



Australian Aquaculture and Wild Catch Industry Sector

Annual Update 2021

IRC Skills Forecast and Proposed Schedule of Work

Prepared on behalf of the Aquaculture and Wild Catch Industry Reference Committee (IRC) for the Australian Industry Skills Committee (AISC).



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Purpose of this Annual Update

This 2021 Annual Update to the Skills Forecast and Proposed Schedule of Work 2019 – 2022 (Skills Forecast) presents additional industry intelligence from 2021 to build on previously reported information. This Annual Update from the Aquaculture and Wild Catch Industry Reference Committee (IRC), includes intelligence based on national and industry data sources and input from key stakeholders. It is a formal channel through which the IRC can submit project proposals for vocational education and training (VET) training package review and development work, for consideration by the Australian Industry and Skills Committee (AISC)¹. The AWC IRC have elected not to submit any project proposals in this Annual Update.

In 2019, the AISC changed the requirements for the annual Skills Forecast. IRCs are now required to submit comprehensive Skills Forecasts once every three years, with abridged annual updates in the intervening two years. As IRCs submitted comprehensive Skills Forecasts in 2019, the next are due in 2022. This Annual Update should be read in conjunction with the Skills Forecast and previous Annual Updates.

This document is not intended to be representative of every issue encountered across all industry sectors; it identifies and addresses the challenges and opportunities that industry has determined as 'priority' for this stage of the schedule, and is a resource for industry and associated skills, learning and accreditation bodies seeking to act upon them.

Detailed information concerning industry skills needs across all sectors covered by the Aquaculture and Wild Catch IRC, including information from previous Skills Forecasts and Annual Updates, can be found on the Skills Impact website: skillsimpact.com.au/aquaculture-and-wild-catch/skills-forecast.

Method & Structure

This is an annual update to the comprehensive Skills Forecast submitted in 2019. IRCs are required to answer the questions in **Section A** to provide updates on issues such as industry skills and workforce development, and qualification utilisation.

IRC's are also permitted to propose additional Training Package development work projects to be included in the Proposed Schedule of Work. These will now be submitted separately to the Annual Updates.

Section B details the extensive, robust and ongoing industry consultation undertaken by IRC members and Skills Impact, including with rural, regional and remote stakeholders. In line with Skills Impact's values², this helps to ensure transparency and accountability in the process of industry research and Training Package development work.

This Annual Update is developed in line with:

- Standards for Training Packages 2012³;
- Training Package Products Policy⁴;
- Training Package Development and Endorsement Process Policy⁵.

¹ Australian Industry and Skills Committee (2021); *Australian Industry and Skills Committee*; <https://www.aisc.net.au/content/national-schedule>; viewed 13/04/2021.

² Skills Impact (2021); *About us*; <https://www.skillsimpact.com.au/about/>; viewed 13/04/2021.

³ Department of Education, Skills and Employment (2017); *Standards for Training Packages 2012*; <https://docs.education.gov.au/documents/standards-training-packages-2012>; viewed 13/04/2021.

⁴ Department of Education, Skills and Employment (2020); *Training Package Products Policy*; <https://docs.employment.gov.au/documents/training-package-products-policy>; viewed 13/04/2021.

⁵ Australian Industry and Skills Committee (2020); *Training Package Development and Endorsement Process Policy*; <https://docs.employment.gov.au/documents/training-package-development-and-endorsement-process-policy-0>; viewed 13/04/2021.

Industry Reference Committee

The Aquaculture and Wild Catch IRC is responsible for national training package qualifications relevant to the seafood, aquaculture and wild catch industry.

Qualifications overseen by the IRC are in the *SFI Seafood Industry Training Package*.

The Aquaculture and Wild Catch IRC is supported by the Skills Service Organisation, Skills Impact.

Name	Organisation or Area of Expertise
Andrew Driscoll	Department of Primary Industries -Fisheries NSW
Andrew Tabor	Expertise in Aquaculture
Andy Myers	South Australian Oyster Growers Association
Brian Jeffriess	National Aquaculture Council
Franca Romeo	Expertise in Wild Catch Fishing
Helen Jenkins	Expertise in Aquaculture (crustaceans)
James Garde	Tasmanian Seafood Industry Council
Johnathon Davey (Chair)	Expertise in Wild Catch Fishing
Kade Wakefield	Australian Workers Union (AWU)
Lisa Terry	Expertise in Seafood Processing and Wholesaling
Mark Cody	Expertise in Aquaculture
Steven Gill (Deputy Chair)	Expertise in Aquaculture
Tom Cosentino	Southern Rock Lobster Limited

Executive Summary

The last twelve months have been turbulent and unpredictable for the aquaculture, fishing and seafood sector through a combination of the impacts of COVID-19, changes to international markets and the continuing evolution of the Australian industry. The Aquaculture and Wild Catch (AWC) Industry Reference Committee has been monitoring the performance of the updated *SFI Seafood Industry Training Package* throughout 2020. It is clear that the training package, along with the updates related to the use of technology and working with crocodiles, is a robust, up-to-date set of industry skill standards with the flexibility and content needed to meet industry needs.

Increasingly apparent is that the ability of the industry to attract workforce is the biggest barrier to training, as competition for workers continues to grow. In particular, the revitalisation of the mining industry in WA is attracting labour to the detriment of other industries. With a lack of access to migrant and visa workers as a result of the pandemic, employers are finding it increasingly difficult to find the workers needed. The IRC has found no evidence of a reluctance to train workers by employers, or a lack of willingness of governments to fund training (although mainly for qualifications). The WA government in particular has been working with industry to address labour issues.

It remains critical to the future growth of the industry and for access to workforce, that issues related to Indigenous involvement in aquaculture and wild catch, as identified by the Productivity Commission in 2017, are addressed. The AWC IRC notes that neither it or the Skills Service Organisation are funded to complete the work needed in this area, and refer to the attempts over the last two years to gain AISC support for relevant work to be undertaken.

The AWC IRC does not intend to undertake any further training package development work in 2021. Instead, it will focus on identifying potential options to support the attraction of labour and ease of training delivery, while also continuing the collection of feedback on the performance and content of the training package. The AWC IRC will consider whether there needs to be additional work, including further streamlining of the Training Package, and will report the results in 2022.

