

High Level Forestry Skills Project



Summary of Changes Document

May 2021

Management, supervision and planning skills are essential to growing sustainable forests for timber, wood and fibre products. A lot has changed in the forestry industry since the *Diploma of Forest and Forest Products* and *Certificate IV in Forest Operations* were last reviewed, with workers at a senior level requiring updated skills for working with data and new technology. Consultation is taking place throughout this project to update these qualifications and related skills standards, so that they better support career pathways and reflect the current high-level skills required to grow and harvest forests sustainably.

Qualifications, skill sets and units of competency for high-level jobs in the forest industry have been reviewed and updated to support a range of skills in forest operations management, forest planning and resource management and forestry business operations management. They are available for review on the [Skills Impact website](#) from 18 May to 15 June 2021. Your feedback will inform further updates to the drafts, after which they will be made available again for your consideration and validation.

Overview of key changes

- Redeveloped the *Certificate IV in Forest Operations* so that it's suitable for those who lead teams and operations in forestry contractor businesses to support business efficiency and management practices. For example, the Certificate IV includes subjects in planning for and supervising a forest operation, managing the forestry contractor business and its people and implementing and monitoring environmental and safety management practices as part of forestry operation.
- Renamed and redesigned the *Diploma of Forestry Operations* to provide workplace-trained foresters, early-career university-trained foresters and forestry field officers with the practical knowledge and skills needed to work in Australia's dynamic commercial forestry industry. It offers specialisations in forest operations management and forest resource management, including studies in digital data collection and analysis, forest inventory, growth modelling, forest valuation, supply chain, forest ecology and biodiversity.
- Units of competency have been developed to meet the skill needs of forestry business managers, crew leaders and early-career foresters and create contemporary qualifications.
- Several units of competency are proposed for deletion due to having no enrolments over the past three years and feedback from industry experts that the work tasks covered by these units are not applicable or relevant to the occupations reflected in the *Certificate IV and Diploma*.
- Nineteen units of competency with similar learning outcomes have been consolidated and revised to become eight units, to reflect the current job requirements of the forestry occupations covered by the Certificate IV and Diploma.
- Imported units of competency from other Training Package to support skills in managing budgets and financial plans, writing technical reports, leading the initial response to and investigating WHS incidents, interpreting environmental legislation, and conducting biological surveys.
- *The Advanced Diploma of Forest Industry Sustainability* and ten skill sets are also proposed for deletion, due to no enrolments in recent years.

Acronyms: APP – Application, E – Element, FWP – Forest and Wood Products, PC – Performance Criteria, PE – Performance Evidence, KE – Knowledge Evidence, AC – Assessment Conditions, SMEs – Subject Matter Experts, ER – Entry Requirements

Qualifications

The *Certificate IV in Forestry Operations* has been reviewed and redeveloped so that it's tailored to support the current and emerging skill needs of managers and crew leaders responsible for forestry business operations.

The Certificate IV provides practical skills and knowledge needed to establish operational plans for silviculture, harvesting, log haulage or forest roading operations and supervise teams implementing the plans. It also enables participants to enhance skills in managing human resources and forestry businesses.

The Diploma has been redesigned to provide workplace-trained foresters, early-career university-trained foresters and forestry field officers with the practical knowledge and skills needed to work in Australia's dynamic commercial forestry industry.

The Diploma offers specialisations in forest operations management and forest resource management, including studies in digital data collection and analysis, forest inventory, growth modelling, forest valuation, supply chain, forest ecology and biodiversity. The flexible course structure enables participants to select subjects that best suit their needs.

For example, foresters wishing to pursue specialist roles in forest operations management might focus on studies in forest management planning, forestry supply chains and optimising forest management practices. Whereas those seeking roles in forest resource management may focus on digital data collection and analysis, growth modelling and forest inventory systems.

| Existing/Replaced Qualification | Revised Qualification | Proposed changes |
|---|---|---|
| FWP40116 Certificate IV in Forest Operations | FWP4XX21 Certificate IV in Forest Operations | <ul style="list-style-type: none"> • Purpose clarified to reflect the job of people who work as managers or crew leaders in forestry contractor businesses. • Reduced the total number of units for qualification completion from 14 to 12 • Created and added 5 new elective FWP units |
| FWP50116 Diploma of Forest and Forest Products | FWP5XX21 Diploma of Forest Operations | <ul style="list-style-type: none"> • Repurposed from a broad forest and forest products qualification to a forestry qualification • Changed scope to meet the training needs of entry-level foresters (including forestry field officers and resource foresters with specialist roles in forest resource management) as opposed to senior foresters • Created 2 specialisations: <ul style="list-style-type: none"> ○ <i>Forest Operations Management or</i> ○ <i>Forest Resource Management.</i> • Reduced the total number of units for qualification completion from 15 to 12 • No core units • Created and added 13 new elective FWP units |

