

# Case for endorsement

**AHC Agriculture, Horticulture and Conservation and  
Land Management Training Package Part 1 of 2**

**Version 4.0**

Agribusiness,  
Carbon Farming,  
Irrigation and Drainage,  
Sports Turf Management  
and Viticulture

**Submitted by Skills Impact  
on behalf of  
Amenity Horticulture, Landscaping,  
Conservation and Land Management IRC  
and  
Agriculture and Production Horticulture IRC**

**June 2019**



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## A. Administrative details

This section provides an overview of the relevant organisations, the case for change and training package components for endorsement.

### Organisational details

This submission is made by the following Industry Reference Committee/s (IRC/s):

- Agriculture and Production Horticulture Industry Reference Committee
- Amenity Horticulture, Landscaping, Conservation and Land Management Industry Reference Committee

The Agriculture and Production Horticulture Industry Reference Committee are responsible for the:

- Agribusiness
- Irrigation and Drainage
- Protected Horticulture
- Viticulture.

The Amenity Horticulture, Landscaping, Conservation and Land Management Industry Reference Committee is responsible for the submission of the:

- Carbon Farming
- Sports Turf Management.

Skills Impact Ltd is the Skills Service Organisation (SSO) supporting this submission.

### Component details

The Case for Endorsement comprises 14 qualifications, 130 units of competency and their associated assessment requirements and 25 skill sets as part of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0*.

This submission is based on the outcomes of four projects.

The components submitted for approval for *AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0* were reviewed during the following projects.

Project	Components
<b>Carbon and Agribusiness Management</b>	<b>Agribusiness</b> <ul style="list-style-type: none"><li>• 3 revised qualifications in Agribusiness</li><li>• 43 revised units of competency across the Agribusiness, Business, Shearing and WHS sectors</li><li>• 1 revised and two new skill sets (non-endorsed component)</li><li>• Proposed deletion of 1 unit of competency</li></ul>
	<b>Carbon Farming</b> <ul style="list-style-type: none"><li>• 7 new units of competency</li><li>• 8 new skill sets (non-endorsed component).</li></ul>
<b>Horticulture Technology</b>	<b>Irrigation</b> <ul style="list-style-type: none"><li>• 4 revised qualifications in Irrigation</li></ul>

Project	Components
	<ul style="list-style-type: none"> <li>• 43 revised units of competency across the Irrigation and Drainage sectors</li> <li>• 1 new Irrigation unit of competency</li> <li>• 7 revised and 4 new skill sets (non-endorsed component)</li> </ul>
	<p><b>Protected Horticulture</b></p> <ul style="list-style-type: none"> <li>• 3 new qualifications in Protected Horticulture</li> <li>• 1 revised unit of competency in Production Horticulture</li> <li>• 1 revised unit of competency in Soils and Media</li> <li>• 5 new units in Production Horticulture and 1 new unit in Hydroponics</li> </ul>
<b>Sports Turf Management</b>	<ul style="list-style-type: none"> <li>• 3 revised qualifications in Sports Turf Management</li> <li>• 1 new and 16 revised units of competency in Turf</li> <li>• 1 revised unit of competency in Soil and Media</li> <li>• 3 new skill sets (non-endorsed component)</li> <li>• proposed deletion of 1 qualification</li> </ul>
<b>Viticulture</b>	<ul style="list-style-type: none"> <li>• 1 revised qualification in Viticulture</li> <li>• 9 revised units of competency across the Broad Acre Cropping, Organic Production, Production Horticulture, Soils and Media, Water, and Work sectors</li> <li>• 1 new unit in Production Horticulture</li> </ul>

Please refer to **Appendix 1 Components for endorsement** for full details of all components.

**Note:** Please refer to the Case for Endorsement ACM Animal Care and Management Training Package Part 2 of 2 V4.0 for details of components covered by the Arboriculture project.

## Case for Change details

The Case for Change (Reference number: Skills Impact/TPD/2017–18/003 was approved on 5 June 2018. The requirements set by the Australian Industry and Skills Committee (AISC) in relation to the training package development work are:

- Advanced skills in rural management and agribusiness
  - Update 3 qualifications
  - Update 51 units of competency.
  - Develop up to 3 new skill sets
- AHCLCLM – 2 Carbon Farming skill sets
  - Update 11 units of competency
  - Develop up to five units of competency
  - Develop up to eight new skill sets

The Case for Change (Reference number: Skills Impact/TPD/2018–19/005 was approved on 26 February 2019. The requirements set by the Australian Industry and Skills Committee (AISC) in relation to the training package development work are:

- Horticulture Technology
  - Reviewing 64 units of competency
  - Development of 16 units of competency

- Covering
  - Irrigation
  - Sports Turf
  - Protected Horticulture

## B. Description of work and request for approval

The section describes the work undertaken and the decision being sought from the AISC. The components submitted for endorsement have been reviewed as part of the following four projects:

- Carbon and Agribusiness Management
- Horticulture Technology covering Irrigation and Protected Horticulture
- Sports Turf Management
- Viticulture.

### Decision being sought

This submission puts forward the Case for Endorsement for the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0*. to be endorsed by the Australian Industry and Skills Committee.

The proposed Training Package components are listed in **Appendix 1: Components for Endorsement**, and comprise:

- 11 revised and 3 new qualifications from the four projects
- 1 qualification proposed for deletion
- 114 revised and 16 new units of competency
- 1 unit of competency proposed for deletion
- 8 revised and 17 new skill sets (non-endorsed components)

In addition to the components proposed for endorsement, minor updates will be completed to 33 qualifications to update the codes of elective units listed in the qualifications. The following qualification has also undergone minor updates to the units listed in the electives:

- *AHC60216 Advanced Diploma of Horticulture* – deletion of an AHC unit and replacement with an imported BSB unit with the same outcomes

Refer to **Appendix 3: Minor updates** for details.

## Work undertaken and why

### 1. Agribusiness

**Skill description:** Skills in strategic planning, risk management, mergers and acquisitions, online marketing, business development and financial planning to assist workers to respond to dynamic and changing operating environments, with increased competition and opportunities to reach global markets.

New skills in agricultural innovation strategies, implementation of new products and innovation leadership to lead innovative thinking and practice.

**Driver for this project:** Australia is experiencing increasing market demands for innovation in product development, to ensure the viability of enterprises and to take advantage of opportunities in the new free trade agreement with Asian Pacific partners.

This project aims to develop skills and knowledge to create opportunities and increase competitiveness in the global agribusiness markets.

**Work undertaken:** A Subject Matter Expert (SME) group was formed and consisted of representatives from New South Wales, Queensland, South Australia, Tasmania, Victoria, and Western Australia. The group represented a range of occupations and industries including graziers, industry associations, government and registered training organisations.

The group considered that the Agribusiness qualifications would be best served if they concentrated on farmers and their employees. Service providers should also be included; however, care should be taken as providers often require special licensing to perform their roles. For example, financial advisors require an Australian Financial Services Licence (AFSL) or Regulatory Guide 146 on Training of financial product advisers Tier 1 qualifications.

A detailed workforce functional analysis (WFA) was conducted with the SME group to identify the current and potential future roles performed. The WFA also helped to determine the correct level of qualification for employees and farmers.

The following job roles were identified:

- Farm hands / Jackaroos and Jillaroos
- Machine Operators
- Livestock handling
- Farm supervisors
- Farm managers
- Second in Charge (2ICs)
- Service Providers:
  - Financial advisors
  - Real estate agents
  - Bankers and Accountants

Based on their outcomes, the job roles were divided into entry, middle and senior levels, and this information was used to align the roles to qualification levels within the Australian Qualifications Framework (AQF).

Current entry level job roles include:

- Farm hands / Jackaroos and Jillaroos
- Machine operators
- Livestock handlers

Entry level roles are best suited to the Certificate IV in Agribusiness.

Current middle level job roles include:

- Farm supervisors
- Other supervisors
- Assistant managers (herd / vineyard)

Middle level roles best suited to the Diploma of Agribusiness Management.

Current senior level job roles for include:

- Farm managers
- 2ICs
- Overseers
- Service Providers including financial advisors, real estate agents, banking and accounting staff

Senior level roles are best suited to the Advanced Diploma of Agribusiness Management.

Once job roles and their associated tasks were identified, a clearer picture was formed as to how the qualifications, units of competency and skill sets could be revised. This included reviewing possible units of competency to be deleted and introducing new skill sets for Farm Business Finances and Farm Business Workforce.

AHCBUS604 Design and manage the enterprise quality management system is proposed for deletion. It is very similar to, and can be replaced by, BSBMGT621 Design and manage the enterprise quality management system.

This unit of competency is currently included as an elective in:

- *AHC60316 Advanced Diploma of Agribusiness Management*. This qualification has been updated in this project and recoded to *AHC60319 Advanced Diploma of Agribusiness Management*. The unit of competency *AHCBUS604 Design and manage the enterprise quality management system* has been removed as an elective in the revision.
- *AHC60216 Advanced Diploma of Horticulture*. A minor update will be completed to remove *AHCBUS604 Design and manage the enterprise quality management system* from this qualification and replace it with *BSBMGT621 Design and manage the enterprise quality management system*. Refer to **Appendix 3: Minor updates** for details.

The project identified that two of the three existing Agribusiness qualifications did not have core units, and the other qualification listed only one core unit. The revised qualifications now have several core units to ensure all graduates develop a base of agribusiness skills required by industry.

A validation forum was held in March 2019 and all units of competency and skill sets were validated. The validation participants represented states and territories including Queensland, New South Wales, Victoria, South Australia, Western Australia and Northern Territory.

**Decision being sought:** The following components be endorsed as part of the as part of the Case for Endorsement of the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0*:

- 3 qualifications
- 43 units of competency in the Agribusiness, Business, Shearing and WHS sectors
- 1 revised and two new skill sets (non-endorsed components).
- 1 unit proposed for deletion - *AHCBUS604 Design and manage the enterprise quality management system* which duplicates the outcomes of - *BSBMGT621 Design and manage the enterprise quality management system*.

## 2. Carbon farming

**Skill description:** Working knowledge of carbon farming and legislation, and carbon project management. The sector requires an in depth applied knowledge of carbon farming methods including those included in the Emissions Reduction Fund (ERF) and non-ERF markets such as voluntary markets (for example, enterprises such as Qantas and Shell) and secondary markets where carbon credits are sold to others who then on sell.

**Driver for this project:** This project focuses on the need for skill sets to address the emerging practices of carbon farming, which is of increased interest since the Paris Agreement on 4 November 2016.

The skills sets will provide skills and knowledge for indigenous communities, agribusiness workers, farmers, managers and technical advisors in the areas of:

- a working knowledge of carbon farming and carbon project management
- carbon farming legislation

This project received support from the National Farmers' Federation to assist farmers to access the ERF, and in response to a growing interest from farmers who are diversifying their farming activities and income through an increased awareness of carbon farming. Currently, there is no nationally endorsed training available for farmers or managers to fill this growing skills gap, as the previously endorsed carbon farming units and skills sets were deleted with no replacements.

**Work undertaken:** An SME group, consisting of fourteen representatives of the carbon farming industry from across the Australian Capital Territory, New South Wales, Queensland, South Australia, and Victoria was formed to provide technical advice. Throughout the project, advice was also sought from stakeholders in the Northern Territory and Western Australia. There is great interest in the carbon farming sector at present. There is also a lack of training for those needing the skills and knowledge to apply for funding and to advise on funding options.



Four main carbon farming methods were identified by the SMEs (from a pool of more than 35 methods): soil, vegetation, agriculture and savanna burning. The application of skills includes:

- Determining applicable method (post farm plans)
- Conduct of relevant surveying / testing
- Application of method specific equations
- Applying risk management actions – safety in controlled savanna burning is particularly significant
- Management action skills – i.e. construct a plan to comply with HIR (human induced regeneration) and the implementation of the plan

The application of knowledge includes:

- Knowledge of method – requirements, obligations, compliance
- Outcomes and benefits of carbon farming including:
  - Increased resilience to drought (later in, earlier out)
  - Stable and diverse income
  - Biodiversity above and below ground
  - Healthier plants and animals / healthier soils
  - Water benefits (better movement across the landscape)
  - Salinity/erosion, acidification control / reduces compaction
  - Improved nutrient balance in soil (increased land versatility)
  - Less die back
  - Community resilience
  - Better fire control
  - Less CO<sup>2</sup>

Following SME and stakeholder discussions, seven new units of competency have been developed in a new Carbon Farming sector (coded AHCCFP), along with eight new skill sets. The new Carbon Farming Services Advisor Skill Set has been designed to cover the work of those who provide advice on carbon farming projects. This skill set could provide the basis for certification of skills within the industry, should a professional association or regulatory body choose to set a standard for work in this area. Other skill sets address carbon farming methods, introduction to carbon farming and managing a carbon farming project.

Other skill sets have been created to cover the work carried out in savanna burning, acknowledging that the work for this method is often carried out by workers with little knowledge and skills to manage the risks involved.

The carbon farming units of competency have been included as electives in all three revised Agribusiness qualifications.

A validation forum was held in March 2019 and all units of competency and skill sets were validated. The group represented states and territories including Queensland, New South Wales, Victoria, South Australia, Western Australia and the Northern Territory.

**Decision being sought:** The following components be endorsed as part of the as part of the Case for Endorsement of the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0*:

- 7 new units of competency in the Carbon Farming sector
- 8 new skill sets (non-endorsed component)

### 3. Irrigation

**Skill description:** Skills in the irrigation sector of instalment, maintenance, troubleshooting, regulation, control, support of irrigation work being completed, sales, operations, measuring, monitoring, interpreting designs, drawings and plans, implementation, management, evaluation, supervising and auditing are included in the review of the irrigation sector. The skill sets bundle these skill area units into effective skill set packages. There are no new areas added to irrigation in this project, rather the updating of the existing aforementioned skill areas.

**Driver for this project:** The irrigation industry is experiencing scrutiny and pressure due to climate change and existing industry standards that are unprecedented in its national history. As a result, wide sweeping changes are moving through all irrigation sectors at a state and federal level. The changes to training is a part of this broader push for modernisation and change. The industry also seeks a trade level qualification at Certificate III, in line with this desire for growth and change.

**Work undertaken:** Units, qualifications and skill sets have been reviewed and created to reflect the driving forces of the changes industry are seeking to make. The expansion of the Certificate III from 12 to 22 units has been the biggest piece of work undertaken within the project. As mentioned, this has been done so that industry can present it to the state and territory accreditation boards as a trade level qualification. The review of the irrigation and drainage units has brought them into line with modern training packaging rules, while better reflecting the actual, day-to-day job actions of industry workers, from assisting level work to design and auditing level work. The creation and review of the skill sets allows for the upskilling of existing irrigation workers and pathways into specific job roles within irrigation for those outside the industry.

**Decision being sought:** The following components be endorsed as part of the as part of the Case for Endorsement of the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0*:

- 4 revised qualifications
- 35 revised units of competency and one new unit of competency in the Irrigation sector
- 8 revised units in the Drainage sector
- 4 revised and 7 new skill sets (non-endorsed component)

### 4. Protected Horticulture

**Skill Description:** Skills in monitoring, assisting, supporting the work of others, maintaining, performing specific tasks, installing and preparing are included in this project.

The new skills developed are to do with tasks within a protected horticultural environment that were not previously covered in existing training. These are mostly performing tasks to do with planting, growing crops and maintaining plants in a protected growing environment.

**Drivers for this project:** Protected horticulture, or protected cropping, is a rapidly growing industry nationally, with many large chain supermarkets increasingly looking to protected growing facilities to produce a more uniform crop, and growing innovations revolutionising how, and for how much, we grow crops. This project aims to give Australia the qualifications and units, previously completely absent, specific to protected horticulture and separate from other growing disciplines.

**Work undertaken:** Units and qualifications have been developed to fill the knowledge and skills gaps that existed previously in protected specific horticulture. These include working with trellis, protected specific hydroponic use and pollinating protected plants. The work undertaken has ensured it reflects the broad nature of the industry, from a simple plastic tarp over plants, to a completely controlled environment. The units and qualifications are applicable to any kind of protected growing set up.

**Decision being sought:** The following components be endorsed as part of the as part of the Case for Endorsement of the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0*:

- 3 new qualifications
- 8 units of competency:
  - 5 new and 1 revised Production Horticulture sector
  - 1 new in Hydroponics sector
  - 1 revised in Soils and Media sector

## 5. Sports Turf Management

**Skill description:** The sports turf management industry is responsible for the construction, preparation, maintenance and restoration of sports turf surfaces. The industry has several sub sectors including sports grounds, horse racing courses, golf courses, bowling greens and other specialist turf surfaces used for sports play.

The main roles identified within this sector.

- Managers that control, coordinate and oversee the development and management of sports turf facilities.
- Trades people responsible for the day to day implementation of sports turf development and maintenance programs under broad direction.
- Entry level workers that operate under direct supervision and assist trades people with the maintenance and preparation of sports turf surfaces, particularly during major sporting events.

Coordination and supervision of the sports turf facility is generally a shared responsibility between the manager for the administrative activities and the experienced tradesperson who is responsible for the day-to-day operations.

This sector requires an in-depth applied knowledge of the sciences of biology and physiology of turf grasses and their cultivation requirements. A detailed knowledge of irrigation and drainage is also important in sports turf management.

Work tasks vary depending on the role and the type of facility but typically involve a combination of:

- machinery operation and maintenance
- preparation of the sports turf surface in readiness for play
- repair and maintenance of sports turf surfaces
- construction of new surfaces
- treatment of turf surfaces and soils to promote health and vigour
- maintenance sports turf equipment and facilities.

**Driver for this project:** The current AHC Sports Turf Management qualifications and their related Turf sector units of competency (coded AHCTRF) no longer accurately reflect current work roles, practices and the technologies in the Sports Turf Management industry. Industry representatives have unsuccessfully tried for several years to update their qualifications and specifically to increase the size of the Certificate III in Sports Turf Management to cover the breadth and depth of skills required by sports turf trades people. The Assessment Requirements in the existing endorsed AHCTRF units are shallow and weak. In particular:

- Performance Evidence lacks specificity and detail required to provide sufficient volume and frequency of evidence to make sound decisions on competency
- Knowledge Evidence lacks detailed descriptors of the knowledge required by industry
- Assessment Conditions do not provide any information on the physical environment, resources, equipment and materials, specifications and relationships that must be available when skills are being assessed. This has allowed for poor quality training and assessment from some providers that could not be reined in without the missing information.

The project set out to address these issues as well as to review and update one Soil and Media sector unit –*AHCSOL303 Implement soil improvements for garden and turf areas*. This new unit was

created in 2015 and released in 2016 but has the same issues as the AHCTRF units described above.

**Work undertaken:** A Subject Matter Expert working group that included representatives from various sub-sectors of the sports turf management industry across Australia was formed to provide technical advice. This group met five times between August 2018 and February 2019 to develop the draft qualifications, skill sets and units of competency, and the process included two releases of the draft components for broader stakeholder feedback. The work began with a detailed workforce functional analysis (WFA) with the SMEs to identify the current roles and work functions in the sports turf management industry. The findings of the WFA were compared to the existing sports turf sector qualifications and units to identify the qualifications, skill sets and units required by the industry. The end result has been to delete one qualification, redesign three existing qualifications, revise 17 units, and create a new unit and three new skill sets.

The *Certificate II in Sports Turf Management* has been radically redesigned in consultation with industry and become a more effective entry pathway and 'taster' qualification that can be delivered successfully to senior secondary school students. It has been reduced from 13 to 8 units (5 core and 3 elective) to make it more appealing to be taken up and completed as part of a VET in Schools program. It is more focused on practical skills in order to engage learners in secondary schools and to make graduates more employable.

The *Certificate III in Sports Turf Management* has been redesigned and increased from 16 to 23 units (18 core and 5 electives) to create a trade qualification that has the breadth and depth of skills and knowledge for trades people required to work across a range of subsectors. It now reflects real industry roles and work functions and has been strongly supported by industry across Australia.

The Diploma of in Sports Turf Management has also been redesigned and increased from 10 to 14 units (10 core and 4 electives) to reflect the increased complexity of the management and consulting roles in the industry. The revised Diploma has increased the Sports Turf Management sector units in the core from one to four.

The Sports turf industry is a specialised sector of the Horticulture industry. Prior to commencing the Diploma, industry expects individuals to possess practical understanding of working safely with sports turf machinery, tools and equipment, as well as experience in the application of the science of horticulture at a technical level for growing and maintaining sports turf. This prior knowledge and experience will help ensure individuals enrolling in the Diploma are able to transition and extend these applied skills and knowledge into the effective design and development of sports turf management activities.

The existing Diploma entry requirement is a *Certificate III in Sports Turf Management* or a trade level qualification in green keeping or turf management. After considering the validation draft feedback, the SMEs thought this was too restrictive for individuals working in the industry that held generic amenity horticulture trade level qualifications plus sport turf industry experience. The revised Diploma entry requirements have been expanded to allow entry to individuals that have:

- completed a *Certificate III in Sports Turf Management* or an equivalent turf management trade level qualification

or

- a certificate III level qualification in amenity horticulture combined with two years current work experience in a trade level role at a sports turf facility.

Based on the WFA and subsequent consultations with the SMEs, *AHC40816 Certificate IV in Sports Turf Management* is proposed for deletion. Industry advised the qualification is not required. In addition, all of the units listed in *AHC40816 Certificate IV in Sports Turf Management* can be achieved by undertaking *AHC40416 Certificate IV in Horticulture*.

A validation forum was held on 27 February 2019 to provide industry with an opportunity to review, discuss and validate all the components being put forward for endorsement. The forum comprised of 14 representatives of the sports turf industry from all of the States and Territories (except Tasmania

and the Northern Territory) who provided constructive feedback on the components and their support for their endorsement.

**Decision being sought:** The following components be endorsed as part of the as part of the Case for Endorsement of the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0*:

- 3 revised qualifications
- 18 units of competency:
  - 16 revised and 1 new in Turf sector
  - 1 revised in Soils and Media sector
- 3 new skill sets (non-endorsed component)
- 1 qualification proposed for deletion - *AHC40816 Certificate IV in Sports Turf Management*

## 6. Viticulture

**Skill Description:** The skills relate to the everyday work undertaken by viticulturists in a multitude of working environments, which include:

- Developing, implementing and reviewing plans
- Preparing work environments
- Monitoring and management of systems and processes

**Driver for this project:** The existing Diploma of Viticulture does not meet industry needs. The units listed in the core and electives do not accurately reflect current job roles and work functions and focuses too heavily on wine. The review of the Diploma and its related units was driven by a need to create training components to address these issues.

