 Department of Agriculture and Water Resources, National pest & disease outbreaks, *White spot disease*, <http://www.outbreak.gov.au/current-responses-to-outbreaks/white-spot-disease> (accessed 27 April 2017).

24 Ridge Partners, Project 2016-17, *Summary Overview: Economic Impact of 2016 White Spot disease Outbreak*, 2017, p. 5.

25 Mr Alistair Dick, Australian Prawn Farmers Association, *Committee Hansard*, 10 April 2017, p. 2. In May 2017, the Queensland Minister for Agriculture and Fisheries stated that the direct financial impact on affected farms was estimated at \$22.3 million; see the Hon Bill Byrne MP, Minister for Agriculture and Fisheries and Minister for Rural Economic Development, 'Queenslanders deserve better from Commonwealth on white spot', *Media Statement*, 5 May 2017, <http://statements.qld.gov.au/Statement/2017/5/5/queenslanders-deserve-better-from-commonwealth-on-white-spot> (accessed 31 May 2017).

26 Australian Prawn Farmers Association, *Submission 2*, p. 9.

27 Australian Prawn Farmers Association, *Submission 2*, p. 9; Ridge Partners, Project 2016-17, *Summary Overview: Economic Impact of 2016 White Spot disease Outbreak*, 2017, p. 8.

## **Moreton Bay**

1.25 On 16 March 2017, the Queensland Government announced that white spot had been detected in wild prawns in Moreton Bay and Deception Bay, near Brisbane.<sup>28</sup>

1.26 Following this detection, a new movement control order was issued with immediate effect, encompassing the whole Moreton Bay region, and replacing the January restrictions imposed on the Logan River.<sup>29</sup>

1.27 These further restrictions had a significant impact on local commercial operators, as noted in an industry update issued by the Queensland Department of Agriculture and Fisheries on 31 March 2017:

Commercial crab operators, some prawn trawlers, commercial wormers and yabby collectors have all been significantly impacted by the movement control zones, as it means that they cannot send raw or live product to their usual markets.<sup>30</sup>

1.28 The closure of the Logan River to beam trawling and crab potting to assist with the management and control of WSSV significantly affected commercial fishers who operate in that area. Evidence provided by the Queensland Seafood Industry Association (QSIA) outlined the financial impact on commercial fishers in the control zone. Mr Eric Perez, Chief Executive Officer of QSIA advised the committee that active commercial fishers, who derive 60 to 100 per cent of their business from fishing in the Logan River, have not traded since the movement restrictions came into effect.<sup>31</sup> Mr Perez of QSIA continued:

Since the extension of movement restrictions from the Logan to the rest of Morton Bay, it has gone from 20-odd operators to over 200 commercial business that are potentially impacted by the spread of the disease. If you are looking at this in terms of value for our crustacean fishery in Queensland alone, at gross value of production the beach price is about \$110 million for all species of crustaceans – prawn are about \$70 million,

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28 Queensland Department of Agriculture and Fisheries, *White spot disease program strategy expands across Moreton Bay*, White spot disease industry update number 20, 16 March 2017, [http://www.vision6.com.au/em/message/email/view.php?id=1141647&u=13082&k=1UWv\\_PsouIXxtc6yUoiYsyAX2f9D\\_cpylkc2Bg73aUA](http://www.vision6.com.au/em/message/email/view.php?id=1141647&u=13082&k=1UWv_PsouIXxtc6yUoiYsyAX2f9D_cpylkc2Bg73aUA) (accessed 8 June 2017).

29 Queensland Department of Agriculture and Fisheries, Movement Control Order (Moreton Bay) – White Spot Syndrome Virus, 16 March 2017, [https://www.daf.qld.gov.au/\\_data/assets/pdf\\_file/0005/1016339/Movement-control-order.pdf](https://www.daf.qld.gov.au/_data/assets/pdf_file/0005/1016339/Movement-control-order.pdf) (accessed 31 May 2017). The area covered by the control order included Moreton Bay, Pumicestone Passage, waterways flowing into the Moreton Bay and south to the Queensland/NSW border, the 100 metres eastward of the ocean beaches on the islands surrounding Moreton Bay and the Gold Coast to the Queensland/NSW border.

30 Queensland Department of Agriculture and Fisheries, *White spot disease industry update number 22*, 31 March 2017, <https://www.daf.qld.gov.au/animal-industries/animal-health-and-diseases/a-z-list/white-spot-disease> (accessed 3 April 2017).

31 Mr Eric Perez, Queensland Seafood Industry Association, *Committee Hansard*, 10 April 2017, p. 13.

and bugs, crabs and I think, tropical rock lobster in the north make up the other \$40-odd million.<sup>32</sup>

### ***Potential pathways***

1.29 At this point in time, it is not known how the virus was introduced to the Logan River area. It has been suggested that the use of imported infected uncooked prawns as bait in the Logan River was the most likely source of the outbreak.<sup>33</sup>

1.30 However, DAWR has cautioned that the cause of the outbreak may never be identified.<sup>34</sup> While the exact route of entry of the virus remains unknown, DAWR has identified five potential pathways, which may have led to the outbreak of WSD to the Logan River.<sup>35</sup>

1.31 The first possibility was that WSSV was already present in Australia but had not been previously detected. As to the other four pathways, DAWR noted that the virus could have been introduced:

- from raw prawns being used as bait (as noted above);
- via imported aquatic feed or feed supplements;
- through diseased broodstock or their progeny; or
- via a human element, including the importation of associated equipment.<sup>36</sup>

1.32 On 5 May 2017, the Minister for Agriculture and Water Resources, the Hon Barnaby Joyce MP, confirmed that neither the department nor Biosecurity Queensland had yet determined the cause of the outbreak, and again reiterated the multiple possible causes of the outbreak. He noted that the 'results of genetic sequencing being undertaken may shed more light on the possible origins of the outbreak'.<sup>37</sup>

1.33 The Fisheries Research and Development Corporation (FRDC) also advised the legislation committee that there were a number of different possible pathways to

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32 Mr Eric Perez, Queensland Seafood Industry Association, *Committee Hansard*, 10 April 2017, pp. 13-14.

33 Ron Glanville, Peter Neville and Peter Walker, Scenario Planning Advisory Panel, *Report on White Spot Disease of Prawns, Queensland Response, 2016-17*, February 2017, p. 3.

34 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 118.

35 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 118.

36 Department of Agriculture and Water Resources, *Report into the cause of white spot syndrome virus outbreak in the Logan River area of Queensland – December 2016, Interim Report*, May 2017, p. 6.

37 The Hon Barnaby Joyce MP, Minister for Agriculture and Water Resources, 'Coalition Government delivers \$20 million to assist prawn farmers', *Media Release*, 5 May 2017.



explain how the WSD outbreak occurred. FRDC Executive Director, Dr Patrick Hone advised the committee that:

I would say from a science perspective we have ruled out the feed as a pathway...which still leaves: was it present in the environment beforehand? We have not done the historical samples. Did it come through some sort of imported green prawn feed bait issue? Again, until we have done the genetics and more testing...it is extremely difficult to actually scientifically demonstrate a particular virus pathway.

...I would say at the moment, on the sort of information we have got today, the most highest risk factor is probably going to be the green imported prawn issue.<sup>38</sup>

### **Purpose of interim report**

1.34 The outbreak of WSD has raised serious questions about Australia's biosecurity regime. Such questions include how the virus was introduced into the country, what needs to be done to prevent its spread beyond Queensland, whether it will establish in Australia or be eradicated as planned, and what measures should be taken to prevent similar outbreaks in the future.

1.35 The outbreak of WSD has also raised important questions about the role of DAWR and the timeliness of its response. Concerns about transparency have been raised with regard to what was known by whom, and when. In addition, the prawn industry has raised particular concerns about the timeliness and consistency of information provided by involved government agencies.

1.36 At the same time, investigations into the practices of seafood importers have exposed the shortcomings of Australia's importation controls and inspection regime. The enhanced testing system imposed following the outbreak of WSD has also brought to the fore a number of questions around the approach taken by different laboratories prior to the outbreak, and current reliance on one testing laboratory to perform enhanced testing. It has also brought to light the fact that the tolerated five per cent prevalence rate for WSSV, as provided for in the IRA for prawns and prawn products, had been exceeded a number of times over the past seven years.

1.37 These matters, which have direct relevance to the terms of reference before the committee, are complex and may have far reaching implications. Underpinning many of the issues is the question of the balance between protecting Australia's biosecurity on the one hand and promoting Australia's trade interests on the other. To enable the committee to consider these issues in a comprehensive manner, the committee seeks an extension from the Senate to the inquiry reporting date.

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38 Dr Patrick Hone, Fisheries Research and Development Corporation, *Estimates Hansard*, 27 February 2017, p. 37.

## **Structure of the report**

1.38 This interim report provides an overview of Australia's biosecurity regime and the respective responsibilities of Commonwealth and state agencies in relation to disease outbreaks, including the white spot outbreak.

1.39 The report considers Australia's importation regime in relation to seafood products and the importation suspension measures imposed to date. The report also details Australia's biosecurity disease testing regime and its impact on the importation of seafood products, following the WSD outbreak.

1.40 The concluding chapter to this interim report details the key concerns of the committee regarding the WSD outbreak thus far, and indicates where the committee may direct its future inquiries.

### ***Next steps***

1.41 The committee will continue to consider the evidence provided to it by submitters, government and key industry stakeholders, in forming its views on the biosecurity risks associated with the importation of seafood and seafood products.

1.42 As the committee continues its inquiries, it will consider evidence from a range of involved agencies and stakeholders including the farmed and wild prawn sectors. The committee expects to travel to the Logan River area in late June 2017 to take evidence from Biosecurity Queensland and the affected prawn industry on the outbreak and responses to it.

## Chapter 2

### Australia's biosecurity regime and the white spot outbreak

2.1 This chapter considers the key principles that underpin Australia's biosecurity regime. It explores the relationship between the Commonwealth, states and territories in managing Australia's biosecurity and considers the application of Australia's biosecurity regime to the outbreak of WSD in the Logan River area.

#### Australia's biosecurity regime

2.2 According to DAWR:

Biosecurity is the management of risks to the economy, the environment and the community, of animal and plant pests and diseases entering, emerging, establishing or spreading.<sup>1</sup>

2.3 DAWR noted that an effective biosecurity system is critical to sustaining a productive agricultural sector, protecting the environment and maintaining export markets.<sup>2</sup> According to a 2008 independent review, Australia's biosecurity regime:

...seeks, through careful management, to minimise the risk of the entry, establishment or spread of exotic pests and diseases that have the potential to cause significant harm to people, animals, plants and other aspects of Australia's unique environment.<sup>3</sup>

2.4 Managing Australia's biosecurity is a responsibility that is shared between the Australian, state and territory governments. To coordinate and implement national action on biosecurity issues, DAWR noted that:

...well-established relationships and national arrangements are in place between the Australian, state and territory governments, relevant industry associations and members and other stakeholders.<sup>4</sup>

2.5 The Australian Government manages biosecurity risks and emergencies under the *Biosecurity Act 2015* (Biosecurity Act). The Act provides the legislative framework to manage Australia's biosecurity and sets out the powers that can be exercised by officials and the requirements of those subject to regulation. According to DAWR, the Biosecurity Act enables the targeting of non-compliant behaviour or activities while also reducing the burden on those that are compliant. It contains a range of enforcement options including infringement notices, civil penalties, enforceable undertakings and criminal sanctions.

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1 Department of Agriculture and Water Resources, *Submission 9*, p. 3.

2 Department of Agriculture and Water Resources, *Submission 9*, p. 3.

3 Roger Beale, *One Biosecurity. A Working Partnership*. The Independent Review of Australia's Quarantine and Biosecurity Arrangements Report to the Australian Government, 30 September 2008, p. xiii, [https://web.archive.org/web/20091024200423/http://daff.gov.au/\\_data/assets/pdf\\_file/0010/931609/report-single.pdf](https://web.archive.org/web/20091024200423/http://daff.gov.au/_data/assets/pdf_file/0010/931609/report-single.pdf) (accessed 29 May 2017).