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| | | <ul style="list-style-type: none"> 7 FWP units are anticipated for deletion (see section below) |
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Qualification Proposed for Deletion

The Advanced Diploma of Forest Industry Sustainability is proposed for deletion, for the reasons outlined below. Please email feedback to Georgiana Daian gdaian@forestworks.com.au

| Qualification code and title | Rationale | Link to qualification |
|--|--|---|
| FWP60116 Advanced Diploma of Forest Industry Sustainability | <ul style="list-style-type: none"> No enrolments during the last 5 years Not listed on the State funded course lists No RTO has it on the scope of registration Some units will be redeveloped and included in the Diploma. Other units were deleted as part of meeting Skills Ministers' priority of removing training products with low or no enrolments, as agreed by the AISC. | View qualification here . |

Skills Sets

Skill Sets Proposed for Deletion

Ten high-level forestry skill sets have been reviewed, and they are all proposed for deletion due to no use during the last five years. Please email feedback to Georgiana Daian gdaian@forestworks.com.au

| Skill set code and title | Link to skill set |
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| FWPSS00001 Skill set for forest and wood product innovation for leaders | View skill set here |
| FWPSS00002 Skill set for forest and wood product innovation for managers | View skill set here |
| FWPSS00003 Skill set for supporting forest and wood products innovation | View skill set here |
| FWPSS00004 Skill set for managing change in the forest and wood products industry | View skill set here |
| FWPSS00005 Skill set for forest and wood products industry stakeholder engagement | View skill set here |
| FWPSS00006 Skill set for supporting workplace engagement in the forest and wood products industry | View skill set here |
| FWPSS00007 Skill set for leading business development in the forest and wood products industry | View skill set here |
| FWPSS00008 Skill set for managing business development in the forest and wood products industry | View skill set here |
| FWPSS00009 Skill set for supporting business development in the forest and wood products industry | View skill set here |
| FWPSS00025 Skill set for carbon accounting | View skill set here |

Units of competency

Safety and Environment - revised units of competency

Three existing units of competency focussing on safety and environmental management in forestry operations have been reviewed and updated. They were improved for clarifying the scope of work and task requirements regarding implementing environmental management practices in forest operations and monitoring workplace safety, health and environment (SHE) policies and procedures.

| Current unit code and name | Revised unit code and name | Proposed changes/rationale |
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| FWPCOR4201 Monitor safety, health and environment policies and procedures | FWPCOR4XXX Monitor safety, health and environment policies and procedures | <ul style="list-style-type: none"> Redrafted Application statement to clarify scope of work ie: monitoring workplace safety, health and environment (SHE) policies and procedures Redrafted Elements 1, 2 and 4 and accompanying PCs to reflect focus of unit on monitoring safety, health and environment [SHE] Redrafted PCs for Element 3 to clarify focus on monitoring emergency procedures New description provided for Foundation Skills Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence Knowledge evidence redrafted to align with Elements and Performance Criteria Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPCOT5201 Implement sustainable forestry practices | FWPFGM4XXX Implement environmental management practices to a forestry operation site | <ul style="list-style-type: none"> Title change Minor change to Application Statement clarifying scope of work Revised Element 1 and PCs 1-2 – 1.5 to clarify work task Revised Element 2 and PCs 2.1 – 2.4 to clarify work task Redraft Element 3 and PCs 3.1- 3.2 to clarify work task Added Element 4 and PCs 4.1-4.3 to identify focus on natural and cultural heritage assets Redraft Element 5 and PCs 5.1- 5.5 to clarify work task New description provided for Foundation Skills Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence Minor changes to Knowledge Evidence to align with PCs Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPCOT5209 Manage tree harvesting to minimise | FWPFGM4XXX Implement environmental management practices to timber harvesting operations | <ul style="list-style-type: none"> Redeveloped to cover the management of timber harvesting operations to minimise environmental impact and meet the environmental management |

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| environmental impact | | requirements specified in the relevant harvest plan. |
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Management Systems – new units of competency

Two new units of competency have been developed to address gaps between the skills needed within the industry and available skill standards in the current qualifications.