**Work undertaken:** An effort to make the qualification and units more viticulture specific has been made, while not excluding those who grow grapes for non-wine related purposes (table grapes and sultanas). The qualification has had important changes to the structure of the core, as dictated by industry experts and representatives of industry associations. There is a greater emphasis on biosecurity and viticulture practices, while not losing focus of the managerial functions of a diploma level qualification.

**Decision being sought:** The following components be endorsed as part of the as part of the Case for Endorsement of the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0*:

- 1 revised qualification
- 10 units of competency:
  - 1 revised in the Broad Acre Cropping sector
  - 2 revised units in the Organic Production sector
  - 3 revised units and 1 new unit in Production Horticulture sector
  - 1 revised unit in the Soils and Media sector
  - 1 revised unit in the Water sector
  - 1 revised unit in the Work sector

## C. Evidence of Industry support

This section provides evidence that *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0* is supported by industry.

### Support by IRC(s)

Members of the Amenity Horticulture, Landscaping, Conservation and Land Management IRC recorded their support for this submission in the Minutes of Meeting held on 10 May 2019.

Members of the Agriculture and Production Horticulture IRC recorded their support for this submission in the Minutes of Meeting held on 22 May 2019.

Please refer to Section I. IRC support for written evidence of support.

### Consultation with stakeholders

During the development and review of the training package components, the following communication strategies were used for consultation with stakeholders.

- Project pages were set up on the Skills Impact website at the start of each of the projects with information about the project, together with progress updates. The project pages remained on the website throughout the projects. Visitors were invited to register their interest so that they received email alerts about the particular project of interest, for example, public consultation workshops, and opportunities to provide feedback on draft materials. Links to the project pages are provided below.
  - Carbon & Agribusiness Management – <https://www.skillsimpact.com.au/agriculture/training-package-projects/carbon-agribusiness-management-project/>
  - Horticulture Technology (Protected Horticulture and Irrigation and Drainage) - <https://www.skillsimpact.com.au/agriculture/training-package-projects/horticulture-technology-project/>
  - Viticulture - <https://www.skillsimpact.com.au/agriculture/training-package-projects/viticulture-project/>
  - Sports Turf Management - <https://www.skillsimpact.com.au/horticulture-conservation-and-land-management/training-package-projects/sports-turf-management-project/>
- Subject matter expert meetings (face to face or via webinar/teleconference) were held for each of the projects:
  - 2 in Agribusiness
  - 2 in Carbon Farming
  - 6 in Irrigation
  - 5 in Protected Horticulture
  - 5 in Sports Turf Management
  - 4 in Viticulture
- Public consultation and feedback workshops were held around Australia for all projects in Adelaide, Brisbane, Melbourne, Sydney and Perth. In addition, workshops were also held:
  - in Canberra and Hobart for Sports Turf Management
  - in Sydney, Melbourne, Brisbane, Adelaide, Perth, Cairns and Darwin for Agribusiness and Carbon Farming
  - in Launceston for Protected Horticulture
  - in the Barossa, SA, Hunter Valley, NSW and Yarra Glen, Vic for Viticulture
- National public consultation webinars were held for all projects to cater for stakeholders that could not attend the face to face workshops.

- Emails and newsletters were sent to state and territory training authorities (STAs/TTAs), VET regulators, industry training advisory bodies (ITABs) and other stakeholders to keep them informed of the project's progress.
- Draft materials were hosted on the Skills Impact website for a four-week period, with an additional two-week period for validation of final drafts. Stakeholders were able to provide feedback via a feedback hub, online questionnaires, emails or telephone calls.
- A presentation was given on the Sports Turf Management project at the National Turf Teachers Validation Meeting held at Melbourne Polytechnic, Fairfield Victoria on 4 December 2018. The event was organised by Albert Sherry of the National Turf Educators Working Group. It was attended by representatives from industry associations and training providers who were given the opportunity to ask questions and provide feedback on draft materials.
- A presentation was given at the VET: Working together to Build the Future Queensland Agriculture Workforce Forum, held in Brisbane on 26 November 2018. The event was organised by The Queensland Farmers' Federation led Rural Jobs and Skills Alliance (RJSA). It was attended by representatives from industry associations and training providers who were given the opportunity to ask questions on the scope of work being undertaken.
- Industry Representative Committee member communications with their industry networks for Irrigation, Protected Horticulture and Sports Turf Management.
- Registered Training Organisations (RTOs) that have existing components on their Scope of Registration related to the project components being reviewed or created were emailed at the beginning of each project to:
  - inform the project had commenced
  - invite them to register to receive project updates
  - advise them of opportunities for feedback
  - seek feedback on existing components available on Training.gov.au
  - advise them of how to become volunteer SMEs
- Stakeholders on Skills Impact's data base for the AHC Training Package were emailed with project updates.
- Several stories have been shared on social media such as Twitter and LinkedIn in support of the Agribusiness and Carbon farming projects to initiate interests in these projects.

Please refer to **Appendix 2: Industry support** for a detailed list of activities conducted, together with organisations and individuals consulted for each of the above projects.

## State/Territory and key stakeholder engagement

Workshops and webinars were conducted throughout Australia to gain industry feedback on all aspects of the Agribusiness, Carbon Farming, Irrigation, Protected Horticulture, Sports Turf Management and Viticulture qualifications, skill sets and units of competency, including the components proposed for deletion.

A wide range of stakeholders have been engaged across Australia and from all states and territories. Stakeholders have included national and state-based industry associations, government departments, peak national committees, union, enterprises, key training providers and a range of individuals who are considered to be subject matter experts.

Irrigation Australia, the largest and most active peak body assisted in creating the draft components with four members in frequent contact with Skills Impact throughout the project. During the review and redesign of the expanded Certificate III, Irrigation Australia offered considerable feedback, including advice from SMEs outside of its membership. This advice was collected from different states, to ensure a broad range of irrigation techniques and regions were included, ensuring the redesigned qualification can be applied effectively across the nation.

In the Protected Horticulture sector, Protected Cropping Australia (PCA) was very active in the early part of the project, and in the debate regarding the formation of qualifications and/or skill sets. Most of

their members were in favour of the formation of qualifications. Members of the PCA provided feedback at the end of the validation period. The R M Consulting Group, Medicinal Crops representatives and some large industry producers were also active during the project, providing advice regarding the formation of the documents, participating in the public consultation phase and the validation phase of the project.

Please refer to **Appendix 2: Industry support** for a list of activities conducted, together with organisations and individuals consulted.

### **Tasmanian consultation for the Irrigation and Viticulture sectors**

Skills Impact approached both the Agriculture and Production Horticulture Industry Reference Committee and Irrigation Australia to nominate Tasmanian SME's to be part of the project to review the Irrigation qualifications and units of competency. Both organisations could not identify potential SMEs. Irrigation Australia consulted with Total Eden, a major irrigation company contracted by the Tasmanian government to run the Tasmanian irrigation sector. A senior consultant of Total Eden advised Skills Impact that the company was satisfied for Irrigation Australia to act as their representative on the project.

The Tasmanian Wine Industry Association (TWIA) was contacted on three separate occasions to nominate subject matter experts (SMEs) for the project. The president of the TWIA advised twice that Tasmania did not wish to participate, due to the fact that there are no RTOs in Tasmania that offer the qualification and because the wine industry in the state is comparatively small. The TWIA suggested a trainer at TasTAFE should be invited to be an SME for the project. Skills Impact approached the TasTAFE representative on two separate occasions but no response was received.

For both the Irrigation and Viticulture projects, consultation webinars were conducted for stakeholders that could not attend face-to-face consultation meetings after the release of the first draft components. There were no participants from Tasmania.

Finally, Skills Impact sends out newsletters to all state and territory training authorities, Industry Technical Advisory Boards (ITABs) or similar organisations in each state. Currently there is no ITAB in Tasmania but individuals and organisations who have registered their interest with Skills Impact are kept updated on AHC projects through the newsletters. At each stage of each project, Skills Impact sought feedback on the work being undertaken. Those registered personnel in Tasmania were kept informed of all the AHC projects but chose not to provide feedback on these projects.

## **Reports by exception**

There are no reports by exception.



## D. Industry expectations about training delivery

This section explains the advice provided in the Companion Volume Implementation Guide for the *AHC Agriculture, Horticulture and Conservation, and Land Management Training Package Version 4.0*, together with recommendations for delivery of qualifications as traineeships/apprenticeships.

### Companion Volume Implementation Guide

The companion volume details information that covers key industry expectations about:

- qualifications suitable for vocational education and training delivered to secondary students
- qualifications suitable for delivery as apprenticeships or traineeships
- amount of training/volume of learning requirements to ensure that the individual can gain the necessary skills and knowledge
- key legislative requirements
- essential knowledge requirements.

#### Carbon Farming

The development of the carbon farming skill sets fosters recognition of the emerging trend of inclusion of carbon farming into current agribusiness practice. The skill sets allow individuals to move into agribusiness occupations where carbon farming skills are sought. Future carbon farming programs can be quickly developed from clustering or drawing on several developed skill sets to meet future industry needs particular to this niche.

The carbon farming skill sets, and individual units of competency have sufficient rigor built in to support high quality training and assessment. The units have also been designed with a focus on a hands-on delivery model as the preferred method for training. This has been done to reduce the risk of poor training found in some of the currently used online delivery and assessment methods. There is great interest in the carbon farming sector at present and a lack of training options for those needing the skills and knowledge to apply for funding and give advice on funding options. It was also established that the units should also include training on non-Emissions Reduction Fund carbon markets.

#### Agribusiness

The review process identified the need for core units to be added to the qualifications in Agribusiness and Agribusiness Management.

Discussion also centred on the need to provide units of competency which were 'farm business centric'. This means that units should be directed at farmers and farm employees at Certificate IV and Diploma level.

Advanced Diploma level roles could include a Property or Production Manager, an Agricultural Manager, Horticultural Enterprise Manager or an Agribusiness advisor or consultant.

The assessment requirements of several units of competency in this project lacked specificity about the volume and frequency of performance evidence, so details in this field of all AHCAGB and AHCBUS units has been updated and clarified. For example, some revised units include detail about the number of times tasks should be performed, and other units specify the requirement to use records for a period of time, such as a financial quarter or a production period.

This was an important part of this project to ensure that there are quality outcomes specific to the job roles targeted at AQF levels 4, 5 and 6. Training organisations will need to ensure their assessments are updated to incorporate these requirements.

### **Sport Turf Management**

It is envisaged that training and assessment of many of the Sports Turf Management units (coded AHCTRF) will occur in the workplace, as these units require access to resources, materials and equipment that are present in a typical sports turf facility. The Assessment Conditions in the Assessment Requirements for each of these units of competency specifies these requirements. Due to the variety of subsectors in the industry, an individual undertaking the *Certificate III in Sports Turf Management* will need access to a variety of sports turf surfaces.

### **Viticulture**

The training and assessment of some units of the Diploma of Viticulture require access to resources (including live grape vines), materials and equipment that are present in a vineyard. The Assessment Conditions in the Assessment Requirements for each of these units of competency specifies these requirements. Advice received from industry and RTO representatives suggest that these requirements will not cause any barriers to delivery.

### **Delivery as apprenticeship/traineeship**

The following qualifications are suitable and recommended for delivery as either a traineeship or apprenticeship:

- AHC31319 Certificate III in Sports Turf Management
- AHC32419 Certificate III in Irrigation Technology
- AHC41019 Certificate IV in Agribusiness

## E. Implementation of the training package components

This section explains how the training package meet occupational and/or licensing requirements and identifies particular implementation issues and strategies to manage these issues.

### Meeting occupational and licensing requirements

#### Agribusiness

There are no occupation and licensing requirements in the Agribusiness sector.

#### Carbon Farming

There are no occupation and licensing requirements in the Carbon Farming sector.

#### Sport Turf Management

There are no specific occupational licencing requirements for the sports turf management sector. Regulatory requirements exist in some States and Territories for the purchase, handling, storage and use of restricted chemicals. Users should check with the authority in their State or Territory.

In particular, there are core units in the Certificate III in Sports Turf Management that include chemical use and their related regulatory requirements. The units in the Certificate II in Sports Turf Management do not require the application of chemicals. The units in the Diploma of Sports Turf Management include planning for chemical use which is not covered by regulatory controls.

#### Irrigation and Protected Horticulture

There are no specific occupational licencing requirements for the Protected Horticulture sector. The irrigation sector has occupational licencing requirements in the Certificate III in Irrigation Technology. Two units have been brought into the qualification to address occupational licencing requirements in NSW. These two units are *UEENEEP024A Attach cords and plugs to electrical equipment for connection to a single phase 230 Volt supply* and *CPCPWT3027A Connect irrigation systems from drinking water supply*.

#### Viticulture

There are no specific occupational licencing requirements for the Viticulture sector.

### Implementation issues and management strategies

#### Sport Turf Management

The training and assessment of the Certificate II and the Certificate III in Sports Turf Management requires a great deal of applied knowledge and practical demonstration which can only be achieved through exposure to and use of hand tools and machinery operation in a real sports turf environment. RTO's wishing to deliver this training must consider the size and complexity of the space required for such an undertaking.

The sports turf management industry consists of various sub sectors and requires broadly and deeply skilled trades people. Industry supports workplace-based delivery through apprenticeships, but it also recognises the need to provide further off the job training or alternative work experience in a sports turf sectors not covered at the apprentice's workplace.

#### Irrigation and Protected Horticulture

Access to Protected Horticulture and Irrigation sites for learners to undertake training and assessment activities has been identified as a possible implementation issue. RTO's will need to establish relationships with local protected horticulture facilities and irrigators to overcome this issue.

## Further implementation advice

### Sport Turf Management

A few stakeholders have questioned the rationale for the increased size of the redesigned Certificate III in Sports Turf Management, citing possible funding issues. Industry representatives nationally have requested and supported the additional units in the qualification, arguing the units are required to produce the next generation of sport turf trades people that can work effectively in a range of industry subsectors. The National Turf Education Working Group is willing to assist training providers to access a range of sports turf facilities to support apprentices. It is also possible to reduce delivery costs by clustering delivery of some units in which the knowledge requirements are duplicated.

A few stakeholders questioned the proposed deletion of the existing *AHC40816 Certificate IV in Sports Turf Management*. Industry advised the qualification has no clear job role and is no longer required. The two AHCTRF units that reflect AQF level 4 outcomes in the qualification (*AHCTRF401 Develop a sports turf maintenance program* and *AHCTRF402 Plan and implement sports turf renovation*) have been revised and will continue to be available for use in other AHC qualifications. In addition, all of the units listed in *AHC40816 Certificate IV in Sports Turf Management* can be achieved by undertaking *AHC40416 Certificate IV in Horticulture*.

## F. Quality assurance reports

Skills Impact declares that the proposed components of *AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0* meets the requirements of the *Standards for Training Packages 2012* and the *Training Package Development and Endorsement Process Policy*.

The table provides a statement of evidence that the components meet the Training Package Quality Principles.

Principle	Evidenced by:
1. Reflect identified workforce outcomes	<ul style="list-style-type: none"> <li>• Changes demonstrate a clear link back to relevant AISC decisions commissioning the work, the IRC Skills Forecast and/or Case for Change, or demonstrate other evidence of industry needs.</li> <li>• Training package components are compliant with the <i>Standards for Training Packages 2012</i>, the <i>Training Package Products Policy</i> and the <i>Training Package Development and Endorsement Process Policy</i></li> <li>• Evidence that the training package components respond to Ministers' policy initiatives, in particular the CISC 2015 training package reforms</li> <li>• Open and inclusive consultation and validation commensurate with scope and impact has been conducted</li> </ul>
2. Support portability of skills and competencies including reflecting licensing and regulatory requirements	<ul style="list-style-type: none"> <li>• Packaging rules, qualifications framework, and pathways support movement within and across sectors</li> <li>• Identification of skill sets that respond to client needs</li> <li>• Other national and international standards for skills are considered</li> <li>• Solutions to incorporate licensing and regulatory requirements are brokered and there is clear evidence of support from licensing and industry regulatory bodies</li> </ul>
3. Reflect national agreement about the core transferable skills and core job-specific skills required for job roles as identified by industry	<ul style="list-style-type: none"> <li>• Active engagement across industry has sought to achieve a national consensus about the advice being provided to the AISC.</li> </ul>
4. Be flexible to meet the diversity of individual and employer needs, including the capacity to adapt to changing job roles and workplaces	<ul style="list-style-type: none"> <li>• Qualifications can be applied in a range of contexts, such as vocational education and training delivered to secondary students, apprenticeships and traineeships.</li> <li>• Provide multiple entry and exit points</li> <li>• Pre-requisite units of competency are used only when required</li> </ul>
5. Facilitate recognition of an individual's skills and knowledge and support movement between the school, vocational education and higher education sectors	<ul style="list-style-type: none"> <li>• Qualifications in this training package support the progression of an individual through school and vocational education sectors, and information about progression is provided in the Implementation Guide</li> <li>• Provide pathways from entry and preparatory level as appropriate to facilitate movement between schools and VET, from entry level into work, and between VET and higher education qualifications</li> </ul>

<p>6. Support interpretation by training providers and others through the use of simple, concise language and clear articulation of assessment requirements</p>	<ul style="list-style-type: none"> <li>• Industry advice about delivery is provided via a Companion Volume Implementation Guide ready for publication at the same time as the Training Package</li> <li>• Units of competency and their associated assessment requirements are clearly written and have consistent breadth and depth</li> <li>• Compliance with the TGA/National Register requirements for publication</li> </ul>
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The declaration and statement of evidence is confirmed by the independent Quality Report which is provided in Appendix 4: **Quality Report**.

The *AHC Agriculture, Horticulture and Conservation and Land Management Implementation Guide* has been quality assured through Skills Impact's quality processes and is available.

## G. Implementation of COAG Industry and Skills Council reforms to training packages

The decision being sought from the AISC would support the COAG Industry and Skills Council reforms to training packages.

### **Agribusiness and Carbon Farming**

The existing unit of competency - *AHCBUS604 Design and manage the enterprise quality management system* is proposed for deletion as it duplicates the outcomes of *BSBMGT621 Design and manage the enterprise quality management system*.

The agribusiness qualifications have been redesigned to include core units to ensure all graduates develop a base of agribusiness skills required by industry.

The agribusiness qualifications, which include Certificate IV, Diploma and Advanced Diploma, allow for a progression of skills that matches an occupational progression of Agribusiness administrator to Property or Production Manager through to Agricultural or Horticultural Enterprise Manager.

The three agribusiness skill sets allow for pathways into and out of these qualifications and provide targeted training and assessment in Farm Business Management, Farm Business Finances and Farm Business Workforce development.

In Carbon Farming, nine new skill sets have been developed to cover emerging skills needs in the industry. In particular, *AHCSS00079 Carbon Farming Services Advisor Skill Set* covers the work of those who provide advice on carbon farming projects. This skill set could provide the basis for certification of skills within the industry, should a professional association or regulatory body choose to set a standard for work in this area.

### **Irrigation and Protected Horticulture**

The new Protected Horticulture units, and the new Irrigation skill sets improve the efficiency of the training system as these of competency can be used by multiple industry sectors.

The skill sets reviewed/developed in this project, enable acquisition of specific national certification requirements of the industry whilst providing transition from other industries into the irrigation industry and between sectors and job roles in the irrigation industry.

The units in this project have been reviewed/developed to enable use by multiple industry sectors. The qualifications list units currently in the system to ensure that there is no duplication of current units of competency, and to enable the recognition of skills for workers transitioning from other industries into the irrigation industry, as well as between sectors within the irrigation industry.

### **Sport Turf Management**

The existing *AHC40816 Certificate IV in Sports Turf Management* is proposed for deletion. Industry advised the qualification has no clear job role and is no longer required. In addition, all of the units listed in *AHC40816 Certificate IV in Sports Turf Management* can be achieved by undertaking *AHC40416 Certificate IV in Horticulture*.

The Sports Turf Management industry expects that a person that achieves a *Certificate III in Sports Turf Management* acquire a broad and deep range of skills to work effectively across various industry sub sectors. The design of the qualification reflects this with an increase in the number of units require to achieve the qualification increasing from 16 to 23, including 18 units core units.

The listed electives of the all if the revised Sports Turf Management qualifications include:

- several electives from other sectors of the AHC Training Package that will enable learners to gain credit into other AHC qualifications
- elective units from the BSB, CHC, CPC, CPP, CUA, and RII Training Packages that enable learners to gain credit into other qualifications in these Training Packages.

Three new skill sets have been added. One is designed to provide basic skills for entry level workers that the industry relies heavily on. Two are designed to up skill existing trades people and provide credit towards the Diploma of Sports Turf Management.

### **Viticulture**

The revised Diploma of Viticulture has been designed to align with current industry roles and work functions. The number of core units in the qualification have been increased to provide clearer alignment with the job role outcomes of the qualification, whilst the number of elective units available in the qualification design enables flexibility in achieving the qualification and ensuring that the breadth of occupational outcomes within the industry are serviced by this qualification. There are no entry requirements for this qualification.

The qualification lists two units from the *TLI Transport and Logistics Training Packages* that enable learners to gain credit into qualifications in the TLI Training Package.



## H. Evidence of completion

Skills Impact confirms that the proposed components of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0* has been completed according to the work assigned by the AISC in the Case for Change and the subsequent Activity Order.

### **Evidence that training package component(s) are prepared for publication.**

The Quality Report provides confirmation that the draft components meet the *Standards for Training Packages 2012*.

All components have been created to comply with the National Register requirements for publication. The **Mapping Summary** and **Training Package Modification History** provided in **Appendix 1 Components for endorsement** provide details of the changes to the training package components that are required to allow them to be published on the National Register.

## I. IRC support

The Agriculture and Production Horticulture IRC and the Amenity Horticulture, Landscaping, Conservation and Land Management IRC support the submission of the training package components detailed in this Case for Endorsement.

Signed for and on behalf of the Agriculture and Production Horticulture IRC by its appointed Chair.

Name of Chair: Geoff Harvey

Signature of Chair:   
\_\_\_\_\_

Date: 28 June 2019

Signed for and on behalf of the Amenity Horticulture, Landscaping, Conservation and Land Management IRC by its appointed Chair.