4 Department of Agriculture and Water Resources, *Submission 9*, p. 14.

2.6 The Biosecurity Act also contains a range of measures to manage the public health risk posed by serious communicable diseases and allows for the management of biosecurity risks in a manner that is consistent with Australia's international obligations.<sup>5</sup> This includes obligations under the World Trade Organisation (WTO) *Agreement on the Application of Sanitary and Phytosanitary Measures 1994* (SPS Agreement), the World Health Organization *International Health Regulations 2005* (International Health Regulations), and the *Convention on Biological Diversity 1992* (Biodiversity Convention).

2.7 The Biosecurity Act provides powers to manage unacceptable levels of biosecurity risk. It defines an appropriate level of protection against biosecurity risks as a 'high level of sanitary and phytosanitary protection aimed at reducing biosecurity risks to a very low level, but not to zero'. Provisions of the Act deal with managing biosecurity risks regarding goods brought into Australian territory. This includes assessing the level of biosecurity risk through Biosecurity Import Risk Analysis (BIRA) pre-border and at-border.

2.8 DAWR is the agency responsible to conduct BIRAs and other risk analyses in accordance with the Act and the Biosecurity Regulations 2016. Under a BIRA, risk is determined by combining the likelihood of the entry, establishment and spread of a disease or pest with the consequence. A BIRA will consider the whole of the risk pathway from the identified hazard to the unwanted outcome or consequence.<sup>6</sup> According to DAWR:

BIRAs assist the department in considering the level of biosecurity risk that may be associated with the importation of goods into Australia. If the biosecurity risks do not achieve the appropriate level of protection (ALOP) for Australia, risk management measures are proposed to reduce the risks to an acceptable level. If the risks cannot be reduced to an acceptable level, the goods will not be imported into Australia, until suitable measures are identified.<sup>7</sup>

2.9 The outcome of a BIRA or IRA may result in particular goods, or a class of goods being prohibited from entry, suspended from entry, or permitted to enter with or without conditions. In accordance with the 2009 prawn IRA, risk management measures, including a range of import conditions, were imposed to reduce the risks associated with WSSV.

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5 Department of Agriculture and Water Resources, *The Biosecurity Act 2015*, <http://www.agriculture.gov.au/biosecurity/legislation/new-biosecurity-legislation> (accessed 30 May 2017).

6 Department of Agriculture and Water Resources, *Biosecurity Import Risk Analysis Guidelines 2016: managing biosecurity risks for imports into Australia*, 2016, p. 2, <http://www.agriculture.gov.au/SiteCollectionDocuments/bira-guidelines-2016.pdf> (accessed 8 June 2017).

7 Department of Agriculture and Water Resources, *Biosecurity Import Risk Analysis Guidelines 2016: managing biosecurity risks for imports into Australia*, 2016, p. 1.

2.10 On 6 January 2017, the Director of Biosecurity issued a determination to suspend the importation of uncooked prawns for a period of six months. The determination was made in accordance with subsection 182(1) of the Biosecurity Act, which provides that specific goods, or a class of goods, must not be imported into Australia for a specific period of time.<sup>8</sup>

2.11 The Biosecurity Act also provides for a statutory role of an Inspector-General of Biosecurity (IGB) who reviews the performance of functions and exercise of power by biosecurity officials under the Act. The IGB is responsible to provide independent assessment of Australia's biosecurity arrangements through evaluation and verification. As part of this role, the IGB may review the performance of functions and exercise of powers by the Director of Biosecurity and make recommendations for overall system improvement.

2.12 On 17 February 2017, the IGB, Dr Helen Scott-Orr commenced a review into biosecurity issues surrounding the WSD outbreak. The review will focus on the circumstances leading to the 6 January 2017 suspension of uncooked prawn imports into Australia and the biosecurity considerations relevant to future trade in uncooked prawns.<sup>9</sup>

### ***Core principles of the Act and risk-based approach***

2.13 While Australia's biosecurity system is complex, a 2008 independent review of Australia's quarantine and biosecurity arrangements (the Beale review) noted that there were three core principles that underpinned Australia's regime:

- an integrated biosecurity continuum involving risk assessment and monitoring, surveillance and response pre-border, at the border and post-border;
- risk assessment reflecting scientific evidence and rigorous analysis; and
- shared responsibility, between the Commonwealth and state governments, and between businesses and the general community.<sup>10</sup>

2.14 The 2008 Beale review found that Australia had historically protected its shores from exotic pests and diseases through a quarantine system that used isolation, segregation, disinfection and measures to kill insects once people or products of concern were identified at the border.<sup>11</sup> It argued that a new approach was needed

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8 Biosecurity (Suspended Goods – Uncooked Prawns) Determination, 6 January 2017.

9 Inspector-General of Biosecurity, 'Inspector-General of Biosecurity to review the current prawn issue', *Media Release*, 17 February 2017, <http://www.igb.gov.au/Pages/IGB-review-current-prawn-issue.aspx> (accessed 6 June 2017).

10 These principles were enunciated in the Nairn Report. Roger Beale, *One Biosecurity: A Working Partnership*. The Independent Review of Australia's Quarantine and Biosecurity Arrangements Report to the Australian Government, 30 September 2008, p. xvi.

11 Roger Beale, *One Biosecurity: A Working Partnership*. The Independent Review of Australia's Quarantine and Biosecurity Arrangements Report to the Australian Government, 30 September 2008, p. 4.

which shifted focus from quarantine measures with a 'border preoccupation' to a broader concept of biosecurity encompassing full pre-border and post-border measures, with an emphasis on managed risk.<sup>12</sup>

2.15 The 2008 Beale review concluded that a zero risk biosecurity regime was not desirable or possible. It noted in this regard that:

Australia cannot afford to search every passenger or every container of cargo arriving in the country, nor can it prevent the arrival of disease or vectors on air currents. Consequently, it is inevitable that there will be pest and disease incursions. A strong coordinated post-border capability minimises the chances of those pests and disease becoming established.<sup>13</sup>

2.16 In December 2008, in response to the Beale review, the Australian Government agreed in principle to the recommendations outlined in the report and moved to a risk-based approach to biosecurity, supported by intelligence.<sup>14</sup> In 2012, DAWR noted that, as part of its reform program, it was moving to a risk-based approach for biosecurity supported by 'intelligence, analysis, risk profiling, operational changes and feedback capabilities'.<sup>15</sup>

2.17 The risk-based approach was reaffirmed in the Biosecurity Act which provides 'flexible and responsive powers that allow biosecurity officials to best target risk based on the circumstances of each case'.<sup>16</sup> In his second reading speech on the bill, the Minister for Agriculture and Water Resources, the Hon Barnaby Joyce MP acknowledged that the development of a risk-based biosecurity system helped DAWR to 'more effectively manage biosecurity risks associated with ever-increasing volumes of trade and passengers moving across our border'.<sup>17</sup>

2.18 DAWR also highlighted the benefits of the approach:

Risk-based operations will reduce the administrative burden on compliant clients, enabling faster clearance at the border through better targeting and focus on higher risk commodities and stakeholder behaviours. It will also

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12 Roger Beale, *One Biosecurity: A Working Partnership*. The Independent Review of Australia's Quarantine and Biosecurity Arrangements Report to the Australian Government, 30 September 2008, p. ix.

13 Roger Beale, *One Biosecurity: A Working Partnership*. The Independent Review of Australia's Quarantine and Biosecurity Arrangements Report to the Australian Government, 30 September 2008, p. 207.

14 Department of Agriculture and Water Resources, *Submission 9*, p. 15.

15 Department of Agriculture, Fisheries and Forestry, *Reform of Australia's biosecurity system*. An update since the publication of *One Biosecurity: a working partnership*, March 2012, p. 7.

16 Explanatory Memorandum, Biosecurity Bill 2014, p. 9.

17 The Hon Barnaby Joyce MP, Minister for Agriculture and Water Resources, Second Reading Speech, *House of Representatives Hansard*, 27 November 2014, p. 13426, [http://parlinfo.aph.gov.au/parlInfo/genpdf/chamber/hansardr/07c1718f-8e51-4958-9cc9-f8492bfb5c93/0019/hansard\\_frag.pdf;fileType=application%2Fpdf](http://parlinfo.aph.gov.au/parlInfo/genpdf/chamber/hansardr/07c1718f-8e51-4958-9cc9-f8492bfb5c93/0019/hansard_frag.pdf;fileType=application%2Fpdf) (accessed 30 May 2017).

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reduce delays for industry and cut the costs for clients who actively and conscientiously take account of biosecurity risks.<sup>18</sup>

2.19 In its submission to the inquiry, DAWR reaffirmed that, as zero risk is not achievable, biosecurity threats are effectively managed using a risk-based approach.<sup>19</sup>

### ***Intergovernmental Agreement on Biosecurity***

2.20 Under the Biosecurity Act, the Australian Government, through DAWR, 'manages biosecurity risks and emergencies and gives effect to Australia's international rights and obligations, including the Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement)'.<sup>20</sup>

2.21 DAWR is the 'custodian' of federal biosecurity services. Its mission is to 'sustain the way of life and prosperity of all Australians and help people and goods move in and out of Australia while managing the risks to the environment and animal, plant and human health'.<sup>21</sup>

2.22 While DAWR's role in relation to biosecurity is set out in the Biosecurity Act, responsibility for Australia's biosecurity is shared between the Commonwealth, state and territory governments. To coordinate national action on biosecurity issues, an Intergovernmental Agreement on Biosecurity (IGAB) came into effect in January 2012. It serves as an agreement between the Commonwealth and all state and territory governments, with the exception of Tasmania:

The IGAB aims to strengthen the working partnership between governments and to improve the national biosecurity system and minimise the impact of pests and disease on Australia's economy, environment and the community.<sup>22</sup>

2.23 A National Biosecurity Committee (NBC) was formally established under the IGAB to provide advice to the Agriculture Senior Officials Committee and Agriculture Ministers' Forum on national biosecurity, while also providing advice on progress in implementing the IGAB.

### **Responding to an outbreak of pests or disease in Australia**

2.24 In 2015, the NBC formed a National Biosecurity Emergency Preparedness Expert Group to enhance Australia's biosecurity emergency preparedness, response

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18 Department of Agriculture, Fisheries and Forestry, *Reform of Australia's biosecurity system: An update since the publication of One Biosecurity: A Working Partnership*, March 2012, p. 8.

19 Department of Agriculture and Water Resources, *Submission 9*, p. 3.

20 Department of Agriculture and Water Resources, *Submission 9*, p. 14.

21 Department of Agriculture and Water Resources, *Reform of Australia's biosecurity system – An update since the publication of One Biosecurity: A working partnership*, March 2012, <http://www.agriculture.gov.au/biosecurity/australia/biosecurity-reform/reform-biosecurity-system> (accessed 29 May 2017).

22 Department of Agriculture and Water Resources, *Intergovernmental Agreement on Biosecurity*, <http://www.agriculture.gov.au/biosecurity/partnerships/nbc/intergovernmental-agreement-on-biosecurity> (accessed 29 May 2017).

and initial recovery arrangements. This expert group administers the Biosecurity Incident Management System (BIMS) which provides guidance on how to manage and respond to a biosecurity incident. The BIMS contributes to achieving a priority reform area of IGAB Schedule 7, namely to:

Maintain clearly defined and consistent emergency response arrangements that are recognised and practiced by all jurisdictions across each level of government.<sup>23</sup>

2.25 In Australia, each state and territory has operational responsibility for the surveillance, monitoring, control and eradication of aquatic animal diseases within its borders, whether the diseases are endemic or exotic. Each state and territory also administers its own emergency disease control legislation.<sup>24</sup> While there are a number of plans, groups and processes that can be utilised to respond to an outbreak, the BIMS is intended to complement these established arrangements by providing a nationally agreed system which can be applied in response to an outbreak:

The Biosecurity Incident Management System is a uniform approach for managing the response to biosecurity incidents and can be applied to all biosecurity sectors. It is based on established incident management systems, which are widely recognised and used throughout Australia.<sup>25</sup>

2.26 In terms of the preferred approach to diseases that affect aquatic animals, an Australian Aquatic Veterinary Emergency Plan (AQUAVETPLAN) serves as a set of technical response manuals focused on aquatic animal disease incursions. The first AQUAVETPLAN disease strategy for WSD was published in June 2005 with the current version (2.0) dated September 2013.