These units are designed to support people who work as forestry business managers and crew leaders to develop efficient practices for managing human resources and operational activities specific to a forestry business setting.

| New unit code and name | Application |
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| FWPFGM4XXX Manage business operations of a forestry contractor business | This unit of competency describes the skills and knowledge required to manage the business operations of a forest contracting business, including the development of strategic and operational plans and strategies for stakeholder engagement, marketing, tendering and service quality. |
| FWPFGM4XXX Manage human resource functions of a forestry contractor business | This unit of competency describes the skills and knowledge required to manage people practices in a forest contracting business, including complying with legislative employment requirements, applying the principles of a fair, just and leadership culture, and managing the employee lifecycle. |

Management Systems – revised units of competency

Eight existing units of competency covering the management of forest management certification, quality products and services and operations improvement have been revised and updated.

For example, two sets of five units with similar learning outcomes have been merged, resulting in two redesigned units for work tasks related to implementing forest management certification systems and workplace sustainability practices.

In addition, the focus of one unit was changed to reflect the skills and knowledge expected of an early-career forester as opposed to an experienced forester. This unit is *FWPFGM5XXX Contribute to establishment and implementation of forest management systems*, replacing *FWPCOT6207 Develop forest management systems and processes*.

Other changes include minor revisions to minor revisions to improve the work task description and meet the requirements of Standards for Training Packages.

| Current unit code and name | Revised unit code and name | Proposed changes/rationale |
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| FWPCOR4202 Monitor and review forestry operations | FWPCOR4XXX Monitor and improve forestry operations | <ul style="list-style-type: none"> • Minor title change • Minor change to Application Statement clarifying scope of work • Revised PC structure for Element 1 to clarify work task and incorporate use of digital equipment • Minor editing to PCs 1.1-1.3 and 2.4-2.5 to clarify work tasks • Redraft Element 3 and PCs 3.1- 3.6 to clarify focus trialling improvements to work practices, systems and technologies • New description provided for Foundation Skills |

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| | | <ul style="list-style-type: none"> • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor wording changes to Knowledge Evidence to align with PCs and include information on types, uses, operation and maintenance of equipment used in forestry operations • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPCOR4203 Monitor quality and product care procedures | FWPFGM4XXX Monitor and manage product quality and supply | <ul style="list-style-type: none"> • Minor change to Application Statement clarifying scope of work • Revised wording of PCs 1.2, 2.4 and 2.5 to reflect style manual requirements • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPCOT6207 Develop forest management systems and processes | FWPFGM5XXX Contribute to establishment and implementation of forest management systems | <ul style="list-style-type: none"> • Repositioned this unit to meet skill needs of early career foresters. • New Title reflecting shift in focus of unit to contributing to establishment and implementation of forest management system • Change to Application Statement reflecting shift in focus of unit to contributing to establishment and implementation of forest management system • Reworded Element 2 and PCs 2.1-2.5 to clarify scope of work in relation to supporting establishment of forest management plans and systems • Reworded Element 3 to clarify scope of work in relation to relation to supporting implementation of forest management system • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor wording changes to Knowledge Evidence and inclusion of new knowledge requirement - techniques for monitoring forest management systems and processes for compliance with laws, international treaties, conventions • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPCOT6202 Develop and manage a forestry chain of custody certification process | FWPFGM5XXX Implement forest management certification scheme | <ul style="list-style-type: none"> • Redesigned unit that includes content from FWPCOT6202 Develop and manage a forestry chain of custody certification process and FWPCOT5206 Implement forestry chain of custody certification system |

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| FWPCOT5206 Implement forestry chain of custody certification system | | |
| FWPCOT5207 Implement sustainability in the workplace | FWPCOT5XXX Implement workplace sustainability practices | <ul style="list-style-type: none"> Redesigned unit that includes content from FWPCOT4208 Implement workplace sustainability practices, FWPCOT5207 Implement sustainability in the workplace and FWPCOR6201 Manage sustainability in the workplace |
| FWPCOR6201 Manage sustainability in the workplace | | |
| FWPCOT4208 Implement workplace sustainability practices | | |

Forest Operations Management – new units of competency

Six new units of competency were developed to address the gaps between the skills needed within the industry and available units in the current qualifications.

One of these units focuses on logistics skills required in managing log loading and haulage operations. This unit will be included in the revised Certificate IV in Forest Operations.