Section A: Overview

Industry Developments

Please refer to the [2020 Annual Update](#), which identified several trends, challenges and opportunities that are still relevant now. Additional and emerging trends include:

Recovery from the Impacts of COVID-19

COVID-19 has disrupted every sector of the Australian aquaculture and wild catch industry. It has also emphasised the importance of food security and the associated roles of rural industries and supply chains⁶.

Businesses continue to struggle from the impact of shutdowns which caused domestic clients, such as restaurants and retailers, to cancel or reduce their regular seafood orders. As a result, market prices have fallen⁷, and operators have been unable to retain crew members due to diminished profits⁸.

In the seafood, agriculture, aviation and logistics sectors, around 35,000 jobs directly and over 120,000 jobs indirectly (many of which are based in regional communities) have been at risk from potential airfreight supply chain failures⁹. Exported seafood is usually carried in the cargo hold of commercial flights, most of which have been cancelled due to COVID-19 restrictions¹⁰. A federally-funded industry assistance package, the International Freight Assistance Mechanism (IFAM), is helping to restore export activity by flying produce to overseas markets. Since its launch in March 2020, over \$500 million worth of seafood has been exported with the assistance of the IFAM¹¹. The Australian Government has now extended the initiative until the end of September 2021.

States are beginning to implement assistance plans and new legislation, with a view of stimulating industry activity:

- Queensland is overhauling regulation to facilitate commercial fishing, protect export jobs and encourage sustainable methods¹².
- The WA Government announced a rock lobster industry support plan, which includes measures to boost local supply and make western rock lobster more accessible to WA communities through back of boat sales¹³.

IBISWorld project that, with state and federal assistance, the seafood industry will rebound from the setbacks of COVID-19 based on Australian seafood's reputation for being sustainably produced and of premium quality. IBISWorld forecast that:

- Following a decline of 8.2% in 2019-20, aquaculture revenue will increase by 7.1% in 2020-21¹⁴
- Following a decline of 22.5% in 2019-20, commercial fishing revenue will increase by 23.1% in 2020-21¹⁵

⁶ Minister for Agriculture (2020); *Backing Agriculture Businesses During Coronavirus*; <https://www.premier.vic.gov.au/backing-agriculture-businesses-during-coronavirus/>; viewed 17/07/2020.

⁷ ABC News (2020); *Coronavirus lockdown sees prawns drop to 1980 prices ahead of Easter splurge*; <https://www.abc.net.au/news/2020-04-09/coronavirus-queensland-seafood-sales-easter-cheap/12129506>; viewed 13/04/2021.

⁸ ABC News (2020); *Coronavirus devastates Bowen's fishing industry, farmers face uncertain winter*; <https://www.abc.net.au/news/2020-03-23/coronavirus-downturn-wreaks-havoc-in-bowen-coral-trout-industry/12076550>; viewed 13/04/2021.

⁹ Australian Government (2020); *International Freight Assistance Mechanism*; <https://www.austrade.gov.au/news/news/international-freight-assistance-mechanism>; viewed 13/04/2021.

¹⁰ ABC News (2020); *Australian tropical rock lobster exports to China and US recovering but volumes, prices remain low*; <https://www.abc.net.au/news/2020-08-29/tropical-rock-lobster-exports-recovering-but-far-from-good/12601952>; viewed 13/04/2021.

¹¹ ABC News (2020); *International Freight Assistance Mechanism extended to help food exporters during pandemic*; <https://www.abc.net.au/news/2020-07-03/ifam-funding-extended-for-fresh-food-exporters/12417328>; viewed 13/04/2021.

¹² Queensland Government (2020); *Fisheries regulation overhaul to support Queensland's economic recover*; <https://statements.qld.gov.au/statements/90915>; viewed 13/04/2021.

¹³ Government of Western Australia (2020); *Lobster rescue plan aims to support industry through COVID-19*; <https://www.mediastatements.wa.gov.au/Pages/McGowan/2020/03/Lobster-rescue-plan-aims-to-support-industry-through-COVID-19.aspx>; viewed 13/04/2021.

¹⁴ IBISWorld (2020); *Aquaculture in Australia, Australia Industry (ANZSIC) Report A0200*

¹⁵ IBISWorld (2020); *Fishing in Australia, Australia Industry (ANZSIC) Report A0410*

Seafood trade tensions

In recent years, around 70% (by weight) of the seafood Australians consume is imported, primarily from Asia¹⁶. Australia is traditionally a net seafood importer because of the lucrative export market for its high-value products, such as rock lobster, premium tuna and abalone, while imports mainly consist of lower-value products, such as frozen fillets and canned tuna. These trends, which shape the ways Australian seafood producers operate, have been significantly disrupted by recent trade tensions with China¹⁷ (compounding the impacts of COVID-19).

In 2018/2019, China accounted for a staggering 94% (\$752 million) of rock lobster exports

[ABARES 2020]

China has been the largest importer of Australian seafood and seafood products, particularly lobster and abalone. In 2018/2019, China accounted for 42% of abalone exports (worth \$194 million) and a staggering 94% (\$752 million) of rock lobster exports¹⁸. As a 'trade-exposed industry'¹⁹, the seafood sector has been rocked by politicised trade tensions with China. Industry operators were among the first of many primary producers impacted by import barriers and intensified inspection protocols by Chinese customs officials, who cited concerns over trace elements of metals in rock lobsters²⁰. It was reported in November 2020 that tonnes of live lobsters, worth \$2 million, were 'stranded' while awaiting inspection and died before reaching the market. Similar incidents have occurred into 2021, with Australia's largest coral trout buyer losing market access to China²¹.

Many seafood producers have been greatly impacted by the loss of Chinese customers and, with no immediate replacement export market, were left with massive surpluses that could not command the same market price domestically (for example, China buyers paid around \$100 per kilo for premium southern rock lobster, while on the domestic market it is generally priced at \$30 per kilo²²). Nevertheless, backed by a Seafood Industry Australia (SIA) campaign, operators adapted over the Christmas period by turning their attentions to domestic consumers, which saw sales of Australian seafood rise by 30% (including popular \$20 western rock lobsters sold in leading retailers)²³.

