Forest and Wood Products Training Package

Companion Volume Implementation Guide

Release 1 (August 2015)

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Overview information

This Companion Volume Implementation Guide has been developed to assist trainers, assessors, Registered Training Organisations (RTOs) and industry representatives to deliver the Forest and Wood Products (FWP) Training Package. It provides advice about the structure and content of the training package, as well as an overview of its components, including: qualifications, skill sets, units of competency and assessment requirements.

Release 1.0 of the Forest and Wood Products (FWP) Training Package is the first component of work aligned and formatted to the new training package standards. It consists of five new forestry-focussed innovation units of competency, developed to build skills in creative and collaborative thinking and practice. The new units of competency have been incorporated into the revised innovation Skill Sets and Advanced Diploma.

The Innovation Skill Sets have been designed to support leaders, managers and workers in the forest and wood products industry to improve innovative thinking, practice and development.

The Advanced Diploma of Forest Industry Sustainability is targeted at workers in a technical role, such as a Production Forester or Production Manager, who are looking to move up into an executive level role. It is often undertaken by foresters with qualifications in higher education and three to five year’s experience in the field.

A suite of online resources has been developed in partnership with the Institute of Foresters of Australia, to support new units in the Advanced Diploma of Sustainability. They are available to download via the “Find a resource” section of the ForestWorks ISC website.

Version control and modification history

<table>
<thead>
<tr>
<th>Release</th>
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<th>Comments</th>
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<td>Primary release of Forest and Wood Products (FWP) Training Package. FWP replaces FPI11 Forest and Forest Products Training Package. Units of Competency have been written in active voice, fatigue and sustainability requirements have been embedded and assessment requirements have been strengthened. Advanced Diploma - 5 new units have replaced generic BSB innovation units. The new units outline industry-specific requirements for innovative thinking, collaboration, leadership, change management, research and project management All Advanced Diploma units of competency have been transitioned to the new standards format</td>
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Qualifications

<table>
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<tr>
<th>Qualification code</th>
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<td>FWP60116</td>
<td>Advanced Diploma of Forest Industry Sustainability</td>
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Units of competency

<table>
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<th>Unit code</th>
<th>Unit title</th>
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<tr>
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<td>Manage sustainability in the workplace</td>
</tr>
<tr>
<td>FWPCOR6202</td>
<td>Implement practices to maximise value from wood residues</td>
</tr>
<tr>
<td>FWPCOT4208</td>
<td>Implement workplace sustainability practices</td>
</tr>
<tr>
<td>FWPCOT5201</td>
<td>Implement sustainable forestry practices</td>
</tr>
<tr>
<td>FWPCOT5202</td>
<td>Manage forestry information and interpretations programs</td>
</tr>
<tr>
<td>FWPCOT5205</td>
<td>Develop biohazard contingency plans</td>
</tr>
<tr>
<td>FWPCOT5206</td>
<td>Implement forestry chain of custody certification system</td>
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<td>FWPCOT5207</td>
<td>Implement sustainability in the workplace</td>
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<tr>
<td>FWPCOT5208</td>
<td>Build and maintain community relationships</td>
</tr>
<tr>
<td>FWPCOT5209</td>
<td>Manage tree harvesting to minimise environmental impact</td>
</tr>
<tr>
<td>FWPCOT6201</td>
<td>Manage community engagement</td>
</tr>
<tr>
<td>FWPCOT6202</td>
<td>Develop and manage a forestry chain of custody certification process</td>
</tr>
<tr>
<td>FWPCOT6203</td>
<td>Develop engineered timber products to meet energy efficient building design needs</td>
</tr>
<tr>
<td>FWPCOT6204</td>
<td>Use carbon accounting to estimate emissions</td>
</tr>
<tr>
<td>FWPCOT6205</td>
<td>Prepare an enterprise carbon management report</td>
</tr>
<tr>
<td>FWPCOT6207</td>
<td>Develop forest management systems and processes</td>
</tr>
<tr>
<td>FWPCOT6208</td>
<td>Manage innovative thinking and practice in the forest and wood products industry</td>
</tr>
<tr>
<td>FWPCOT6209</td>
<td>Manage forest and wood products industry research</td>
</tr>
<tr>
<td>FWPCOT8101</td>
<td>Lead forest and wood products industry innovative thinking and practice</td>
</tr>
<tr>
<td>FWPCOT8102</td>
<td>Initiate and lead a forest and wood products industry innovation</td>
</tr>
<tr>
<td>FWPFGM5217</td>
<td>Promote plantations as a sustainable form of land use</td>
</tr>
<tr>
<td>FWPFGM5219</td>
<td>Undertake carbon stock sampling of forests and plantations</td>
</tr>
<tr>
<td>FWPFGM6201</td>
<td>Plan a bio-char storage system for carbon capture and storage</td>
</tr>
<tr>
<td>FWPFGM6203</td>
<td>Manage sustainable tree inventory</td>
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</table>
* FWP units of competency within the Forest and Wood Products Training Package have no prerequisite units.

**Imported units of competency**

Units of competency have been imported into the FWP Forest and Wood Products Training Package to provide greater flexibility, choice and transferability of skills within the industry.