All other new units cover skills and knowledge required to contribute to and implement required silviculture regimes, assist in calculating costs and production targets for forestry operations, and use principles of forest science to optimise forest management practices. They will be included in the new Diploma in Forest Operations for early career foresters.

| New unit code and name | Application |
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| FWPFGM4XXX Plan for and coordinate log loading and haulage operations | This unit of competency describes the skills and knowledge required to plan for and coordinate log loading and haulage operations to facilitate the movement of logs from a native forest or plantation to an end point for processing. |
| FWPFGM5XXX Contribute to and implement a silviculture regime for a plantation | This unit of competency describes the skills and knowledge required to select a silviculture regime consistent with plantation management objectives and contribute to the planning and implementation of a silviculture regime for plantation operations. |
| FWPFGM5XXX Contribute to and implement a silviculture regime for native forest | This unit of competency describes the skills and knowledge required to select a silvicultural regime consistent with native forest management objectives and contribute to the planning and implementation of the silviculture regime for native forest. |
| FWPFGM5XXX Contribute to management and monitoring of forestry supply chains | This unit of competency describes the skills and knowledge required to contribute to the management and monitoring of forestry supply chains and to make recommendations for improving the efficiency of existing forestry supply chains. |

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| FWPFGM5XXX Apply principles of forest science to optimise forest management practices | This unit of competency describes the skills and knowledge required to apply principles of forest science related to soil, water, landslide and nutrient management to optimise forest management practices. |
| FWPFGM5XXX Assist with calculating costs and production targets for forestry operations | This unit of competency describes the skills and knowledge required to source information and calculate costs and production targets for forestry operations. |

Forest Operations Management - revised units of competency

Twenty-two existing units of competency for forest operations management have been reviewed and updated.

Some of these units have been redeveloped to reflect the skills expected of early-career foresters, particularly to contribute to and implement forest operations plans. Other units have been updated for forest business managers and crew leaders to develop skills in planning for and supervising forest operations.

Changes also include minor revisions to minor revisions to improve the work task description and meet the requirements of Standards for Training Packages.

| Current unit code and name | Revised unit code and name | Proposed changes |
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| FWPFGM4201 Implement a forest establishment plan | FWPFGM4XXX Plan for and coordinate forest establishment operations | <ul style="list-style-type: none"> • New Title reflecting shift in focus of unit to planning for and coordinating forest establishment operations • Change to Application Statement reflecting shift in focus of unit to planning for and coordinating forest establishment operations • Reworded Element 1 and PCs 1.1-1.3 to clarify scope of work in relation to preparing for the implementation of forest establishment operations • Reworded Element 2 and PCs 2.1-2.7 to clarify scope of work in relation to coordinating forest establishment operations • Reworded Element 3 and 4 to reflect focus on establishment operations • New description provided for Foundation Skill • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor wording changes to Knowledge Evidence and inclusion of new knowledge requirement - techniques for monitoring forest management systems and processes for compliance with laws, international treaties, conventions • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPFGM4202 Manage stand health | FWPFGM4XXX Plan for and coordinate a stand | <ul style="list-style-type: none"> • New unit formed from merger of units FWPFGM4202 Manage stand health and FWPFGM5211 Coordinate stand nutrition |

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| FWPFGM5211 Coordinate stand nutrition | health and nutrition program | |
| FWPFGM4203 Design plantations | FWPFGM5XXX Contribute to and implement a forest establishment plan | <ul style="list-style-type: none"> • New Title reflecting shift in focus of unit to contributing to development and implementation of forest establishment plans • Change to Application Statement reflecting shift in focus of unit to development and implementation of forest establishment plans • Revised Elements 1-4 and associated Performance Criteria • New description provided for Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Knowledge Evidence revised to reflect changes in Elements and Performance Criteria and incorporate site factors to consider in forest establishment planning • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPFGM4204 Conduct a pests and diseases assessment | FWPFGM4XXX Plan for and coordinate a pests and diseases assessment | <ul style="list-style-type: none"> • Revised title • Minor change to Application Statement clarifying scope of work • Revised Element 1 and PCs 1-1 – 1.8 to clarify work task • Revised Element 2 and PCs 2.1 – 2.6 to clarify work task • Redraft Element 3 and PC 3.1 -3.3 to clarify work task • New description provided for Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor changes to Knowledge Evidence • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPFGM4205 Monitor regeneration rates | FWPFGM4XXX Plan for and coordinate a regeneration rate assessment | <ul style="list-style-type: none"> • Revised title • Minor change to Application Statement clarifying scope of work • Revised Element 1 and PCs 1-1 – 1.6 to clarify work task • Revised Element 2 and PCs 2.1 – 2.6 to clarify work task • Redraft Element 3 and PC 3.1 to clarify work task • New description provided for Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor changes to Knowledge Evidence |