ABARES reports that the seafood industry's ability to diversify its export markets will largely determine how the sector recovers and balances risk moving forward²⁴. There are signs of new markets and opportunities being explored, including businesses building their brands domestically and pivoting to new or alternative selling platforms, such as online sales for domestic and international consumers.

¹⁶ Australian Government (2019); *Australia's seafood trade*; <https://www.agriculture.gov.au/fisheries/aus-seafood-trade>

¹⁷ The Sydney Morning Herald (2020); *Wine, lobster, copper ... what's at stake in our trade tensions with China?*; <https://www.smh.com.au/business/companies/wine-lobster-copper-what-s-at-stake-in-our-trade-stoush-with-china-20201104-p56bki.html#:~:text=Australia%20exported%20%2484.8%20billion%20worth,been%20nothing%20short%20of%20phenomenal;viewed 13/04/2021>.

¹⁸ ABARES (2020); *Seafood production value expected to dip in 2019–20*; <https://www.agriculture.gov.au/abares/news/media-releases/2020/seafood-production-value-expected-dip-2019-20>.

¹⁹ ABARES (2021); *Australian fisheries and aquaculture outlook 2021*; <https://www.agriculture.gov.au/abares/research-topics/fisheries/fisheries-economics/fisheries-forecasts#austrian-exports>

²⁰ ABC News (2020); *Tonnes of Australian lobsters stuck in Chinese airports amid trade tensions*; <https://www.abc.net.au/news/2020-11-02/australian-lobster-exports-caught-in-china-trade-tensions/12837700;viewed 13/04/2021>.

²¹ ABC News (2021); *China pulls the plug on Australia's biggest live reef fish exporter*; <https://www.abc.net.au/news/rural/2021-02-25/coral-trout-rout-as-china-pulls-plug-on-export-licence/13190640;viewed 13/04/2021>.

²² 9 News (2021); *Fears for future of rock lobster fishing industry as China ban bites*; <https://www.9news.com.au/national/china-trade-sanctions-bans-hitting-australian-rock-lobster-industry/67c04d24-7e61-4a04-b46c-d205f3d39e23;viewed 13/04/2021>.

²³ ABC News (2021); *China's lobster ban helped lift Australian Christmas seafood purchases by 30 per cent*; <https://www.abc.net.au/news/rural/2021-01-06/christmas-seafood-sales-up-30-pc-after-chinas-ban-on-lobsters/13035636;viewed 13/04/2021>.

²⁴ ABARES (2021); *Australian fisheries and aquaculture outlook 2021*; <https://www.agriculture.gov.au/abares/research-topics/fisheries/fisheries-economics/fisheries-forecasts#austrian-exports>

The National Skills Commission and attracting new industry workers

The National Skills Commission (NSC) was created in 2019 when much of the national debate focused on skills gaps; but, with the onset of COVID-19, the focus is now firmly on managing skills surpluses and identifying training options for unemployed workers, especially young people, women and city-dwellers, who have been disproportionately affected²⁵. The aquaculture and wild catch industries may be able to capitalise on the availability of people who have been displaced from their usual work and are seeking new opportunities.

As well as highlighting reskilling and upskilling options for improving the prospects of people already performing an industry role, the NSC are promoting 'skills transferability' to facilitate clearer pathways between roles in diverse industries that require similar capabilities. The IRC notes that skills transferability is an important objective that must be considered as complementary to the primary role of vocational education and training in enabling potential workers to reach competency and be job-ready. This contention recognises that specific skills are required for jobs in order to complete tasks safely and effectively.

The growth of aquaculture

The Cooperative Research Centre for Developing Northern Australia (CRCNA)²⁶ estimate that there will be 1,400 to 2,300 new direct jobs in aquaculture over the next 10 years, while there is potential for a 50-fold expansion in area available for freshwater pond aquaculture. To meet these targets, they advocate for increased training and skills development to promote aquaculture career pathways.

Examples of expanding employment opportunities in Northern Australia include:

- Humpty Doo Barramundi, Australia's largest barramundi farm, which, after securing a \$24.2 million loan from the Northern Australia Infrastructure Facility, is set to expand production and establish a modern hatchery with the CSIRO²⁷. It is estimated that this will directly support 160 jobs and 110 indirectly (through construction work).
- Managers of Project Sea Dragon, a proposed large-scale, integrated, land-based prawn aquaculture development, are confident that it will go ahead despite delays due to COVID-19²⁸. The project would span across five sites in the NT and WA and lead to large infrastructure investments to link operations²⁹. Once operational, the Project would be one of the biggest employers in Northern Australia³⁰.

In their *Aquaculture Development Plan for Western Australia*, the WA Government Department of Primary Industries and Regional Development (DPIRD) address key issues that have previously presented barriers to developing WA aquaculture³¹. It focusses on developing a robust industry that supports communities and helps diversify regional economies by creating new types of jobs, including opportunities for Aboriginal economic development and participation. When fully operational, current and proposed investments (such as the Albany Aquaculture Development Zone, which will be the largest single zone dedicated to marine shellfish farming in Australia) are projected to increase direct and indirect employment from an estimated 280 jobs to almost 6,000 jobs.

While welcoming the 2019 SFI Training Package update, especially its inclusion of sought-after skills in diving and boating, the DPIRD identifies that, while training opportunities and alignment with industry requirements are improving, relatively few aquaculture graduates are transitioning into industry employment. Consequently, the DPIRD will establish a process between the Aquaculture Council of Western Australia (ACWA) and Department of Training and Workforce Development (DTWD) to identify specific skills and training needed for industry to increase employment opportunities and review RTO courses. As part of this process, the DPIRD will undertake a Training Needs Analysis, including a focus on opportunities for Aboriginal people.

²⁵ National Skills Commission (2020); *A snapshot in time: The Australian labour market and COVID-19*

²⁶ CRCNA (2020); *State of the North 2020*; p.26

²⁷ ABC News (2020); [https://www.abc.net.au/news/2020-10-23/australias-biggest-barramundi-farm-gets-\\$24-million-naif-loan/12806502](https://www.abc.net.au/news/2020-10-23/australias-biggest-barramundi-farm-gets-$24-million-naif-loan/12806502); viewed 13/04/2021.

²⁸ ABC News (2020); *Australia's biggest barramundi farm set to get bigger, after securing \$24m NAIF loan*; <https://www.abc.net.au/news/2020-09-17/project-sea-dragon-financial-future-hangs-in-balance-after-covid/12669560>; viewed 13/04/2021.