Name of Chair: Esther Ngang

Signature of Chair:   
\_\_\_\_\_

Date: 28 June 2019

## Appendix 1: Components for endorsement

### a. List of qualification titles and codes

Qualifications in the AHC - Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0	
Code	Title
AHC20919	Certificate II in Sports Turf Management
AHC21119	Certificate II in Irrigation
AHC21819	Certificate II in Protected Horticulture
AHC31319	Certificate III in Sports Turf Management
AHC32419	Certificate III in Irrigation Technology
AHC33719	Certificate III in Protected Horticulture
AHC40219	Certificate IV in Protected Horticulture
AHC41019	Certificate IV in Agribusiness
AHC41119	Certificate IV in Irrigation Management
AHC51019	Diploma of Sports Turf Management
AHC51419	Diploma of Agribusiness Management
AHC51519	Diploma of Viticulture
AHC51619	Diploma of Irrigation Design
AHC60319	Advanced Diploma of Agribusiness Management

### b. List of unit titles and codes and associated assessment requirements

Units of competency in the AHC - Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0	
Code	Title
AHCAGB302	Keep production records for a primary production business
AHCAGB404	Plan and implement infrastructure improvements
AHCAGB405	Analyse and interpret production data
AHCAGB406	Keep financial records for primary production business
AHCAGB512	Plan and manage infrastructure
AHCAGB513	Develop a farm plan
AHCAGB514	Manage application of agents to crops or pastures
AHCAGB515	Develop sustainable agricultural practices that utilise renewable energy and recycling systems
AHCAGB516	Select and implement a GIS for sustainable agricultural systems
AHCAGB517	Develop and manage a plan for sustainable production
AHCAGB518	Develop climate risk management strategies
AHCAGB519	Plan and monitor production processes
AHCAGB520	Plan production for the whole business
AHCAGB521	Select and use agricultural technology

**Units of competency in the AHC - Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0**

<b>Code</b>	<b>Title</b>
AHCAGB522	Implement the introduction of biotechnology into the production system
AHCAGB607	Manage succession planning
AHCAGB608	Manage financial resources
AHCAGB609	Develop export markets for produce
AHCAGB610	Manage the production system
AHCAGB611	Analyse business performance
AHCAGB612	Manage price risk through trading strategy
AHCBAC509	Plan and manage long-term weed, pest and disease control in crops
AHCBUS406	Administer finance, insurance and legal requirements
AHCBUS407	Cost a project
AHCBUS408	Operate within a budget framework
AHCBUS409	Participate in an e-business supply chain
AHCBUS511	Manage enterprise staff requirements
AHCBUS512	Develop and implement family business structures and relationships
AHCBUS513	Market product and services
AHCBUS514	Negotiate and monitor contracts
AHCBUS515	Prepare estimates, quotes and tenders
AHCBUS516	Develop and review a business plan
AHCBUS517	Monitor and review business performance
AHCBUS518	Prepare and monitor budgets and financial reports
AHCBUS519	Manage finance, insurance and legal requirements
AHCBUS609	Develop and review an enterprise strategic plan
AHCBUS610	Manage agribusiness risk
AHCBUS611	Manage capital works
AHCBUS612	Review land management plans and strategies
AHCBUS613	Manage human resources
AHCBUS614	Develop a monitoring, evaluation and reporting program
AHCBUS615	Implement a monitoring, evaluation and reporting program
AHCCFP301	Identify the effects of climate change as a factor in land management
AHCCFP401	Increase soil organic carbon using land management practices
AHCCFP402	Prepare to comply with measuring and modelling requirements of carbon farming methods
AHCCFP403	Identify opportunities and risks in carbon farming projects
AHCCFP404	Plan a land-based carbon farming project
AHCCFP405	Increase carbon using vegetation and/or agricultural approaches
AHCCFP501	Advise on carbon farming project planning and implementation
AHCDRG202	Maintain drainage systems
AHCDRG305	Install drainage systems
AHCDRG306	Measure drainage system performance
AHCDRG307	Troubleshoot drainage systems
AHCDRG308	Maintain and repair irrigation drainage systems
AHCDRG403	Coordinate and supervise installation of an irrigation drainage system
AHCDRG404	Monitor and control irrigation drainage systems
AHCDRG502	Design drainage systems

**Units of competency in the AHC - Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0**

<b>Code</b>	<b>Title</b>
AHCHYD401	Establish and monitor hydroponic crops
AHCIRG102	Support irrigation work
AHCIRG219	Assist with low volume irrigation operations
AHCIRG220	Assist with surface irrigation operations
AHCIRG221	Assist with pressurised irrigation operations
AHCIRG222	Assist with pump and flow control device operations
AHCIRG301	Install gravity fed irrigation systems
AHCIRG328	Operate irrigation controller and sensor technology
AHCIRG336	Operate and maintain gravity fed irrigation systems
AHCIRG337	Measure irrigation delivery system performance
AHCIRG338	Troubleshoot irrigation systems
AHCIRG339	Monitor soils under irrigation
AHCIRG340	Install irrigation pumps
AHCIRG341	Operate and maintain irrigation pumping systems
AHCIRG342	Interpret irrigation plans and drawings
AHCIRG343	Operate irrigation injection equipment
AHCIRG344	Implement an irrigation schedule
AHCIRG345	Install pressurised irrigation systems
AHCIRG346	Operate pressurised irrigation systems
AHCIRG347	Maintain pressurised irrigation systems
AHCIRG348	Operate and maintain moving irrigation system
AHCIRG435	Determine hydraulic parameters for an irrigation system
AHCIRG436	Implement an irrigation-related environmental protection program
AHCIRG437	Schedule irrigations
AHCIRG438	Select and manage pumping systems for irrigation
AHCIRG439	Interpret and apply irrigation designs
AHCIRG440	Manage a moving sprinkler irrigation system
AHCIRG441	Evaluate water supply for irrigation
AHCIRG442	Supervise irrigation system installation
AHCIRG443	Supervise irrigation system maintenance
AHCIRG444	Manage irrigation systems
AHCIRG445	Manage surface irrigation systems
AHCIRG507	Audit irrigation systems
AHCIRG508	Design irrigation system maintenance and monitoring programs
AHCIRG506	Design irrigation systems
AHCIRG509	Develop an irrigation and drainage management plan
AHCIRG510	Establish and maintain an irrigation-related environmental protection program
AHCORG507	Develop an organic or biodynamic management plan
AHCORG508	Prepare the enterprise for organic or biodynamic certification
AHCPHT210	Assist with protected cropping water sampling and testing
AHCPHT211	Maintain crop
AHCPHT212	Perform manual pollination of crops
AHCPHT213	Perform plant blocking on
AHCPHT214	Support horticultural crop harvesting

**Units of competency in the AHC - Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0**

<b>Code</b>	<b>Title</b>
AHCPHT311	Install and maintain vertical hanging trellis
AHCPHT507	Evaluate grapes for production
AHCPHT508	Develop a grape production plan
AHCPHT509	Evaluate wine
AHCPHT510	Manage a wine making process
AHCSHG407	Prepare shearing team wages
AHCSOL304	Implement soil improvements for garden and turf areas
AHCSOL305	Prepare growing media
AHCSOL505	Monitor and manage soils for production
AHCTRF102	Support turf work
AHCTRF205	Assist in the preparation of turf surfaces for play
AHCTRF206	Assist with turf construction
AHCTRF207	Renovate grassed areas
AHCTRF208	Support turf establishment
AHCTRF306	Prepare sports turf surfaces for play
AHCTRF307	Construct turf playing surfaces
AHCTRF308	Establish turf
AHCTRF309	Implement a grassed area maintenance program
AHCTRF310	Monitor turf health
AHCTRF311	Renovate sports turf
AHCTRF403	Develop a sports turf maintenance program
AHCTRF404	Plan and implement sports turf renovation
AHCTRF505	Plan the establishment of sports turf playing surfaces
AHCTRF506	Manage sports turf renovation programs
AHCTRF507	Develop sports turf management programs
AHCTRF508	Manage sports turf facility assets
AHCWAT503	Manage water systems
AHCWHS502	Manage work health and safety processes
AHCWRK512	Plan, implement and review a quality assurance program

**c. Skill sets (not for endorsement)**

**Skill sets in the AHC - Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0**

<b>Code</b>	<b>Title</b>
AHCSS00030 (Release 3)	Farm Business Management Skill Set
AHCSS00079	Carbon Farming Services Advisor Skill Set
AHCSS00080	Introduction to Carbon Farming Skill Set
AHCSS00081	Introduction to Carbon Farming Savanna Burning Skill Set
AHCSS00082	Carbon Farming Aerial Savanna Burning Skill Set
AHCSS00083	Carbon Farming Savanna Burning Operations Leader Skill Set

<b>Skill sets in the AHC - Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0</b>	
<b>Code</b>	<b>Title</b>
AHCSS00084	Carbon Farming Vegetation Method Skill Set
AHCSS00085	Carbon Farming Soil-based Method Skill Set
AHCSS00086	Carbon Farming Agricultural Method Skill Set
AHCSS00087	Farm Business Finances Skill Set
AHCSS00088	Farm Business Workforce Skill Set
AHCSS00089	Business Skills For Sports Turf Management Skill Set
AHCSS00090	Introduction To Sports Turf Maintenance Skill Set
AHCSS00091	Technical Skills For Sports Turf Management Skill Set
AHCSS00092	Irrigation Retailer Skill Set
AHCSS00093	Gravity Fed Irrigation Operator Skill Set
AHCSS00094	Irrigation Agronomist Skill Set
AHCSS00095	Irrigation Contractor Skill Set
AHCSS00096	Irrigation Installer Skill Set
AHCSS00097	Irrigation Manager Skill Set
AHCSS00098	Pressurised Irrigation System Operator Skill Set
AHCSS00099	Irrigation Systems Auditor Skill Set
AHCSS00100	Irrigation Systems Efficiency Skill Set
AHCSS00101	Irrigation Retail Sales Skill Set
AHCSS00102	Irrigation Meter Installation and Validation Skill Set

### c. Mapping information

#### Qualifications

<b>Mapping of qualifications for AHC Agriculture, Horticulture, Landscaping, Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHC20916 Certificate II in Sports Turf Management	AHC20919 Certificate II in Sports Turf Management	Total number of units required to achieve the qualification decreased from 15 to 8 Changes to packaging rules, core and elective units	Equivalent qualification
AHC21116 Certificate II in Irrigation	AHC21119 Certificate II in Irrigation	Amended packaging rules, new core units	Equivalent qualification
Not applicable	AHC21819 Certificate II in Protected Horticulture	New qualification	No equivalent qualification
AHC31316 Certificate III in Sports Turf Management	AHC31319 Certificate III in Sports Turf Management	Total number of units required to achieve the qualification increased from 16 to 23 Changes to packaging rules, core and elective units	No equivalent qualification

<b>Mapping of qualifications for AHC Agriculture, Horticulture, Landscaping, Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHC32416 Certificate III in Irrigation	AHC32419 Certificate III in Irrigation Technology	Amended packaging rules, new core and elective units	No equivalent qualification
Not applicable	AHC33719 Certificate III in Protected Horticulture	New qualification	No equivalent qualification
Not applicable	AHC40219 Certificate IV in Protected Horticulture	New qualification	No equivalent qualification
AHC40816 Certificate IV in Sports Turf Management	Not applicable	Deleted The qualification does not reflect current job roles	Not applicable
AHC41016 Certificate IV in Agribusiness	AHC41019 Certificate IV in Agribusiness	Qualification recoded Packaging rules changed to include more core units Electives units added	No equivalent qualification
AHC41116 Certificate IV in Irrigation	AHC41119 Certificate IV in Irrigation Management	Amended packaging rules, new core and elective units	No equivalent qualification
AHC51016 Diploma of Sports Turf Management	AHC51019 Diploma of Sports Turf Management	Total number of units required to achieve the qualification increased from 10 to 14 Changes to packaging rules, core and elective units	No equivalent qualification
AHC51416 Diploma of Agribusiness Management	AHC51419 Diploma of Agribusiness Management	Qualification recoded Packaging rules changed to include core units Elective units added	No equivalent qualification
AHC51516 Diploma of Viticulture	AHC51519 Diploma of Viticulture	Version created to add a unit to the core, add elective units and update elective units of competency and imported unit codes.	No equivalent qualification
AHC51616 Diploma of Irrigation Management	AHC51619 Diploma of Irrigation Design	Amended qualification title and packaging rules, new core and elective units	No equivalent qualification
AHC60316 Advanced Diploma of	AHC60319 Advanced Diploma	Qualification recoded. Packaging rules changed to include core unit Elective units added	No equivalent qualification



<b>Mapping of qualifications for AHC Agriculture, Horticulture, Landscaping, Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
Agribusiness Management	of Agribusiness Management		

### Skill Sets

<b>Skill sets Mapping of skill sets for AHC Agriculture, Horticulture, Landscaping, Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCSS00030 Farm Business Management Skill Set	AHCSS00030 Farm Business Management Skill Set	Unit codes updated	Equivalent skill set
AHCSS00031 Gravity Fed Irrigation Operator Skill Set	AHCSS00093 Gravity Fed Irrigation Operator Skill Set	Skill set requirements amended and new units required for completion of skill set.	Equivalent skill set
AHCSS00033 Irrigation Agronomist Skill Set	AHCSS00094 Irrigation Agronomist Skill Set	Skill set requirements amended and new units required for completion of skill set.	Equivalent skill set
AHCSS00034 Irrigation Contractor Skill Set	AHCSS00095 Irrigation Contractor Skill Set	Skill set requirements amended, new and additional units required for completion of skill set.	Equivalent skill set
AHCSS00035 Irrigation Installer Skill Set	AHCSS00096 Irrigation Installer Skill Set	Skill set title and requirements amended, new units required for completion of skill set.	Equivalent skill set

<b>Skill sets Mapping of skill sets for AHC Agriculture, Horticulture, Landscaping, Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCSS00036 Irrigation Manager Skill Set	AHCSS00097 Irrigation Manager Skill Set	Skill set requirements amended, new and additional units required for completion of skill set.	Equivalent skill set
AHCSS00037 Irrigation Retailer Skill Set	AHCSS00092 Irrigation Retailer Skill Set	Skill set requirements amended, new and additional units required for completion of skill set.	Equivalent skill set
AHCSS00062 Pressurised Irrigation System Operator Skill Set	AHCSS00098 Pressurised Irrigation System Operator Skill Set	Skill set requirements amended and new units required for completion of skill set.	Equivalent skill set
Not applicable	AHCSS00087 Farm Business Finances Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00088 Farm Business Workforce Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00079 Carbon Farming Services Advisor Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00080 Introduction to Carbon Farming Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00081 Introduction to Carbon Farming Savanna Burning Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00082 Carbon Farming Aerial Savanna Burning Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00083 Carbon Farming Savanna Burning Operations Leader Skill Set	New skill set	No equivalent skill set

<b>Skill sets Mapping of skill sets for AHC Agriculture, Horticulture, Landscaping, Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
Not applicable	AHCSS00084 Carbon Farming Vegetation Method Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00085 Carbon Farming Soil-based Method Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00086 Carbon Farming Agricultural Method Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00089 Business Skills For Sports Turf Management Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00090 Introduction To Sports Turf Maintenance Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00091 Technical Skills For Sports Turf Management Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00099 Irrigation Systems Auditor Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00100 Irrigation Systems Efficiency Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00101 Irrigation Retail Sales Skill Set	New skill set	No equivalent skill set
Not applicable	AHCSS00102 Irrigation Meter Installation and Validation Skill Set	New skill set	No equivalent skill set

### Units of competency

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCAGB301 Keep production records for a primary production business	AHCAGB302 Keep production records for a primary production business	Performance criteria clarified  Foundation skills added	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
		Assessment requirements updated	
AHCAGB401 Plan and implement property improvement	AHCAGB404 Plan and implement infrastructure improvements	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB402 Analyse and interpret production data	AHCAGB405 Analyse and interpret production data	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB403 Keep financial records for primary production business	AHCAGB406 Keep financial records for primary production business	Element removed Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB501 Develop climate risk management strategies	AHCAGB518 Develop climate risk management strategies	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB502 Plan and manage infrastructure requirements	AHCAGB512 Plan and manage infrastructure	Title updated Performance criteria clarified Foundation skills added. Assessment requirements updated	Equivalent unit
AHCAGB503 Plan and monitor production processes	AHCAGB519 Plan and monitor production processes	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB504 Plan production for the whole business	AHCAGB520 Plan production for the whole business	Performance criteria clarified	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
		Element removed Foundation skills added Assessment requirements updated	
AHCAGB505 Develop a whole farm plan	AHCAGB513 Develop a farm plan	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB506 Manage application technology	AHCAGB514 Manage application of agents to crops or pastures	Unit title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB507 Select and use agricultural technology	AHCAGB521 Select and use agricultural technology	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB508 Improve agricultural sustainability using renewable energy and recycle systems	AHCAGB515 Develop sustainable agricultural practices that utilise renewable energy and recycling systems	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB509 Select and implement a Geographic Information System (GIS) for sustainable agricultural systems	AHCAGB516 Select and implement a GIS for sustainable agricultural systems	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB510 Implement the introduction of	AHCAGB522 Implement the introduction of	Performance criteria clarified	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
biotechnology into the production system	biotechnology into the production system	Foundation skills added Assessment requirements updated	
AHCAGB511 Develop and manage a plan for sustainable production reflecting sustainable production principles	AHCAGB517 Develop and manage a plan for sustainable production	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB601 Develop export markets for produce	AHCAGB609 Develop export markets for produce	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB602 Manage estate planning	AHCAGB607 Manage succession planning	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB603 Manage the production system	AHCAGB610 Manage the production system	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB604 Analyse business performance	AHCAGB611 Analyse business performance	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCAGB605 Manage business capital	AHCAGB608 Manage financial resources	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCAGB606 Manage price risk through trading strategy	AHCAGB612 Manage price risk through trading strategy	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBAC505 Plan and manage long-term weed, pest or disease control in crops	AHCBAC509 Plan and manage long-term weed, pest and disease control in crops	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS401 Administer finance, insurance and legal requirements	AHCBUS406 Administer finance, insurance and legal requirements	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS402 Cost a project	AHCBUS407 Cost a project	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS404 Operate within a budget framework	AHCBUS408 Operate within a budget framework	Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS405 Participate in an e-business supply chain	AHCBUS409 Participate in an e-business supply chain	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS501 Manage staff	AHCBUS511 Manage enterprise staff requirements	Title updated Two performance criteria removed due to overlap with WHS units Performance criteria clarified Foundation skills added	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
		Assessment requirements updated	
AHCBUS502 Market product and services	AHCBUS513 Market product and services	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS503 Negotiate and monitor contracts	AHCBUS514 Negotiate and monitor contracts	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS504 Prepare estimates, quotes and tenders	AHCBUS515 Prepare estimates, quotes and tenders	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS506 Develop and review a business plan	AHCBUS516 Develop and review a business plan	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS507 Monitor and review business performance	AHCBUS517 Monitor and review business performance	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS508 Prepare and monitor budgets and financial reports	AHCBUS518 Prepare and monitor budgets and financial reports	Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS509 Develop and implement business structures and relationships	AHCBUS512 Develop and implement family business structures and relationships	Title updated Foundation skills added Assessment requirements updated	Equivalent unit



<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCBUS510 Manage finance, insurance and legal requirements	AHCBUS519 Manage finance, insurance and legal requirements	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS601 Manage capital works	AHCBUS611 Manage capital works	Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS602 Review land management plans and strategies	AHCBUS612 Review land management plans and strategies	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS603 Develop and review a strategic plan	AHCBUS609 Develop and review an enterprise strategic plan	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS604 Design and manage the enterprise quality management system		Unit deleted	Not applicable
AHCBUS605 Manage human resources	AHCBUS613 Manage human resources	Element 7 updated to remove overlap with WHS units Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS606 Develop a monitoring, evaluation and reporting program	AHCBUS614 Develop a monitoring, evaluation and reporting program	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCBUS607 Implement a	AHCBUS615 Implement a monitoring, evaluation	Performance criteria clarified	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
monitoring, evaluation and reporting program	and reporting program	Foundation skills added Assessment requirements updated	
AHCBUS608 Manage risk	AHCBUS610 Manage agribusiness risk	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
Not applicable	AHCCFP301 Identify the effects of climate change as a factor in land management	New unit	No equivalent unit
Not applicable	AHCCFP401 Increase soil organic carbon using land management practices	New unit	No equivalent unit
Not applicable	AHCCFP402 Prepare to comply with measuring and modelling requirements of carbon farming methods	New unit	No equivalent unit
Not applicable	AHCCFP403 Identify opportunities and risks in carbon farming projects	New unit	No equivalent unit
Not applicable	AHCCFP404 Plan a land-based carbon farming project	New unit	No equivalent unit
Not applicable	AHCCFP405 Increase carbon using vegetation and/or agricultural approaches	New unit	No equivalent unit
Not applicable	AHCCFP501 Advise on carbon farming project planning and implementation	New unit	No equivalent unit
AHCDRG201 Maintain drainage systems	AHCDRG202 Maintain drainage systems	Performance criteria clarified	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
		Foundation skills added Assessment requirements updated	
AHCDRG301 Install drainage systems	AHCDRG305 Install drainage systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCDRG302 Measure drainage system performance	AHCDRG306 Measure drainage system performance	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCDRG303 Troubleshoot drainage systems	AHCDRG307 Troubleshoot drainage systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCDRG304 Maintain and repair irrigation drainage systems	AHCDRG308 Maintain and repair irrigation drainage systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCDRG401 Coordinate and supervise installation of an irrigation drainage system	AHCDRG403 Coordinate and supervise installation of an irrigation drainage system	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCDRG402 Monitor and control irrigation drainage systems	AHCDRG404 Monitor and control irrigation drainage systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCDRG501 Design drainage systems	AHCDRG502 Design drainage systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
Not applicable	AHCHYD401 Establish and monitor hydroponic crops	New unit	No equivalent unit
AHCIRG101 Support irrigation work	AHCIRG102 Support irrigation work	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG215 Assist with low volume irrigation operations	AHCIRG219 Assist with low volume irrigation operations	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG216 Assist with surface irrigation operations	AHCIRG220 Assist with surface irrigation operations	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG217 Assist with pressurised irrigation operations	AHCIRG221 Assist with pressurised irrigation operations	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG218 Assist with pump and flow control device operations	AHCIRG222 Assist with pump and flow control device operations	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
Not applicable	AHCIRG301 Install gravity fed irrigation systems	New unit	No equivalent unit
AHCIRG303 Measure irrigation delivery system performance	AHCIRG337 Measure irrigation delivery system performance	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG306 Troubleshoot irrigation systems	AHCIRG338 Troubleshoot irrigation systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG308 Monitor soils under irrigation	AHCIRG339 Monitor soils under irrigation	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG309 Install irrigation pumps	AHCIRG340 Install irrigation pumps	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG310 Operate and maintain irrigation pumping systems	AHCIRG341 Operate and maintain irrigation pumping systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG315 Interpret irrigation plans and drawings	AHCIRG342 Interpret irrigation plans and drawings	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCIRG325 Operate irrigation technology	AHCIRG328 Operate irrigation controller and sensor technology	Title updated Performance criteria clarified Foundation skills added Range of conditions added Assessment requirements updated	No equivalent unit
AHCIRG326 Operate irrigation injection equipment	AHCIRG343 Operate irrigation injection equipment	Performance criteria clarified Foundation skills added Assessment requirements updated.	Equivalent unit
AHCIRG327 Implement an irrigation schedule	AHCIRG344 Implement an irrigation schedule	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG331 Install pressurised irrigation systems	AHCIRG345 Install pressurised irrigation systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG332 Operate pressurised irrigation systems	AHCIRG346 Operate pressurised irrigation systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG333 Maintain pressurised irrigation systems	AHCIRG347 Maintain pressurised irrigation systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCIRG334 Operate and maintain gravity fed irrigation systems	AHCIRG336 Operate and maintain gravity fed irrigation systems	Performance criteria clarified Foundation skills added Assessment requirements updated	No equivalent unit
AHCIRG335 Operate and maintain moving irrigation system	AHCIRG348 Operate and maintain moving irrigation system	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG402 Determine hydraulic parameters for an irrigation system	AHCIRG435 Determine hydraulic parameters for an irrigation system	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG404 Implement an irrigation-related environmental protection program	AHCIRG436 Implement an irrigation-related environmental protection program	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG408 Schedule irrigations	AHCIRG437 Schedule irrigations	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG410 Select and manage pumping systems for irrigation	AHCIRG438 Select and manage pumping systems for irrigation	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG415 Interpret and apply irrigation designs	AHCIRG439 Interpret and apply irrigation designs	Performance criteria clarified Foundation skills added	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
		Assessment requirements updated	
AHCIRG422 Manage a moving sprinkler irrigation system	AHCIRG440 Manage a moving sprinkler irrigation system	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG426 Evaluate water supply for irrigation	AHCIRG441 Evaluate water supply for irrigation	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG431 Supervise irrigation system installation	AHCIRG442 Supervise irrigation system installation	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG432 Supervise irrigation system maintenance	AHCIRG443 Supervise irrigation system maintenance	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG433 Manage irrigation systems	AHCIRG444 Manage irrigation systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG434 Manage surface irrigation systems	AHCIRG445 Manage surface irrigation systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG501 Audit irrigation systems	AHCIRG507 Audit irrigation systems	Performance criteria clarified	Equivalent unit