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Unit Title</th>
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<tbody>
<tr>
<td>BSBAUD501</td>
<td>Initiate a quality audit</td>
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<td>BSBCMM402</td>
<td>Implement effective communication strategies</td>
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<td>BSBCRT402</td>
<td>Collaborate in a creative process</td>
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<td>BSBFIM501</td>
<td>Manage budgets and financial plans</td>
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<td>BSBINN501</td>
<td>Establish systems that support innovation</td>
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<td>BSBINN502</td>
<td>Build and sustain an innovative work environment</td>
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<td>BSBINN601</td>
<td>Lead and manage organisational change</td>
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<td>BSBMGT616</td>
<td>Develop and implement strategic plans</td>
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<td>BSBLDR803</td>
<td>Develop and cultivate collaborative partnerships and relationships</td>
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<td>BSBSUS501</td>
<td>Develop workplace policy and procedures for sustainability</td>
<td>BSB</td>
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<tr>
<td>BSBSUS501</td>
<td>Coordinate research and analysis</td>
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<td>ICTSUS804</td>
<td>Use ICT to improve sustainability outcomes</td>
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<td>Develop and manage sustainable environmental practices</td>
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<td>MSS015002A</td>
<td>Develop strategies for more sustainable use of resources</td>
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<td>MSS015003A</td>
<td>Analyse product lifecycle for sustainability</td>
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<td>Manage and lead inspection and monitoring programs</td>
<td>PSP12</td>
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<td>SIRXFIND004A</td>
<td>Manage financial resources</td>
<td>SIR07</td>
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<tr>
<td>SIRXQUA001A</td>
<td>Develop innovative ideas at work</td>
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<tr>
<td>TLI4006A</td>
<td>Collect, analyse and present workplace data and information</td>
<td>TLI10</td>
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* Import units of competency within the Forest and Wood Products Training Package have no prerequisite units.
## Skill sets

<table>
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<tr>
<th>Skill set code</th>
<th>Skill set title</th>
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<td>FWPSS00033</td>
<td>Skill set for forest and wood product innovation for leaders</td>
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<td>FWPSS00034</td>
<td>Skill set for forest and wood product innovation for managers</td>
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<tr>
<td>FWPSS00035</td>
<td>Skill set for supporting forest and wood products innovation</td>
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<td>FWPSS00036</td>
<td>Skill set for managing change in the forest and wood products industry</td>
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<tr>
<td>FWPSS00037</td>
<td>Skill set for forest and wood products industry stakeholder engagement</td>
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<tr>
<td>FWPSS00038</td>
<td>Skill set for supporting workplace engagement in the forest and wood products industry</td>
</tr>
<tr>
<td>FWPSS00039</td>
<td>Skill set for leading business development in the forest and wood products industry</td>
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<td>Skill set for managing business development in the forest and wood products industry</td>
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## Qualification mapping information

### Mapping of qualifications to the previous training package

<table>
<thead>
<tr>
<th>FWP</th>
<th>Relationship to FPI11 V2</th>
<th>Relation to the previous iteration of the training package</th>
<th>Equivalent/Not-equivalent</th>
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| FWP60116        | FPI6013 Advanced Diploma of Forest Industry Sustainability | • Reflects new standards policy, five new units of competency added  
                  |              | • All Advanced Diploma units of competency have been transitioned to the new standards format  
                  |              | • Imported units have been updated to the most current at time of publication | Equivalent |

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# Unit of competency mapping information

## Mapping of units to the previous training package

<table>
<thead>
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<td>FWPCOR6201 Manage sustainability in the workplace</td>
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<tr>
<td>FWPCOR6202 Implement practices to maximise value from wood residues</td>
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<tr>
<td>FWPCOT5202 Manage forestry information and interpretations programs</td>
<td>FPICOT5202B Manage forestry information and interpretations programs</td>
<td>Equivalent</td>
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<tr>
<td>FWPCOT5205 Develop biohazard contingency plans</td>
<td>FPICOT5205A Develop biohazard contingency plans</td>
<td>Equivalent</td>
</tr>
<tr>
<td>FWPCOT5206 Implement forestry chain of custody certification system</td>
<td>FPICOT5206B Implement forestry chain of custody certification system</td>
<td>Equivalent</td>
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<tr>
<td>FWPCOT5207 Implement sustainability in the workplace</td>
<td>FPICOT5207A Implement sustainability in the workplace</td>
<td>Equivalent</td>
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<td>FWPCOT5208 Build and maintain community relationships</td>
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<td>FWPCOT5209 Manage tree harvesting to minimise environmental impact</td>
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<td>FWPCOT6201 Manage community engagement</td>
<td>FPICOT6201B Manage community engagement</td>
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<td>FPICOT6203A Develop engineered timber products to meet energy efficient building design needs</td>
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<td>FPICOT6204A Use carbon accounting to estimate emissions in the workplace</td>
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<td>FWPCOT6205 Prepare an enterprise</td>
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<td>FWPCOT6207 Develop forest management systems and processes</td>
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<tr>
<td>FWPFGM6203 Manage sustainable tree inventory</td>
<td>FPIFGM6203 Manage sustainable tree inventory</td>
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Key work and training requirements in the industry

About the industry

The forest and wood products industry is critical to Australia’s sustainable and clean energy future. The industry is a low-carbon and carbon-storage leader, generating durable carbon storage through forest growing and management activities and wood and timber manufactured products.