²⁹ Seafarms (2020); *About Project Sea Dragon*; <https://seafarms.com.au/about-project-sea-dragon/>

³⁰ Seafarms (2020); *Community is important to us*; <https://seafarms.com.au/community/>

³¹ WA Government Department of Primary Industries and Regional Development (2020); *Aquaculture Development Plan for Western Australia*; https://www.fish.wa.gov.au/Documents/Aquaculture/aquaculture_development_plan_2020.pdf; p.4

The expansion of aquaculture in NSW is being driven by the continuing success of the Sydney rock oyster sector (which showed 10.1% yearly growth to reach a value of \$53.6 million in 2018-2019), as well as through innovative practices. For example, a new venture in Jervis Bay, backed by a \$2.3 million infrastructure investment by Shoalhaven City Council, is a collaboration between South Coast Mariculture and a world expert on seaweed to farm blue mussels and seaweed together. Seaweed farming has been touted by AgriFutures Australia as potentially a \$1.5 billion industry within 20 years due to its many possible uses, including for animal feed, fertiliser, pharmaceuticals and nutraceuticals, as well as mitigating livestock emissions³². It is estimated that, by 2025, the industry will employ 1,200 people, which could rise to 9,000 by 2040.

Aboriginal and Torres Strait Islander communities

Aboriginal and Torres Strait Islander communities continue to express a desire to have more economic opportunities around fishing, particularly in their own sea country.

A revised 'Aboriginal and Torres Strait Islander commercial fishing development policy' was released in May 2020 by the Queensland Government³³. It aims to support economic development opportunities for Indigenous peoples and communities by:

- Providing pathways, including training, for Indigenous peoples and communities to enter or take part in fishing-related businesses.
- Setting overarching principles, including setting aside an access allocation (Indigenous commercial allocation) for economic development opportunities.

Indigenous Community Rock Oyster Project

In WA, a Pilbara Indigenous community tropical rock oyster project is being hailed as a success. In collaboration with key regional players, WA company Maxima owns and operates oyster farms with the help of rangers from the Murujuga Aboriginal Corporation, who monitor the hatchery sites off the Dampier Archipelago. As well as monitoring the growth of the oysters, rangers employed by the Murujuga Aboriginal Corporation are being trained in aquaculture and management techniques. As operations expand, it is estimated that for every 1,000 tonnes of oysters produced 250 jobs will be created³⁴.

Country of Origin Labelling (CoOL)

The Australian Government are currently reviewing CoOL legislation, which came into effect in 2018, and the Australian seafood industry, supported by the National Farmers' Federation³⁵, is promoting the expansion of current laws to include seafood sold in restaurants and cafes³⁶. The majority of seafood consumed in Australia is imported but, since the onset of the COVID-19 pandemic, 52% of Australians now have a greater preference for Australian-made products for reasons including job creation and supporting Australian business and industry³⁷. Seafood Industry Australia contends that clearly labelling Australian seafood allows consumers to support both domestic producers and jobs throughout the supply chain, including processors, truck drivers and regional communities generally³⁸.

³² J. Kelly (2020); *Australian Seaweed Industry Blueprint: A Blueprint for Growth*; AgriFutures Australia

³³ Queensland Government (2020); *Aboriginal and Torres Strait Islander commercial fishing development policy*

³⁴ ABC News (2020); *WA tropical rock oyster project gives Pilbara Indigenous community 'a sense of achievement'*; <https://www.abc.net.au/news/2020-10-11/wa-tropical-rock-oyster-farms-pilbara-indigenous-dampier-coast/12748848>; viewed 13/04/2021.

³⁵ National Farmers' Federation (2020); *Farmers back expansion of Country of Origin Labelling to seafood & flowers*; <https://nff.org.au/media-release/farmers-back-expansion-of-country-of-origin-labelling-to-seafood-flowers/>; viewed 13/04/2021.

³⁶ Food & Beverage Industry News (2020); *Seafood industry wants Australians to support origin labelling review*; <https://foodmag.com.au/seafood-industry-wants-australians-to-support-origin-labelling-review/>; viewed 13/04/2021.

³⁷ Food & Drink Business (2020); *Research: Preference for Australian-made post-COVID*; <https://www.foodanddrinkbusiness.com.au/news/research-preference-for-australian-made-post-covid/>; viewed 13/04/2021.

³⁸ Seafood Industry Australia (2020); *'Aussie! Aussie! Aussie?': Seafood industry calls on Aussies to support origin labelling review*; <http://seafoodindustryaustralia.com.au/aussie-aussie-aussie-seafood-industry-calls-on-aussies-to-support-origin-labelling-review/>; viewed 13/04/2021.

VET Qualifications & Employment Outcomes

The data and literature references presented in the [2020 Annual Update](#) remain relevant.

Over the last year, consultation with stakeholders has led to the identification of several key factors that lead employers not to seek or favour VET graduates, including:

- Absence of legislative, regulatory or licensing requirements governing an occupation or industry³⁹
- Lack of value assigned to VET within industry cultures and networks⁴⁰
- Belief that formal credentials are relevant for career establishers but not for higher level roles filled by more experienced candidates⁴¹
- Dissatisfaction with the work-readiness of previously employed VET graduates⁴², especially those whose learning did not include a workplace-based component⁴³
- Abundance of alternatives to VET recognised by employers
- Worker shortages, especially within small businesses in RRR areas⁴⁴, which leads to employers being often forced to hire candidates who do not possess the desired qualifications, but who subsequently receive informal, on-the-job training.

The IRC notes, however, there is strong evidence that exposure to and engagement with quality VET-related outcomes are indicators of the system being valued and regarded as a yardstick by employers. Data released from NCVER's survey of employers' use and views of the VET system⁴⁵ shows that, of 'Agriculture, forestry and fishing' employers who are 'satisfied with training as a way of meeting their skill needs', 80% mandated 'vocational qualifications as a job requirement' (which is above the all-industry average of 72%).

Other Training Used by Employers

The data and literature references presented in the [2020 Annual Update](#) remain relevant.

Enrolment Levels

The data and literature references presented in the [2020 Annual Update](#) remain relevant.