<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
		Foundation skills added Assessment requirements updated	
AHCIRG502 Design irrigation system maintenance and monitoring programs	AHCIRG508 Design irrigation system maintenance and monitoring programs	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG503 Design irrigation, drainage and water treatment systems	AHCIRG506 Design irrigation systems	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	No equivalent unit
AHCIRG504 Develop an irrigation and drainage management plan	AHCIRG509 Develop an irrigation and drainage management plan	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCIRG505 Establish and maintain an irrigation-related environmental protection program	AHCIRG510 Establish and maintain an irrigation-related environmental protection program	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCORG501 Develop an organic management plan	AHCORG507 Develop an organic or biodynamic management plan	Title updated Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCORG502 Prepare the enterprise for organic certification	AHCORG508 Prepare the enterprise for organic or biodynamic certification	Title updated Performance criteria clarified Foundation skills added	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
		Assessment requirements updated	
AHCPHT203 Support horticultural crop harvesting	AHCPHT214 Support horticultural crop harvesting	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
Not applicable	AHCPHT210 Assist with protected cropping water sampling and testing	New unit	No equivalent unit
Not applicable	AHCPHT211 Maintain crop	New unit	No equivalent unit
Not applicable	AHCPHT212 Perform manual pollination of crops	New unit	No equivalent unit
Not applicable	AHCPHT213 Perform plant blocking on	New unit	No equivalent unit
Not applicable	AHCPHT311 Install and maintain vertical hanging trellis	New unit	No equivalent unit
AHCPHT504 Develop a grape production plan	AHCPHT508 Develop a grape production plan	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCPHT505 Evaluate wine	AHCPHT509 Evaluate wine	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCPHT506 Manage a wine making process	AHCPHT510 Manage a wine making process	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
Not applicable	AHCPHT507 Evaluate grapes for production	New unit	No equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCSHG406 Prepare shearing team wages	AHCSHG407 Prepare shearing team wages	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCSOL301 Prepare growing media	AHCSOL305 Prepare growing media	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCSOL303 Implement soil improvements for garden and turf areas	AHCSOL304 Implement soil improvements for garden and turf areas	Performance criteria clarified Foundation skills added Performance evidence, knowledge evidence Assessment conditions expanded	Equivalent unit
AHCSOL501 Monitor and manage soils for production projects	AHCSOL505 Monitor and manage soils for production	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCTRF101 Support turf work	AHCTRF102 Support turf work	Performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF201 Assist with turf construction	AHCTRF206 Assist with turf construction	Element 5 added Performance criteria added to elements 2 and 3 Performance criteria clarified Performance evidence, knowledge evidence	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
		and assessment conditions expanded	
AHCTRF202 Prepare turf surfaces for play	AHCTRF205 Assist in the preparation of turf surfaces for play	Title changed Elements and performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF203 Renovate grassed areas	AHCTRF207 Renovate grassed areas	Performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF204 Support turf establishment	AHCTRF208 Support turf establishment	Performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
Not applicable	AHCTRF306 Prepare sports turf surfaces for play	New unit	No equivalent unit
AHCTRF301 Construct turf playing surfaces	AHCTRF307 Construct turf playing surfaces	Performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF302 Establish turf	AHCTRF308 Establish turf	Performance criteria clarified Foundation skills added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF303 Implement a grassed	AHCTRF309 Implement a grassed	Elements and performance criteria clarified	Equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
area maintenance program	area maintenance program	Foundation skills added Performance evidence, knowledge evidence and assessment conditions expanded	
AHCTRF304 Monitor turf health	AHCTRF310 Monitor turf health	Performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF305 Renovate sports turf	AHCTRF311 Renovate sports turf	Performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF401 Develop a sports turf maintenance program	AHCTRF403 Develop a sports turf maintenance program	Performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF402 Plan and implement sports turf renovation	AHCTRF404 Plan and implement sports turf renovation	Performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF501 Plan the establishment of sports turf playing surfaces	AHCTRF505 Plan the establishment of sports turf playing surfaces	Elements 2 and 3 added Elements and performance criteria clarified Foundation skill added Performance evidence, knowledge evidence and assessment conditions expanded	No equivalent unit

<b>Mapping of units of competency for AHC Agricultural, Horticulture and Conservation and Land Management Training Package Version 4.0</b>			
<b>Code and title (previous version)</b>	<b>Code and title (current version)</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHCTRF502 Manage sports turf renovation programs	AHCTRF506 Manage sports turf renovation programs	Performance criteria clarified Foundation skills added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF503 Develop sports turf management programs	AHCTRF507 Develop sports turf management programs	Performance criteria clarified Foundation skills added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCTRF504 Manage sports turf facility assets	AHCTRF508 Manage sports turf facility assets	Performance criteria clarified Foundation skills added Performance evidence, knowledge evidence and assessment conditions expanded	Equivalent unit
AHCWAT502 Manage water systems	AHCWAT503 Manage water systems	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCWHS501 Manage work health and safety processes	AHCWHS502 Manage work health and safety processes	Elements removed Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit
AHCWRK501 Plan, implement and review a quality assurance program	AHCWRK512 Plan, implement and review a quality assurance program	Performance criteria clarified Foundation skills added Assessment requirements updated	Equivalent unit

## d. Credit arrangements

<b>Credit arrangements for AHC Agriculture, Horticulture, Landscaping, Conservation and Land Management Training PackageV3.0</b>		
<b>Qualification Code</b>	<b>Qualification Title</b>	<b>Credit Arrangement Details</b>
AHC20919	Certificate II in Sports Turf Management	At the time of endorsement of this training package, no national credit arrangements exist.
AHC21119	Certificate II in Irrigation	At the time of endorsement of this training package, no national credit arrangements exist.
AHC21819	Certificate II in Protected Horticulture	At the time of endorsement of this training package, no national credit arrangements exist.
AHC31319	Certificate III in Sports Turf Management	At the time of endorsement of this training package, no national credit arrangements exist.
AHC32419	Certificate III in Irrigation Technology	At the time of endorsement of this training package, no national credit arrangements exist.
AHC33719	Certificate III in Protected Horticulture	At the time of endorsement of this training package, no national credit arrangements exist.
AHC40219	Certificate IV in Protected Horticulture	At the time of endorsement of this training package, no national credit arrangements exist.
AHC41019	Certificate IV in Agribusiness	At the time of endorsement of this training package, no national credit arrangements exist.
AHC41119	Certificate IV in Irrigation Management	At the time of endorsement of this training package, no national credit arrangements exist.
AHC51019	Diploma of Sports Turf Management	At the time of endorsement of this training package, no national credit arrangements exist.
AHC51419	Diploma of Agribusiness Management	At the time of endorsement of this training package, no national credit arrangements exist.

**Credit arrangements for AHC Agriculture, Horticulture, Landscaping, Conservation and Land Management Training PackageV3.0**

<b>Qualification Code</b>	<b>Qualification Title</b>	<b>Credit Arrangement Details</b>
AHC51619	Diploma of Irrigation Design	At the time of endorsement of this training package, no national credit arrangements exist.
AHC60319	Advanced Diploma of Agribusiness Management	At the time of endorsement of this training package, no national credit arrangements exist.



## Appendix 2: Industry support

### Industry Feedback – Agribusiness and Carbon Farming

#### Agribusiness Subject Matter Experts Meeting – Melbourne 12 September 2018

Name	Organisation	State
Grady Powell	WA Farmers and IRC member	WA
Barb McPherson	River Murray Training	SA
David Robertson	Agribusiness and Commercial Finance	TAS
Andrew Curtis	SA Dairy Farmers	SA
Mick Hay	Rimfire Resources	QLD

#### Agribusiness Subject Matter Experts Meeting – Sydney 19 September 2018

Participants	Organisation	State
Diana Saunders	Queensland Farmers' Federation	QLD
Rod Morris	Queensland Agricultural Training Colleges	QLD
Rick Whistler	Queensland Agricultural Training Colleges and IRC member	QLD
Karen George	Queensland Agriculture Workforce Network (QAWN)	QLD
Noeleen Clarke	NSW Department of Primary Industries – Tocal College	NSW
Charlie Bell NSW	Department of Primary Industries – Tocal College	NSW
Louisa Kiely	Carbon Farmers of Australia	NSW

#### Carbon Farming Subject Matter Experts Meeting – Sydney 18 September 2018

Participants	Organisation	State
Ian Packer	Soil Knowledge Network	NSW
John Lawrie	Soil Knowledge Network	NSW
Greg Chapman	Soil Knowledge Network	NSW
Thakur Bhattarai	Carbon Link	QLD
Adrianna Marchand	Bootstrap Environmental Services	VIC
Richard Makim	Grazier	NSW
Dr Iqbal Muhammad	Clean Energy Regulator	ACT
Leigh Mackie	Green Collar Group	NSW
Rachel Chiswell	Green Collar Group	NSW
Louisa Kiely	Carbon Farmers of Australia	NSW

**Carbon Farming Subject Matter Experts Meeting – Melbourne 18 September 2018**

Participants	Organisation	State
Warwick Ragg	National Farmers Federation	ACT
Daryl Killin	Killin Management	QLD
Laura Long	SA Training and Consulting	SA
Jeffrey Castellias	Castellias Consulting Pty Ltd	VIC

**Agribusiness and Carbon Farming Consultation Workshop – Brisbane 15 November 2018**

Participants	Organisation	State
Dr Shweta Singh	University of Qld	QLD
Dr Chuck Galea	University of Qld	QLD
Andres Jaramillo	Irrigation Australia	NSW
Geoff Harvey	Irrigation Australia and IRC member	NSW
Rick Whistler	QATC and IRC member	QLD
Rod Morris	QATC	QLD
Diana Saunders	Qld Farmers Federation	QLD

**Agribusiness and Carbon Farming Consultation Workshop – Sydney 20 November 2018**

Participants	Organisation	State
Cliff Lee-Leong	Trained Up RTO	NSW
Louisa Kiely	Carbon Farmers of Australia	NSW

**Agribusiness and Carbon Farming Consultation Workshop – Melbourne 30 November 2018**

Participants	Organisation	State
Lynda Green	AATIS	VIC
Brian Murphy	NSW Soil Knowledge Network	VIC

**Agribusiness and Carbon Farming Consultation Workshop – Adelaide 5 December 2018**

Participants	Organisation	State
Linda Wilkshire	Regional Skills Training	SA
Kelsey Klopp	Regional Skills Training	SA
Jessica Lemon	Regional Skills Training	SA
Tim Moore	Biodiverse Carbon Consultation	SA
Iqbal Muhammad	Clean Energy Regulator	ACT

**Agribusiness and Carbon Farming Consultation Workshop – Perth 6 December 2018**

Participants	Organisation	State
Paul Etheredge	Food, Fibre and Timber Industries Council	WA

Participants	Organisation	State
Kay Gerard	Food, Fibre and Timber Industries Council	WA

#### **Agribusiness and Carbon Farming Consultation Workshop – Darwin 11 December 2018**

Participants	Organisation	State
Josh Lowe	Charles Darwin University	NT
Tony King	Charles Darwin University	NT
Case Hawkey	Charles Darwin University	NT
Aisla Connolly	NT Farmers	NT
Dominic Nicholls	Mimal Land Management Aboriginal Corporation	NT
Jaemie Page	Wadeye Rangers	NT
Kerry Weisshaupt	All Aspects Recruitment	NT
Pauline Halse	ISACNT	NT
Deb Knight	ISACNT	NT
Anna Boustead	Indigenous Carbon Industry Network	NT

#### **Agribusiness and Carbon Farming Consultation Workshop – Cairns 13 December 2018**

Participants	Organisation	State
Daryl Killin	Killin Management	QLD

#### **Agribusiness and Carbon Farming – Webinar 30th November 2018**

Name	Organisation	State
Anne Wiltshire	Melbourne Polytechnic	VIC
Frances Parnell	Department of Training and Workforce Development	WA
Doug Hall,	Pastoralists and Graziers Association WA	WA
Meg Parkinson	Victorian Farmers Federation	VIC
Alvin Gopal,	Australian College of Agriculture and Horticulture	VIC

### Agribusiness and Carbon Farming consultation survey respondents

Name	Organisation	State
Paul Etheredge	Food, Fibre & Timber Industries Training Council (WA)	WA
Tony Woolrich	STA	VIC
David Lindsay	University of WA	WA
Anne Wiltshire	Primary Industries Curriculum Maintenance Manager (PICMM)	VIC
Laura Long	SA Training	SA
Stephen Drum	Longerenong College	VIC
Brian Murphy PhD	Soil Scientist	NSW
Dr Pip Brock	NSW Department of Primary Industries	NSW
Noeleen Clarke	Tocal College	NSW

### Agribusiness and Carbon Farming consultation emailed respondents

Name	Organisation	State
Stephen Drum	Longerenong College	VIC
John Mills	Self employed	NSW
Dr Pip Brock	NSW Department of Primary Industries	NSW
Fiona Raleigh	Australian Wool Exchange	NSW
Kim Haywood	WA Farmers	WA
Jason Letchford	Shearing Contractors' Association of Australia (SCAA)	NSW
Noeleen Clarke	Tocal College	NSW
Anne Wiltshire	Primary Industries Curriculum Maintenance Manager (PICMM)	VIC
Barry Ray	Longerenong College	VIC

### Other face-to-face consultation activities

In addition to regular email and telephone contact with relevant stakeholders and Subject Matter Experts, the following face-to-face consultation activities have taken place as part of this project.

Name	Organisation	State/ Territory	Activity
Rowan Foley	Aboriginal Carbon Fund	NT	Face to face meeting 17th July to explain carbon farming project
Dr Steve Rogers	Centre for Appropriate Technology Limited	NT	Face to face meeting 17th July to explain carbon farming project
Daryl Killin	Killin Management	QLD	Face to face meeting 25th January to discuss and validate carbon farming units
Barry Ray	Longerenong College	VIC	Face to face meeting 13th March to discuss and clarify core units and performance evidence requirements

Name	Organisation	State/ Territory	Activity
John Goldsmith	Longerenong College	VIC	Face to face meeting 13th March to discuss and clarify core units and performance evidence requirements

#### Agribusiness and Carbon Farming validation survey workshop

Name	Organisation	State
Rick Whistler	QATC and IRC Member	QLD
Rod Morris	QATC	QLD
Diana Saunders	Queensland Farmers' Federation	QLD
Doug Hall	Pastoralists and Graziers' Association of WA	WA
Laura Long	SA Training	SA
Barbara McPherson	River Murray Training	SA
Wayne Barbour	Batchelor Education	NT
Brian Murphy	Soil Knowledge Network	VIC
John Mills	Total College	NSW

#### Agribusiness and Carbon Farming validation email respondents

Name	Organisation	State
Adrianna Marchand	Bootstrap Environmental Services	VIC
Delphine Puxty	Fernlawn Environmental Pty Ltd	NSW
Julia McKay	Credibility Ag	NSW

#### Stakeholders/organisations contacted for involvement, but did not participate or respond

The following stakeholders (listed by area of expertise) were contacted in an attempt to introduce the project and ask for involvement in the project. In most cases the contacts listed below did not respond at all. All were contacted at least twice. The list shows the type of organisation, the state or territory and their area of expertise.

Stakeholder type	Expertise	State	Contact	Involvement sought	Outcome
RTO	Agribusiness	QLD	Email	Introduction and invitation to attend SME meetings	No response
Industry	Agribusiness	ACT	Email	Introduction and invitation to attend SME meetings	No response
Industry	Agribusiness	VIC	Email	Introduction and invitation to attend SME meetings	No response
Industry	Agribusiness	WA	Email	Introduction and invitation to attend SME meetings	Not interested (gave referral)

Industry	Agribusiness	WA	Email	Introduction and invitation to attend SME meetings	Unavailable (don't contact)
RTO	Agribusiness	VIC	Email	Introduction and invitation to attend SME meetings	No response
Union	Agribusiness	NSW	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	NSW	Email	Invitation to SME meeting in Sydney.	Currently on leave. No response
Government	Carbon Farming	NSW	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	NSW	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	NSW	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	VIC	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	QLD	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	NSW	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	NSW	Email	Introduction and invitation to attend SME meetings	Not interested (don't contact)
Industry	Carbon Farming	VIC	Email	Introduction and invitation to attend SME meetings	Unavailable (try again)
Industry	Carbon Farming	VIC	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	VIC	Email	Introduction and invitation to attend SME meetings	No response
Government	Carbon Farming	ACT	Email	Invitation to attend workshop	No response
Industry	Carbon Farming	NSW	Email	Introduction and invitation to attend SME meetings	No response
Industry	Carbon Farming	NT	Email	Invitation to attend workshop	No response
Industry	Carbon Farming	NSW	Email	Invitation to attend workshop Thanks for the invitation. Simply put it is not worth my while to attend as a private citizen unless you can pay a reasonable fee. Good luck with it all Cheers	Not interested (don't contact)

## Industry Feedback – Irrigation

### Irrigation Subject Matter Expert Working Group (five meetings between August 2018 and February 2019)

Name	Position	Organisation
Albert Sherry	Acting Head Teacher	TAFE NSW
John Harvie	Owner	Irrigation Systems Australia
Geoff Harvey	Communications Officer	Irrigation Australia
Deb Atkins	Industry Board Representative	Irrigation Australia
Paul Willmott	Owner	Willmott Irrigation
Andrew Ratten	Owner	Water Plus Irrigation
Andrew Ogden	CEO	Irrigation Australia
Phil Best	Consultant	Think Water
Leo Hodgson	Owner	Hodgson Electrical

### Irrigation Consultation Workshop Adelaide 22/01/2019

Name	Position	Organisation
Peter Hayes	Consultant	Wine Australia
John Harvie	Owner	Irrigation Systems Australia

### Irrigation Consultation Workshop Perth 23/01/2019

Name	Position	Organisation
Neil Marriott	Trainer	South Metropolitan TAFE
Leah Goodrem	Trainer	Ti Education and Training
Kay Lawlor	Trainer	Ti Education and Training
Paul Etheredge	Governing Body Associate	FFTITC
Paul Willmott	Owner	Willmott Irrigation
Truyen Vo	Representative	Vegetables WA
Brett Heather	Founder	Foothills Fresh

Libby Kinna	Apprenticeships Research Coordinator	Apprenticeships Australia
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#### **Irrigation Consultation Workshop Sydney 29/01/2019**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
David McKechnie	Consultant/ Freelancer	Irrigation Maintenance Pty
Lucas Bendt	Head of Training	Open Colleges
George Koukoulis	Trainer	Open Colleges

#### **Irrigation Consultation Workshop Brisbane 30/01/2019**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
Steve Clarke	Freelancer	Self Employed
Jim Phillips	Owner	Irrigation Down Under
Geoff Harvey	Communications Officer	Irrigation Australia
Andre Jarquillo	Trainer	Irrigation Australia

#### **Irrigation Consultation Workshop Melbourne 31/01/2019**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
David Arter	Owner	Advanced Irrigation and Sprinkler
Andrew Ratten	Owner	Water Plus Irrigation

#### **Irrigation Consultation Webinar 20/12/2018**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
Deb Atkins	Industry Board Representative	Irrigation Australia
Geoff Harvey	Communications Officer	Irrigation Australia
Albert Sherry	Trainer	TAFE NSW
Andrew Ratten	Owner	Water Plus Irrigation
Paul Willmott	Owner	Willmott Irrigation



**Irrigation Consultation Webinars 01/02/2019 and 04/02/2019**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
Deb Atkins	Industry Board Representative	Irrigation Australia
Scott Duley	Owner	CutGrass
Simon Cowland-Cooper	Trainer	Irrigation Australia
Geoff Connellan	Owner	G&M Connellan Consultants
Tony Filippi	Representative	Nursery & Garden Industry Australia
Trevor Noble	Owner	GrowSmart Training

**Irrigation Consultation Draft Feedback Hub Contributors**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
John Harvie	Owner	Irrigation Systems Australia
Neil Marriott	Trainer	South Metropolitan TAFE
Darren Davidson	Trainer	TAFE Queensland
Kath Eden	Organisation Representative	Irrigation Australia
Charlie Griffiths	Consultant/ Freelancer	Watermation Solutions
Andrew Ratten	Owner	Water Plus Irrigation
Paul Etheredge	Governing Body Associate	FFTITC
David McKechnie	Consultant/ Freelancer	Irrigation Maintenance Pty

