

Case for Change

Aquaculture and Wild Catch Biosecurity

Administrative information

Name of IRC: Aquaculture and Wild Catch

Name of SSO: Skills Impact

Training Package: SFI Seafood Training Package

Brief description of how the case for change was developed

Several key drivers identifying impacts on the Australian Seafood Industry and skills development were identified by the previous Seafood IRC and included in the *Skills Forecast and Proposed Schedule of Work* and validated by the refreshed Aquaculture and Wild Catch IRC. Of these drivers, three key areas for development have been identified, agreed and prioritised with biosecurity identified as equal priority one.

Research into the industry was reviewed to determine trends and potential skill development in training needs that may result. Stakeholders were consulted both directly and indirectly, through research reports commissioned by government and industry bodies. Biosecurity has been identified by the Federal Government in the *AQUAPLAN 2017-2019* and *National Aquaculture Strategy 2017* as a critical factor to manage in protecting the aquaculture and wild catch sectors. Training in support of the various strategies within these documents is also highlighted.

The case for change

Australia is relatively free from many aquatic animal diseases that occur in other countries. Maintaining this status is important for the aquaculture industry to ensure growth and profitability is not jeopardised by exotic pathogens or the emergence of endemic pathogens.

Recent disease outbreaks include Pacific Oyster Mortality Syndrome (POMS) in oysters with a devastating impact on the industry with over 90% mortality observed in some regions¹; and white spot disease in Australian prawns with a major impact on the industry. The potential loss may be significant given the impact on individual farms and producers, wild catch operators, exports and the reputation.

Increased global movement of passengers, increased shipping – sea cargo, cruise liners, sailing, increased international mail articles and increased food imports to Australia cannot allow for zero risk of a pest or disease coming into the country. This increased trade carries with it risk of pests or diseases coming into the country. It has only been through Senate hearings and evidence by the Rural and Regional Affairs and Transport References Committee – Biosecurity risks associated with the importation of seafood and seafood products into Australia; that the full extent of biosecurity risks, illegal behaviour of importers and the large quantities of infected product was understood.

“Biosecurity management is an increasing focus for the industry, with the control of and management of actual and potential disease outbreaks that may impact the industry.”²

¹ Tasmanian Seafood Industry Council, Seafood Industry Work Profile, May 2017

² Crane, M., Dr, Slater, J., Aquatic Animal Health and Biosecurity Subprogram: Research and Development Plan 2016–2020 (2016 ver 1.0), Fisheries Research and Development Corporation

Appropriately trained staff are essential to support the response to outbreaks and the management of farms and wild catch fisheries to reduce the risks of potential outbreaks. It will be necessary to:

- Identify relevant functions required
- determine existing training package components that support biosecurity and modify if practical, including importing units from other training packages
- develop new training package components to address skills development needs.

These changes will assist in the development of skills required to manage biosecurity risk in both prevention and management of outbreaks. A lack of skills in this area will present significant risk to the Australian aquaculture and wild catch industries.

Given the close relationship and integration of functions with aquaculture, and in order to maximise efficiencies, it is recommended that this project be completed concurrently with the separate project on aquaculture.

Recommended changes

It is recommended that the following changes be made so that training package components, which includes an extensive functional analysis across all job functions, may be streamlined, updated and new components developed as necessary to address current and future industry needs as follows:

- review of 11 qualifications
- potential development of up to five skill sets
- review and edit of 86* units and development of up to 2 units (this figure will need to be confirmed during the review process). **12 of the 86 units are aquaculture units.*

During the project, units may be identified for deletion either due to relevancy or the opportunity to import more appropriate units from other training packages.

These changes will assist in the development of skills required to support the growth in demand for skilled employees expected as the sector itself expand. Changes will also support the strategies defined by the Federal Government.

Given the close relationship and integration of functions with aquaculture, and in order to maximise efficiencies, it is recommended that this project be completed concurrently with the separate project on aquaculture.

Industry support for change

Method and scale of consultation

Members of the Aquaculture and Wild Catch IRC have had discussions across various industry sectors as a function of their industry role. Consultations have been face-to-face, individually and in group environments and via telephone. Discussions have included organisations and individuals within the aquaculture and wild catch sectors with significant operations across Australia. As consultations have been ongoing, records of individual discussions are not available.

Indirect consultation through industry and government activities has highlighted biosecurity as a key issue for the industry. To support strategies and initiatives highlighted in various reports and industry specific plans it will be necessary for training package development work to occur. Key reports supporting the focus on biosecurity include:

- *AQUAPLAN 2014–2019, Commonwealth of Australia, 2014*
- *Crane, M., Dr, Slater, J., Aquatic Animal Health and Biosecurity Subprogram: Research and Development Plan 2016–2020 (2016 ver 1.0), Fisheries Research and Development Corporation*
- *National Aquaculture Strategy, Commonwealth of Australia, 2017*
- *Tasmanian Seafood Industry Council, Seafood Industry Work Profile, May 2017*

Various committees exist to focus on broader biosecurity issues across several industries and include a focus on agriculture and wild catch. Advice from these various committees have assisted in defining responses to address biosecurity issues within Australia and include:

- the National Biosecurity Committee (NBC) supported by the Animal Health Committee and the Marine Pest sectorial committees with membership from Federal, State and Territory Governments
- National Biosecurity Emergency Preparedness Expert Group
- Biosecurity Roundtables
- the National Aquatic Animal Health Industry Reference Group (NAAHIRG)
- the Australian Fisheries Management Forum (AFMF)
- Animal Health Committee (AHC)
- Sub-Committee on Aquatic Animal Health (SCAAH).