Consultation undertaken on behalf of the IRC throughout 2020 has identified key information regarding the low use of qualifications, including:

- Unmet demand for 'flexible' training
- Negative industry perceptions of the VET system and training delivery
- Emerging preference for short courses and micro-credentials
- A lack of trainers demonstrating both pedagogical excellence and industry expertise
- RTO viability challenges, especially relating to:
- compliance

³⁹ L. Wheelahan & G. Moodie (2017); Vocational education qualifications' roles in pathways to work in liberal market economies; *Journal of Vocational Education & Training* 69 (1): 10-27; p.13

⁴⁰ Parliament of Victoria (2012); *Inquiry into agricultural education and training in Victoria*; p.41

⁴¹ A. Hall, L. Turner & S. Kilpatrick (2019); Understanding Tasmanian dairy farmer adoption of pasture management practices: a Theory of Planned Behaviour approach; *Animal Production Science*; CSIRO Publishing; <https://doi.org/10.1071/AN18321>

⁴² National Farmers' Federation (2019); *Submission to Hon Steven Joyce: Expert review of Australia's vocational education and training system*; 25 January 2019; p.10

⁴³ C. Smith, S. Ferns, L. Russell, Leoni & P. Cretchley (2014); *The impact of work integrated learning on student work-readiness*; Sydney, New South Wales: Office for Learning and Teaching

⁴⁴ S. Gelade & T. Fox (2008); *Reality check - Matching training to the needs of regional Australia*; NCVER, Adelaide; p.33

⁴⁵ NCVER (2019); *Australian vocational education and training statistics: Employers' use and views of the VET system 2019*; NCVER, Adelaide

- training and assessment materials development
- thin markets in RRR areas
- biosecurity, seasonality and production times
- government funding
- creating and maintaining industry partnerships.

Qualifications recently reviewed/updated/created

Except for the *Certificate III in Working with Crocodiles*, which was first released in October 2020, all SFI qualifications have been reviewed and updated, and were released 21 June 2019. Table 1, below, includes enrolments in superseded versions of the qualifications where available; however, due to their recent releases, most of the current versions have not yet been delivered by RTOs, for whom the teach-out period for SFI11 qualifications expires on 31 December 2020⁴⁶. The AWC IRC advises that RTOs are currently applying to get new SFI qualifications on scope and developing training and assessment materials. As such, these qualifications cannot yet be defined as 'low enrolment' because there has been insufficient time to analyse RTO/industry supply and demand.

However, demand may reasonably be expected to rise when a qualification has been significantly updated to meet industry needs (ascertained through extensive consultation regarding current and future skills and occupations). For example, the *Certificate IV in Aquaculture* is now considered to be reflective of current industry practices and occupations and is therefore expected to attract a greater number of enrollees over the next few years in reflection of businesses seeking candidates with the skills and knowledge it enables.

Table 1: Qualifications recently reviewed/updated/created

Qualification	2015	2016	2017	2018	2019
SFI10119- Certificate I in Seafood Industry	137	100	122	40	62
SFI20119- Certificate II in Aquaculture	508	498	413	299	270
SFI20219- Certificate II in Fishing Operations	172	115	161	89	88
SFI20319- Certificate II in Seafood Post Harvest Operations	31	2	0	0	0
SFI20419- Certificate II in Fisheries Compliance Support	0	36	40	35	19
SFI30119- Certificate III in Aquaculture	422	446	428	442	447
SFI30219- Certificate III in Fishing Operations	31	1	17	35	11
SFI30319- Certificate III in Seafood Post Harvest Operations	65	35	22	18	13
SFI30419- Certificate III in Fisheries Compliance	6	26	36	25	11
SFI30520- Certificate III in Working with Crocodiles	n/a	n/a	n/a	n/a	n/a
SFI40119- Certificate IV in Aquaculture	7	1	0	1	1
SFI40219- Certificate IV in Seafood Post Harvest Operations	7	86	66	43	13
SFI40319- Certificate IV in Fisheries Compliance	2	0	0	0	1
SFI50119- Diploma of Aquaculture	38	22	52	12	35
SFI50219- Diploma of Fisheries Compliance	7	14	16	12	12

Source: NCVET VOCSTATS, TVA program enrolments 2015-19

PLEASE NOTE: Qualification data includes enrolments in superseded versions where available

The Aquaculture and Wild Catch IRC has reviewed the Prioritisation Framework and notes that *SFI20319 Certificate II in Seafood Post Harvest Operations* has been identified as a qualification with low enrolments. The IRC will continue to monitor this qualification and will consider it further at meetings during 2021.

⁴⁶ ASQA (2021); *Training products with current transition extensions*; <https://www.asqa.gov.au/rto/change-scope/transition-items/training-products-current-transition-extensions>

Reasons for Non-Completion

The data and literature references presented in the [2020 Annual Update](#) remain relevant.

Workplace-Based Training & Assessment and Mandatory Work Placements

The challenges of safely accessing workplaces to deliver training are compounded by many RTOs' inability to plan and deliver viable training and assessment strategies in light of the many restrictions in place. Learner retention is compromised by increasingly expensive training delivery, lay-offs, social distancing requirements on-campus and restrictions to travel limiting the number of trainers and assessors that can be sent to relevant regional, rural and remote (RRR) areas. Generally, these issues have had more of an impact than mandatory work placements, which remain strongly supported by industry where they are appropriate. Alternatives implemented by RTOs, including online delivery, have been met with some dissatisfaction by learners who are finding it harder to submit assessments considering increased demands on their time, especially from families, and difficult study conditions while learning from home.

Other major issues relate to peoples' loss of employment and their associated apprenticeship status. Due to diminishing prices and disrupted export market, some employers are retrenching staff, including those with formal VET training arrangements. Not only do economic downturns increase the rate of apprentices and trainees who are unable to complete qualifications because of job loss or redundancy⁴⁷, research also shows that, when compared to similar cohorts, those apprentices and trainees made redundant are also more likely to be unemployed nine months after losing their job⁴⁸. Due to restricted labour market opportunities, many displaced individuals are choosing to pursue employment and study options in other fields rather than wait for a possible resumption of their previous arrangements⁴⁹.

Cross-Sector Units

The response presented in the [2020 Annual Update](#) remains relevant. There is no additional information to add at this time.