**Irrigation Consultation Draft Email Feedback Contributors**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
John Harvie	Owner	Irrigation Systems Australia
David McKechnie	Consultant/ Freelancer	Irrigation Maintenance Pty
Albert Sherry	Acting Head Teacher	TAFE NSW
Frances Parnell	STA Representative	Department of Training and Workforce Development
Geoff Harvey	Communications Officer	Irrigation Australia

Andrew Ogden	CEO	Irrigation Australia
Martina Matzner	Owner	Acacia Hills Farms NT
Deb Atkins	Industry Board Representative	Irrigation Australia
Neil Marriott	Trainer	South Metropolitan TAFE
Peter Hayes	Consultant	Wine Australia
Leo Hodgson	Owner	Hodgson Electrical
Shane Burgess	NT Regional Committee, Irrigation Australia Representative	NT Regional Committee, Irrigation Australia
John Harvie	Owner	Irrigation Systems Australia
Phil Best	Consultant	Think Water
Andrew Ratten	Owner	Water Plus Irrigation

#### **Irrigation Validation Survey respondents**

Albert Sherry	Acting Head Teacher	TAFE NSW
Deb Atkins	Industry Board Representative	Irrigation Australia
Leo Hodgson	Owner	Hodgson Electrical

#### **Irrigation Validation Forum Participants**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
John Harvie	Owner	Irrigation Systems Australia
Geoff Harvey	Communications Officer	Irrigation Australia
Paul Willmott	Owner	Willmott Irrigation
Andrew Ratten	Owner	Water Plus Irrigation
Andrew Ogden	CEO	Irrigation Australia
Phil Best	Consultant	Think Water

## Industry Feedback – Protected Horticulture

### Protected Horticulture Subject Matter Expert Working Group (five meetings between August 2018 and February 2019)

Name	Position	Organisation
Leigh Taig	Trainer	Goulburn Ovens Institute of TAFE
Sophie Lapsley	Association Representative	RMCG
Emma Germano	President of Horticulture Group	Victorian Farmers Federation
Graeme Smith	Freelance Consultant	Graeme Smith Consulting
Saskia Blanch	Company Secretary	Protected Cropping Australia (PCA)
Tony Bundock	Freelance Consultant, Member	PCA – Board/Genesis Horticultural Solutions
Jonathan Eccles	Member of the Board	PCA – Board/Raspberries and Blackberries Australia
Emily Rigby	Member of the Board	PCA – Board/Cannatrek
Marcus van Heijst	Member of the Board/ Contractor	PCA – Board/Priva Oceani
Michelle Smith	Member of the Board	NSW Department of Primary Industry – Tocal College

### Protected Horticulture Consultation Workshop, Adelaide 22/01/2019

Name	Position	Organisation
Nicole Turner	Head of Curriculum	TAFE SA

### Protected Horticulture Consultation Workshop, Perth 23/01/2019

Name	Position	Organisation
Libby Kinna	Apprenticeships Research Coordinator	Apprenticeships Australia
John Henchy	Association Chair	Farm Machinery & Industry Association of WA
Leah Goodrem	Trainer	Ti Education and Training Pty Ltd
Kay Lawlor	Trainer	Ti Education and Training Pty Ltd
Paul Etheredge	Governing Body Associate	FFTITC

Faisal Ahmet	Industry Expert, City Council Worker	City of Melville
Pascaline Owers	Head of Curriculum	South Metropolitan TAFE

#### **Protected Horticulture Consultation Workshop, Launceston 25/01/2019**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
Sophie Lapsley	Association Representative	RMCG

#### **Protected Horticulture Consultation Workshop, Sydney 29/01/2019**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
Jonathan Eccles	Member of the Board	PCA – Board/Raspberries and Blackberries Australia
Michelle Smith	Member of the Board	NSW Department of Primary Industry – Tocal College

#### **Protected Horticulture Consultation Workshop, Brisbane 30/01/2019**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
Steve Clarke	Freelancer	Self-Employed Industry Specialist
Jalenko Dragesic	Head of Training	Greening Australia Training
Kathleen Fitzgerald	Trainer	Greening Australia Training

#### **Protected Horticulture Consultation Workshop, Melbourne, 31/01/2019**

<b>Name</b>	<b>Position</b>	<b>Organisation</b>
Tim McInnery	Arboriculturalist	TAG Consulting Arboriculture
Tony Bundock-	Freelance Consultant, Member	PCA – Board/Genesis Horticultural Solutions
Lynda Green	Training Package Content Officer	Australian Apprenticeships & Traineeships Information Services
Elise Sullivan	CEO	Alchemy Bioservices

**Protected Horticulture Consultation Webinars 01/02/2019 and 04/02/2019 Protected**

Name	Position	Organisation
Deb Atkins	Industry Representative	Irrigation Australia
Jim Johnson	Owner	Oasis Horticulture
Brian Gopal	Head Trainer	Australian College of Agriculture and Horticulture
Lucas Bendt	Head Trainer	Open Colleges
Ian McLeod-	Owner	McLeod Training Organisations
Tracey McGrogan	HR Manager	Flavorite Hydroponic Tomatoes
Trevor Noble	Owner	GrowSmart Training

**Protected Horticulture Consultation Draft Feedback Hub Contributors**

Name	Position	Organisation
Paul Etheredge	Governing Body Associate	FFTITC
Faisal Ahmet	Industry Expert, City Council Worker	City of Melville
Colin Hunt	Trainer	TAFE NSW

**Consultation Draft Email Feedback Contributors**

Name	Position	Organisation
Jonathan Eccles	Member of the Board	PCA – Board/Raspberries and Blackberries Australia
Tony Bundock-	Freelance Consultant, Member	PCA – Board/Genesis Horticultural Solutions
Graeme Smith	Freelance Consultant	Graeme Smith Consulting
Meg Smith	Representative	Victorian Farmers Federation
Jacqueline Heap	Trainer	TAFE NSW
Stephen Weatherley	Trainer	Foresite Training
Bianca Cairns	Board Member	Horticulture Innovation Australia
Aisla Connelly Mahri	Industry Coordinator	NT Farmers Association

Frances Parnell	STA Representative	Department of Training and Workforce Development
Colin Bednarz	Trainer	Chisholm TAFE
Elise Sullivan	CEO	Alchemy Bioservices
Colin Hunt	Trainer	TAFE NSW
Shane Roulstone	Organiser	Australian Workers Union
Leigh Taig	Trainer	Goulburn Ovens Institute of TAFE
Michelle Smith	Member of the Board	NSW Department of Primary Industry – Tocal College
Tracey McGrogan	HR Manager	Flavorite Hydroponic Tomatoes
Sophie Lapsley	Association Representative	RMCG

#### Protected Horticulture Validation Survey respondents

Name	Position	Organisation
Karli Groves	Industry Researcher	CQ University
Tracey McGrogan	HR Manager	Flavorite Hydroponic Tomatoes

#### Protected Horticulture Validation Forum Participants

Name	Position	Organisation
Jonathan Eccles	Member of the Board	PCA – Board/Raspberries and Blackberries Australia
Tony Bundock-	Freelance Consultant, Member	PCA – Board/Genesis Horticultural Solutions
Sophie Lapsley	Association Representative	RMCG

## Industry Feedback – Sport Turf Management

### Sports Turf Management Subject Matter Expert Working Group (five meetings between August 2018 and February 2019)

Name	Position	Organisation
Albert Sherry	Acting Head Teacher	TAFE NSW
Bruce Davies	Teacher	Canberra Institute of Technology
Chris Deppeler	Turf Management Teacher	The Gordon TAFE
Damian Hough	Head Curator	Adelaide Oval
Hugh Gardner	Parks Technical Officer	Subiaco Council
Darren Lee	Golf Course Superintendent	Palm Meadows Golf Club
John Forrest	Chairman of the Greens	Hartfield Country Club
John Shannon	Grounds Manager	Melbourne Grammar School
Mark Schroder	Golf Course Superintendent	Liverpool Golf Club
Dr. Phil Ford	Consultant	Turfgrass Agronomy
Simone Staples	Events & Education Manager	Australian Golf Course Superintendents' Association
Steve Tuckett	Sports Turf Teacher	Melbourne Polytechnic
Wade Turner	Head Greenkeeper	Queanbeyan RSL Bowling Club
Tom Vassallo	Industry Skills Standards Manager	Skills Impact
Ron Barrow	Contractor for Skills Impact	Nestor Consulting

### Sports Turf Management Consultation Workshop – Melbourne 30 October 2018

Participants	Organisation
John Neylan	Turfgrass Consulting & Research
Grant Pritchard	Holmesglen TAFE

### Sports Turf Management Consultation Workshop – Perth 31 October 2018

Participants	Organisation
Frances Parnell	Department of Training & Workforce Development

<b>Participants</b>	<b>Organisation</b>
Pascaline Owers	Southern Metropolitan TAFE
Nick Kinley	Golf Course Superintendents Association
John Forrest	Hartfield Country Club Sports Turf Association
Hugh Gardner	Turf Association Working Group

#### **Sports Turf Management Consultation Workshop – Adelaide 1 November 2018**

<b>Participants</b>	<b>Organisation</b>
Stuart Gillespie	Westlakes Golf Club
Nathan Bennett	Royal Adelaide Golf Course
Rowan Daymond	Grange Golf Club
Pat Wake	TAFE SA
Wayne Sims	TAFE SA
Gerry Charlton	IPOS Consulting - Sports Turf Association
Damien Hough	Adelaide Oval
Daryl Sellar	Living Turf

#### **Sports Turf Management Consultation Workshop – Canberra 2 November 2018**

<b>Participants</b>	<b>Organisation</b>
Ben Grylewicz	Royal Canberra Golf Club
Julie Collins	Canberra Institute of Technology
Bruce Davies	Canberra Institute of Technology
Peter Dunn	Federal Golf Club
Terry Doyle	Canberra North Bowling Club
Joseph Doyle	Canberra North Bowling Club
Garry Dawson	Canberra Institute of Technology
Wade William	Federal Golf Club
Paul Janssens	Department of Parliamentary Services
Wade Turner	Queanbeyan RSL Bowling Club



**Sports Turf Management Consultation Workshop – Hobart 5 November 2018**

<b>Participants</b>	<b>Organisation</b>
Adam Spargo	University of Tasmania Stadium
Stephen Lewis	Royal Hobart Golf Club
Gareth Kelly	Royal Hobart Golf Club
Malcolm Sinclair	Swansea Golf Club
Dylan Knight	Kingston Beach Golf Club
Tim Goodluck	Cricket Tasmania / Blundstone Arena
Blair Dayton	Cricket Tasmania / Blundstone Arena
Richard Lancaster	TASTAFE
John Jeffs	TASTAFE

**Sports Turf Management Consultation Workshop – Sydney 7 November 2018**

<b>Participants</b>	<b>Organisation</b>
David McKechnie	University of Tasmania Stadium
Jenny Zadro	Turf Australia
Malcolm Harris	Northbridge Golf Club
Russell Fletcher	St. Michaels Golf Club
Ian Clarke	TAFE NSW
Albert Sherry	TAFE NSW
Frank Dempsey	Sports Turf Association NSW
Jyri Kaapro	Bayer
Peter McMaugh	Turfgrass Scientific Services
Mark Schroder	Liverpool Golf Club

**Sports Turf Management Consultation Workshop – Brisbane 8 November 2018**

<b>Participants</b>	<b>Organisation</b>
Cameron Tree	Horticulture Training Pty Ltd
Brian Dale	Horticulture Training Pty Ltd
John Hagan	TAFE QLD

**Sports Turf Management Consultation Webinar – 10am -11am 15 November 2018**

<b>Participant</b>	<b>Organisation</b>
Anne Wiltshire	Melbourne Polytechnic, Victoria

**Sports Turf Management Consultation Webinar – 1pm - 2pm 15 November 2018**

<b>Participants</b>	<b>Organisation</b>
Hans Porada	TAFE NSW
Sophie Devine	Sports Turf Association NSW
James Porter	Endeavour Turf Professionals, Victoria
Gary Lee	TAFE QLD

**Sports Turf Management Consultation Draft Feedback Hub Contributors**

<b>Name</b>	<b>Organisation</b>	<b>State</b>
John Neylan	Turfgrass Consulting & Research	VIC
Ian Clarke	TAFE NSW	NSW
Steven Tuckett	Melbourne Polytechnic	VIC
Matt Rawlinson	Queensland Small Business Courses	QLD
Hugh Gardner	National Turf Education Working Group	National
Jarrod Bird	Queensland Cricket	QLD
Christopher Deppeler	Gordon TAFE	VIC
Phillip Ford	Turfgrass Agronomy	VIC
Paul Deller	Gordon TAFE	VIC
John Forrest	Forrest & Forrest Horticultural Consultancy Services	WA
Bruce Davies	Canberra Institute of Technology	ACT
Jeff Austen	Southern Metropolitan TAFE	WA
Jim Porter	ETP Turf	VIC
David McKechnie	Sole Trader	NSW
Nathan Bennett	Royal Adelaide Golf Club	SA
Paul Luck	TAFE QLD	QLD

### Sports Turf Management Consultation Draft Email Feedback Contributors

Name	Organisation	State
Tony Woolrich	Department of Education & Training	National
Hans Porada	Skillspoint	NSW
Albert Sherry	TAFE NSW	NSW
Evan James	TAFE NSW	NSW
Frances Parnell	Department of Training & Workforce Development	WA
Jenny Zadro	Turf Australia	VIC
Peter McMaugh	Turfgrass Scientific	NSW
Gerry Charlton	IPOS Consulting Sports Turf Association	SA
Brian Dale	Horticultural Training	QLD
Peter Macqueen	TAFE QLD	QLD
Jarrod Bird	Queensland Cricket	QLD
John Hagan	TAFE QLD	QLD
Anne Wiltshire	Melbourne Polytechnic	VIC
Mark Schroder	Liverpool Golf Club	NSW
Mark Unwin	Australian Golf Course Superintendents Association	VIC
Damian Hough	Adelaide Oval	SA
Debbie Knight	Industry Skills Advisory Council	NT
Cameron Tree	Horticultural Training	QLD

### Sports Turf Management Validation Survey respondents

Name	Organisation	State
Mark Burchell	Melbourne Polytechnic	VIC
Mike Wells	TAFE QLD	QLD
Albert Sherry	TAFE NSW	NSW
David Strickland	Central Regional TAFE / AIH	WA
Frances Parnell	Department of Training & Workforce Development	WA
Bruce Davies	Canberra Institute of Technology	ACT

<b>Name</b>	<b>Organisation</b>	<b>State</b>
Phil Ford	Turf Grass Agronomy	VIC
Paul Etheridge	Food, Fibre & Timber Industries Training Council	WA

#### **Sports Turf Management Validation email respondents**

<b>Name</b>	<b>Organisation</b>	<b>State</b>
Nathan Bennett	Royal Adelaide Golf Club	SA
Mark Unwin	Australian Golf Course Superintendents Association	VIC
James Porter	Sports Turf Association - Victoria	VIC
Mary Napier	Victorian Golf Course Superintendents Association	VIC
John Forrest	Forrest & Forrest Horticultural Consultancy Services	WA

### Sports Turf Management Validation Forum Participants – 27 February 2019

Name	Position	Organisation
Chris Chapman	President	Sports Turf Association of NSW
Garry McClymont	Golf Course Superintendent	Twin Waters Golf Club, Sunshine Coast, QLD
Justin Haslam	Golf Course Superintendent	Yowani Country Club, ACT
Simon Muller	President and Golf Course Superintendent	Victorian Golf Course Superintendents' Association and The Dunes Golf Club
Tony Guy	President	Sports Turf Association of WA
Albert Sherry	Acting Head Teacher	TAFE NSW
Bruce Davies	Teacher	Canberra Institute of Technology
Chris Deppeler	Turf Management Teacher	The Gordon TAFE
Damian Hough	Head Curator	Adelaide Oval
Hugh Gardner	Parks Technical Officer	Subiaco Council
Darren Lee	Golf Course Superintendent	Palm Meadows Golf Club
John Forrest	Chairman of the Greens	Hartfield Country Club
John Shannon	Grounds Manager	Melbourne Grammar School
Mark Schroder	Golf Course Superintendent	Liverpool Golf Club
Dr. Phil Ford	Consultant	Turfgrass Agronomy
Simone Staples	Events & Education Manager	Australian Golf Course Superintendents' Association
Steve Tuckett	Sports Turf Teacher	Melbourne Polytechnic
Wade Turner	Head Greenkeeper	Queanbeyan RSL Bowling Club

## Industry Feedback – Viticulture

### Viticulture Subject Matter Expert Working Group (five meetings between August 2018 and February 2019)

Name	Position	Organisation
Damien Sheehan	Owner/ Member	Langi Wines/ Wine Victoria
Frank Alampi	Trainer	TAFE NSW- Riverina Institute
Charlotte Newton	Wine educator / Winemaker	South Regional TAFE
Lisa Bennier	Chairperson	Wine Grape Council of SA
Sarah Hills	Board Member	Wine SA
Mike Hayes	Board Member	Queensland Wine Industry Association
Andrew Weeks	Viticulturalist	Rivawine Collaboration
Anna Hooper	Acting CEO	Australian Vignerons
Liz Riley	Board Member/ Viticulturalist	Vitibit Pty Ltd, NSWVIA

### Viticulture Consultation Workshop Barossa Valley 19/11/2018

Name	Position	Organisation
Robert Gibson	Owner, Viticulturalist	Gibson Wines

### Viticulture Consultation Workshop Adelaide 20/11/2018

Name	Position	Organisation
Belinda Bramley	Technical Officer	Australia Wine Reseach Centre
Asheley Keegan	CEO	Fabal Operations

### Viticulture Consultation Workshop Margaret River 21/11/2018

Name	Position	Organisation
Charlotte Newton	Wine educator / Winemaker	South Regional TAFE
Paul McGrath	Trainer	South Regional TAFE
Tony Proffitt	Viticulturalist	AHA Viticulture

### Viticulture Consultation Workshop Hunter Valley 28/11/2018

Name	Position	Organisation
Alex Woods	Viticulturalist	Allandale Winery
James Lusby	Viticulturalist	Tintilla Estate
Bob Lusby	Viticulturalist	Tintilla Estate
Geoff Broadfield	Trainer	TAFE NSW
Sue Broadfield	Trainer	TAFE NSW
Barbara Brasington	Trainer	TAFE NSW
Stuart Murphy	Viticulturalist	TAFE NSW
Kelly Drysdale	Viticulturalist	Hope Estate and TAFE NSW
Ian Tinkler	Viticulturalist	Tinkers
Stephen Gell	Trainer	TAFE NSW
Brendan Kuczowski	Viticulturalist	Keith Tulloch Wine
Dan Bird	Viticulturalist	Bird Family Wines
Andrew Pengilly	Viticulturalist	Tyrells Vineyards
Steve Ferguson	Viticulturalist	McWilliams Wines
Colin Peterson	Viticulturalist	Peterson Wines
Allen Johns	Viticulturalist	Bimbadgen Estate
Peter Went	Viticulturalist	Pierre's Wines
Rod Muldoon	Viticulturalist	Merton Vineyard
Clara Decottignies	Trainer	TAFE NSW
Liz Riley	Viticulturalist/ Association Member	Vitibit Pty Ltd, NSWVIA
Mike Deluliis	Viticulturalist	Deluliis Wines
Brian McGuigan	Viticulturalist	McGuigan Wines

**Viticulture Consultation Workshop Yarra Glen 04/12/2018**

Name	Position	Organisation
Anne Wiltshire	Program Leader	Melbourne Polytechnic

**Viticulture Consultation Webinar 10/12/2018**

Name	Position	Organisation
Kirsty Waller	Head Trainer	TAFE SA
Mark Townsend	Trainer	TAFE NSW
Sarah Hills	Board Member	Wine SA
Allison Blake	Leader of Bilateral Evaluation	Department of Primary Industries
Sue Broadfield	Trainer	TAFE NSW

**Viticulture Consultation Draft Feedback Hub Contributors**

Name	Position	Organisation
Liz Riley	Viticulturalist/ Association Member	Vitibit Pty Ltd, NSWVIA
James Lusby	Viticulturalist	Tintilla Estate
Liz Riley	Viticulturalist/ Association Member	Vitibit Pty Ltd, NSWVIA

**Viticulture Consultation Draft Email Feedback Contributors**

Name	Position	Organisation
Charlotte Newton	Wine educator / Winemaker	South Regional TAFE
Lisa Bennier	Chairperson	Wine Grape Council of SA
Rod Muldoon	Viticulturalist	Merton Vineyard
Peter Went	Viticulturalist	Pierre's Wines
Damien Sheehan	Owner/ Member	Langi Wines/ Wine Victoria
Sarah Hills	Board Member	Wine SA
Liz Riley	Viticulturalist/ Association Member	Vitibit Pty Ltd, NSWVIA
Andrew Weeks	Viticulturalist	Rivawine Collaboration



Gillian Ireland	Teacher	River Murray Training
Kirsty Waller	Head Trainer	TAFE SA
Shane Roulstone	Organiser	Australian Workers Unions
Anna Hooper	Acting CEO	Australian Vignerons
Frances Parnell	STA Representative	Department of Training and Workforce Development
Kelly Drysdale	Viticulturalist	Hope Estate
Paul Etheredge	Governing Body Associate	FFTITC
Jeff Milne	National Citrus Surveillance Coordinator	Citrus Australia
Tony Proffitt	Viticulturalist	AHA Viticulture
Jason Males	Expert Consultant	Department of Agriculture and Water Resources
Mike Blake	Trainer and Researcher	Box Hill Institute
Inca Pierce	Biosecurity Specialist	Vine Health Australia
Anne Wiltshire	Program Leader	Melbourne Polytechnic

#### Viticulture Validation Survey respondents

Name	Position	Organisation
Kirsty Waller	Head Trainer	TAFE SA
Frances Parnell	STA Representative	Department of Training and Workforce Development

#### Viticulture Validation Forum Participants

Name	Position	Organisation
Charlotte Newton	Wine educator / Winemaker	South Regional TAFE
Lisa Bennier	Chairperson	Wine Grape Council of SA
Damien Sheehan	Owner/ Member	Langi Wines/ Wine Victoria
Sarah Hills	Board Member	Wine SA
Liz Riley	Viticulturalist/ Association Member	Vitibit Pty Ltd, NSWVIA

# Letters of support

## Agribusiness and Carbon Farming

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**From:** Fiona Raleigh <[fraleigh@awex.com.au](mailto:fraleigh@awex.com.au)>  
**Sent:** Wednesday, 10 April 2019 3:53 PM  
**To:** Catherine Beven  
**Subject:** Letter of support.

Dear Catherine,

Thank you for including myself as a representative of the wool industry and to be involved in the development and support of training standards that are current, reflective and valid to the industry.