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| | | <ul style="list-style-type: none"> • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPFGM4206 Conduct a wood volume and yield assessment | FWPFGM4XXX Conduct a wood volume and yield assessment | <ul style="list-style-type: none"> • Minor changes to PCs 2.6 and 2.7 to clarify tasks • Minor changes to Element 3 and PCs 3.1 and 3.2 to clarify tasks • New description provided for Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Addition to Knowledge Evidence to include wood volume and yield assessment techniques • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPFGM4207 Conduct a forest site assessment | FWPFGM4XXX Plan for and coordinate a forest site assessment | <ul style="list-style-type: none"> • Revised title • Minor change to Application Statement clarifying scope of work • Revised Element 1 and PCs 1-1 – 1.7 to clarify work task • Revised Element 2 and PCs 2.1 – 2.5 to clarify work task • Redraft Element 3 and PC 3.1 -3.3 to clarify work task • New description provided for Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor changes to Knowledge Evidence • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPFGM4208 Plan a quarry | FWPFGM4XXX Plan for and coordinate quarry operations | <ul style="list-style-type: none"> • Revised title • Minor change to Application statement clarifying scope of work • Revised Element 1 and PCs 1-1 – 1.9 to clarify work task • Revised Element 2 and PCs 2.1 – 2.8 to clarify work task • Redraft Element 3 and PC 3.1 -3.3 to clarify work task • New description provided for Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor changes to Knowledge Evidence • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPFGM5208 Manage road construction and maintenance | FWPFGM4XXX Plan for and coordinate road construction and maintenance | <ul style="list-style-type: none"> • Original unit FWPFGM5208 Manage road construction and maintenance restructured as two new units FWPFGMXXXX Plan for and coordinate road construction and |

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| | FWPFGM5XXX Contribute to and implement a forest roading operational plan | maintenance [to be included in Certificate IV] and FWPFGMXXXX Contribute to and implement a forest roading operational plan [to be included in Diploma]. |
| FWPFGM5210 Manage tending operations in a native forest | FWPFGM4XXX Plan for and coordinate tending operations in a native forest or plantation | <ul style="list-style-type: none"> Redesigned unit that includes content from FWPFGM5210 Manage tending operations in a native forest and FWPFGM5213 Coordinate plantation tending operations |
| FWPFGM5213 Coordinate plantation tending operations | | |
| FWPHAR4203 Design log landings and snig tracks | FWPFGM4XXX Plan for and coordinate construction of log landing and snig tracks | <ul style="list-style-type: none"> Revised title Minor change to Application statement clarifying scope of work Revised Element 1 and PCs 1.1 and 1.5 to clarify work task Revised Element 2 and PCs 2.2, 2.3, 2.4 and 2.6 to clarify work task Revised PCs 3.1, 3.2, 3.3 and 3.5 to clarify work task Minor changes to Foundation Skills Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence Minor changes to Knowledge Evidence Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPHAR4204 Plan and coordinate fire salvage operations | FWPFGM4XXX Plan for and coordinate fire salvage operations | <ul style="list-style-type: none"> Revised Title Minor change to Application statement clarifying scope of work Revised Element 1 and PCs 1-1 – 1.7 to clarify work task Revised Element 2 and PCs 2.1 – 2.8 to clarify work task Redraft Element 3 and PC 3.1 -3.9 to clarify work task Revised Foundation Skills Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence Minor changes to Knowledge Evidence Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPHAR4205 Implement harvesting plans | FWPFGM4XXX Plan for and coordinate forest harvesting operations | <ul style="list-style-type: none"> Revised title Minor change to Application statement clarifying scope of work Revised Element 1 and PCs 1.1 and 1.9 to clarify work task Revised Element 2 and PCs 2.1-2.7 to clarify work task Revised Element 3 and PCs 3.1- 3.2 to clarify work task |