### **AQUAVETPLAN white spot disease strategy**

2.27 The AQUAVETPLAN strategy for WSD sets out the disease control principles for use in an aquatic veterinary emergency incident caused by the suspicion or confirmation of WSD in Australia.<sup>26</sup> The basic principles for disease eradication and control responses are contained in other manuals within the AQUAVETPLAN

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23 Biosecurity Emergency Preparedness Working Group, Biosecurity Emergency Management (V1.0), *Biosecurity Incident Management System*, 2012, p. 7, <http://www.agriculture.gov.au/SiteCollectionDocuments/animal-plant/pihc/bepwg/biosecurity-emergency-management-biosecurity-incident-management-system.pdf> (accessed 30 May 2017).

24 Department of Agriculture Fisheries and Forestry, *Australian Aquatic Animal Diseases Veterinary Emergency Plan – AQUAVETPLAN 2001, Management Manual*, 2001, p. 13. <http://www.agriculture.gov.au/SiteCollectionDocuments/animal-plant/aquatic/aquavetplan/control.pdf> (accessed 6 June 2017).

25 Biosecurity Emergency Preparedness Working Group, Biosecurity Emergency Management (V1.0), *Biosecurity Incident Management System*, 2012, p. 7.

26 Department of Agriculture, *Australian Aquatic Veterinary Emergency Plan. Disease Strategy. White spot disease*, Version 2, 2013, p. 4, <http://www.agriculture.gov.au/SiteCollectionDocuments/animal-plant/aquatic/aquavetplan/white-spot.pdf> (accessed 29 May 2017).



including the Enterprise Manual which provides state and territory legislation relating to disease control and eradication.

2.28 The white spot disease strategy identifies three preferred response options and sets out strategies to appropriately control and eradicate WSD. The most appropriate strategy must be chosen after epidemiological investigations have been conducted, while the decision must be based on scientific effectiveness and financial feasibility.<sup>27</sup>

2.29 The three broad control options for WSD identified by the strategy are:

- *Eradication*—eradication of WSSV from Australia (highest level control measure and may be the most cost-effective in the long term).
- *Containment, control and zoning*—containment of WSSV to areas in which infection has become endemic, and prevention of further spread and protection of uninfected areas.
- *Control and mitigation of disease*—implementation of management practices that decrease the incidence and severity of clinical disease outbreaks (lowest level control measure and likely to be the least costly).<sup>28</sup>

2.30 Each of the response options may involve the use of a combination of strategies such as quarantine and movement controls on crustaceans within declared areas to prevent infection spreading.<sup>29</sup>

2.31 In terms of roles and responsibilities, the AQUAVETPLAN Control Centres Management Manual sets out the notification arrangements, order of procedures, management structures and roles of personnel following suspicion of the presence of WSD in Australia.

2.32 In the first instance, the Director of Fisheries and/or the Chief Veterinary Officer (CVO) in the state or territory in which the outbreak occurs is responsible to develop an Emergency Animal Disease response plan (EAD response plan). In turn, the EAD response plan is submitted to the Aquatic Consultative Committee on Emergency Animal Diseases (Aquatic CCEAD) to ensure that it is technically sound and consistent with the AQUAVETPLAN. Thereafter, the responsible Director of Fisheries and/or CVO will implement the disease control measures as agreed in the EAD response plan and in accordance with relevant legislation.<sup>30</sup>

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27 Department of Agriculture, *Australian Aquatic Veterinary Emergency Plan. Disease Strategy. White spot disease*, Version 2, 2013, p. 46.

28 Department of Agriculture, *Australian Aquatic Veterinary Emergency Plan. Disease Strategy. White spot disease*, Version 2, 2013, p. 29.

29 Department of Agriculture, *Australian Aquatic Veterinary Emergency Plan. Disease Strategy. White spot disease*, Version 2, 2013, p. 46.

30 Department of Agriculture, *Australian Aquatic Veterinary Emergency Plan. Disease Strategy. White spot disease*, Version 2, 2013, p. 47.

## **Managing the WSD outbreak**

### ***Role the Commonwealth Government***

2.33 In terms of the Commonwealth, DAWR is responsible to provide technical support to Biosecurity Queensland through the Aquatic CCEAD:

The AqCCEAD's role during the Logan River WSSV incursion is to provide technical advice to Biosecurity Queensland on response activities and objectives, facilitate Australia's international reporting obligations and coordinate communications.<sup>31</sup>

2.34 In addition, DAWR has responsibility for establishing an Incident Management Team (IMT) to coordinate its own activities during the outbreak.<sup>32</sup> An investigation into the cause of the outbreak commenced on 13 December 2016 at the request of the IMT. Of the investigation, DAWR noted:

The investigation focussed on identifying the potential pathways through which the virus may have been transmitted. The investigation involved Departmental scientists who visited the affected farms with investigators. The investigation did not identify the actual pathway.<sup>33</sup>

2.35 Additional assistance provided by DAWR has included the secondment of 13 staff to assist Biosecurity Queensland with the eradication response.<sup>34</sup>

### ***Role of the Queensland Government***

2.36 As the December 2016 WSD outbreak occurred in Queensland, Biosecurity Queensland (within the Queensland Department of Agriculture and Fisheries) took the lead as the agency with primary responsibility for the containment and eradication of WSD in that state.<sup>35</sup>

2.37 However, the Australian and Queensland governments have affirmed a shared commitment to support affected prawn farmers and work together to eradicate the disease. In a joint statement with the Assistant Minister for Agriculture and Water Resources, Senator the Hon Anne Ruston, the Hon Bill Byrne MP, Minister for Agriculture and Fisheries (Queensland) advised:

From day one Biosecurity Queensland has worked in close co-operation with the national committee and at every stage the response has been approved and endorsed by national experts including the Australian Chief

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31 Department of Agriculture and Water Resources, *Submission 9*, p. 42. The AqCCEAD or Aquatic CCEAD is a national committee comprising state and territory directors of fisheries or CVOs together with DAWR and CSIRO representatives and industry bodies. It is chaired by the Australian Chief Veterinary Officer.

32 Department of Agriculture and Water Resources, *Interim Report into the cause of white spot syndrome virus outbreak in the Logan River area of Queensland – December 2016*, 2017, p. 8.

33 Department of Agriculture and Water Resources, *Submission 9*, p. 43.

34 Department of Agriculture and Water Resources, *Submission 9*, p. 43.

35 Mr Daryl Quinlivan, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 29.

Veterinary Officer, state and territory chief veterinary officers or directors of fisheries, representatives of the Federal Department of Agriculture and Water Resources, the Fisheries Research and Development Corporation and the CSIRO Australian Animal Health Laboratory.<sup>36</sup>

## Costs and funding

### *Queensland Government funding*

2.38 On Friday, 17 February 2017, the Queensland Minister for Agriculture and Fisheries, the Hon Bill Byrne MP, reaffirmed a commitment of the Queensland Government to reimburse prawn farmers for the costs incurred under the directions of Biosecurity Queensland.<sup>37</sup>

2.39 As at 5 May 2017, the Queensland Government had spent more than \$11 million on the response to WSD. The Minister noted that by the end of the current financial year, the response, surveillance and sampling activities undertaken by the state government would amount to at least \$17.6 million.<sup>38</sup>

2.40 The Queensland Minister also noted that a total of \$30 million in concessional loans would be available to prawn farmers to assist them to return to disease-free production as early as possible.<sup>39</sup>

### *Federal funding*

2.41 On 26 January 2017, the Minister for Agriculture and Water Resources, the Hon Barnaby Joyce MP announced up to \$1.74 million in emergency assistance to Queensland and the industry in the response to the outbreak of WSD. This funding included up to \$400,000 in direct support for Queensland prawn farmers.<sup>40</sup>

2.42 Additional funding was announced on 1 March 2017 in the form of grants to the APFA and QSIA as follows:

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36 The Hon Bill Byrne MP, Minister for Agriculture and Fisheries and Minister for Rural Economic Development (Queensland), 'Australian and Queensland governments working together to respond to white spot outbreak', *Media statement*, 17 February 2017, <http://statements.qld.gov.au/Statement/2017/2/17/australian-and-queensland-governments-working-together-to-respond-to-white-spot-outbreak> (accessed 24 May 2017).

37 The Hon Bill Byrne MP, Minister for Agriculture and Fisheries and Minister for Rural Economic Development (Queensland), 'Australian and Queensland governments working together to respond to white spot outbreak', *Media statement*, 17 February 2017.

38 The Hon Bill Byrne MP, Minister for Agriculture and Fisheries and Minister for Rural Economic Development, 'Queenslanders deserve better from Commonwealth on white spot', *Media Statement*, 5 May 2017, <http://statements.qld.gov.au/Statement/2017/5/5/queenslanders-deserve-better-from-commonwealth-on-white-spot> (accessed 31 May 2017).

39 The Hon Bill Byrne MP, Minister for Agriculture and Fisheries and Minister for Rural Economic Development, 'Queenslanders deserve better from Commonwealth on white spot', *Media statement*, 5 May 2017.

40 The Hon Barnaby Joyce MP, Deputy Prime Minister and Minister for Agriculture and Water Resources, 'Emergency assistance for prawn disease response', *Media release*, 26 January 2017.

- \$221,100 to the APFA to improve WSD management within the Australian prawn farm industry; and
- \$220,000 to the QSIA to increase the preparedness of the wild harvest seafood industry through the appointment of a Biosecurity and Industry Liaison Officer and the implementation of biosecurity programs.<sup>41</sup>

2.43 Further funding of up to \$20 million for Queensland prawn farmers affected by the outbreak was announced on 5 May 2017. Of the announcement, the Minister noted that:

This additional funding of \$20 million will be delivered directly to the prawn industry, with \$4 million to be repaid by prawn farmers through an industry levy once affected producers are back on their feet.<sup>42</sup>

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41 Department of Agriculture and Water Resources, *Submission 9*, p. 43.

42 The Hon Barnaby Joyce MP, Deputy Prime Minister and Minister for Agriculture and Water Resources, 'Coalition Government delivers \$20 million to assist prawn farmers', *Media release*, 5 May 2017, [http://minister.agriculture.gov.au/joyce/Pages/Media-Releases/Coalition-Government-delivers-\\$20-million-to-assist-prawn-farmers.aspx](http://minister.agriculture.gov.au/joyce/Pages/Media-Releases/Coalition-Government-delivers-$20-million-to-assist-prawn-farmers.aspx) (accessed 30 May 2017).

# Chapter 3

## Prawn imports into Australia

3.1 This chapter considers the importation of prawns and prawn products into Australia. It explores Australia's biosecurity obligations and the measures undertaken following the outbreak of WSD to suspend prawn imports.