I would be very happy to continue in this capacity any time that I am required by Skillsimpact to participate.

Regards,

Fiona Raleigh  
Woolclasser Registrar  
[Australian Wool Exchange Ltd](http://www.australianwoolexchange.com.au)



**From:** Rod Morris <[Rod.Morris@qatc.edu.au](mailto:Rod.Morris@qatc.edu.au)>  
**Sent:** Wednesday, 27 March 2019 3:52 PM  
**To:** Catherine Beven  
**Subject:** re; Agribusiness and Carbon farming project

Hi Catherine,

As an instructor that delivers the Agribusiness Diploma and Farm Business Management Skill Set, I jumped at the opportunity to participate in the 'Agribusiness and Carbon farming project'.

I have attended 3 workshops, (Sydney, Brisbane and Adelaide) and found the process both rewarding and beneficial to my own knowledge of the processes involved.

Overall the outcomes achieved will better reflect the learning needs of agribusiness and carbon farming.

Cheers



QUEENSLAND  
AGRICULTURAL  
TRAINING  
COLLEGES

**Rod Morris**  
Instructor / Program Coordinator (Agribusiness)  
T: 07 4591 5101 M: 0428 793 767  
E: [Rod.Morris@qatc.edu.au](mailto:Rod.Morris@qatc.edu.au) W: [qatc.edu.au](http://qatc.edu.au)

---

QCCA Building, 203 Tor Street, PO Box 384, Toowoomba Qld 4350

Queensland Agricultural Training Colleges (QATC) is a Registered Training Organisation. RTO 31258.



**From:** [noeleen.clarke@dpi.nsw.gov.au](mailto:noeleen.clarke@dpi.nsw.gov.au) <[noeleen.clarke@dpi.nsw.gov.au](mailto:noeleen.clarke@dpi.nsw.gov.au)> on behalf of Diploma Online <[diploma.online@dpi.nsw.gov.au](mailto:diploma.online@dpi.nsw.gov.au)>  
**Sent:** Monday, 1 April 2019 12:11 PM  
**To:** Catherine Beven  
**Cc:** Jenni Oldfield  
**Subject:** Re: Letters of support

Hi Catherine,

In my role as the Coordinator for the Diploma of Agriculture at Tocal College I would like to express my support for the review and update of the agribusiness units.

In particular I would like to thank you for adding AHCWHS501 to the review even though this unit was not in the original scope for review. Your responsiveness to the needs of industry in addressing the issues surrounding this unit are greatly appreciated. The result being a unit that will actually be delivered by RTO's.

Many thanks

Noeleen

Industry Qualifications | Education Delivery  
NSW Department of Primary Industries  
Tocal College | CB Alexander Campus | Paterson NSW 2320  
T: 02 4939 8888 | F: 02 4938 5549 | E: [industryquals@dpi.nsw.gov.au](mailto:industryquals@dpi.nsw.gov.au)  
W: [www.tocal.com](http://www.tocal.com) | [www.dpi.nsw.gov.au](http://www.dpi.nsw.gov.au) | [www.shop.nsw.gov.au](http://www.shop.nsw.gov.au)



**From:** Jeffrey Castellás <[jeffcastellas@gmail.com](mailto:jeffcastellas@gmail.com)>  
**Sent:** Monday, 1 April 2019 11:07 AM  
**To:** Catherine Beven  
**Cc:** 'Jenni Oldfield'  
**Subject:** RE: Letters of support

Hi Catherine,

I acknowledge the stakeholder engagement that has been done as part of your process.

Regards,

Jeff

**Jeffrey Castellás, B.A.Sc., M.A.**

Castellás Consulting Pty Ltd  
Managing Director  
M: +61 (0)401 067 252  
E: [jeffcastellas@gmail.com](mailto:jeffcastellas@gmail.com)  
<https://www.linkedin.com/in/jeffrey-castellas-6b6a3613/>

Advisor to Major General Jeffery, The National Soil Advocate  
and Chairman, Soils For Life  
[www.soilsforlife.org.au](http://www.soilsforlife.org.au)

Sustainable Regenerative Agriculture and Carbon Farming Solutions

**From:** Diana Saunders <[Diana@qff.org.au](mailto:Diana@qff.org.au)>  
**Sent:** Thursday, 28 March 2019 2:17 PM  
**To:** Catherine Beven  
**Cc:** Jenni Oldfield  
**Subject:** RE: Letters of support

Hi Catherine

In response to your email, I acknowledge the work that Skills Impact has done to review and update the Agribusiness qualifications. I have been part of the process and participated in many of the consultation activities that took place.

Regards,

**DIANA SAUNDERS PhD**  
Policy Advisor Workforce Planning

T (07) 3837 4726 M 0401 560096 E [diana@qff.org.au](mailto:diana@qff.org.au)  
Level 3 183 North Quay  
(PO Box 12009)  
Brisbane Queensland 4003



**From:** Thakur Bhattarai <[thakur@carbonlink.com.au](mailto:thakur@carbonlink.com.au)>  
**Sent:** Thursday, 28 March 2019 9:17 AM  
**To:** Catherine Beven  
**Cc:** [jenni@joconsultancy.com.au](mailto:jenni@joconsultancy.com.au)  
**Subject:** RE: Letters of support

Hi Cathy,

It was also a great opportunity for us too to share our real world experiences as well as science behind it with so many stakeholders, scientists and professionals, so thanks for organising such an important platform. I am sure the input provided from experts/participants has definitely assisted the projects to produce a standard documents.

I was away for the last few months and just back on my desk, so please feel free to ask if you have any questions.

Many thanks.

Kind Regards,  
Thakur

**Dr Thakur Bhattarai**  
Senior Scientist (Soil/Carbon Farming Specialist)

**Carbon Link**  
PO Box 633, Yeppoon QLD 4703  
Phone: 07 4939 5149  
Mobile: 0413 600 088

Email: [thakur@carbonlink.com.au](mailto:thakur@carbonlink.com.au)  
Web: [www.carbonlink.com.au](http://www.carbonlink.com.au)



**From:** Chuck Galea <[c.galea@uq.edu.au](mailto:c.galea@uq.edu.au)>  
**Sent:** Wednesday, 27 March 2019 4:44 PM  
**To:** Catherine Beven  
**Subject:** RE: Letters of support

Hi Catherine

I acknowledge that the Agribusiness and Carbon Farming project has included as much as possible the collective feedback provided from the RTO and Industry representatives from Brisbane and I recommend that these qualifications be allowed to progress to the next phase.

Regards

**Dr Chuck Galea** PhD  
Training Coordinator

The University of Queensland Skills (UQSkills)  
Faculty of Science  
Room110, Morrison Hall, Building 8123  
The University of Queensland  
Gatton Campus, Gatton QLD 4343 Australia

m 0438070612  
T +61 7 5460 1353 (int 50173)  
E [c.galea@uq.edu.au](mailto:c.galea@uq.edu.au) W [www.uq.edu.au](http://www.uq.edu.au)

RTO:1511, CRICOS code: 00025B



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**From:** Richard Makim <[rjmakim@gmail.com](mailto:rjmakim@gmail.com)>  
**Sent:** Wednesday, 27 March 2019 2:50 PM  
**To:** Catherine Beven  
**Subject:** Re: Fw: Letters of support

Thank you Cathy, I would like to recommend and endorse the Agribusiness and Carbon Farming project as a long overdue and worthwhile incentive for the sequestration of carbon from Regenerative agriculture. With so much of the country suffering from extended drought, it is imperative to build resilience into agriculture for the fluctuating future. The best way to do this is replenishing the rundown soil carbon, to ensure infiltration and storage of water recovers. We learn daily of breakthrough research, extending the need for these changes, from fungi and pollen spores seeding clouds to biochar and zeolite fed through ruminants sequestered by dung beetle, while reducing methane produced and increasing animal performance.

Richard Makim

Holistic grazier and Carbon farmer.

---

**From:** Rick Whistler <[Rick.Whistler@qatc.edu.au](mailto:Rick.Whistler@qatc.edu.au)>  
**Sent:** Wednesday, 27 March 2019 1:32 PM  
**To:** Catherine Beven  
**Cc:** Jenni Oldfield  
**Subject:** RE: Letters of support

Hi Cathy,

I am pleased to be able to provide my support for the completed Agribusiness project and the related Carbon Farming. The project has been well run and gave a wide range of opportunities for people to have their input.

Regards  
Rick

**Rick Whistler**  
Manager, Education Quality & Student Learning  
Queensland Agricultural Training Colleges  
P: 07 4591 5121 M: 0428 778 430  
E: [Rick.Whistler@qatc.edu.au](mailto:Rick.Whistler@qatc.edu.au) W: [qatc.edu.au](http://qatc.edu.au)

**From:** Shweta Singh <[shweta.singh@uq.edu.au](mailto:shweta.singh@uq.edu.au)>  
**Sent:** Wednesday, 27 March 2019 2:03 PM  
**To:** Catherine Beven  
**Subject:** Re: Letters of support

Hi Cathy

I endorse the project and it is very important for future.

Thanks

**Dr Shweta Singh**

Ph.D MBA Msc  
Lecturer

UQ Skills/SAFS  
Faculty of Science  
The University of Queensland  
Room 110, Morrison Hall, Building 8123  
The University of Queensland  
Gatton Campus, Gatton QLD 4343 Australia

T +61 7 5460 1355  
E [shweta.singh@uq.edu.au](mailto:shweta.singh@uq.edu.au) W [www.uq.edu.au](http://www.uq.edu.au)

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[The University of Queensland, Australia](http://www.uq.edu.au)

[www.uq.edu.au](http://www.uq.edu.au)

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## Irrigation



WPI(AUS) Pty Ltd Trading As  
P.O. Box 6763  
Shepparton Vic 3632  
ABN: 30 114 572 780  
Phone: 03 5822 2224 Fax: 03 5822 2011

Skills Impact  
559A Queensberry Street  
North Melbourne vic 3051

30<sup>th</sup> April 2019

Attn: William Henderson

Dear William,

The recent changes to the irrigation qualifications, skill sets and units are vital to ensuring the skill needs of our industry are met.

I have been consulted throughout the process and have validated the final product.

I see the changes as a great step forward in providing quality and relevant training for new and existing workers to allow us to keep pace with a rapidly developing industry.

Thank you for your involvement in this process.

Yours faithfully,

A handwritten signature in blue ink, appearing to read "A. Ratten", with a long, sweeping underline.

Andrew Ratten  
DIRECTOR



7<sup>th</sup> May 2019

**Re: 2018-2019 Irrigation Project Review**

To whom it may concern

Irrigation Australia Ltd (IAL) has been actively involved in all portions of the 2018-2019 irrigation project, which included a review of all national irrigation qualifications, skill sets and units.

Irrigation Australia Ltd, in conjunction with all of its members and the irrigation industry, has been consulted throughout the process, provided validation for the final drafts and hereby writes a letter of support that these changes made become endorsed national training material.

Irrigation Australia Ltd believes that the changes made are vital in bringing irrigation students up to speed with best industry practice, provide proper career opportunities for both experienced students and school leavers entering the workforce, and will give them the tools to succeed in the field.

In a changing and important time for irrigation nationally, these qualifications represent a fortification against poor industry standards, and a marked rise in quality from what was previously available.

Yours sincerely

A handwritten signature in blue ink, appearing to read "Geoff Harvey", is written over a light blue circular stamp.

Geoff Harvey  
National Training, Certification & Marketing Manager

1Unit 11, 58 Metroplex Avenue,  
Murarrie, QLD 4172

E: [geoff.harvey@irrigation.com.au](mailto:geoff.harvey@irrigation.com.au)  
W: [www.irrigationaustralia.com.au](http://www.irrigationaustralia.com.au)

ACN 002 567 633  
ABN 41 002 567 633



## Protected Horticulture



2<sup>nd</sup> May 2019

Dear William Henderson

It is my pleasure to write a letter of support for the changes made to the documents for the proposed Cert II, Cert III and Cert IV in Protected Horticulture.

These courses and the changes that were made are critical to be able to provide the industry with valuable, up to date courses to improve the skills of those working in, and those that want to work in the Horticultural sector.

The consultation and validation process were very rigorous with plenty of time to consult with industry members and ample chances to give feedback and thus I was happy to validate the final product.

Once again these courses will be critical for the future expansion of protected horticulture in Australia. With the industry currently employing over 10,000 people and expanding at 4-6% per year these qualifications cannot come soon enough.

Kind regards

A handwritten signature in black ink, appearing to read 'Sophie Lapsley'.

**[Sophie Lapsley]**  
[SENIOR CONSULTANT]

# HYDROPONIC FARMERS FEDERATION INC



ABN 91 573 752 496  
A0033906W  
President – John Elford  
273 Harbours Road, Yendon  
Victoria 3352  
Mobile 0417 035 956  
Email. [johnelford@bigpond.com](mailto:johnelford@bigpond.com)  
Web: [www.hff.org.au](http://www.hff.org.au)

3/05/2018

Skills Impact  
559A Queensberry Street  
(PO Box 466)  
North Melbourne  
VIC 3051

## Support for Skills Impact

Dear Will,

I write to you to communicate the support of the Victorian Hydroponic Farmers Federation for the training resources that Skills Impact have developed.

Our Secretary, Tony Bundock, has been acting on behalf of the HFF to provide input and review to the competencies that have been developed.

As part of the review process, Tony has worked directly with you and also advised the HFF committee in to the project's development.

I concur with Tony that the changes that have been made to the recent documents are vital in terms of contextualisation and accurate content, and I commend Skills Impact for the ongoing consultation process during the project.

As an organisation, the HFF would endorse and validate the final products.

Sincerely,



Skills Impact  
559A Queensberry Street  
(PO Box 466)  
North Melbourne  
VIC 3051

3<sup>rd</sup> May, 2019

### **Letter of Support for Skills Impact Project**

Dear Will,

On behalf of Protected Cropping Australia, I would acknowledge the work that Skills Impact has undertaken in to the development of specific competencies that are aligned to the Protected Cropping Industry.

I was particularly impressed with the ongoing industry consultation process throughout the project where industry could provide input and comment where required.

Following this process, I would endorse the changes that have been proposed to the documents and see these as being vital to enable the documents to align with industry standards end expectations.

On behalf of the PCA, I would formally endorse the final products that have been developed.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tony Bundock', written in a cursive style.

**Tony Bundock**  
**Deputy Chair PCA**

## Sports Turf Management

Australian Golf Course Superintendents' Association  
Suite 1, 752 Blackburn Road, Clayton  
Victoria, Australia, 3168



11<sup>th</sup> February, 2019

### Re: Sports Turf Management Training Package Review

To Whom It May Concern,

On behalf of the Australian Golf Course Superintendents Association (AGCSA) and our members, I confirm we support the proposed revisions to the Sports Turf Management Training Package review as developed as a joint approach between Skills Impact and the Turf Management Industry.

The revisions of the Sports Turf Management package include the development of new units and qualifications in order to accurately represent and deliver the skills required for those working in the Sports Turf Management industry.

To date, immense time and effort has been allocated by industry representatives, practicing Turf Managers from all areas of the profession, and members of the National Turf Education Working Group (NTEWG) into preparation, into preparation and regular consulting nationwide of the revised Training Package. It is our submission that the proposed increase in units reflects the changing nature of the Sports Turf Management industry and will accommodate for innovation and changes that occurring within the profession soundly into the future.

The National Turfgrass Education Working Group (NTEWG) includes representatives from all major Sports Turf industry associations, trade companies and Registered Training Organisations, the fundamental role of whom is to present a unified industry voice on education and training, to ensure the best possible outcomes regarding the Sports Turf Management Training Package for the profession.

Over the course of the review, numerous industry stakeholders, educational organisations, practicing Sports Turf Managers and industry Associations have worked together to provide feedback on the revised Package, and we are confident that the continued development and increase in the units of competency will lead to better skilled Sports Turf Managers within Australia.

Again, I would like to confirm our support the proposed changes to the Sports Turf Management Training Package following the extensive engagement period with the industry, and look forward to the endorsement Training Package in the near future

Regards,

A handwritten signature in blue ink, consisting of a large, stylized 'M' followed by a long horizontal stroke that curves upwards at the end.

Mark Unwin  
Chief Executive Officer  
Australian Golf Course Superintendents' Association



**VICTORIAN GOLF COURSE SUPERINTENDENTS ASSOCIATION INC**  
ABN 72 650 223 609  
PO Box 8050 TOTTENHAM VIC 3012  
Email: [adminvgcsa@bigpond.com](mailto:adminvgcsa@bigpond.com)  
[www.vgcsa.com.au](http://www.vgcsa.com.au)

13 February 2019

**Re: Sports Turf Management Training package review**

To whom it may concern

I am writing on behalf of the Victorian Golf Course Superintendents Association Inc. (VGCSA) to provide our support and approval of proposed modifications to the Sports Turf Management Training package review, which has been in development via consultation between Skills Impact and the Sports Turf Industry.

Our Association agrees that is essential to revise and expand the Sports Turf Management Training package to introduce units and qualifications that are relevant and meet the high demands of an ever growing and changing Sports Turf Industry.

As an advocate to promote opportunities, and improve training and education services to not only our members but all turf representatives throughout Victoria, the VGCSA provides its endorsement of the revisions to the Sports Turf Management Training package review.

Yours sincerely

Mary Napier  
**VGCSA CEO**  
*(on behalf of the VGCSA Inc. Committee)*



To whom it may concern

**Re: Letter of support**

We the SAGCSA (South Australian Golf Course Superintendents Association) have been informed and consulted through the whole project by Skills Impact. We have been invited to read and go through the documentation and have input and discussion on any changes we see fit. It has been an open and transparent process.

We fully support the project and can see that it will be of benefit to the industry. Having more units of competency will create a more skilled sportsturf manager, this will lead onto a more professional industry.

The South Australian Golf Course Superintendents Association is very happy with the final qualifications and units of competency and support their implementation.

Regards

Nathan Bennett  
Royal Adelaide Golf Club  
President SAGCSA

26 February, 2019

Our Association provides support and technical assistance for the turf industry to deliver environmentally sustainable surfaces for sport and recreation



PO Box 1100,  
Sandringham, Vic 3191  
Mobile: +61 439 089 005  
Email: [vic@sportsturf.asn.au](mailto:vic@sportsturf.asn.au)  
Web: [www.vicsportsturf.asn.au](http://www.vicsportsturf.asn.au)  
[www.facebook.com/sportsturfassociationvic](https://www.facebook.com/sportsturfassociationvic)

ABN: 63 545 014 818

---

1<sup>st</sup> March, 2019

Mr. Tom Vassallo  
Skills Impact  
Email: [tvassallo@skillsimpact.com.au](mailto:tvassallo@skillsimpact.com.au)

Dear Tom,

**Re: Training Package Review – Sports Turf Management**

Apologies for the lateness of this response.

The STA (Vic) Committee has been involved, kept advised of the process and happy with the consultation and feedback opportunities.

The STA (Vic) Committee met recently and agreed to support the changes and believe the increase in the units of competency will lead to better skilled sportsturf managers. In addition, the units themselves have been improved to better meet the needs of industry and provide clearer training guidelines for providers.

The STA (Vic) believes it is a positive move for the industry and that the resulting changes have been largely accepted across industry.

Yours sincerely,

**JIM PORTER**  
Education Convenor



5<sup>th</sup> April 2019

To Whom It May Concern

Skills Impact announced in June 2018 that it would conduct a review the Sports turf training package. This followed several frustrated attempts by industry over a decade to get Agrifoods to develop the qualification to meet their requirements, including lifting the number of units above 16, in order to reflect real industry roles and work functions.

The Sports Turf Subject Matter Group consisting of Skills Impact Officers, an Independent Curriculum Writer, Members of Industry Partners from the three main sporting bodies impacted by our product, The Australian Golf Course Superintendents Association, The Sports Turf Association of Australia and the NSW Bowling Greenkeepers Association, members of the body we represent, the National Turf Education Working Group (NTEWG) and representatives of TAFE RTOs delivering the qualifications across Australia have met several times since August 2018 with changes proposed based on a Work Function Analysis to determine what skills were required at each level then determining the knowledge required at each skill level.

The result of these meetings have been shared with the wider sports turf community in public forums conducted by Skills Impact and held in each state in November 2018, articles have been published in industry journals and websites since September 2018 to engage and invite feedback on proposed changes makeup of all qualifications.

Feedback provided was vigorously analysed by the SME group and culminated in what we, and our members believe will provide industry will be a wonderful model to guide the sports turf management industry into the next decade.

The proposed qualifications and skillsets have been validated by all major industry group representatives and the NTEWG during February 2019.

It is with much pleasure that we, on behalf of the National Turf Education Working Group members firmly endorse the proposed changes.

Kind Regards



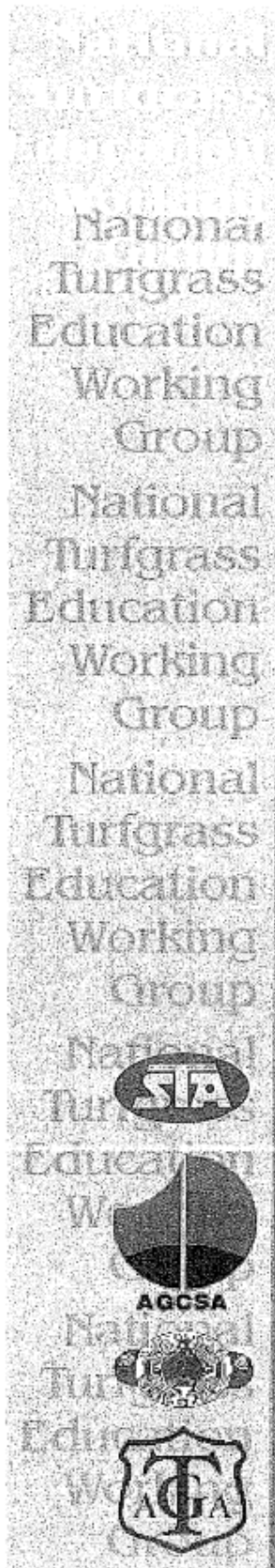
Hugh Gardner  
Co-Chair (Industry Representative)

Mobile: 0418 245 557  
Email: [hugh.gardner@iinet.net.au](mailto:hugh.gardner@iinet.net.au)



Albert Sherry  
Co-Chair (Education Representative)  
Office: 02 4936-0215

Mobile: 0477 722 488, 0408 476 130  
Email: [albert.sherry@tafensw.edu.au](mailto:albert.sherry@tafensw.edu.au)





Mr Tom Vassallo  
Industry Skills Standards Manager  
559A Queensberry Street (PO Box 466)  
North Melbourne VIC 3051

Dear Tom,

The Sports Turf Association (WA) would like to express our full support and gratitude for the Sports Turf Management Training package review performed by Skills Impact. This also includes the validation project forum meetings that were facilitated by Skills Impact in Melbourne in December 2018 and February 2019.