Overview of issues identified by stakeholders

Improved biosecurity practices are seen to³:

- result in better animal health and performance
- mitigate disease transmission and amplification within/between farms
- allow for early disease detection and impact reduction
- limit or exclude diseases that affect marketability
- be integrated into other farm quality control systems, such as hazard analysis and critical control point (HACCP)
- facilitate translocation within and between jurisdictions
- allow farms to meet international trade requirements (for example, through health accreditation).

Sensitivities

Possible sensitivities include:

- some parts of industry view biosecurity as a border control issue and the Commonwealth government being responsible for stopping aquatic diseases and pests
- some believe that free trade agreements are at the expense of some Australian industries and in the case of seafood industry wants to ensure no more exotic diseases can enter via this pathway
- cost for farms to be more bio-secure prepared.

Impact of change

Impacts of recommended changes

Biosecurity is a functional skill area not yet been clearly defined through analysis. The project will clearly identify what skills are required to support specific functions across both aquaculture and wild catch. It is expected that some units of competency will be updated to include specific biosecurity elements while new units will be developed focusing only on biosecurity. Skill sets are also a likely output of this project while qualifications will be modified to include new and revised units in their packaging rules.

³ Aquaplan 2014-2019, Commonwealth of Australia, 2014

Impacts include:

RTOs and students: with the usual teach out period, there will be limited if any impact in the transition to revised qualifications. New and revised units will provide RTOs with the opportunity to further support industry in skill development in this critical area. Delivery of new and revised training package components will consider delivery implications and RTOs will be consulted during the development stage. Students will not be impacted.

Employees and Employers: Given that limited content exists to support biosecurity, and the critical nature of the area in protecting the aquaculture and wild catch industries, the introduction of new, and updating of existing, training package content will have a positive impact on both employers and employees.

Government: the review, update and development of training package components to support biosecurity functions will support various government agencies – Federal, State and Local – in supporting industry in safe guarding against potential diseases and managing outbreaks to minimise impact.

Risks of not implementing the change

The impact of not having workers skilled in the necessary biosecurity functions across the aquaculture and wild catch sectors is considerable. Without properly trained staff capable of implementing risk mitigation progress across the industry and those capable of managing outbreaks to minimise impact the Australian seafood industry, overall the industry is at risk. Possibilities include:

- potential loss of aquaculture farming land as illustrated by the white spot outbreak in Queensland which has affected 23% of the production area or 142 hectares of which it is unclear when this will be available for use if at all
- catastrophic loss of stock in existing operation as demonstrated by POMS and the oyster industry
- loss of international markets through inability to supply and reputation
- flow-on impact to other 'downstream' sectors such as post-harvest operations (processing and sales).

Timeframes for implementation

It is estimated that the project would be completed in eleven (11) months from receipt of approval. Stages and timelines include:

- Functional analysis and review of existing qualifications – three months from receipt of approval to proceed
- Development work including update to existing units, development of new units, development of skills sets and changes to qualifications, industry consultation and validation – six months
- Editorial and Equity, Quality Assurance and STA consultation – two months

Implementing the COAG Industry and Skills Council (CISC) reforms for Training Packages

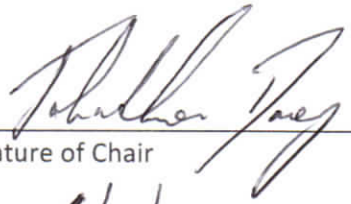
The proposed work will support the implementation of the reforms agreed by CISC in November 2015 in the following ways:

- providing a focus on the development of skills sets to allow upskilling of existing staff and provide opportunities of new training to be operationally focused
- ensuring industry's expectations of biosecurity training requirements is made clear to training providers

- providing units that could potentially be used across other training packages with a need to manage biosecurity risks eg: agriculture.

This Case for Change was agreed to by the Aquaculture and Wild Catch IRC

JOHNATHAN DAVEY
(Name of Chair)


Signature of Chair

Date: 16/11/17

Training Package components to change

Skills Impact

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Date submitted: 17 November 2017

Training Package Code	Training Package Name	Qualification Code	Qualification Name	IRC Name	Review status	Change Required
SFI	Seafood	SFI10111	Certificate I in Aquaculture	Aquaculture and Wild Catch	For review	<ul style="list-style-type: none"> Review existing units and update to include biosecurity elements as required Development of up to two new units per AQF level (to be confirmed during functional analysis) Potential development of new skill set at each AQF level Change to packaging rules in qualification
		SFI20111	Certificate II in Aquaculture			
		SFI20211	Certificate II in Fishing Operations			
		SFI30311	Certificate III in Seafood Industry (Environmental Management Support)			
		SFI30111	Certificate III in Aquaculture			
		SFI30211	Certificate III in Fishing Operations			
		SFI40111	Certificate IV in Aquaculture			
		SFI40211	Certificate IV in Fishing Operations			
		SFI40311	Certificate IV in Seafood Industry (Environmental Management)			
		SFI50211	Diploma of Fishing Operations			
		SFI50111	Diploma of Aquaculture			

Stakeholder Consultation Method and Scale

In addition to the list below, the Industry Reference Committee members consulted broadly with their networks.

Stakeholder Consultation	
Name of Stakeholder	Detail method(s) and Scale of Consultation
Animal Health Australia	Consultations with individual employer on more than one occasion
Australian Prawn Farmers	Consultations with individual employer on more than one occasion
Huon Aquaculture	Face-to-face to determine company needs – a significant stakeholder