### Biosecurity obligations

#### *Appropriate Level of Protection*

3.2 To protect against biosecurity risks, the Biosecurity Act provides for an Appropriate Level of Protection (ALOP) for Australia. In accordance with Australia's risk-based approach, this requires a high level of sanitary (animal) and phytosanitary (plant) (SPS) protection aimed at reducing biosecurity risks to a very low level, but not to zero.<sup>1</sup>

3.3 The ALOP accords with WTO agreements such as the SPS Agreement, which requires WTO members to maintain a level of protection appropriate to protect life or health within their territory.<sup>2</sup>

3.4 The SPS Agreement provides that biosecurity measures must be based on either a risk assessment appropriate to the circumstances or drawn from standards developed by the World Organisation for Animal Health (OIE). Such measures can only be applied to the extent necessary to protect human, animal or plant life or health. Additionally, the measures must be based on science, and must not arbitrarily or unjustifiably discriminate between WTO members or be a disguised restriction on trade.<sup>3</sup>

#### *ALOP and impacts on international trade*

3.5 Risk assessments are used to determine what SPS measures should be applied to an import, to achieve Australia's ALOP. Each WTO member has the right to determine its ALOP. However, the ALOP should aim to minimise negative trade effects, and should not be more trade-restrictive than required to achieve the ALOP's objective:

Under the SPS Agreement, risk management measures must not be more trade-restrictive than required to achieve ALOP, taking into account technical and economic feasibility. In addition, WTO members are required

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1 *Biosecurity Act 2015*, s. 5. While the ALOP is a broad objective, SPS measures are established to meet that objective.

2 Department of Agriculture and Water Resources, *Appropriate Level of Protection*, 20 June 2016, <http://www.agriculture.gov.au/biosecurity/risk-analysis/conducting/appropriate-level-of-protection> (accessed 2 May 2017).

3 Department of Agriculture and Water Resources, *Australia's international biosecurity obligations*, 20 June 2016, <http://www.agriculture.gov.au/biosecurity/risk-analysis/conducting/international-obligations> (accessed 4 May 2017).

to apply the concept of ALOP consistently; that is they must 'avoid arbitrary or unjustifiable distinctions' that 'result in discrimination or a disguised restriction on international trade'.

Consistency in the application of ALOP means that the Australia [sic] cannot, for example, be less restrictive to risk where imports are desired, or more restrictive than necessary to manage the risk where trade would create competitive pressure on a domestic industry.<sup>4</sup>

3.6 The Aquatic Animal Health Code, produced by the OIE, details the standards and processes required to ensure the safe international trade of aquatic animals, including prawns and other seafood products, while avoiding unnecessary trade impediments.<sup>5</sup>

3.7 Risks to Australia's trading agreements were highlighted following the outbreak of WSD in Australia, and the decision to suspend the import of raw prawns and prawn products. The Vietnamese Government claimed that the suspension breached Australia's WTO responsibilities and exceeded necessary SPS measures. The Seafood Importers Association of Australia argued that the suspension damaged Australia's trade reputation.<sup>6</sup>

3.8 DAWR has publicly acknowledged the impacts that the suspension may have on trade and on international exporters. However, it argued that the suspension complied with WTO agreements which allow member states to temporarily suspend imports, in certain circumstances, and that the suspension would not be in place any longer than necessary.<sup>7</sup>

3.9 As the committee continues its investigation into the potential biosecurity risks arising from imported seafood products, it will consider Australia's international trade obligations, alongside the importance of measures to maintain the desired ALOP in Australia. The committee recognises the importance of finding the right balance between open and fair trade, and protecting Australia's biosecurity, and will consider the implications of the WSD outbreak on future trade responsibilities.

### **Import Risk Analysis (IRA)**

3.10 In 2009, Biosecurity Australia (BA) released the *Generic Import Risk Analysis Report for Prawns and Prawn Products* (the IRA). The IRA determined that:

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4 Department of Agriculture and Water Resources, *Appropriate Level of Protection*, 20 June 2016.

5 World Organisation for Animal Health (OIE), *Aquatic Animal Health Code*, June 2016, <http://www.oie.int/en/international-standard-setting/aquatic-code/> (accessed 4 May 2017).

6 It was argued that a number of Vietnamese exporters were at risk of bankruptcy as a result of the suspension. Marty McCarthy, 'Vietnamese Government says Australia's prawn import ban is 'causing serious damage' to its producers', *ABC Rural News*, 10 March 2017, <http://www.abc.net.au/news/rural/2017-03-10/vietnam-frustrated-australia-prawn-import-ban/8344002> (accessed 11 May 2017).

7 Marty McCarthy, 'Vietnamese Government says Australia's prawn import ban is 'causing serious damage' to its producers', *ABC Rural News*, 10 March 2017.

The unrestricted risk associated with WSSV is...*high*. The unrestricted risk exceeds Australia's ALOP and, therefore, risk management is deemed necessary.<sup>8</sup>

3.11 The IRA therefore considered the import of prawns and prawn products into Australia, excluding live prawns. The IRA identified a number of acceptable risk management measures, including sourcing all uncooked prawn product from a country considered free of WSSV; removing the prawn head and shell and testing all imported batches, and importing highly processed product (like marinated or battered prawns).<sup>9</sup>

3.12 The IRA also found that the likelihood of release of WSSV 'via the unrestricted importation of non-viable, farm-sourced, frozen, uncooked whole prawns intended for human consumption is estimated to be high'.<sup>10</sup>

3.13 The IRA provided a tolerance for the presence of WSSV in Australia, but at a low level, of no greater than five per cent. According to DAWR, this level was not considered a risk, as it did not provide a sufficient viral load for the disease to spread through susceptible hosts, and then into prawn farms.<sup>11</sup>

### ***Import conditions***

3.14 An importer must obtain a permit to import all uncooked prawns and prawn products for human consumption. The permit application must include clear, labelled photographs, details of manufacturing steps and a complete ingredients list totalling 100 per cent of product weight.<sup>12</sup>

3.15 Under the IRA, if an importing country is free from pathogens, and Australia has recognised that country as being free from pathogens, batch testing is not required.<sup>13</sup>

3.16 In terms of the importation of uncooked prawns or prawn product, there are three possible options:

- the uncooked prawns must be from a country or zone free from WSSV, yellowhead virus (YHV) and Taura syndrome virus. In addition, the

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8 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 119.

9 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, pp. 11-12.

10 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 112.

11 Mr Tim Chapman, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 6.

12 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, pp. 190, 263.

13 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 191.

prawns must be free of Necrotising hepatopancreatitis bacterium if the product is not frozen (i.e. the product is chilled);<sup>14</sup> or

- the uncooked prawns must have their heads and shells removed, be frozen and each batch tested on arrival in Australia, and found to be free of WSSV and YHV; or
- the uncooked prawns should be highly processed, with the head and shell removed, and coated in crumb or batter, wet or dry marinade, or processed into products like dumplings or spring rolls.<sup>15</sup>

3.17 The exporting country is required to certify that the uncooked prawns or prawn products, including those that are highly processed, are fit for human consumption, have been processed, inspected and graded in approved premises, and are free from visible signs of infectious disease.

3.18 Packages of uncooked imported prawns that are not highly processed must be labelled 'for human consumption only' and 'not to be used as bait or feed for aquatic animals'. However, the IRA also noted that as this labelling would not necessarily apply at the point of retail sale, the general public could be unaware of these requirements.<sup>16</sup>

3.19 The IRA stipulates that all prawn imports are to be held in quarantine control for sample testing, where they remain until the test results are known. Batches returning any positive results for disease will be re-exported, destroyed or cooked in an approved facility.<sup>17</sup>

3.20 The IRA does note, however, that the efficacy of testing depends on the availability of effective tests, the capacity of overseas authorities to conduct testing off-shore, and the maintenance of product integrity throughout the chain of custody. Testing alone was not considered to reduce the overall risk of disease.<sup>18</sup>

### ***Approved arrangements***

3.21 Some importers can enter into an approved arrangement with DAWR, allowing them to manage and operate cold storage facilities in accordance with

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14 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, pp. 190-191.

15 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, pp. 190-191.

16 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, pp. 182, 192.

17 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 191.

18 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 181.



biosecurity requirements. All importers, regardless of having an approved arrangement, must undergo an inspection of their product by biosecurity officers.<sup>19</sup>

3.22 While DAWR does not allow self-assessment of product, there are other arrangements in place whereby some importers do not need to present their product, with what is known as 'seals intact'. This process means that:

upon export from an exporting country there is a seal applied to the outside of a container which is intended to ensure that the contents of the container are not tampered with.<sup>20</sup>

### **WSD outbreak and import suspensions**

3.23 While full investigations were underway in relation to the WSD outbreak and its cause, the import suspension was triggered by three factors:

- the actual outbreak of WSD in farms in the Logan River;
- evidence that imported prawns intended for human consumption which had tested positive to WSSV were being used as bait by fishers in the Logan River;<sup>21</sup> and
- the high incidence of infected prawns available for sale in retail outlets in the Logan River area.<sup>22</sup> On 4 January 2017, 14 out of 19 retail samples returned positive results for WSD.<sup>23</sup>

3.24 DAWR explained that consideration of these three incidents led to the conclusion that the biosecurity risk had elevated to a point sufficient for trade to be suspended.<sup>24</sup> DAWR officials clarified that its awareness that some importers were acting in a non-compliant way was not sufficient to impose the suspension. As Mr Tim Chapman, First Assistant Secretary, Biosecurity Animals Division, DAWR, explained, prior to the suspension:

when there was information that had come out of Operation Cattai that there were white-spot-positive prawns that had evaded our border controls

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19 Mr Wayne Terpstra, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, pp. 145-146.

20 Mr Wayne Terpstra, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 146.

21 The Biosecurity (Suspended Goods – Uncooked Prawns) Determination 2017 noted that the use of imported uncooked prawns as bait in recreational fishing carries a 'likelihood of infecting crustaceans, including farmed prawns, in Australian river systems'. See further Compilation 1 of the Determination, dated 6 February 2017, <https://www.legislation.gov.au/Series/F2017L00034>

22 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 142.

23 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 120.

24 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard* 28 February 2017, p. 142.

and were for sale, that was an important issue for us. But knowing that there are some prawns available for sale and knowing that some importers appeared to be acting in a deliberately noncompliant way, that, in itself, is not sufficient justification to say that the risk has changed and we would not be able to suspend trade consistent with our SPS obligations.<sup>25</sup>

### ***Import suspension***

3.25 From 9 January 2017, and for a period of six months, all uncooked prawns and prawn meat (including that used for bait), and uncooked prawns and prawn meat marinated for human consumption, were suspended from import.

3.26 In making the determination to suspend prawn imports, the Director of Biosecurity noted that uncooked imported prawns (including prawn meat) represent an 'unacceptable level of biosecurity risk'.<sup>26</sup>

3.27 Certain prawn products were excluded from the suspension, namely uncooked prawns and prawn meat sourced from New Caledonia;<sup>27</sup> highly processed prawn products (like dumplings and samosas), and breaded, crumbed or battered prawns intended for human consumption.<sup>28</sup>

3.28 Whether uncooked prawns could be distributed once reaching Australia depended on a number of factors, including the date the product left the country of origin or the date the product arrived in Australia:

- if the product arrived in Australia **on or before 8 January 2017**, the goods were subject to new and enhanced inspections, including 'secure-seals intact direction, 100 per cent inspection of the consignment and sampling inspection and testing of all consignments'. Importers could export the product if they did not wish to have it inspected
- if the product arrived **9 January 2017** or later, it could not be imported and was exported or destroyed at the importers expense. All import permits for the suspended product were suspended as of 9 January 2017, until further notice.<sup>29</sup>

3.29 The committee was advised that approximately 780 tonnes of prawns were 'on the water' and in transit to Australia when the initial suspension was implemented in January 2017. This product was subject to enhanced testing and as of 28 March 2017,

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25 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard* 28 February 2017, p. 142.

26 Biosecurity (Suspended Goods – Uncooked Prawns) Determination 2017 (No 1).

27 At this time, only New Caledonia is recognised by Australia as being free from WSSV.

28 Department of Agriculture and Water Resources, *02-2017 – Suspension of uncooked prawns and uncooked prawn meat imports*, 7 January 2017, <http://www.agriculture.gov.au/import/industry-advice/2017/02-2017> (accessed 21 March 2017).

29 Department of Agriculture and Water Resources, *02-2017 – Suspension of uncooked prawns and uncooked prawn meat imports*, 7 January 2017.