It was a very rewarding experience, seamlessly progressing on from the meetings and webinars held during the past 6 months.

We found the whole process very professional and personally rewarding as the Skills Impact staff were excellent meeting facilitators, allowing everyone a respected voice while keeping us all on track. Workshopping with such knowledgeable, experienced and committed participants was uplifting. We reviewed and workshopped editing adjustments to the units of competency for the four Sports Turf Management qualifications - Certificate II (AHC20916), Trade Level - Certificate III (AHC31316) Certificate IV (AHC40816) and Diploma (AHC51016). The core purpose of the review (besides being decades overdue) is that we focussed on defining a direct mapped link between the curriculum and the main occupations and job functions within the Sports Turf Management industry. It is our opinion that this provided a coherent pathway that could be successfully demonstrated, lectured and audited by the TAFE lecturers and industry supervisors.

As a result of this process the Western Australian Turf Industry now possesses a greatly increased optimism towards the future of Sports Turf Management and the improved level of quality trained turf managers emerging to meet the industry's challenges.

Regards  
Tony Guy  
President  
Sports Turf Association (WA) Inc.  
PO Box 8492  
Perth BC, WA 6849.



9 April 2019

Mr Tom Vassallo  
Skills Impact  
559A Queensberry Street  
NORTH MELBOURNE VIC 3051  
Email: tvassallo@skillsimpact.com.au

Dear Tom,

**Skills Impact: Review of Sports Turf Training Packages  
AHC20916, AHC31316, AHC40816, AHC51016**

Firstly, we would like to acknowledge the effort of all stakeholders to the review of the Sports Turf Training Packages. It is pleasing to see the level of engagement by all parties, which has no doubt added to the positive momentum to drive this project to its current point.

The Sports Turf Association of NSW (STA NSW) believes that a solid foundation of learning, whether at the beginning of a career or as continued learning, is vital to ensuring that our industry can provide the correct level of expertise to sustain sporting fields now and into the future. Sports turf management is a specialised industry where individuals are required to balance agronomy, weather, climate, innovation, staff management, budget constraints, along with stakeholder expectations. Given its highly specialised nature, we believe that the additional units recommended for both the Certificate III (AHC31316) and Diploma (AHC51016) are appropriate and required, and it is vital that these additional units are matched with appropriate funding. And whilst initially we had concerns around the deletion of Certificate IV (AHC40816), we can see the merit given the expansion of the other packages. As for the Certificate II (AHC20916), we look forward to seeing growth in enrolments through school-based VET programs

STA NSW would like to see these packages delivered at the highest quality, with appropriate time allocations, tools, and experienced expert teachers, in order to attract post-graduates to our profession. Here in NSW, we support delivery of these programs by TAFE, as they have a solid track record of providing expert programs and a high calibre of graduates. The gradual reduction to TAFE funding is exceedingly evident and we hope with these new packages and appropriate funding that we will see a rejuvenated and more professional program, as it is vital that our industry has a continued supply of experienced sports turf graduates into the future.

Should you require any further support, please do not hesitate to contact us.

Yours sincerely



Chris Chapman  
President  
Sports Turf Association NSW Inc



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Sports Turf Association, ACT Inc.  
PO Box 3223  
Weston Creek ACT 2611  
Ph.: 0412 533 785

[act@sportsturf.asn.au](mailto:act@sportsturf.asn.au)  
[www.sportsturf.asn.au](http://www.sportsturf.asn.au)

To Whom It May Concern

Skills Impact announced in June 2018 that it would conduct a review the Sports turf training package. This followed several frustrated attempts by industry over a decade to get the Certificate III qualification to meet their requirements, including lifting the number of units above 16, in order to reflect real industry roles and work functions.

The "Sports Turf Association of ACT region" have been involved through direct meetings and online feedback and support the process that was followed. The association is supportive of the changes proposed to the training package.

Kind Regards

A handwritten signature in blue ink, appearing to read 'B Van Dam', is positioned below the 'Kind Regards' text.

Brad Van Dam  
President STA ACT region  
0407072293  
8<sup>th</sup> April 2019

Promoting, Educating & Networking the Sports Turf Industry of the ACT region

## Viticulture



3 May 2019

William Henderson  
Industry Skills Standards Specialist  
Skills Impact  
PO Box 466  
North Melbourne, VIC 3051

Dear William

**RE: DIPLOMA OF VITICULTURE APPROVAL**

**About us**

The South Australian Wine Industry Association (SAWIA) is an employer and industry association representing the interests of wine grape growers and wine producers throughout the state of South Australia. SAWIA (as it is known today) was established in 1840 as the *Society for the Introduction of Vines*.

SAWIA is a not for profit incorporated association, funded by voluntary member subscriptions, grants and fee for service activities, whose mission is to provide leadership to South Australian grape and wine businesses so they achieve great things that they couldn't by themselves.

SAWIA membership represents approximately 96% of the grapes crushed in South Australia and about 36% of the land under viticulture. Each major wine region within South Australia is represented on the board governing our activities.

SAWIA has a strong track record as an industry leader and innovator in many areas. SAWIA proactively represents members and the greater wine industry with government and related agencies in all aspects of business in the wine sector.

What SAWIA does for members is covered in four key areas:

- Representation and Leadership;
- Advice and Information;
- Products and Services; and
- Promotion and Opportunities.

SAWIA is a registered association of employers under the South Australian *Fair Work Act 1004* and is also a Recognised State-Registered Association under the *Fair Work (Registered Organisations) Act 2009*.

SAWIA has a long standing interest in employment, vocational education and training, skills and careers, immigration and related policy areas. SAWIA's policy positions in relation to employment are proposed and endorsed by our Employee Relations Committee, which comprises of HR Executives and Senior Managers, some with national responsibilities, drawn from the membership.

SAWIA is a member of the Food, Beverage and Pharmaceutical Industry Reference Committee.

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**South Australian Wine Industry Association Incorporated**  
ABN 43 807 200 028  
1<sup>st</sup> Floor Industry Offices, National Wine Centre, Botanic Road, Adelaide SA 5000  
Tel: 81 8 8222 0277 Fax: 81 8 8222 0276 Email: [admin@wina.com.au](mailto:admin@wina.com.au) Web: [www.wina.com.au](http://www.wina.com.au)

### Diploma of Viticulture

SAWIA supported the review of the Diploma of Viticulture qualification and participated in the consultation on the qualification.

Throughout this process we have engaged with other wine industry stakeholders, including individual employers and associations.

SAWIA validated the end product and support the changes made to ensure that the qualification better responds to industry needs and better reflects current industry practice.

We therefore support this qualification being submitted for final approval.

Yours sincerely

  
HENRIK WALLGREN  
Business Services Manager

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South Australian Wine Industry Association Incorporated  
ABN 43 807 200 928  
1<sup>st</sup> Floor Industry Offices, National Wine Centre, Botanic Road, Adelaide SA 5000  
Tel: 61 8 8222 9277 Fax: 61 8 8222 9276 Email: [admin@awisa.asn.au](mailto:admin@awisa.asn.au) Web: [www.winesa.asn.au](http://www.winesa.asn.au)



**Monday, 6 May 2019**

Re: Revisions to the Diploma of Viticulture

To whom it may concern,

The NSW Wine Industry Association wishes to support the revisions to the Diploma of Viticulture and the units which were revised under this project. We have been involved in both the consultation and validation phases.

The revisions reflect the evolving needs expectations of the NSW Wine Industry.

Regards

Liz Riley  
VP and Chair of R&D, NSWWIA

A handwritten signature in black ink that reads "Angus P. Barnes". The signature is written in a cursive style.

Angus Barnes  
Executive Officer  
NSW Wine Industry Association

0407 615132  
[exec@nswwine.com.au](mailto:exec@nswwine.com.au)

10 May 2019

Lucinda O'Brien

Industry Skills Standards Specialist

Skills Impact

PO Box 466 North Melbourne VIC 3051

Dear Lucinda,

TAFE NSW is a leading provider of Vocational Education Training in Australia, with industry qualified and experienced staff that bring up-to-date, real-world skills directly to the classroom. With over 130 locations across NSW, TAFE NSW is in the ideal position to deliver current and relevant vocational training to industry.

The ability to engage with Skills Impact to develop consistent skills standards and qualifications is essential for TAFE NSW to ensure we are delivering industry relevant training.

TAFE NSW Agribusiness SkillsPoint has recently been established as a single point of contact for industry and training agencies and has been recently involved in the validation stage of the Skills Impact Animal Incident Management Project and the Horse Education Project.

We also participated in the consultation workshops for the Racing and Breeding Projects: Retraining Horses and Greyhounds to New Environments, Greyhound Health Assistance Services and Horse Breeding Skills.

We appreciate the invitation from Skills Impact to collaborate with industry professionals and subject matter experts during these workshops and projects. The recent validation projects were extremely well organized, collaboration was encouraged, and the Skills Impact project teams were very knowledgeable and engaged in the process.

TAFE NSW has also had the opportunity to engage with a number of the Skills Impact Industry Engagement Managers. Kate Vanson recently visited our Agribusiness SkillsPoint in Griffith, NSW and engaged with staff about the proposed restructuring of the projects in the AHC Training Package.

Michelle Ingley-Smith and Diana McNaughton have also been working closely with our TAFE NSW Industry Relationship Lead. Providing feedback to TAFE NSW regarding the structure of some of our qualifications has allowed us to minimise the disruption to employers and employees in superseded courses.

TAFE NSW SkillsPoint staff have also recently participated in consultation on the units in the Viticulture project and with Julie Stratford as part of the Seafood Industry Project.

The opportunity to work closely with Skills Impact on such projects ensures TAFE NSW is aligning the delivery of industry relevant training, with Skills Impact forecasts and proposed schedules of work.

The TAFE NSW Agribusiness SkillsPoint values our developing relationship with Skills Impact, and look forward to working together in the future to support the development of qualifications and training materials that meet the needs of our industry.

Yours sincerely,

A handwritten signature in blue ink that reads "Mark Grove".

**Mark Grove**

**Head of SkillsPoint - Agribusiness**



## Appendix 3: Minor updates

The IRC approved the following changes as minor updates. These components are not submitted for endorsement but will be released as part of the *AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0*.

### Qualification

<b>Mapping of qualifications from AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0.</b>			
<b>Code and title previous version</b>	<b>Code and title current version Code</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHC10216 Certificate I in AgriFood Operations Release 1	AHC10216 Certificate I in AgriFood Operations Release 2	Updated elective unit codes	Equivalent qualification
AHC20116 Certificate II in Agriculture Release 4	AHC20116 Certificate II in Agriculture Release 5	Updated elective unit codes	Equivalent qualification
AHC20316 Certificate II in Production Horticulture Release 1	AHC20316 Certificate II in Production Horticulture Release 2	Updated elective unit codes	Equivalent qualification
AHC20416 Certificate II in Horticulture Release 3	AHC20416 Certificate II in Horticulture Release 4	Updated elective unit codes	Equivalent qualification
AHC20816 Certificate II in Retail Nursery Release 2	AHC20816 Certificate II in Retail Nursery Release 3	Updated elective unit codes	Equivalent qualification
AHC21616 Certificate II in Landscaping Release 1	AHC21616 Certificate II in Landscaping Release 2	Updated elective unit codes	Equivalent qualification
AHC30116 Certificate III in Agriculture Release 4	AHC30116 Certificate III in Agriculture Release 5	Updated elective unit codes	Equivalent qualification
AHC30516 Certificate III in Poultry Production Release 1	AHC30516 Certificate III in Poultry Production Release 2	Updated elective unit codes	Equivalent qualification
AHC30616 Certificate III in Production Horticulture Release 3	AHC30616 Certificate III in Production Horticulture Release 4	Updated elective unit codes	Equivalent qualification
AHC31016 Certificate III in Parks and Gardens Release 1	AHC31016 Certificate III in Parks and Gardens Release 2	Updated elective unit codes	Equivalent qualification
AHC32116 Certificate III in Commercial Seed Processing	AHC32116 Certificate III in Commercial Seed Processing	Updated elective unit codes	Equivalent qualification

<b>Mapping of qualifications from AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0.</b>			
<b>Code and title previous version</b>	<b>Code and title current version Code</b>	<b>Comments</b>	<b>Equivalence statement</b>
Release 3	Release 4		
AHC33216 Certificate III in Floriculture Release 3	AHC33216 Certificate III in Floriculture Release 4	Updated elective unit codes	Equivalent qualification
AHC33416 Certificate III in Seed Production Release 1	AHC33416 Certificate III in Seed Production Release 2	Updated elective unit codes	Equivalent qualification
AHC40116 Certificate IV in Agriculture Release 4	AHC40116 Certificate IV in Agriculture Release 5	Updated elective unit codes	Equivalent qualification
AHC40416 Certificate IV in Horticulture Release 3	AHC40416 Certificate IV in Horticulture Release 4	Updated elective unit codes	Equivalent qualification
AHC40516 Certificate IV in Parks and Gardens Release 3	AHC40516 Certificate IV in Parks and Gardens Release 4	Updated elective unit codes	Equivalent qualification
AHC40716 Certificate IV in Retail Nursery Release 3	AHC40716 Certificate IV in Retail Nursery Release 4	Updated elective unit codes	Equivalent qualification
AHC40916 Certificate IV in Conservation and Land Management Release 4	AHC40916 Certificate IV in Conservation and Land Management Release 5	Updated elective unit codes	Equivalent qualification
AHC41416 Certificate IV in Seed Production Release 3	AHC41416 Certificate IV in Seed Production Release 4	Updated elective unit codes	Equivalent qualification
AHC41616 Certificate IV in Organic Farming Release 3	AHC41616 Certificate IV in Organic Farming Release 4	Updated elective unit codes	Equivalent qualification
AHC41716 Certificate IV in Pest Management Release 3	AHC41716 Certificate IV in Pest Management Release 4	Updated elective unit codes	Equivalent qualification
AHC42116 Certificate IV in Permaculture Release 1	AHC42116 Certificate IV in Permaculture Release 1	Updated elective unit codes	Equivalent qualification
AHC50116 Diploma of Agriculture Release 3	AHC50116 Diploma of Agriculture Release 4	Updated elective unit codes	Equivalent qualification
AHC50216 Diploma of Pork Production	AHC50216 Diploma of Pork Production	Updated elective unit codes	Equivalent qualification

<b>Mapping of qualifications from AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0.</b>			
<b>Code and title previous version</b>	<b>Code and title current version Code</b>	<b>Comments</b>	<b>Equivalence statement</b>
Release 1	Release 2		
AHC50316 Diploma of Production Horticulture Release 1	AHC50316 Diploma of Production Horticulture Release 2	Updated elective unit codes	Equivalent qualification
AHC50416 Diploma of Horticulture Release 2	AHC50416 Diploma of Horticulture Release 3	Updated elective unit codes	Equivalent qualification
AHC50616 Diploma of Landscape Design Release 1	AHC50616 Diploma of Landscape Design Release 2	Updated elective unit codes	Equivalent qualification
AHC50916 Diploma of Retail Nursery Management Release 1	AHC50916 Diploma of Retail Nursery Management Release 2	Updated elective unit codes	Equivalent qualification
AHC51116 Diploma of Conservation and Land Management Release 3	AHC51116 Diploma of Conservation and Land Management Release 4	Updated elective unit codes	Equivalent qualification
AHC51216 Diploma of Community Coordination and Facilitation Release 2	AHC51216 Diploma of Community Coordination and Facilitation Release 3	Updated elective unit codes	Equivalent qualification
AHC51816 Diploma of Organic Farming Release 3	AHC51816 Diploma of Organic Farming Release 4	Updated elective unit codes	Equivalent qualification
AHC52116 Diploma of Permaculture Release 2	AHC52116 Diploma of Permaculture Release 3	Updated elective unit codes	Equivalent qualification
AHC60216 Advanced Diploma of Horticulture Release 1	AHC60216 Advanced Diploma of Horticulture Release 2	Deleted unit - AHCBUS604 Design and manage the enterprise quality management system removed from the Electives and replaced with BSBMGT621 Design and manage the enterprise quality management system.	Equivalent qualification

<b>Mapping of qualifications from AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0.</b>			
<b>Code and title previous version</b>	<b>Code and title current version Code</b>	<b>Comments</b>	<b>Equivalence statement</b>
AHC60415 Advanced Diploma of Conservation and Land Management Release 2	AHC60415 Advanced Diploma of Conservation and Land Management Release 3	Updated elective unit codes	Equivalent qualification

## Appendix 4: Quality assurance report

### Quality Report Template

#### Section 1 – Cover page

Information required	Detail
Training Package title and code	AHC Agriculture, Horticulture and Conservation and Land Management Training Package V4.0
Number of new qualifications and their titles <sup>1</sup>	3 AHC21819 Certificate II in Protected Horticulture AHC33719 Certificate III in Protected Horticulture AHC40219 Certificate IV in Protected Horticulture
Number of revised qualifications and their titles	11 AHC20919 Certificate II in Sports Turf Management AHC21119 Certificate II in Irrigation AHC31319 Certificate III in Sports Turf Management AHC32419 Certificate III in Irrigation Technology AHC41019 Certificate IV in Agribusiness AHC41119 Certificate IV in Irrigation Management AHC51019 Diploma of Sports Turf Management AHC51419 Diploma of Agribusiness Management AHC51519 Diploma of Viticulture AHC51619 Diploma of Irrigation Design AHC60319 Advanced Diploma of Agribusiness Management
Number of new units of competency and their titles	16 (See Attachment 1)
Number of revised units of competency and their titles	114 (See Attachment 1)
Confirmation that the panel member is independent of: <ul style="list-style-type: none"> <li>the Training Package or Training Package components review ('Yes' or 'No')</li> <li>development and/or validation activities associated with the Case for Endorsement ('Yes' or 'No')</li> <li>undertaking the Equity and/or Editorial Reports for the training package products that are the subject of this quality report ('Yes' or 'No')</li> </ul>	I confirm that I, Maree Thorne, <u>am</u> independent of: <ul style="list-style-type: none"> <li>the Training Package or Training Package components review (YES)</li> <li>development and/or validation activities associated with the Case for Endorsement (YES)</li> <li>undertaking the Equity and/or Editorial Reports for the training package products that are the subject of this quality report (YES)</li> </ul>

<sup>1</sup> When the number of training products is high the titles can be presented as an attached list.

Information required	Detail
Confirmation of the Training Packages or components thereof being compliant with the <i>Standards for Training Packages 2012</i>	The Training Package components in the Case for Endorsement comprising three new, 11 (revised) qualifications, 16 new and 114 revised units of competency and their associated assessment requirements as part of the <i>AHC Agriculture, Horticulture, Conservation and Land Management Training Package 4.0</i> are compliant with the <i>Standards for Training Packages 2012</i> .
Confirmation of the Training Packages or components thereof being compliant with the <i>Training Package Products Policy</i>	The Training Package components in the Case for Endorsement comprising three new, 11 (revised) qualifications, 16 new and 114 revised units of competency and their associated assessment requirements as part of the <i>AHC Agriculture, Horticulture, Conservation and Land Management Training Package 4.0</i> are compliant with the <i>Training Package Products Policy</i> .
Confirmation of the Training Packages or components thereof being compliant with the <i>Training Package Development and Endorsement Process Policy</i>	The Training Package components in the Case for Endorsement comprising three new, 11 (revised) qualifications, 16 new and 114 revised units of competency and their associated assessment requirements as part of the <i>AHC Agriculture, Horticulture, Conservation and Land Management Training Package 4.0</i> are compliant with the <i>Training Package Development and Endorsement Process Policy</i> .
Panel member's view about whether: <ul style="list-style-type: none"> <li>the evidence of consultation and validation process being fit for purpose and commensurate with the scope</li> <li>estimated impact of the proposed changes is sufficient and convincing</li> </ul>	It is the panel member's view that evidence of the consultation and validation processes undertaken by the developer are fit for purpose and commensurate with the scope of the Case for Endorsement (CfE). The estimated impact of the proposed changes is sufficiently outlined in the CfE.
Name of panel member completing Quality Report	<b>Maree Thorne</b>
Date of completion of the Quality Report	<b>31 May 2019</b>

## Section 2 – Compliance with the Standards for Training Packages 2012

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p><b>Standard 1</b></p> <p>Training Packages consist of the following:</p> <ol style="list-style-type: none"> <li>1. AISC endorsed components: <ul style="list-style-type: none"> <li>• qualifications</li> <li>• units of competency</li> <li>• assessment requirements (associated with each unit of competency)</li> <li>• credit arrangements</li> </ul> </li> <li>2. One or more quality assured companion volumes</li> </ol>	<p><b>Yes</b></p>	<p>The proposed components of the AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0 meet the requirements of Standard 1.</p> <p>The Training Package components in the Case for Endorsement (CfE) include:</p> <ul style="list-style-type: none"> <li>• three new qualifications</li> <li>• 11 revised qualifications, and</li> <li>• 16 new and 114 revised units of competency, each with associated assessment requirements.</li> </ul> <p>The CfE specifies that no credit arrangements exist for the Agriculture, Horticulture and Conservation and Land Management Training Package (AHC) qualifications at the time of development.</p> <p>The AHC Training Package V4.0 Companion Volume Implementation Guide (CVIG) Parts 1 and 2, provide implementation advice including mapping of equivalency and changes and have been quality assured in this process.</p>

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p>Standard 2</p> <p>Training Package developers comply with the <i>Training Package Products Policy</i></p>	<p>Yes</p>	<p>Skills Impact has complied with the requirements of the <i>Standards for Training Packages 2012</i> for the three new, 11 revised qualifications, as well as the 16 new and 114 revised units of competency.</p> <p>Supporting evidence includes:</p> <ul style="list-style-type: none"> <li>• Compliance with coding and titling of qualifications and units of competency. Where units of competency have undergone review with changes to performance criteria, knowledge or performance evidence or assessment conditions, codes have been changed to reflect</li> <li>• Only one AHC qualification reviewed specifies an entry requirement, with information in the CVIG (p. 51) providing a rationale for the requirement.</li> <li>• The AHC Companion Volume Implementation Guide, Version 4.0 includes guidance to ensure that learners are not discriminated against and guidance around reasonable adjustment to accommodate learners with disabilities or particular needs. Reference has been made to Disability Standards for Education, 2005.</li> <li>• The Companion Volume outlines how Foundation Skills have been addressed in units of competency and emphasises that RTOs must consider them as part of the training and assessment for each unit.</li> <li>• Pathway advice is included in the Companion Volume Implementation Guide (CVIG), as is clear information about qualification and unit mapping to inform users of changes to both equivalent and not equivalent qualifications and units.</li> <li>• The availability of 25 (17 new and 8 revised) skill sets provides additional flexibility and pathway options for individuals and learners.</li> </ul> <p>The qualifications are clearly written with clear, achievable packaging rules, and a significant range of elective options to cover a broad range of outcomes</p>