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| | | <ul style="list-style-type: none"> • New description provided for Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor changes to Knowledge Evidence • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPHAR5201 Design harvesting plans | FWPFGM5XXX Contribute to and implement a forest harvesting plan | <ul style="list-style-type: none"> • Redesigned unit that includes content from FWPHAR5201 Design harvesting plans and FWPFGM5216 Manage coupe planning |
| FWPFGM5216 Manage coupe planning | | |
| FWPFGM5214 Develop a native forest regeneration plan | FWPFGM5XXX Contribute to and implement a forest regeneration plan | <ul style="list-style-type: none"> • New Title reflecting shift in focus of unit to contributing to development and implementation of a forest regeneration plan • Change to Application Statement reflecting shift in focus of unit to contributing to development and implementation of a forest regeneration plan • Reworded PCs 1.1-1.8 – to clarify work task • Reworded Element 2 and PCs 2.1, 2.3, 2.4 and 2.5 -2.9 to clarify scope of work in relation to supporting implementation of a regeneration plan • Reworded PCs 3.1, 3.4, 3.5 to clarify scope of work in relation to monitoring of forest regeneration • Reworded PCs 4.2 and 4.3 to clarify scope of work in relation to reviewing forest regeneration • New description provided for Foundation Skills • New Knowledge Evidence requirement on principles of forest science • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence |
| FWPCOT5205 Develop biohazard contingency plans | FWPFGM5XXX Contribute to and implement a biohazard contingency plan | <ul style="list-style-type: none"> • New Title reflecting shift in focus of unit to contributing to development and implementation of a biohazard contingency plan • Change to Application Statement reflecting shift in focus of unit to contributing to development and implementation of a biohazard contingency plan • Reworded Element 2 and PCs 2.1-2.9 to clarify scope of work in relation to supporting development of a contingency plan • Reworded Element 3 and PC 3.4 to clarify scope of work in relation to coordinating implementation of a contingency plan • New description provided for Foundation Skills – Oral Communication |

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| | | <ul style="list-style-type: none"> • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor wording changes to Knowledge Evidence to comply with style manual requirements • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPCOR6202 Implement practices to maximise value from wood residues | FWPFGM5XXX Implement practices to maximise value from wood residues | <ul style="list-style-type: none"> • Minor change to Application Statement to reflect style manual requirements • Minor changes to PCs 1.1, 1.3, 2.1, 2.2 and 3.1 to reflect style manual requirements • Reworded Element 3 to clarify task • Minor redraft of Foundation Skills – Oral Communication and Reading • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| Units updated to correct the alignment of the job task with the AQF level | | |
| FWPHAR4201 Apply tree jacking techniques | FWPHAR3XXX Apply tree jacking techniques in felling trees | <ul style="list-style-type: none"> • Revised Title • Minor change to Application statement clarifying scope of work • Revised PCs 1-1 – 1.9 to clarify work task • Revised Element 2 to clarify work task • Revised PCs 3.2, 3.3, 3.4, 3.6 and 3.7 to clarify work task • Revised Element 4 and PCs 4.1, 4.3 and 4.6 to clarify work task • Revised Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Minor changes to Knowledge Evidence • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPHAR4202 Coordinate log recovery (hook tender) | FWPHAR3XXX Coordinate log recovery (hook tender) | <ul style="list-style-type: none"> • Revised PCs 1-1 – 1.8 to clarify work task • Minor changes to PCs 5.2, 5.3, 5.5 and 5.6 to comply with style requirements • Minor editorial changes to Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| Units updated as part of the Entry Level Forestry Skills Project to correct alignment of the job task with the AQF level | | |
| FWPFGM2202 Prepare seedbed | FWPFGM4XXX Plan for and coordinate forest site preparation operations | <ul style="list-style-type: none"> • New title • Updated Application Statement to increase focus on planning and coordination of forest site preparation activities |

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| | | <ul style="list-style-type: none"> • Updated Elements and added new Performance Criteria • Updated and added new Knowledge and Performance Evidence • Updated Foundation Skills • Updated Assessment Conditions |
| FWPFGM3206 Plan and implement non-commercial thinning operations | FWPFGM4XXX Plan for and coordinate thinning operations in a native forest or plantation | <ul style="list-style-type: none"> • Minor change to Application Statement clarifying scope of work to focus on planning, coordinating the implementation of and monitoring thinning operations in a forest or plantation • Revised PCs 2.1-2.6 to clarify work task associated with planning thinning operations • Revised Element 3 and PCs 3.1-3.7 to clarify work task associated with coordinating the implementation of and monitoring thinning operations • Minor wording change to Element 4 and PCs 4.1-4.4 to clarify work task associated with reviewing and reporting on outcomes of thinning operations • New description provided for Foundation Skills • Performance Evidence redrafted regarding the volume of evidence • Knowledge Evidence amended to include measurements relevant to thinning operations, safe chemical use, monitoring points, purpose of thinning operations • Redrafted Assessment |
| FWPFGM3207 Coordinate stem improvement | FWPFGM4XXX Plan for and coordinate stem improvement operations | <ul style="list-style-type: none"> • Reworded Unit Title • Minor change to Application Statement clarifying that work involves planning, coordinating and monitoring the implementation of stem improvement activities • Minor wording change to Element 2 and PCs 2.1-2.3 and 2.5-2.6 to clarify work task associated with planning stem improvement operations • Minor wording change to Element 3 and PCs 3.1 and 3.4 to clarify work task associated with coordinating implementation of stem improvement operations • Minor wording change to PCs 4.1-4.4 to clarify work task associated with reviewing stem improvement operations • New description provided for Foundation Skills • Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence • Knowledge Evidence amended to include stem improvement methods, working safely at heights, safe chemical use, purpose of stem improvement |