Changes to Skill Requirements

The Aquaculture and Wild Catch IRC is not aware of any changes in skills requirements since the updating of the full training package completed in 2019, other than related to work completed in 2020. The AWC IRC will utilise networks in 2021 to gather intelligence on the performance of the updated training package and will report further in 2022.

⁴⁷ Hurley, P. (2020); *The impact of coronavirus on apprentices and trainees*; Mitchell Institute for Education and Health Policy, Victoria University.

⁴⁸ Karmel, T. & Oliver, D. (2011); *Effect of the downturn on apprentices and trainees*; NCVET, Adelaide

⁴⁹ National Skills Commission (2020); *A snapshot in time: The Australian labour market and COVID-19*

Apprenticeship & Traineeship Barriers

The data and literature references presented in the [2020 Annual Update](#) remain relevant. Likewise, barriers to VET delivery and the reasons for industry's low engagement with the system detailed under the sections titled 'Enrolment Levels' and 'Reasons for Non-Completion' are also relevant.

Industry-specific data relating to the Australian Government's \$2 billion JobTrainer skills package, which includes objectives to attract new apprentices and keep existing apprentices in jobs, has yet to be released. Its design is in part a response to research⁵⁰ forecasting that COVID-19 will cause apprenticeship/traineeship commencements to decrease over the next few years because they have fallen during past economic downturns, with struggling employers reluctant to commit to three- to four-year apprenticeship arrangements⁵¹. JobTrainer anticipates such challenges and will further be supported by industry strategies to expand apprenticeship and traineeship opportunities.

The IRC will assess the outcomes of such initiatives as information becomes available.

Other Relevant Activities

The IRC has been busy during 2020, with many responsibilities bestowed upon it, requiring extensive time and resources, for dealing with the impacts of COVID-19, workforce, industry and trade issues.

The IRC has assisted the AISC and the AISC Emergency Response Sub-Committee (ERSC) by seeking industry input and responding to a number of requests for information. These requests have taken place in several stages.

Immediate crisis response

- Identification of immediate training issues relating to workplace and campus-based training (completed April 2020).
- Identification of skills needs and delivery challenges for essential workforces (completed May 2020).

Supporting training for worker movement and potential surge workforces to meet current needs

- Identification of existing training products and potential surge workforces (completed May 2020).
- Analysis of available infection control training (completed June 2020).

Support for workforce recovery

- Critical Response Projects to create pathways for displaced workers (submitted July 2020, in progress).
- Promotion of pathways for displaced workers (first projects submitted July 2020, under consideration).

Mandatory work placements analysis and response

- Initial analysis of units requiring mandatory work placements or assessment/training conditions that were likely to require the use of physical workspaces, most likely in workplaces (completed April 2020).
- Analysis of units within qualifications with high levels of enrolments (completed October and November 2020).

The IRC is extremely pleased to report that the current *SFI Training Package* is robustly standing up to the additional logistical challenges brought about by COVID-19. Since the establishment of the IRC, the components of the training package that have undergone review have enabled:

⁵⁰ Hurley, P. (2020); *The impact of coronavirus on apprentices and trainees*; Mitchell Institute for Education and Health Policy; Victoria University.

⁵¹ Hurley, P. (2020); *The impact of coronavirus on apprentices and trainees*; Mitchell Institute for Education and Health Policy; Victoria University.

- Flexible options for training and assessment to meet fluid and urgent industry needs.
- Coverage of the major training requirements for all industries associated with the training package.
- Minimal requirements for mandatory work placements or onsite training and assessment (there are multiple delivery mode options), while recognising that many units cannot be delivered virtually or online.
- Extensive and suitable options of recognised skill sets and units for use by the states that have decided to develop their own training offerings outside the national system (without IRC consultation).

The IRC has also responded to a Ministers' request to delete units and qualifications which had zero enrolments in the years 2017 to 2019. Each of the units identified by the Ministers were only first released in June 2019 and the IRC advised that more time is necessary to allow training to be delivered by RTOs.

The additional work detailed above has required that the IRC meet more regularly and that members conduct many more additional "out of session" discussions and consultations than in previous years. This has been achieved without additional IRC members or secretariat support. The Chair of the IRC would like to express their gratitude to all IRC members and stakeholders who have given up so much of their time and energy in 2020 to complete this important work.

Section B: Ongoing Consultation

Details of industry consultation undertaken by IRC members and Skills Impact, including with rural, regional and remote stakeholders will be included in the final document that is submitted to the Australian Industry and Skills Committee (AISC). Once submitted, the final document will also be published on the Skills Impact website.

Engagement activities are described across four key areas:

- **Ongoing engagement** and validation with industry and stakeholders
- Collection of **industry intelligence**
- **Promotion of the VET** system
- Cultivating and maintaining **networks and partnerships** with industry including engagement in rural and regional areas.

Entity Name	Sector	State	Rural Regional Remote	Ongoing engagement	Industry intelligence	Promotion of VET	Networks & Partnerships
Abalone Industry Association of South Australia Inc.	Industry Association	SA	Yes	✓	✓		✓
Abalone Victoria (Central Zone)	Industry Association	VIC	No	✓	✓	✓	✓
Agriculture, Food & Animal Management	State Government Agency	NSW	Yes	✓	✓	✓	✓
Agriculture VIC	State Government Agency	VIC	No	✓		✓	
Animal Health Australia	Industry Association	National		✓			✓
Apollo Bay Fishermen's Cooperative Society Ltd	Industry Association	VIC	Yes		✓		
Aquaculture Council of Western Australia	Industry Association	National	No	✓	✓	✓	✓
Aquarium Industry Association of Australia	Industry Association	National	No			✓	
Atlantis Fisheries Consulting Group	Commercial Business	National	No	✓	✓		
Austral Fisheries	Commercial Business	Multi State	Yes	✓	✓	✓	✓
Australian Barramundi Farmers Association (ABFA)	Industry Association	National	Yes	✓	✓	✓	✓
Australian Crocodile Traders	Commercial Business	QLD	Yes		✓	✓	
Australian Diver Accreditation Scheme	Regulator	National	No	✓		✓	✓
Australian Fisheries Management Authority	Regulator	National		✓	✓	✓	✓
Australian Maritime College	RTO public	Multi State	No			✓	
Australian Maritime Safety Authority (AMSA)	Regulator	National	No	✓	✓	✓	✓