<p>Standard 3</p> <p>Training Package developers comply with the AISC <i>Training Package Development and Endorsement Process Policy</i></p>	<p>Yes</p>	<p>The CfE provides detailed information about Skills Impact's development and endorsement processes of the draft components, including alignment to and compliance with ASIC's Activity Order, comprising four areas of project activity:</p> <ul style="list-style-type: none"> <li>• Carbon and Agribusiness Management</li> <li>• Horticulture Technology (irrigation and protected horticulture)</li> <li>• Sports Turf Management, and</li> <li>• Viticulture</li> </ul> <p>The CfE outlines details of consultation undertaken and communication strategies. Evidence of contributing personnel, listed in Appendices, supports evidence of consultation undertaken for the various projects throughout the development process with stakeholders, including</p> <ul style="list-style-type: none"> <li>• engagement via Subject Matter Experts (SME) working groups,</li> <li>• undertaking workforce functional analyses (WFA),</li> <li>• public consultation and feedback workshops and webinars,</li> <li>• email and newsletter communication with a range of industry stakeholders and training organisations,</li> <li>• participation at and presentation of project information at industry events and</li> <li>• with the relevant Industry Reference Committees.</li> </ul> <p>Consultation and validation strategies inclusive of online project information and online feedback platforms support provision of range of opportunities for engagement with industry and other relevant stakeholders in the development and validation processes.</p> <p>Project(s) information on the Skills Impact website supports invitations to contribute to and assist in development, as well as provide updates of changes made throughout the development and validation processes. Summaries of feedback, responses and actions for both projects are available on the Skills Impact website and were referred to in the quality assurance process to validate stakeholder agreement.</p>
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Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p>Standard 4</p> <p>Units of competency specify the standards of performance required in the workplace</p>	<p>Yes</p>	<p>All units of competency have been reviewed to ensure they specify the standards of performance required in the workplace.</p>
<p>Standard 5</p> <p>The structure of units of competency complies with the unit of competency template</p>	<p>Yes</p>	<p>The Editorial Report comments that the structure of all 130 (new and revised) units reviewed comply with the unit of competency template is confirmed.</p>
<p>Standard 6</p> <p>Assessment requirements specify the evidence and required conditions for assessment</p>	<p>Yes</p>	<p>All Assessment requirements associated with the units of competency specify the performance evidence and knowledge evidence to be demonstrated for assessment, along with required conditions for assessment as per the appropriate template.</p> <p>Reference to frequency of Performance Evidence is stated, with some units (Sports Turf Management in particular) specifying and clarifying volume and frequency of performance requirements. Assessment Conditions in relation to how evidence may be gathered and provision of necessary resources for meeting assessment requirements have been reviewed to ensure alignment with the units of competency.</p>
<p>Standard 7</p> <p>Every unit of competency has associated assessment requirements. The structure of assessment requirements complies with the assessment requirements template</p>	<p>Yes</p>	<p>All draft units of competency have associated assessment requirements, the structures of which comply with the assessment requirements template and the <i>Standards for Training Packages 2012</i>.</p>

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p>Standard 8</p> <p>Qualifications comply with the Australian Qualifications Framework specification for that qualification type</p>	Yes	<p>The QA process confirmed qualification packaging rules specified requirements to ensure AQF outcomes for qualifications are met with the wording:</p> <p><i>Elective units must ensure the integrity of the qualification's Australian Qualification Framework (AQF) alignment and contribute to a valid, industry-supported vocational outcome.</i></p> <p>The performance requirements of listed units of competency as either core or within elective groups, and the options for packaging them, are considered to result in alignment to the AQF level specifications for the qualifications (including the collective complexity of required performance and knowledge).</p>
<p>Standard 9</p> <p>The structure of the information for the Australian Qualifications Framework qualification complies with the qualification template</p>	Yes	<p>The structure of the information for the 14 qualifications complies with the qualification template.</p> <p>The Quality Assurance process confirms the Editorial Report comment that <i>'each qualification specifies the total number of core and elective units to achieve the qualification, including rules for specialisation (for AHC21819 and AHC33719), and the number of elective units which can be imported from outside the training package'</i></p>
<p>Standard 10</p> <p>Credit arrangements existing between Training Package qualifications and Higher Education qualifications are listed in a format that complies with the credit arrangements template</p>	Yes	<p>The CfE and AHC CVIG indicate that no national credit arrangements exist at this time for any of the proposed qualifications.</p>

Standards for Training Packages	Standard met 'yes' or 'no'	Evidence supporting the statement of compliance or noncompliance (including evidence from equity and editorial reports)
<p>Standard 11</p> <p>A quality assured companion volume implementation guide produced by the Training Package developer is available at the time of endorsement and complies with the companion volume implementation guide template.</p>	Yes	<p>The training package components in this submission are accompanied by the AHC Agriculture, Horticulture and Conservation and Land Management Training Package Companion Volume Implementation Guide Version 4.0 (Parts 1 and 2)</p> <p>The AHC CVIG complies with the companion volume implementation guide template included in the 2012 Standards and was reviewed in this QA process, including for alignment to the CfE and to the proposed endorsed components.</p>
<p>Standard 12</p> <p>Training Package developers produce other quality assured companion volumes to meet the needs of their stakeholders as required.</p>	Yes	<p>No additional companion volumes are produced</p>

### Section 3 – Compliance with the training package quality principles

Note: not all training package quality principles might be applicable to every training package or its components. Please provide a supporting statement/evidence of compliance or non-compliance against each principle.

#### Quality principle 1. Reflect identified workforce outcomes

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance/non compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Driven by industry's needs	Yes	<p>The CfE provides information about the extent of, and strategies for industry consultation and advice and the rationales for the changes that have occurred in the review. It speaks to drivers for each project and the work undertaken with stakeholders including:</p> <ul style="list-style-type: none"> <li>• developing skills and knowledge to access globally competitive agribusiness markets with the emerging opportunities afforded by new free trade agreements</li> <li>• the increasing interest in and uptake of carbon farming practices and emission reduction opportunities</li> <li>• modernisation and changes to irrigation practices and standards in the context of climate change pressures</li> <li>• enabling skills in protected horticulture to meet retailer and consumer growing demands</li> <li>• increasing skill levels and the quality of training and assessment of people who maintain and manage sports turf facilities across a plethora of different sport surfaces, through more specificity in training package components</li> <li>• enable broader applications of viticulture training products and ensure an emphasis on biosecurity issues</li> </ul> <p>There is evidence in the CfE and proposed endorsed components that the SSO has addressed industry's requirements and has undertaken appropriate stakeholder consultation including consideration of the 2015 training package reforms, in the development and validation process for the endorsed components submitted.</p>
Compliant and responds to government policy initiatives  Training package component	Yes	<p>The endorsed components respond to the COAG Industry and Skills Council's (CISC) training package reforms, specifically:</p> <ul style="list-style-type: none"> <li>• <b>ensure obsolete and superfluous qualifications are removed from the system</b></li> </ul> <p>The CfE outlines that workforce functional analysis (WFA) undertaken in the Sports Turf Management project identified that the AHC40816 Certificate IV in Sports Turf Management had no clear job role, all units could be achieved in an alternative qualification, and consequently was proposed for</p>

<p>responds to the COAG Industry and Skills Council's (CISC) training package-related initiatives or directions, in particular the 2015 training package reforms. Please specify which of the following CISC reforms are relevant to the training product and identify supporting evidence:</p> <ul style="list-style-type: none"> <li>• ensure obsolete and superfluous qualifications are removed from the system</li> <li>• ensure that more information about industry's expectations of training delivery is available to training providers to improve their delivery and to consumers to enable more informed course choices</li> <li>• ensure that the training system better supports individuals to move easily from one related occupation to another</li> <li>• improve the efficiency of the training system by creating units that can be owned and used by multiple industry sectors</li> <li>• foster greater recognition of skill sets</li> </ul>		<p>deletion. Additionally, a unit of competency in agribusiness was considered to duplicate a Business Services unit of competency and is proposed for deletion to minimise duplication and make use of cross sector units.</p> <ul style="list-style-type: none"> <li>• <b>foster greater recognition of skill sets</b></li> </ul> <p>The endorsed components will be supported by 25 (new and revised) skill sets.</p> <ul style="list-style-type: none"> <li>• <b>ensure that the training system better supports individuals to move easily from one related occupation to another</b></li> </ul> <p>AHC and imported elective units are used across the AHC qualifications and would enable transition and credit between AHC qualifications and flexible packaging rules support diversity of elective options to move within and across sectors.</p> <ul style="list-style-type: none"> <li>• <b>ensure that more information about industry's expectations of training delivery is available to training providers to improve their delivery and to consumers to enable more informed course choices</b></li> </ul> <p>Information about inclusion and strengthening of volume and frequency of performance evidence and necessary resources for assessment according to industry's advice, in the AHC revised components, has been specifically addressed in the CVIG (pages 70 -71) including advising RTOs of the need to update assessments to incorporate.</p>
<p>Reflect contemporary work organisation and job profiles incorporating a future orientation</p>	<p>Yes</p>	<p>The CfE outlines work undertaken in each project with stakeholders to align qualifications and units of competency to contemporary work organisation and job profiles by redesigning core and elective structures 'to ensure all graduates develop a base of agribusiness skills required by industry', deleting a qualification which does not lead to an industry recognised job outcome, a proposal to advocate for irrigation to be recognised as a trade outcome, the development of 17 new skill sets (and revision of 8 existing) to reflect current industry needs,</p>
		<p>including emerging industry skill needs in carbon farming, protected horticulture and viticulture.</p>

**Quality principle 2: Support portability of skills and competencies including reflecting licensing and regulatory requirements**

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Support movement of skills within and across organisations and sectors	Yes	<p>The draft Units of Competency and associated Assessment Requirements are written in a manner that allows adaptability and flexibility in relation to a range of industry variables. This enables the units to be contextualised to meet the various needs of a wide range of contexts.</p> <p>All qualifications include a proportionately significant number of elective options, including options to import units from other training packages (BSB, CHC, CPP, CUA, RII and others), to enable movement within organisations, within each sector, and through inclusion of import units, to other sectors.</p> <p>Endorsed components will be supported by 25 skill sets to provide entry and skill movements within and across the diversity of the agriculture, horticulture and conservation and land management industries.</p>
Promote national and international portability	Yes	<p>The CfE cites key drivers of the Agribusiness project to be to upskill the industry to be able to respond to market demands for innovation in product development to enable the industry to take advantage of opportunities in free trade agreements with Asian Pacific partners and more widely in global markets, whilst incorporating emerging practices of carbon farming, which are of increased global focus since the 2016 Paris Agreement.</p> <p>Proposed endorsed components and the accompanying CVIG V4.0 (Parts 1 and 2) promote national legislative requirements (safety, environmental protection and sustainability) and reference national standards and codes of practice where applicable.</p>

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Reflect regulatory requirements and licensing	Yes	<p>The CfE identifies licencing requirements are applicable to the AHC32419 Certificate III in Irrigation Technology and has specifically included imported units from UEE and CPC to address jurisdictional licencing requirements. Regulatory requirements associated with the use of restricted chemicals in some jurisdictions are also identified.</p> <p>The Qualification Descriptions further specifies that:</p> <ul style="list-style-type: none"> <li>• <i>'Learners of the revised and new units of competency are also expected to meet workplace and legal obligations related to work health and safety, apply relevant standards and perform activities according to workplace procedures and operational requirements. These requirements are explicitly reflected throughout the units'.</i></li> </ul> <p>The CVIG specifies that individual imported units with licencing or regulatory requirements must be delivered and assessed according to the requirements of the parent training package.</p>

**Quality principle 3: Reflect national agreement about the core transferable skills and core job-specific skills required for job roles as identified by industry**

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Reflect national consensus	Yes	<p>The CfE evidences a national consultation process providing stakeholders with opportunities to participate via a number of communication channels (SMEs, email and online, workshops and webinar forums, etc) to capture ongoing feedback on the endorsed components throughout the duration of the review.</p> <p>The CfE Appendix 2 reflects a range of respondent stakeholders including national industry participants, state training authorities, industry /content expert and training practitioners.</p>
Recognise convergence and connectivity of skills	Yes	Units listed in the qualifications include imported units from other nationally endorsed training packages.



**Quality principle 4: Be flexible to meet the diversity of individual and employer needs including the capacity to adapt to changing job roles and workplaces**

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Meet the diversity of individual and employer needs	Yes	<p>The assessment conditions of all of the units specify that assessment must take place in a workplace, or ‘<i>demonstrated in an environment that accurately represents workplace conditions</i>’.</p> <p>This allows for assessment to occur in a range of different contexts including a simulated environment if required.</p> <p>All qualifications include elective choices, and options to choose two or more units from any current training package or accredited course, suitable to vocational requirements and context – this ensures that each qualification can be packaged to suit different contexts and a range of employer and individual needs.</p>
Support equitable access and progression of learners	Yes	<p>As noted in Standard 2 comments above, only one AHC qualification reviewed specifies an entry requirement, with information in the CVIG (p. 51) providing a rationale for the requirement.</p> <p>Although not a component of this endorsement submission, 25 (17 new and 8 revised) skill sets allow for entry and exit points into and between qualifications.</p> <p>No AHC proposed components have prerequisite units which could limit access or progression of learners.</p> <p>As noted in the Equity Report: <i>‘AHC Companion Volume Implementation Guide Release 4 includes a section that outlines the multiple pathways to gain qualifications and diagrams showing the possible pathways into, and from qualification’</i> and further <i>‘all the qualifications allow for a reasonable number of units not listed in the elective banks to be imported from other training packages or accredited courses. The implementation guide provides guidance on selecting electives to enable different occupational outcomes’</i>.</p>

**Quality principle 5: Facilitate recognition of an individual’s skills and knowledge and support movement between the school, vocational education and higher education sectors**



Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Support learner transition between education sectors	Yes	<p>The CFE identified the three Certificate II (one new and two revised) qualifications to be suitable for delivery to secondary schools.</p> <p>In addition, the Equity Report confirms ‘<i>the implementation guide outlines the multiple pathways to gain qualifications including training and assessment pathway, recognition of prior learning pathway or combinations of each pathway to complete a qualification</i>’.</p> <p>The CFE notes that there are currently no nationally applicable credit arrangements between AHC qualifications proposed for endorsement and higher education qualifications.</p>

**Quality principle 6: Support interpretation by training providers and others through the use of simple, concise language and clear articulation of assessment requirements**

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Support implementation across a range of settings	Yes	<p>Industry advice about delivery is provided via the AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0 Companion Volume Implementation Guide (CVIG) in two parts, which has been quality assured and is ready for publication at the same time as the Training Package.</p> <p>The CVIG provides comprehensive advice about delivery requirements including reasonable adjustments, foundation skills, and progressions and pathways between qualifications.</p>
Support sound assessment practice	Yes	<p>The draft Units of Competency and associated Assessment Requirements include references to volume and frequency of Performance Evidence and include Assessment Conditions specifying necessary resources, equipment and allowable contexts for assessment.</p> <p>Units are written in a manner that allows adaptability and flexibility which enables the units to be contextualised to meet the varied and broad needs of the AHC industries</p>

Key features	Quality principle is met: Yes / No or N/A	Evidence demonstrating compliance with the quality principle Please see examples of evidence in the <i>Training Package Development and Endorsement Process Policy</i>
Support implementation	Yes	The developer has confirmed that all suggestions for change have been implemented and all components are ready for publication.

## **Attachment 1**

### **NEW AHC Units of Competency (16)**

AHCCFP301	Identify the effects of climate change as a factor in land management
AHCCFP401	Increase soil organic carbon using land management practices
AHCCFP402	Prepare to comply with measuring and modelling requirements of carbon farming methods
AHCCFP403	Identify opportunities and risks in carbon farming projects
AHCCFP404	Plan a land-based carbon farming project
AHCCFP405	Increase carbon using vegetation and/or agricultural approaches
AHCCFP501	Advise on carbon farming project planning and implementation
AHCHYD401	Establish and monitor hydroponic crops
AHCIRG301	Install gravity fed irrigation systems
AHCPHT210	Assist with protected cropping water sampling and testing
AHCPHT211	Maintain crop
AHCPHT212	Perform manual pollination of crops
AHCPHT213	Perform plant blocking on
AHCPHT311	Install and maintain vertical hanging trellis
AHCPHT507	Evaluate grapes for production
AHCTRF306	Prepare sports turf surfaces for play

### **REVISED AHC Units of Competency (114)**

AHCAGB302	Keep production records for a primary production business
AHCAGB404	Plan and implement infrastructure improvements
AHCAGB405	Analyse and interpret production data
AHCAGB406	Keep financial records for primary production business
AHCAGB518	Develop climate risk management strategies
AHCAGB512	Plan and manage infrastructure
AHCAGB519	Plan and monitor production processes
AHCAGB520	Plan production for the whole business
AHCAGB513	Develop a farm plan
AHCAGB514	Manage application of agents to crops or pastures
AHCAGB521	Select and use agricultural technology

AHCAGB515	Develop sustainable agricultural practices that utilise renewable energy and recycling systems
AHCAGB516	Select and implement a GIS for sustainable agricultural systems
AHCAGB522	Implement the introduction of biotechnology into the production system
AHCAGB517	Develop and manage a plan for sustainable production
AHCAGB609	Develop export markets for produce
AHCAGB607	Manage succession planning
AHCAGB610	Manage the production system
AHCAGB611	Analyse business performance
AHCAGB608	Manage financial resources
AHCAGB612	Manage price risk through trading strategy
AHCBAC509	Plan and manage long-term weed, pest and disease control in crops
AHCBUS406	Administer finance, insurance and legal requirements
AHCBUS407	Cost a project
AHCBUS408	Operate within a budget framework
AHCBUS409	Participate in an e-business supply chain
AHCBUS511	Manage enterprise staff requirements
AHCBUS513	Market product and services
AHCBUS514	Negotiate and monitor contracts
AHCBUS515	Prepare estimates, quotes and tenders
AHCBUS516	Develop and review a business plan
AHCBUS517	Monitor and review business performance
AHCBUS518	Prepare and monitor budgets and financial reports
AHCBUS512	Develop and implement family business structures and relationships
AHCBUS519	Manage finance, insurance and legal requirements
AHCBUS611	Manage capital works
AHCBUS612	Review land management plans and strategies
AHCBUS609	Develop and review an enterprise strategic plan
AHCBUS613	Manage human resources
AHCBUS614	Develop a monitoring, evaluation and reporting program
AHCBUS615	Implement a monitoring, evaluation and reporting program
AHCBUS610	Manage agribusiness risk
AHCDRG202	Maintain drainage systems

AHCDRG305	Install drainage systems
AHCDRG306	Measure drainage system performance
AHCDRG307	Troubleshoot drainage systems
AHCDRG308	Maintain and repair irrigation drainage systems
AHCDRG403	Coordinate and supervise installation of an irrigation drainage system
AHCDRG404	Monitor and control irrigation drainage systems
AHCDRG502	Design drainage systems
AHCIRG102	Support irrigation work
AHCIRG219	Assist with low volume irrigation operations
AHCIRG220	Assist with surface irrigation operations
AHCIRG221	Assist with pressurised irrigation operations
AHCIRG222	Assist with pump and flow control device operations
AHCIRG337	Measure irrigation delivery system performance
AHCIRG338	Troubleshoot irrigation systems
AHCIRG339	Monitor soils under irrigation
AHCIRG340	Install irrigation pumps
AHCIRG341	Operate and maintain irrigation pumping systems
AHCIRG342	Interpret irrigation plans and drawings
AHCIRG328	Operate irrigation controller and sensor technology
AHCIRG343	Operate irrigation injection equipment
AHCIRG344	Implement an irrigation schedule
AHCIRG345	Install pressurised irrigation systems
AHCIRG346	Operate pressurised irrigation systems
AHCIRG347	Maintain pressurised irrigation systems
AHCIRG336	Operate and maintain gravity fed irrigation systems
AHCIRG348	Operate and maintain moving irrigation system
AHCIRG435	Determine hydraulic parameters for an irrigation system
AHCIRG436	Implement an irrigation-related environmental protection program
AHCIRG437	Schedule irrigations
AHCIRG438	Select and manage pumping systems for irrigation
AHCIRG439	Interpret and apply irrigation designs
AHCIRG440	Manage a moving sprinkler irrigation system
AHCIRG441	Evaluate water supply for irrigation

AHCIRG442	Supervise irrigation system installation
AHCIRG443	Supervise irrigation system maintenance
AHCIRG444	Manage irrigation systems
AHCIRG445	Manage surface irrigation systems
AHCIRG507	Audit irrigation systems
AHCIRG508	Design irrigation system maintenance and monitoring programs
AHCIRG506	Design irrigation systems
AHCIRG509	Develop an irrigation and drainage management plan
AHCIRG510	Establish and maintain an irrigation-related environmental protection program
AHCORG507	Develop an organic or biodynamic management plan
AHCORG508	Prepare the enterprise for organic or biodynamic certification
AHCPHT214	Support horticultural crop harvesting
AHCPHT508	Develop a grape production plan
AHCPHT509	Evaluate wine
AHCPHT510	Manage a wine making process
AHCSHG407	Prepare shearing team wages
AHCSOL305	Prepare growing media
AHCSOL304	Implement soil improvements for garden and turf areas
AHCSOL505	Monitor and manage soils for production projects
AHCTRF102	Support turf work
AHCTRF206	Assist with turf construction
AHCTRF205	Assist in the preparation of turf surfaces for play
AHCTRF207	Renovate grassed areas
AHCTRF208	Support turf establishment
AHCTRF307	Construct turf playing surfaces
AHCTRF308	Establish turf
AHCTRF309	Implement a grassed area maintenance program
AHCTRF310	Monitor turf health
AHCTRF311	Renovate sports turf
AHCTRF403	Develop a sports turf maintenance program
AHCTRF404	Plan and implement sports turf renovation
AHCTRF505	Plan the establishment of sports turf playing surfaces
AHCTRF506	Manage sports turf renovation programs
AHCTRF507	Develop sports turf management programs
AHCTRF508	Manage sports turf facility assets
AHCWAT503	Manage water systems
AHCWHS502	Manage work health and safety processes
AHCWRK512	Plan, implement and review a quality assurance program