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| | | <ul style="list-style-type: none"> • Redrafted Assessment Conditions statement to comply with Standards for Training Packages • Redrafted Assessment Conditions |
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Forest Resource Management – new units of competency

Eight new units of competency were developed to cover skills requirements for undertaking growth and yield modelling in forest management; contributing to forest valuation to optimise forest management practice; applying scientific principles and methods for the management of biodiversity in planning forestry operations; and, manipulating and analyse data within digital and geographic information systems.

| New unit code and name | Application |
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| FWPFGM5XXX Contribute to the planning and conduct of forest valuation | This unit of competency describes the skills and knowledge required to contribute to the selection and application of appropriate forest valuation methods to value forest stands. |
| FWPFGM5XXX Contribute to selection and application of forest growth models | This unit of competency describes the skills and knowledge required to select and apply a forest growth model to forecast forest growth and yield of a forest stand and to compare forecasts with actual yields. |
| FWPFGM5XXX Analyse ecology of commercial native forests and plantations | This unit of competency describes the skills and knowledge required to explain the impact of forestry operations on biodiversity, conduct biodiversity evaluations and monitor biodiversity management and conservation in forestry operations. |
| FWPFGM5XXX Process and interpret harvester and forwarder optimisation data | This unit of competency describes the skills and knowledge required to use and apply a software program for processing harvesting and forwarding optimisation data to monitor wood flow planning and production. This unit includes confirming wood flow planning and production data requirements, accessing Standard for Forest Machine Data and Communication (StanForD) compliant data, using software application features to process data and conduct production and wood flow analysis, and generating reports of production and wood flow across sites, machines and time. |
| FWPFGM5XXX Create digital forestry operational map | This unit of competency describes the skills and knowledge required to create digital forest operational maps. This includes determining map specifications, selecting and setting up Geographic Information System (GIS) software package, creating, reviewing and finalising a map, and sharing the map with end-users. |
| FWPFGM5XXX Create cutting instruction files for forestry harvesters | This unit of competency describes the skills and knowledge required to create cutting instructions, which are also known as bucking instructions or ATP files, for forestry harvesters. This unit includes sourcing and collecting data sets for use in creating cutting instructions, using a software package to create cutting instructions for forestry harvesters, trialling and editing cutting instructions and transmitting cutting instructions to end-users. |
| FWPFGM5XXX Plan unmanned aerial vehicle (UAV) collection of forestry data | This unit of competency describes the skills and knowledge required to plan unmanned aerial |

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| | vehicle (UAV) collection of forestry data. This includes preparing for UAV data collection, interpreting user requirements or specifications for spatial and environmental data collection, identifying the UAV platform and sensors required for the data collection task, and preparing a data collection plan. |
| FWPFGM5XXX Quality assure forestry data acquisition by unmanned aerial vehicle (UAV) | This unit of competency describes the skills and knowledge required to quality assure forestry data acquisition by unmanned aerial vehicle (UAV). This includes establishing quality criteria for UAV data acquisition, conducting pre and post-flight quality assurance checks of UAV data acquisition and preparing UAV data acquisition quality assurance report. |

Forest Resource Management – revised units of competency

Four existing units of competency describing jobs in forest resource management have been reviewed and updated.

For example, one unit has been redeveloped to reflect the skills required to analyse and use data generated by new technology used in forest planning and management, such as Lidar, aerial photography and geographic information system (GIS) software.

The other units have been redeveloped to provide skills that contribute to the implementation of forest inventory programs and to develop knowledge of forestry contributions to carbon reduction strategies.