62 per cent of product had passed testing and was released for sale; approximately 30 per cent had failed testing and eight per cent was still to undergo testing.<sup>30</sup>

3.30 All uncooked prawns and prawn product that was at the border or on the water at the time of the suspension 'remains under biosecurity control until it has been inspected, tested or exported'. Further:

The department has increased border inspections of some permitted goods, such as breaded, battered and crumbed uncooked prawns to a 100 per cent inspection rate, and enhanced monitoring of other permitted products, like uncooked prawns and prawn meat processed into dumplings, spring rolls, samosas and other similar products.<sup>31</sup>

3.31 DAWR explained that while the importation of certain products had been suspended, there was already a considerable amount of seafood product, potentially including infected prawns, still moving through distribution channels across the country.<sup>32</sup>

3.32 On 5 May 2017 DAWR advised stakeholders that the 'enhanced inspection and testing regime for product that was in transit to Australia or had not cleared biosecurity control when the suspension took effect is now complete'.<sup>33</sup>

### **Exemptions from suspension**

3.33 In making the original suspension determination, the Director of Biosecurity noted that:

I am satisfied that existing import conditions are insufficient to provide the high level of sanitary protection needed to reduce the biosecurity risk presented by WSSV on imported uncooked prawns to a very low level, in accordance with the ALOP for Australia. A temporary suspension of the importation of uncooked prawns will allow for a review of risk management conditions and compliance arrangements and for the results of that review to be implemented.<sup>34</sup>

3.34 A number of amendments have been made to the original import suspension of January 2017, to exempt certain prawn products from the suspension. DAWR argued that the exemptions have resulted 'because stringent measures have been

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30 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 2.

31 Department of Agriculture and Water Resources, *Department's action on imported prawns – update April 2017*, 20 April 2017, <http://www.agriculture.gov.au/about/media-centre/media-releases/dept-action-white-spot-april> (accessed 1 May 2017).

32 Ms Raelene Vivian and Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 10.

33 Department of Agriculture and Water Resources, *Weekly Imported Prawn Suspension Update*, 5 May 2017.

34 Biosecurity (Suspended Goods – Uncooked Prawns) Determination 2017, p. 2.

applied to the importation of these prawn products including strict on-arrival testing and mandatory notification by trading partners of positive offshore test results'.<sup>35</sup>

### **February 2017**

3.35 On 3 and 27 February 2017, the Director of Biosecurity amended the suspension order and listed a number of products to be exempt from import suspension, due to low or negligible biosecurity risks in line with Australia's ALOP.

3.36 Products exempted from the import suspension included uncooked prawns and prawn meat harvested within specific areas of Australia, exported to a specific, approved processing plant in Thailand, and re-exported to Australia; imported for use in a laboratory or food sample analysis; and irradiated bait for aquatic use, pet fish food and aquaculture feed.<sup>36</sup>

3.37 The department confirmed to the committee that all prawns wild-caught in Australia and sent to Thailand for processing, were tested for WSD upon re-entry into Australia. The processing plant in Thailand was decontaminated prior to processing Australian prawns, and as of 28 March 2017, all consignments returning from Thailand had tested negative for WSD.<sup>37</sup>

### **April 2017**

3.38 On 3 April 2017 the Director of Biosecurity made a third amendment to the suspension order, to exempt from the import suspension any wild-caught Australian prawns processed overseas and re-exported to Australia.<sup>38</sup>

3.39 The third amendment determined that 'uncooked Australian wild-caught prawns exported overseas for processing, and re-exported to Australia, represent an acceptable level of biosecurity risk that meets Australia's ALOP'.<sup>39</sup>

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35 Department of Agriculture and Water Resources, *Department's action on imported prawns – update April 2017*, 20 April 2017, <http://www.agriculture.gov.au/about/media-centre/media-releases/dept-action-white-spot-april> (accessed 1 May 2017).

36 Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017, Schedule 1, s. 6; Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017 (No. 2), Schedule 1, s. 6.

See also Department of Agriculture and Water Resources, *11-2017 – Update on temporary suspension of uncooked prawns and uncooked prawn products*, 6 February 2017, <http://www.agriculture.gov.au/import/industry-advice/2017/11-2017> (accessed 22 March 2017);

Department of Agriculture and Water Resources, *20-2017 – Update on temporary suspension of uncooked prawns and uncooked prawn products*, 1 March 2017, <http://www.agriculture.gov.au/import/industry-advice/2017/20-2017> (accessed 22 March 2017).

37 Mr Tim Chapman, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, pp. 3-4.

38 Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017 (No. 3), Schedule 1.

39 Explanatory Statement, Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017 (No. 3), p. 1.

3.40 A number of other measures were implemented to limit biosecurity risks for re-imported prawns, such as:

- conditions on import permits, including declarations from the overseas authority as to the Australian origin of the prawns, and that the prawns were segregated from non-Australian prawns and other contamination sources throughout transport, processing and storage;
- exporting countries certifying that all batches of processed uncooked prawns are free from WSSV and YHV, based on OIE testing methods;
- overseas authorities notifying the department if positive test results for WSSV or YHV arise from Australian prawn consignments, processed in approved establishments;
- increased on-arrival inspections and testing for WSSV and YHV, and holding the product pending testing and inspection outcomes; and
- for positive test results, ordering the product to be exported, destroyed or treated, or, at the importer's request and expense, conduct a retest at AAHL.<sup>40</sup>

3.41 DAWR advised that it had contacted major trading partners including China, Indonesia, Malaysia and Vietnam and confirmed with these exporting countries that they could re-commence trade with Australia, provided updated health certification requirements could be met.<sup>41</sup>

### **May 2017**

3.42 On 15 May 2017 the Director of Biosecurity amended the suspension orders for a fourth time to allow the import of uncooked prawns and prawn meat, which has been marinated for human consumption. Imports of such product will be allowed to commence eight weeks after the amendment is registered (mid-July 2017).<sup>42</sup>

3.43 The explanatory statement to the amendment notes that further assessment was made as to the biosecurity risks of these products. The resulting assessment showed:

that those goods, where accompanied by a foreign country health certificate and subject to inspection and testing on-arrival, represent an acceptable level of biosecurity that meets Australia's Appropriate Level of Protection (ALOP).<sup>43</sup>

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40 Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017 (No. 3), Schedule 4.

41 Department of Agriculture and Water Resources, *Weekly Imported Prawn Suspension Update*, 5 May 2017.

42 Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017 (No. 4), s. 2.

43 Explanatory Statement, Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017 (No. 4), p. 1.

3.44 The amendment states that uncooked marinated prawns, released from biosecurity, will have an acceptably low prevalence of WSSV and YHV. Additionally, the product will be sufficiently modified through processing to 'reduce their likelihood of diversion to unintended end-uses (bait, burley or aquatic animal feed) to an acceptably low level'.<sup>44</sup>

3.45 Other measures at the border, further to the foreign country health certificate, will include increased on-arrival inspections; 100 per cent seals intact inspections, and an 'appropriate level' of on-arrival testing (being all batches tested with a sampling that provides 95 per cent confidence at 5 per cent prevalence).<sup>45</sup>

### *Timeliness of suspension*

3.46 DAWR has stated that it implemented the import suspension due to 'an unacceptable level of [WSSV] in imported uncooked prawns in retail outlets'. It was argued that these levels indicated that compliance with biosecurity risk management conditions was not managing the risk to a level consistent with the ALOP.<sup>46</sup>

3.47 On 4 January 2017, DAWR formed the view that trade in uncooked prawns and prawn product should be suspended, due to the increased retail prevalence of WSD. The Minister for Agriculture, the Hon Barnaby Joyce MP, was briefed on the issue on the afternoon of 5 January 2017, with the formal determination to suspend trade made on 6 January 2017.<sup>47</sup>

3.48 The Minister acknowledged that the department had failed to advise him of the increasing detection of WSD for approximately six months.<sup>48</sup> A number of other stakeholders have argued that the import suspension was implemented too late, and after WSD had taken hold in a number of Australian prawn farms.

3.49 DAWR argued that it would not have been possible to suspend trade any earlier. As of 1 December 2016, the department was:

aware of non-compliant activity but there was not sufficient information at that stage to say that the level of risk had changed sufficient for us to suspend trade. The key bit of information...was the confirmatory test from

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44 Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017 (No. 4), Schedule 2.

45 Biosecurity (Suspended Goods – Uncooked Prawns) Amendment (Exceptions) Determination 2017 (No. 4), Schedule 2.

46 Department of Agriculture and Water Resources, *Questions and answers – Import Related Questions*, [www.agriculture.gov.au/import/goods/uncooked-prawns/questions-and-answers](http://www.agriculture.gov.au/import/goods/uncooked-prawns/questions-and-answers) (accessed 21 March 2017).

47 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 120.

48 Hedley Thomas, 'Silence was 'to protect prawn virus probe'', *The Australian*, 11 February 2017, <http://www.theaustralian.com.au/national-affairs/state-politics/silence-was-to-protect-prawn-virus-probe/news-story/860ab119e63eaf3528f8a1383504a69c> (accessed 22 March 2017).

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AAHL which was received on 4 January that there were white spot positive prawns available for sale in supermarkets in the Logan River region.<sup>49</sup>

3.50 The committee will continue to consider the efficacy and timeliness of the import suspension, and the variations made to that suspension, as it progresses its inquiry.

3.51 The committee is also interested to ascertain whether the chain of communication between government officials and key industry stakeholders, regarding information about the increased prevalence of WSD, was effective, consistent and timely.

3.52 In addition, the committee will consider whether the import conditions in place prior to the outbreak were adequate to address the risk of WSSV entering Australia.

### **Import biosecurity breaches**

#### ***Assessing prawn imports***

3.53 The IRA provides that industry or government employees physically inspect imported prawns, using touch, smell and visual assessments. Prawns with visible lesions or physical damage are rejected or diverted for further processing. However, 'prawn processing lines usually operate at high speed, allowing little time for detailed inspection'.<sup>50</sup>

3.54 The IRA acknowledges that the prevalence and expression of prawn infection can vary greatly between various countries or regions. Not all prawn-producing countries have active surveillance measures to look for prawn disease, and may lack appropriate facilities and trained staff.<sup>51</sup>

3.55 Additionally, the focus on prawn aesthetics and suitability for human consumption means that quarantine risks from imported prawns may not be addressed:

Not all infected animals would be removed as infection may not result in visible disease signs; and where obvious signs of clinical disease are present, not all such prawns would be detected and removed. Even those animals detected with lesions indicative of a pest or an infectious disease may not be rejected if the pest or disease is not of concern to human health and does not result in visible lesions that affect marketability.<sup>52</sup>

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49 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 152.

50 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 81.

51 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 80.

52 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 82.

3.56 DAWR has noted that 'inspectors we have at the border would not have specialist knowledge in prawn diseases' but would select random samples from each consignment to complete the border testing for WSSV and YHV.<sup>53</sup>

3.57 Following the outbreak of WSD, DAWR appointed a group of biosecurity officers to undertake inspections of prawn products, namely those products that are crumbed, battered or breaded. The appointed officers have 'specific knowledge and experience, which will assist with the provision of efficient inspection activity and consistent assessment against the import conditions'.<sup>54</sup>

### ***Departmental investigations***

3.58 DAWR detailed to the legislation committee its investigations into seafood importers, for potential breaches of biosecurity regulations. It advised that since the IRA, it has performed a number of investigations into single incidents of non-compliant behaviour.<sup>55</sup> DAWR informed the committee that in 2013, it became aware of:

independent testing which detected white spot disease in prawns for sale at retail outlets in Australia which then resulted in an investigation into possible washing or mislabelling of marinated prawns. As a result, a number of marinated prawn consignments were rejected and re-exported and the conditions around importing marinated prawns were clarified with importers.<sup>56</sup>

3.59 DAWR launched further investigations in mid-2016, following evidence that some importers were 'allegedly circumventing inspection and testing processes at the border'. These investigations aimed to stop illegal activity and therefore prevent the spread of infectious disease into Australia, but were not specifically related to the WSD outbreak.<sup>57</sup>

3.60 DAWR detailed some of the methods believed to be used by importers to evade biosecurity and quarantine controls. These include:

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53 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 127.