Australian Prawn Farmers Association	Industry Association	National	Yes	✓	✓	✓	✓
Australian Southern Bluefin Tuna Industry Association (ASBTIA)	Industry Association	SA	Yes	✓	✓	✓	✓
Australian Trout and Salmon Farmers Association	Industry Association	National	No	✓			✓
Australian Workers Union	Employer Organisation	National	No	✓			✓
Balanggarra Rangers	State Government agency	WA	Yes	✓	✓		✓
Batchelor Institute of Indigenous Tertiary Education	RTO	NT	Yes	✓		✓	
Bawinanga Aboriginal Corporation	Commercial Business	NT	Yes	✓			✓
Big Gecko	Commercial Business	NT	Yes	✓			✓
Biosecurity QLD	State Government Agency	QLD	Yes	✓	✓	✓	
Blue Harvest	Commercial Business	NT	Yes	✓	✓	✓	✓
Blue Mussel Holdings	Commercial Business	WA	No	✓			✓
Bunuba Dawangarri Aboriginal Corporation	State Government agency	WA	Yes	✓	✓		✓
Camberwell Market Seafoods	Commercial Business	VIC	No		✓		
Cameron of Tasmania	Commercial Business	TAS	Yes	✓	✓		✓
Central Queensland University - Mackay	University	QLD	Yes			✓	✓
Centre for Crocodile Research	Research Organisation	NT	Yes	✓	✓		✓
Charles Darwin University	RTO public	NT	Yes	✓	✓	✓	✓
Chisolm Institute	RTO public	VIC	No	✓		✓	
Clamms Seafood	Commercial Business	VIC	No	✓	✓	✓	
Clarence River Fishermen's Co-Operative Ltd	Industry Association	NSW	Yes	✓	✓		✓
Commonwealth Fisheries Association	Industry Association	National	No	✓	✓		✓
Cooperative Research Centre for Northern Australia	Research Organisation	Multi State	Yes	✓	✓	✓	✓
Coral Coast Barramundi	Commercial Business	QLD	Yes	✓	✓		✓
Craig Mostyn Group (Seafood)	Commercial Business	TAS	Yes		✓		✓
Crocodylus Park	Commercial Business	NT	Yes	✓	✓		✓
Dambimangari Rangers	State Government agency	WA	Yes	✓	✓		✓

Department of Biodiversity, Conservation & Attractions	State Government Agency	WA	Yes	✓	✓	✓	✓
Department of Education, Skills and Employment	Federal Government Agency	National	No	✓		✓	✓
Department of Education & Training	State Government Agency	NT	Yes	✓		✓	✓
Department of Fisheries Western Australia	Local Government	WA	No	✓	✓		✓
Department of Innovation & Skills	State Government Agency	SA	No	✓	✓	✓	✓
Department of Primary Industries - NSW Fisheries	State Government agency	NSW	No	✓	✓	✓	✓
Department of Primary Industries - Fisheries	State Government Agency	NT	Yes	✓	✓	✓	✓
Department of Primary Industries & Regions	State Government agency	SA	Yes	✓	✓		✓
East Gippsland Estuarine Fishermen's Association	Industry Association	VIC	Yes	✓			✓
Eastern Victorian Sea Urchin Divers Association	Industry Association	VIC	Yes		✓		✓
Eastern Zone Abalone Industry Association	Industry Association	VIC	Yes		✓		✓
Fisheries Research and Development Corporation (FRDC)	Commercial Business	National	No	✓	✓		✓
Fishing Industry Training Committee	RTO public	NSW	Yes	✓	✓	✓	✓
Food Fibre Timber Industries Training Council	State Government agency	WA	No	✓	✓	✓	✓
Food & Primary Skills VIC	State Government Agency	VIC	No	✓	✓	✓	✓
Freshwater Native Fish Association	Industry Association	National	Yes		✓		✓
Geraldton Fisherman's Cooperative (GFC)	Industry Association	WA	Yes	✓	✓		✓
Gold Cost Tiger Prawns	Commercial Business	QLD	Yes	✓	✓		✓
Gold Coast University	RTO public	QLD	Yes			✓	
Gooniyandi Rangers	State Government agency	WA	Yes	✓	✓		✓
GrowCom	Industry Association	QLD	Yes	✓	✓	✓	✓
Hartleys Crocodile Farm	Commercial Business	QLD	Yes	✓	✓		✓
HL Australia	Commercial Business	Multi State	Yes	✓	✓		✓
Horticulture Coalition of SA	Industry Association	SA	Yes	✓	✓		✓
Humpty Doo	Commercial	NT	Yes	✓	✓		✓

	Business						
Huon Aquaculture	Commercial Business	Multi State	Yes	✓	✓	✓	✓
Huon Valley Trade Training Centre	RTO public	TAS	No	✓	✓	✓	✓
Indian Ocean Fresh Australia	Commercial Business	WA	Yes		✓		✓
Industry Skills Advisory Council NT	State Government agency	NT	Yes	✓	✓	✓	✓
James Cook University	RTO public	QLD	Yes	✓	✓	✓	✓
Johnstone River Crocodile Farm	Commercial Business	QLD	Yes	✓	✓	✓	✓
Kakadu National Park	Federal Government	NT	Yes	✓	✓	✓	✓
Kimberley Land Council	State Government agency	WA	Yes	✓	✓	✓	✓
Kirwan State High School	RTO public	QLD	Yes			✓	
Lagoon Crocodile Farm	Commercial Business	NT	Yes	✓	✓		✓
Lakes Entrance Fishermen's Co-op	Industry Association	VIC	Yes	✓	✓	✓	✓
LMC Training	RTO public	QLD	No	✓	✓	✓	✓
Magic Abalone	Commercial Business	WA	Yes		✓		✓
Mainstream Aquaculture	Commercial Business	VIC	Yes	✓	✓		✓
Mareterram Fisheries	Commercial Business	WA	Yes	✓			✓
Marine Stewardship Council	Research Organisation	National	No	✓			✓
Maritime & Safety Training	RTO public	NSW	Yes	✓	✓	✓	✓
Maritime Union of Australia	Union	National	No	✓		✓	✓
Maxima Pearling Company	Commercial Business	WA	Yes	✓	✓		✓
Melbourne Seafood Centre	Commercial Business	VIC	No	✓	✓		✓
Melbourne Polytech	RTO public	VIC	No	✓		✓	✓
Ministry of Primary Industries	Local Government	Other	No		✓		
Miriuwung Gajerrong Rangers	Commercial Business	VIC	Yes	✓			✓
Mitchelson Fisheries Pty Ltd	Employer Organisation	VIC	Yes	✓			✓
National Aquaculture Council	Industry Association	National	No	✓	✓		✓
National Indigenous Australians Agency	Federal Government	National	Yes	✓	✓	✓	✓
Nautilus Collaboration	Commercial Business	TAS	Yes	✓		✓	✓
Ngurrara Rangers	State Government agency	WA	Yes	✓	✓		✓
Northern Land Council	State	NT	Yes	✓	✓	✓	✓