| Current unit code and name | Revised unit code and name | Proposed changes |
|--|---|--|
| FWPFGM4209 Interpret and use aerial photographs for forest management | FWPFGM5XXX Interpret and use image data in forestry planning and management | <ul style="list-style-type: none"> Redeveloped unit describing the skills and knowledge required to select and interpret image data, including satellite images, aerial photographs, Lidar images and other remotely sensed or scanned data used in forestry planning and management. The unit covers accessing image data, querying and interpreting image data from different sources, collating image data and archiving image data. The unit requires the ability to use geographic information system (GIS) software to access, manipulate, archive, retrieve and validate image data |
| FWPFGM5219 Undertake carbon stock sampling of forests and plantations | FWPFGM5XXX Apply knowledge of forestry contributions to carbon reduction strategies | <ul style="list-style-type: none"> New Title reflecting shift in scope of units of competency Change to Application Statement reflecting shift in in scope of units of competency Deleted previous and replaced with significantly revised Elements and Associated Performance Criteria New description provided for Foundation Skills Performance Evidence redrafted to comply with Standards for Training Packages regarding the volume of evidence Significant changes to Knowledge Evidence to reflect shift in scope of units of competency |

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| | | <ul style="list-style-type: none"> Redrafted Assessment Conditions statement to comply with Standards for Training Packages |
| FWPFGM5201 Plan and manage an inventory program | FWPFGM5XXX Contribute to and implement a forest inventory program | <ul style="list-style-type: none"> Redesigned unit that includes content from FWPFGM5201 Plan and manage an inventory program and FWPFGM6203 Manage sustainable tree inventory |
| FWPFGM6203 Manage sustainable tree inventory | | |

Stakeholder management and innovation - revised units of competency

Eight existing units of competency have been reviewed and consolidated into three units with a focus on community engagement strategies and innovative thinking to support forestry best practice.

| Current unit code and name | Revised unit code and name | Proposed changes |
|--|---|--|
| FWPCOT5208 Build and maintain community relationships | FWPFGM5XXX Contribute to and implement a community engagement plan | <ul style="list-style-type: none"> Redesigned unit that includes content from FWPCOT5208 Build and maintain community relationships and FWPCOT6201 Manage community engagement |
| FWPCOT6201 Manage community engagement | | |
| FWPCOT5202 Manage forestry information and interpretations programs | FWPFGM5XXX Communicate forestry and forest science with stakeholders and the community | <ul style="list-style-type: none"> Redesigned unit that includes content from FWPCOT5202 Manage forestry information and interpretations programs and FWPFGM5217 Promote plantations as a sustainable form of land use |
| FWPFGM5217 Promote plantations as a sustainable form of land use | | |
| FWPCOT6208 Manage innovative thinking and practice in the forest and wood products industry | FWPFGM5XXX Apply innovative thinking to support forestry best practice | <ul style="list-style-type: none"> Redesigned unit that includes content from FWPCOT8101 Lead forest and wood products industry innovative thinking and practice, FWPCOT8102 Initiate and lead a forest and wood products industry innovation, FWPCOT6208 Manage innovative thinking and practice in the forest and wood products industry and FWPCOT6209 Manage forest and wood products industry research |
| FWPCOT6209 Manage forest and wood products industry research | | |
| FWPCOT8101 Lead forest and wood products industry innovative thinking and practice | | |
| FWPCOT8102 Initiate and lead a | | |

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| forest and wood products industry innovation | | |
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Other revised units of competency

The following unit of competency, not related to the forestry qualifications, has been reviewed and updated as part of this project. The application of this unit was broadened based on industry feedback to include other CNC controlled machines available in the frame and truss businesses. This update will support the unit delivery as part of the *Certificate III in Timber Frame or Truss Manufacture*.

| Current unit code and name | Revised unit code and name | Proposed changes |
|---|--|---|
| FWPCOT3234 Cut material with CNC sizing machines | FWPCOT3XXX Cut material with CNC sizing machines | <ul style="list-style-type: none"> Updated Performance Evidence to include other CNC controlled machines |

Units proposed for deletion

Seven units of competency are proposed for deletion due to no enrolments in these units during the last three years. Industry feedback also suggests that the work tasks covered by these units are not applicable or relevant to the occupations reflected in the Certificate IV and Diploma, i.e. early career foresters, managers and crew leaders/supervisors working in forestry businesses.

| Unit code and name | Link to the unit |
|---|----------------------------------|
| FWPCOT5203 Manage installation and commissioning of equipment | View unit here . |
| FWPCOT5204 Organise enterprise maintenance programs | View unit here . |
| FWPCOT6204 Use carbon accounting to estimate emissions | View unit here . |
| FWPCOT6205 Prepare an enterprise carbon management report | View unit here . |
| FWPFGM5212 Manage genetic resources | View unit here . |
| FWPFGM5215 Breed Trees | View unit here . |
| FWPFGM6201 Plan a biochar storage system for carbon capture and storage | View unit here . |

Please email to Georgiana Daian gdaian@forestworks.com.au if any of these units should be retained in the forest operations qualifications.