54 Department of Agriculture and Water Resources, *Weekly Imported Prawn Suspension Update*, 5 May 2017.

55 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 126.

56 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 119.

57 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, pp. 119-120.



- knowingly submitting clean product for testing and hiding product that may be infected (as was done by the Sino seafood company<sup>58</sup>);
- providing empty consignments on shipments, including bags and containers, to allow for product substitution;
- deliberately mislabelling product so it does not require testing; and
- colluding with foreign prawn suppliers.<sup>59</sup>

3.61 DAWR confirmed it was aware of instances where non-compliant importers were changing imported product from vannamei prawns to banana prawns, and avoiding the seals intact requirements. Other efforts to avoid border controls included importers using colour-coded and other markings on cartons to help avoid disease testing of certain stock, by providing biosecurity officers with 'good' prawns.<sup>60</sup>

3.62 It was also claimed by DAWR that importers would:

pack empty boxes from the exporter coming into Australia. They have got a big container full of prawns but there would be a few empty boxes in there. Normally the prawns are in some sort of plastic bag so they would put in a few empty plastic bags. Then at this end, the importer, before our inspectors got there, was taking those empty boxes out with the plastic bags and filling them with effectively prawns that did not have white spot virus.<sup>61</sup>

3.63 DAWR noted that one of the biggest challenges in dealing with the WSD disease outbreak was:

the deliberate activities by some importers to substitute prawns and to evade the controls. Much like other smuggled goods, it is very difficult to detect deliberate smuggling, deliberate attempts to evade controls, and that is where our concern is.<sup>62</sup>

### ***Operation Cattai***

3.64 In March 2016, as part of its investigations, DAWR commenced Operation Cattai. Operation Cattai was a result of information from various sources and

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58 Michael Wray, 'Prawn white spot outbreak: Probe finds prawns meant for human consumption being used as bait', *The Courier-Mail*, 12 January 2017, <http://www.couriermail.com.au/news/queensland/prawn-white-spot-outbreak-probe-finds-prawns-meant-for-human-consumption-being-used-as-bait/news-story/f7fe3e500ae6507ced36ace7934ba7ab> (accessed 22 March 2017).

59 Michael Atkin, 'Importers 'swapping prawns' so white spot disease is not detected, Barnaby Joyce fears', *ABC News*, 17 January 2017, <http://www.abc.net.au/news/2017-01-17/importers-swapping-prawns-barnaby-joyce-fears/8185274> (accessed 11 May 2017).

60 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, pp. 128, 132-133.

61 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 133.

62 Mr Tim Chapman, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 8.

intelligence work. The operation sought to determine if importers were acting in a non-compliant way and thereafter collect evidence for prosecution.<sup>63</sup>

3.65 Mr Wayne Terpstra, Assistant Secretary in the Compliance Division of DAWR detailed to the committee the phases of Operation Cattai and what these involved:

Phase 1 of Operation Cattai involved the purchase of a number of prawn samples at retail levels. Those results came in and were confirmed on 24 June 2016... Phase 2 of Cattai was commenced on 1 August 2016. As new consignments arrived in Australia, there were a number of targeted inspections and, for those consignments that were not specifically targeted for an enhanced Cattai-type enforcement response, we had our regular testing of product as it passed through the border to determine whether there were white-spot-positive prawns being presented for importation. There was no further retail testing undertaken until the outbreak itself, but there was ongoing testing at the border as product was being cleared.<sup>64</sup>

3.66 As part of the investigation, prawns were purchased for testing from retail outlets in Brisbane, Sydney and Melbourne, in order to best determine where non-compliant importers may be distributing their product.<sup>65</sup>

3.67 Prawns available for retail sale and infected with white spot were detected between Melbourne and Brisbane. The white spot was detected 'either at the point of sale through a purchasing assessment or through controls at the border, where there appeared to be some subversion of departmental controls taking place'. DAWR acknowledged that the Logan River may therefore be only one of many locations where infected prawns were available for sale, and potentially used as bait.<sup>66</sup>

3.68 As part of its investigations into non-compliant importers, the department also surveyed recreational fishers in the Logan River area, over the 2016-17 summer period. It was found that fishers were using imported prawns meant for human consumption as bait. When tested by the DAWR, two of the prawns tested positive for WSD. Prawns obtained from retail outlets in the same area also tested positive for WSD. These results contributed to the decision to implement the import suspension.<sup>67</sup>

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63 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, pp. 136, 143.

64 Mr Wayne Terpstra, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 11.

65 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p 131.

66 Mr Wayne Terpstra, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 143.

67 Department of Agriculture and Water Resources, *Media Statement*, 'Department's action on imported prawns', 10 February 2017, <http://www.agriculture.gov.au/about/media-centre/media-releases/dept-action-white-spot> (accessed 23 March 2017).

3.69 Departmental investigators became aware of the presence of infected product in retail outlets, following positive tests results received on 24 June 2016. The positive WSD retail results obtained as part of Operation Cattai helped to identify and actively target 25 out of 40 importers, as part of the second phase of the operation, with 13 of those 25 importers attracting a higher level of scrutiny and concern.<sup>68</sup>

3.70 Operation Cattai has led the department to submit a brief of evidence to the Department of Public Prosecutions, in relation to Chinese seafood importer Sino. Action has also been taken against six importers whose approved arrangements, permits and ability to import prawns has been removed.<sup>69</sup> At the time of their suspension, the six importers were responsible for an estimated 30 per cent of the entire volume of prawn imports into Australia.<sup>70</sup>

3.71 As part of its investigations, DAWR also examined the activity of biosecurity officers at the border, and determined that some officers were not following 'their work procedures'.<sup>71</sup> In particular, staff were being handed prawn cartons by importers from which to select product for WSSV testing, rather than randomly choosing the carton from a consignment. Thereafter, DAWR argued that it reiterated the proper procedures to staff and implemented further training in areas such as prawn identification, although no staff were dismissed.<sup>72</sup>

#### ***Import suspension breaches***

3.72 Soon after the implementation of the import suspension, the Minister for Agriculture and Water Resources stated that some importers were knowingly selling prawns infected with WSD. The importers were providing healthy prawns for biosecurity inspection, while importing infected prawns that were not tested.<sup>73</sup>

3.73 Media reports have suggested that some importers into Western Australia have been 'using technicalities' to circumvent the suspension conditions, and are washing coatings, such as bread, crumb or batter, off the prawns after importation.

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68 Mr Wayne Terpstra, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, pp. 144-145.

69 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Estimates Hansard*, 24 May 2017, p. 27.

70 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard*, 24 May 2017, p. 29.

71 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 128.

72 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, pp. 128-129.

73 Michael Atkin, 'Importers 'swapping prawns' so white spot disease is not detected, Barnaby Joyce fears', *ABC News*, 17 January 2017, <http://www.abc.net.au/news/2017-01-17/importers-swapping-prawns-barnaby-joyce-fears/8185274> (accessed 11 May 2017).

This allows importers to avoid the suspension, and to 'target the bigger and more lucrative raw prawn market'.<sup>74</sup>

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74 Daniel Mercer, 'Loophole exposes prawn industry to lethal virus', *The West Australian*, 10 May 2017, <https://thewest.com.au/news/wa/loophole-exposes-prawn-industry-to-lethal-virus-ng-b88469113z> (accessed 10 May 2017).

# Chapter 4

## WSSV and testing of prawn imports

4.1 This chapter focuses on the biosecurity testing regime. It considers testing undertaken prior to the outbreak of WSD as well as the enhanced testing system imposed following the detection of WSD.

### *Testing for WSSV*

4.2 While a number of tests are available for detecting WSSV, in most cases various types of polymerase chain reaction (PCR) testing is recommended, to the standards developed by the OIE. However, PCR testing is unable to distinguish between infectious and non-infectious virus.<sup>1</sup>

4.3 Under the 2009 IRA, it was determined that PCR testing on prawns for WSSV, as determined under the OIE guidelines, would be required to provide 95 per cent confidence of detecting the virus, if it was present at a prevalence of five per cent. The IRA therefore provided that some WSSV may be in Australia, but at a sufficiently low prevalence. The IRA went on to provide that:

The level of protection provided by testing would depend on the availability of effective tests (including with respect to their sensitivity and commercial availability, as well as sampling and other operational procedures). The option of testing off-shore would need to be considered on a case-by-case basis...

...Given uncertainty about the sensitivity of available tests for prawn pathogens, this option alone is not expected to reduce the likelihoods of entry and exposure sufficiently to reduce the overall risk to an acceptable level, but may be effective in combination with other measures.<sup>2</sup>

4.4 According to DAWR:

WSSV testing was an import permit condition; it is the responsibility of importers to meet import permit conditions. Biosecurity officers obtain samples of imported prawns and direct the samples for testing. Importers would choose one of the accredited laboratories for testing. Importers were responsible for testing expenses.<sup>3</sup>

4.5 DAWR does not undertake its own WSSV testing, instead approving laboratories for 'testing imported aquatic animals for biosecurity purposes according to established policy'. The three laboratories approved by DAWR to test for WSSV in imported prawns are AgriGen, Advanced Analytical Australia (AAA) and the Elizabeth Macarthur Agricultural Institute (EMAI), run by the NSW Department of

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1 Department of Agriculture and Water Resources, *Submission 9*, p. 12.

2 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 181.

3 Department of Agriculture and Water Resources, *Submission 9*, pp. 12-13.

Primary Industries. Prior to the current WSD outbreak, test results were provided within three to five days.<sup>4</sup>

4.6 Under the conditions prior to the WSD outbreak, if an approved laboratory returned a negative WSSV test result, the prawn product could be released from biosecurity control. If the test results were positive for WSSV, the importer was required to export or destroy the consignment.<sup>5</sup>

### ***Enhanced testing regime***

4.7 The Australian Animal Health Laboratory (AAHL), operated by the CSIRO, undertakes tests in line with OIE standards, but has developed additional WSSV testing processes. These include an additional real time PCR test.<sup>6</sup> The two AAHL tests approach the virus differently:

There is a test that picks up a fragment of DNA. The OIE test and the test that AAHL have developed pick up different fragments of DNA, so they are testing different parts of the virus, because it is testing the DNA of the virus. It is not isolating the whole virus; it just picks up a fragment. That is why there are two different tests. They are both testing for white spot syndrome virus, but they target a different part of the genome. That is why you can have different results from the test.<sup>7</sup>

4.8 AAHL commenced using this second test under an enhanced testing regime, following the implementation of the import suspension of raw prawns and prawn product in January 2017. DAWR was unaware of any other laboratories completing the same tests as AAHL, and therefore was unaware of other laboratories that could test AAHL processes.<sup>8</sup>

4.9 DAWR confirmed with the committee that following the WSD outbreak, any negative test results from AAA, AgriGen or EMAI would result in automatic retesting at AAHL. DAWR considered that this was 'a very conservative approach', relying on AAHL as the 'premier lab in Australia for animal health issues'. DAWR noted that prior to the release of any uncooked product for sale, a 'very high level of confidence' was required that the prawns were white spot free.<sup>9</sup>

4.10 The Fisheries Research and Development Corporation (FRDC) advised the legislation committee that through its testing for WSSV, it was taking samples to try and help determine the country of origin of the virus that appeared in the Logan River.

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4 Department of Agriculture and Water Resources, *Submission 9*, pp. 12, 24.

5 Department of Agriculture and Water Resources, *Submission 9*, p. 24.

6 Department of Agriculture and Water Resources, *Submission 9*, p. 13.

7 Dr Robyn Martin, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 5.

8 *Committee Hansard*, 28 March 2017, p. 9.