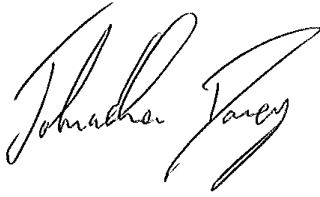
	Government agency						
Northern Territory Government	State Government agency	NT	Yes	✓	✓		✓
Northern Territory Parks & Wildlife	State Government agency	NT	Yes	✓	✓	✓	✓
Northern Territory Seafood Council	Industry Association	NT	Yes	✓	✓		✓
North Regional TAFE	RTO public	WA	Yes	✓		✓	✓
NSW Fishing Industry Training Committee LTD	RTO private	NSW	Yes	✓			✓
Nyamba Buru Yawaru	State Government agency	WA	Yes	✓	✓		✓
Nyangumarta Rangers	State Government agency	WA	Yes	✓	✓		✓
Oceanwatch	Commercial Business	National	No	✓	✓		✓
Odyssey Fisheries	Employer Organisation	SA	Yes		✓		✓
Oysters Australia	Industry Association	National	No	✓	✓		✓
Pacific Labour Facility	Federal Government	National	Yes				✓
Pacific Reef Fisheries	Commercial Business	QLD	Yes	✓	✓		✓
PADI Asia Pacific	RTO private	NSW	No		✓	✓	
Parks Australia	Federal Government	National	Yes	✓	✓	✓	✓
Parks & Wildlife Commission	State Government Agency	NT	Yes	✓	✓		
Paruku Rangers	State Government agency	WA	Yes	✓	✓		✓
Paspaley	Commercial Business	WA	Yes	✓	✓		✓
Pearl Producers Association (Australian South Sea Pearls)	Industry Association	National	Yes	✓	✓		✓
Phillip Island Nature Parks	Research Organisation	VIC	Yes	✓			
Porosus Pty Ltd	Commercial Business	NT	Yes	✓	✓		✓
Port Franklin Fishermen's Association	Industry Association	VIC	Yes		✓		
Portland Professional Fishermen's Association	Industry Association	VIC	Yes		✓		
Primary Industry Skills Council	Industry Skills Council	SA	No	✓	✓	✓	✓
Professional Diving Services	RTO public	VIC	No	✓	✓	✓	✓
Professional Fishermen's Association	Commercial Business	National	No	✓	✓		✓
Queensland Farmers	Industry	QLD	Yes	✓	✓	✓	✓

Federation	Association						
Queensland Seafood Industry Association	Industry Association	QLD	No	✓	✓		✓
Queensland Seafood Marketers Association	Industry Association	QLD	Yes	✓	✓		✓
Seafarms Group	Commercial Business	Multi State	Yes	✓	✓		✓
Seafood & Maritime Training	RTO private	TAS	No	✓		✓	✓
Seafood Industry Australia	Industry Association	National	No	✓	✓		✓
Seafood Industry Victoria	Industry Association	VIC	Yes	✓	✓	✓	✓
Seafood Processors and Exporters Council	Industry Association	QLD	Yes	✓	✓		✓
Shark Bay Prawn Trawler Operator's Association	Employer Organisation	WA	Yes	✓	✓		✓
South Australian Northern Zone Rock Lobster Fishermen's Association Inc	Industry Association	SA	No	✓			✓
South Australian Oyster Growers Association	Industry Association	SA	Yes	✓	✓	✓	✓
South East Trawl Fishing Industry Association	Industry Association	VIC	Yes	✓	✓		✓
Southern Ocean Express	Commercial Business	SA	Yes		✓		
Southern Tasmanian Divers	Commercial Business	TAS	No	✓	✓	✓	✓
Sydney Fish Market	Commercial Business	NSW	No	✓	✓		✓
TAFE NSW	RTO Public	NSW	Yes	✓	✓	✓	✓
TAFE SA	RTO Public	SA	Yes	✓	✓	✓	✓
Tasmanian Seafood Industry Council	Industry Association	TAS	No	✓	✓	✓	✓
Tassal Group	Commercial Business	Multi State	Yes	✓	✓	✓	✓
Two Gulf's Crab	Commercial Business	SA	No	✓			✓
The Master Fish Merchants Association of Australia	Industry Association	National	No				✓
Victorian Abalone Processors Association	Industry Association	VIC	Yes		✓		✓
Victorian Bays and Inlets Fisheries Association	Industry Association	VIC	Yes		✓		✓
Victorian Fish and Food Marketing Association	Industry Association	VIC	No		✓		✓
Victorian Rock Lobster Association	Industry Association	VIC	No	✓	✓		✓
Victorian Trout Farmers Association	Industry Association	VIC	No				✓
Walalakoo Ranger Group	State Government agency	WA	Yes	✓	✓		✓
WA Fishing Industry Council (WAFIC)	Industry Association	WA	No	✓	✓	✓	✓
Western Abalone Divers	Industry	VIC	Yes	✓			✓

Association	Association						
Wildcatch Fisheries SA	Industry Association	SA	No	✓	✓	✓	✓
Wunggurr Rangers	State Government agency	WA	Yes	✓	✓		
Yumbah Aquaculture	Commercial Business	SA	Yes				✓

IRC Sign-Off

Signed on behalf of the Aquaculture and Wild Catch IRC

A handwritten signature in black ink, appearing to read "Johnathon Davey". The signature is fluid and cursive, with the first name being more prominent.

.....
Chair: Johnathon Davey