9 Mr Tim Chapman, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, pp. 4-5.

This would provide a better understanding of the outbreak, and help eradication and prevention programs.<sup>10</sup>

## Testing results

### *Tolerated levels of white spot*

4.11 The IRA provides that a sampling regimen should provide 95 per cent confidence of detecting a disease agent, if it is present at a prevalence of 5 per cent.<sup>11</sup> The department confirmed to the committee that, under these conditions, it was 'always aware that white spot positive prawns would approach the border' and could pass through biosecurity controls, 'notwithstanding the 100 per cent testing requirement'.<sup>12</sup>

4.12 DAWR argued that these testing parameters were intended to be supplemented by other biosecurity measures, including peeling or cooking the prawns. Dr Andrew Cupit, Assistant Secretary in the Biosecurity Animal Division of DAWR noted that testing was just one way to measure the risk of disease, and while testing can detect viral particles, these may not necessarily be infective and do not necessarily indicate an infection or outbreak will occur.<sup>13</sup>

### *Initial white spot detection*

4.13 On 24 June 2016 and as part of its ongoing investigations into non-compliant importers, the department first received positive test results for WSD from retail outlets. DAWR commenced work to determine how and why this was occurring, in light of the 100 per cent testing requirement at the border, and how to stop non-compliant behaviour (through Operation Cattai).<sup>14</sup>

4.14 During the period between August and December 2016, there were elevated numbers of positive test results for WSD.<sup>15</sup>

4.15 On 22 November 2016, Biosecurity Queensland was first made aware of biosecurity issues on a prawn farm. Samples were taken on 28 November 2016 from that farm and tested by AAHL.<sup>16</sup>

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10 Dr Patrick Hone, Fisheries Research and Development Corporation, *Committee Hansard*, 28 February 2017, p. 35.

11 Biosecurity Australia, *Generic Import Risk Analysis Report for Prawns and Prawn Products*, October 2009, p. 191.

12 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 126.

13 Dr Andrew Cupit, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, pp. 153-154.

14 Mr Tim Chapman, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 148.

15 *Estimates Hansard*, 28 February 2017, p. 154.

16 Dr Robyn Martin, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, pp. 122-123.

4.16 On 1 December 2016, testing confirmed the presence of WSD on a prawn farm in the Logan River area. Following these results, department investigators tested uncooked prawns obtained from retail outlets in the area, as well as raw prawns being used by recreational fishers as bait. Testing on both products returned positive results for WSD.<sup>17</sup>

4.17 As previously noted, the IRA provides that WSSV will be tolerated in Australia, if its presence is detected at a rate not greater than five per cent (with 95 per cent certainty). However, evidence provided to the committee by DAWR, at Table 4.1, indicates that the five per cent prevalence rate has been exceeded a number of times in recent years.

**Table 4.1 – Raw prawn virus testing failure rate by consignments as at 31 March 2017**<sup>18</sup>

Financial Year	Consignments tested	Consignments with a testing failure	Percentage failed of total	Percentage failed of completed <sup>#</sup>
FY 2009/10	623	110	18%	18%
FY 2010/11	534	59	11%	11%
FY 2011/12	834	31	4%	4%
FY 2012/13	726	51	7%	7%
FY 2013/14	950	101	11%	11%
FY 2014/15	757	32	4%	4%
FY 2015/16	697	54	8%	8%
July - Dec 2016	350	82	23%	23%
Jan - March 2017	376	46	12%	57%*

<sup>#</sup> *Consignments with completed Agriculture Import Management System directions (tests finalised)*

\* *At 31 March 2017 there were 297 out of 376 consignments with test results pending*

4.18 This table shows that in the 2009-10, 2010-11, 2012-13, 2013-14, and 2015-16 financial years, the prevalence of WSSV exceeded the five per cent rate of tolerance determined by the IRA.

4.19 Under questioning from the committee, the department confirmed that enhanced testing, using the 'stronger test' of AAHL, was returning higher levels of positive WSSV results following the WSD outbreak. DAWR acknowledged that

17 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 120.

18 Department of Agriculture and Water Resources, answer to question taken on notice, 28 March 2017 (received 20 April 2017).



results in prior years could have been higher, had the enhanced testing then been in place.<sup>19</sup>

4.20 DAWR also acknowledged that higher rates of infection over the past year could be expected as a result of targeted inspection activity against various seafood importers, but that these results would not necessarily be reflective of the whole Australian market.<sup>20</sup>

4.21 According to DAWR, higher test results could also be a result of retail testing, where the ratio of tested prawns to total product is far lower than that of testing an entire consignment. Retail testing therefore has a higher sensitivity, and could also be open to cross-contamination.<sup>21</sup>

4.22 The FRDC confirmed to the legislation committee its understanding that positive tests for WSSV had been returned for a considerable period of time, including between 1997 and 2007.<sup>22</sup>

4.23 Reports in mid-February 2017, citing senior department officials, put the infection rate of WSD in some tested imported prawns in retail outlets 'at more than 80 per cent since December'. Additionally:

Industry leaders have told their lawyers that chief veterinary officer Mark Schipp disclosed in a teleconference late [January 2017] that '50 per cent' of imported prawns bought from retail outlets and tested were positive for white spot disease.<sup>23</sup>

### Issues with testing

4.24 The committee raised its concerns with DAWR about possible dissimilar approaches taken by the different laboratories to WSSV testing, noting that process variances between laboratories could result in different standards for negative and positive test results.<sup>24</sup>

4.25 The committee noted that the enhanced testing regime may not go any way to control the WSD outbreak, as the disease has already spread. The committee also

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19 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 3.

20 Hedley Thomas, 'Silence was 'to protect prawn virus probe'', *The Australian*, 11 February 2017, <http://www.theaustralian.com.au/national-affairs/state-politics/silence-was-to-protect-prawn-virus-probe/news-story/860ab119e63eaf3528f8a1383504a69c> (accessed 22 March 2017).

21 Dr Andrew Cupit, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 154.

22 *Estimates Hansard*, 28 February 2017, p. 39.

23 Hedley Thomas, 'Devastating prawn virus outbreak reveals biosecurity 'failures'', *The Australian*, 9 February 2017, <http://www.theaustralian.com.au/news/health-science/devastating-prawn-virus-outbreak-reveals-biosecurity-failures/news-story/72916888e9ea7d570d6facf7b7ad6143> (accessed 22 March 2017).

24 *Committee Hansard*, 28 March 2017, pp. 6-7.

queried why negative tests results from AgriGen, AAA and EMAI were not relied on after the outbreak occurred. The department informed the committee that:

post the outbreak of the disease, we took a very conservative approach to make absolutely certain that no prawns that entered the Australian retail market had any trace of white spot in them at all.<sup>25</sup>

4.26 However, the committee notes that for the operational phases of Operation Cattai, AgriGen and EMAI were specifically engaged by the department for white spot testing.<sup>26</sup>

4.27 DAWR acknowledged that the tests used by AAHL, and on which the department made its decisions post-outbreak, were 'very, very sensitive'. However, DAWR noted that AAHL tests a different part of the genome to other laboratories, and this does not necessarily mean that it was 'establishing a higher bar' than other tests.<sup>27</sup>

4.28 In response to questions from the committee, DAWR confirmed that a positive result included the detection of 'any presence of white spot DNA', even if the amount of the virus present was too low to be infectious, or amounted to small amounts of viral fragments.<sup>28</sup>

4.29 The committee inquired about the possibility of false positives in the AAHL testing. DAWR argued that while there can be false positives in any test, this risk is minimised by having negative and positive controls run with every test. Additionally, AAHL completes all tests in duplicate and multiple tests are completed on the one sample. However, if any of these duplicates are positive, the sample is considered positive for WSSV.<sup>29</sup>

### ***Impact on importers***

4.30 The committee raised the concerns of prawn importers, who, on receiving a positive test result from AAHL, could not have these results tested by another laboratory, using the same methods as AAHL. This was despite the importer willing to bear any expense for further testing.<sup>30</sup>

4.31 The committee heard that some importers were also unable to release significant volumes of prawn product into the market, following both a positive and negative WSD test result from AAHL. In this instance, importers were unable to get

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25 Mr Tim Chapman, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 8.

26 Mr Wayne Terpstra, Department of Agriculture and Water Resources, *Estimates Hansard*, 28 February 2017, p. 166.

27 Mr Tim Chapman and Dr Robyn Martin, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 7.

28 *Committee Hansard*, 28 March 2017, pp. 6-7.

29 Dr Robyn Martin, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 8.

30 *Committee Hansard*, 28 March 2017, p. 9.

the prawns tested at another laboratory, including any located overseas, as AAHL was being used by the department as the 'final arbiter' on the presence or absence of white spot.<sup>31</sup>

4.32 Stakeholders argued that the new testing regime for WSD resulted in prawns being held in storage until they could be tested. However, 'given the high rate of diseased prawns already recorded it was unlikely they would ever return to supermarket shelves'.<sup>32</sup>

## **WSD and retail conditions**

### ***Uncooked prawns already in Australia***

4.33 The committee received evidence from DAWR as to how it was approaching prawn product already in Australia and on sale in retail environments. DAWR estimated that over 10 000 retail outlets across Australia sold prawn product, and the decision was made to 'effectively choke the domestic supply chain'. Testing at the largest supermarket chain distribution centres was undertaken, resulting in some prawns testing positive for white spot and subsequently being destroyed or re-exported.<sup>33</sup>

4.34 DAWR noted that there were potentially thousands of locations and distribution centres across the country where prawns could be stored. It was therefore utilising techniques to stop prawn product reaching retail outlets, via work with importers, entities with approved arrangements and through examination of large-scale cold storage units.<sup>34</sup>

4.35 DAWR explained to the committee the complexities of the supply chain in relation to testing, and the difficulties this presented when determining the quantity of prawns in the market. The department advised that:

we have gone to enormous effort to make sure that stock that was already in Australia is tested. We have done that by going straight to warehouses of the major supermarkets because that is where most of the product is. The supermarkets have worked incredibly well with us, and all of that has been tested. Where it has been found to be positive it has been withdrawn from sale. We cannot guarantee that there are not some prawns out there at retail level that are still white spot positive but we have done a heck of a lot of testing and an awful lot of withdrawal from sale to try and make that the situation.<sup>35</sup>

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31 *Committee Hansard*, 28 March 2017, p. 5.

32 Marty McCarthy, 'All imported raw prawns to be pulled for white spot testing; fears that prices will rise', *ABC News*, 20 February 2017.

33 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 2.

34 Ms Raelene Vivian, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 3.

35 Ms Lyn O'Connell, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 10.

4.36 Approximately 300 tonnes of prawn product at distribution centres across Australia had been tested as of April 2017, with a 'significant volume' returning positive results, and being removed from retail sale. Wholesale facilities and cold stores were also tested, with infected product barred from entering the retail environment.<sup>36</sup>

4.37 As of 20 April 2017, approximately 2 million kilograms of imported uncooked prawns were being held in secure storage facilities across Australia, as worked continued on testing this product for WSSV.<sup>37</sup>

4.38 On 5 May 2017, DAWR advised that it was continuing its inspection regime with the aim of completing inspections and sampling 'within the coming weeks'. Prawn products were under the control of biosecurity while the risk assessments were taking place.<sup>38</sup>

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36 Department of Agriculture and Water Resources, *Department's action on imported prawns – update April 2017*, 20 April 2017, <http://www.agriculture.gov.au/about/media-centre/media-releases/dept-action-white-spot-april> (accessed 1 May 2017).

37 Department of Agriculture and Water Resources, *Department's action on imported prawns – update April 2017*, 20 April 2017, <http://www.agriculture.gov.au/about/media-centre/media-releases/dept-action-white-spot-april> (accessed 1 May 2017).

38 Department of Agriculture and Water Resources, *Weekly Imported Prawn Suspension Update*, 5 May 2017.

# Chapter 5

## Committee view and recommendations

5.1 This chapter provides the committee's views on various aspects of the WSD outbreak. The committee will continue its inquiries into a number of key areas, including the responsiveness of government departments to the outbreak, the adequacy of biosecurity controls and the need for balance between effective biosecurity protection and successful international trade.

### DAWR response to outbreak

5.2 Despite the outcomes of Operation Cattai and efforts by DAWR to contain the spread of WSD once it was discovered in Australia, there has been considerable criticism of the way biosecurity and other officials responded to the outbreak.

#### *Communication*

5.3 Industry stakeholders have raised concerns that DAWR failed to notify them of the increased risk of a WSD outbreak. The department has argued that the failure to provide earlier notification was due to ongoing investigations into a number of importers.<sup>1</sup>

5.4 Reports allege that, despite WSD being detected at 'alarmingly high rates' since August 2016, officials failed to act promptly or in accordance with the Biosecurity Act, did not appropriately respond to the outbreak and did not effectively communicate with prawn farmers about the potential risks of a WSD outbreak. In particular:

Industry experts are angry at what they have described as late, inadequate responses from the federal department when the problem reared its head last year; a lack of transparency about what has been known; and a failure of federal and state agencies to liaise effectively and agree on comprehensive actions to slow the spread of the virus.<sup>2</sup>

5.5 In addition to the financial losses, uncertainty regarding future operations has placed affected farmers under significant stress. According to evidence provided to the committee, factors including a lack of timely, clear and consistent information provided to farmers as well as insufficient resources contributed to this stress and hindered the ability of farmers to respond.<sup>3</sup>

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1 Hedley Thomas, 'Silence was 'to protect prawn virus probe'', *The Australian*, 11 February 2017, <http://www.theaustralian.com.au/national-affairs/state-politics/silence-was-to-protect-prawn-virus-probe/news-story/860ab119e63eaf3528f8a1383504a69c> (accessed 22 March 2017).

2 Hedley Thomas, 'Devastating prawn virus outbreak reveals biosecurity 'failures'', *The Australian*, 9 February 2017, <http://www.theaustralian.com.au/news/health-science/devastating-prawn-virus-outbreak-reveals-biosecurity-failures/news-story/72916888e9ea7d570d6facf7b7ad6143> (accessed 22 March 2017).

3 DigsFish Services Pty Ltd, *Submission 1*, pp. 5-6.

5.6 The committee queried why, if positive results for WSD in retail outlets were obtained in June 2016, the relevant government and biosecurity agencies were not notified at that time. DAWR advised that as it was dealing with 'organised noncompliance' from some importers, targeted operations were deemed the best way to address this. DAWR took the view that sharing information more broadly about these operations was likely to 'send noncompliant behaviour underground or further underground and make it much harder to detect or deal with the risk product'.<sup>4</sup>

5.7 The committee was concerned by evidence that infected raw prawns were available for retail sale throughout the eastern seaboard, and that this infected product could be used as bait. Given this, it appears the potential risk for white spot to spread beyond the Logan River area is considerable.

5.8 The committee asked extensive questions of DAWR, to clarify who knew what and when in relation to this outbreak, without a clear response. The committee remains very concerned that white spot was detected in Australia during 2016, and yet serious action to prevent its spread did not occur until January 2017, at which point it was too late.

5.9 The conservative actions taken by DAWR, with regards to import restrictions and enhanced testing, may have prevented further outbreaks. However, this does not alter the fact that WSD was able to enter Australia despite biosecurity controls and the IRA conditions. The outbreak has caused extensive damage to a number of prawn farms and continues to financially impact farmers and fishers in the affected region.

5.10 Given that positive results for WSD were obtained from retail outlets in mid-2016, in conjunction with serious biosecurity breaches at the border by non-compliant importers during 2016, and elevated detection of WSD in testing during that time, the committee is very concerned that action was not taken with appropriate urgency. The elevated level of risk has resulted in the current WSD outbreak, and destroyed extensive prawn stock, at great expense.

5.11 As the inquiry continues, the committee will closely examine the role of various government stakeholders in countering the actions of noncompliant importers, and responding to the detection of WSSV and the presence of WSD. The committee will also consider the timeliness and efficacy of the department's communication with government and industry stakeholders.

5.12 The committee notes that DAWR and Biosecurity Queensland remain committed to a WSD eradication program.<sup>5</sup> The committee hopes that this work does indeed help eradicate the presence of WSD in Australia.

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4 Mr Wayne Terpstra, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 11.

5 Mr Daryl Quinlivan, Department of Agriculture and Water Resources, *Committee Hansard*, 28 March 2017, p. 8.

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## **Importation concerns**

5.13 The importation of infected prawns through non-compliance with prawn importation requirements or circumvention of the inspection and testing processes at Australia's borders has raised serious questions not only about the current biosecurity regime but also the assumptions and posture which underpin it.

5.14 Mr Daryl Quinlivan, Secretary of DAWR explained the assumptions on which Australia's biosecurity system is based, stating that the department is 'dealing with people who are making mistakes or acting benignly' with a system 'designed to detect' such persons. However, the discovery of WSD in imported prawns has raised questions for DAWR about whether it will have to 'rethink our posture and the assumptions we make about the motives and behaviour' of industrial-scale importers.<sup>6</sup>

5.15 In its final report, the committee will endeavour to explore the five potential importation pathways identified by DAWR, to determine the extent to which Australia's biosecurity regime in relation to WSD and the assumptions on which it is based are fit for purpose.

### ***Import suspension determination and amendments***

5.16 The committee notes that the import suspension order served to halt the import of potentially infected prawns and prawn product from foreign countries. DAWR argued that the various amendments to the suspension order were made in line with assessed risks, and in accordance with Australia's ALOP.

5.17 However, the committee also notes that suspending the import of various seafood products, while useful in preventing further WSD outbreaks, does not alter the fact that WSD has already breached Australia's biosecurity controls. Biosecurity measures at the border should have been robust enough to detect WSD-infected prawns and to prevent such product from entering the country.

5.18 The committee is concerned that some amendments to the suspension order continue to present a risk to Australia's biosecurity, especially as the cause of the WSD outbreak remains unknown. The committee is particularly concerned that raw marinated prawns and prawn product, intended for human consumption, will soon recommence importation. Infected raw prawns, including marinated prawns, remain one of the possible causes of the WSD outbreak.

5.19 While all imports are being inspected as part of the enhanced border inspection program following the WSD outbreak, the committee notes that if importers were inclined to breach the suspension conditions or biosecurity controls, and remove coatings from raw prawns prior to retail sale, this would not be detected at the border. It would likely occur after inspection, and therefore the risk of WSSV being imported via these products remains unchanged.

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6 Mr Daryl Quinlivan, Department of Agriculture and Water Resources, *Estimates Hansard*, 24 May 2017, p. 32.

5.20 The committee will continue to inquire into the biosecurity measures implemented and enforced by DAWR in its efforts to stop the import and potential outbreak of infectious disease agents.

5.21 The committee will be particularly interested in the efficacy and relevance of the 2009 IRA, and whether elements of this analysis could have been strengthened or improved.

5.22 To this end, the committee notes with interest that DAWR has announced a review into the import conditions for prawns and prawn products, imported for human consumption, and the biosecurity risks of these products. The review will 'identify and categorise hazards of biosecurity concern associated with the importation of these products' and 'risk assessments of disease agents will be undertaken as required'.<sup>7</sup>

## **Testing for white spot**

### ***Testing results***

5.23 The committee is concerned that in the majority of the financial years since the commencement of the IRA, the detected levels of WSSV in imported raw prawns exceeded the accepted tolerance level of not greater than five per cent. However, it is unclear to the committee that any further preventative biosecurity measures were implemented to address these high rates.

5.24 As part of its ongoing inquiries, the committee will consider the efficacy of the actions taken by biosecurity officials, if any, to address these high test results as they occurred, and consider what actions could have potentially been taken to address the increasing prevalence of WSSV in imported product.

### ***Testing issues and impact on importers***

5.25 The committee appreciates that the enhanced testing regime was designed by DAWR to ensure that no further cases of WSSV entered Australia, and that no products in a retail environment had WSD. However, the highly conservative approach now taken to the testing results has caused a large volume of prawn product to return positive results, even in the event that the WSSV detected was unlikely to be infectious.

5.26 The committee notes that prior to the outbreak, AgriGen, AAA and EMAI were approved biosecurity testing laboratories, and that AgriGen and EMAI were used as part of Operation Cattai. However, following the outbreak of WSD, test results regarding WSSV from these laboratories were no longer accepted by DAWR.

5.27 As these laboratories adhere to OIE standards, and were in use by DAWR for some time prior to the outbreak, the committee queries why they were not considered satisfactory following the outbreak, as part of enhanced testing.

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7 Department of Agriculture and Water Resources, *Review of import conditions for prawns and prawn products*, 16 May 2017, <http://www.agriculture.gov.au/about/media-centre/media-releases/review-prawn-products> (accessed 7 June 2017).



5.28 The committee was concerned to hear about the inconsistencies in the WSSV enhanced testing regime, as applied to importers and other prawn suppliers. In particular, it was concerned that the AAHL results were unable to be verified by any other testing laboratories, and importers were unable to use laboratories of their choice, even if they adhered to OIE testing standards. This was a particular issue when AAHL returned both positive and negative WSSV test results.

5.29 The committee takes the view that DAWR should approve the use of other testing laboratories to determine the presence of WSSV in uncooked prawns. These laboratories should work in conjunction with the AAHL and adhere to OIE standards.

### **Recommendation 1**

**5.30 The committee recommends that the Department of Agriculture and Water Resources approve the use of other testing laboratories, in conjunction with the Australian Animal Health Laboratory, to determine the presence of the white spot syndrome virus in uncooked prawns and prawn product in Australia. The approved laboratories would adhere to World Organisation for Animal Health standards.**

### **Extension to report**

5.31 This interim report provides an overview of some of the key issues and concerns relating to the outbreak of WSD in Australia which the committee intends to pursue. The committee would like the opportunity to gather further evidence and to consider the matters raised in this report in greater depth. Therefore, the committee recommends that the Senate extend the reporting date for the inquiry to 7 December 2017.

### **Recommendation 2**

**5.32 The committee recommends that the Senate extend the inquiry reporting date to 7 December 2017.**

**Senator Glenn Sterle**

**Chair**



# Appendix 1

## Public hearings and witnesses

### Tuesday, 28 March 2017, Canberra, ACT

- CHAPMAN, Mr Tim, First Assistant Secretary, Department of Agriculture and Water Resources
- MARTIN, Dr Robyn, Assistant Secretary, Department of Agriculture and Water Resources
- O'CONNELL, Ms Lyn, Deputy Secretary, Department of Agriculture and Water Resources
- PADOVAN, Mr Nico, First Assistant Secretary, Department of Agriculture and Water Resources
- QUINLIVAN, Mr Daryl, Secretary, Department of Agriculture and Water Resources
- TERPSTRA, Mr Wayne, Assistant Secretary, Department of Agriculture and Water Resources
- VIVIAN, Ms Raelene, First Assistant Secretary, Department of Agriculture and Water Resources

### Monday, 10 April 2017, Brisbane, Queensland

- BETZEL, Mr Marshall, President, Queensland Seafood Marketers Association
- DICK, Mr Alistair, Board Member, R&D Committee, Australian Prawn Farmers Association
- DIGGLES, Dr Ben, Managing Director, DigsFish Services Pty Ltd
- JARRETT, Ms Annie, Chairperson, Australian Council of Prawn Fisheries
- JENKINS, Ms Helen, Executive Officer, Australian Prawn Farmers Association
- LANDOS, Dr Matt, Future Fisheries Veterinary Service
- PEREZ, Mr Eric, Chief Executive Officer, Queensland Seafood Industry Association
- RIESENWEBER, Mr Tony, Member, Queensland Seafood Industry Association
- STEPHENS, Dr Len, Managing Director, Seafood CRC Company Ltd
- WILKINSON, Mr Michael, Member, Queensland Seafood Industry Association
- WOOD, Mr Michael, Vice President, Trawl and Safety Representative, Moreton Bay Seafood Industry Association