The industry value chain includes the management of forests, forest reserves and parks through conservation and land management, forest growing and management for timber production, through to the manufacturing of a diverse range of wood-based products and the distribution channels to deliver and sell these products. Distribution channels are composed of retail and trade merchants on one side and wholesalers, manufacturers, importers and exporters on the other side. Traditional and non-traditional wood-based products include:

- Timber elements and structural systems (including cross-laminated timber, laminated veneer lumber, parallel strand lumber and laminated strand lumber)
- Wood chips
- Wood panels
- Indoor and outdoor wooden furniture
- Pulp and paper and packaging products
- Bio-fuels and bio-energy
- Wood-based compounds and composites (from the manufacturing of cellulose fibre, nano-crystalline cellulose and carbon fibres from lignin)

Traditional and non-traditional wood-based products can substitute emission-intensive building materials, such as steel and aluminium. Innovative use of wood fibre in bio-refineries can generate wood-based compounds and composites, as well as bio-energy. Wood-based products can also replace petroleum-based compounds in a variety of materials, processes and industries (automotive, aerospace, electronics, consumer products, and medical device and products), and can reduce the use of fossil fuel sources such as oil and gas.

Key work requirements

To thrive, enterprises need to be creative, develop strong leadership skills and effectively manage change. As such, key work requirements at a strategic management level include working innovatively, sustainability and with the community.

Working innovatively

Strategies for a culture of collaboration and innovation need to be driven by management. When workers learn new skills and improved ways of working, there is a direct impact on the productivity and development of the workplace.

Innovative coordination of planned harvesting with production schedules along the supply chain can produce significant efficiencies and cost savings. For example, the product range, timing and volume of value-adding processing can be significantly affected by elements of the tree harvesting plan, including available timber, equipment and resource requirements, environmental and...
seasonal weather factors, site preparation and landscape/habitat protection factors, labour and skill supply, and a plethora of operational issues.

Effective and efficient supply chain management by managers within and between enterprises will result from close collaboration around creative problem solving and idea generation. Improving productivity requires the opportunity to learn from expert insights and from those who have already been successful. It involves working together, participating in training and developing practical solutions to existing challenges.

**Working sustainably**

Sustainability is a far-reaching concept that can relate to numerous environmental, economic and social aspects of forestry operations. Strategies and initiatives that support sustainable work practices need to be championed and driven by management. A key work requirement for all managers along the value chain is to develop and implement practical initiatives for reducing, recycling or eliminating waste and chemicals; conserving energy, water and material use; and to promote sustainable work practices and policies within and external to the organisation. This includes legal and regulatory obligations, as well as communicating with local communities.

The Australian Forestry Standard Ltd (AFS), Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) schemes recognise sustainability in the industry. Certification gives customers confidence that they are supporting a sustainable forestry operation and good management practices. For certification, audit and quality purposes, a chain of custody certification system needs to be implemented. A register of documents can include timber source information, processing records, quality records, and details for numbering/labelling systems.

Sustainable forestry practices include the management of fire, weeds, soils and culturally significant landscapes, irrigation and watering strategies, and protection of native flora and fauna. Fungal, viral bacterial, insect and vertebrate biohazards are of particular threat to long term sustainability. The potential economic damage of a biohazard infestation may include the loss of forest value, current and future markets and damage to trading status. Forestry managers need to carry out risk assessments of the social, economic and environmental impacts of potential infestations as well as planning the use of infestation treatments and control methods such eradication, quarantine, fumigation, use of pesticides, biological controls and culling of infected plants.

Whether developing plans for forest growing and management, timber harvesting or timber product production, managers are increasingly required to implement policies, operational controls and monitoring and measurement programs that minimise our environmental footprint. An awareness of customer and community expectations ensures economic viability for the long term.

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1 The AFS oversees the operation of the Australian Forest Certification Scheme (AFCS), which is made up to two Australian Standards: the Australian Standard for Sustainable forest management and the Australian Standard for Chain of custody for certified wood and forest products. Both the FSC and PEFC are internationally recognised forest certification networks that provide for the mutual recognition of regional and national standards that meet their criteria for sustainable forest management.
Working with the community

The ability to engage and work with local community groups is essential to the success of a project or business. In fact, “people” represent a key pillar for long-term sustainable operations. Community groups are represented by a diverse range of stakeholders, across a range of ages, cultures, religions, education levels and politics. Promotion programs can help achieve community buy-in by communicating the benefit of tree plantations as alternative land use and the use of timber products as an environmentally friendly alternative. Community engagement provides information on a range of matters relating to plantation management, including the benefits and opportunities for the local community. This engagement is through community events, media and promotional activities, and through community participation. Genuine engagement strategies are all about building relationships, to establish trust.

Other key work requirements include the ability to connect with numerous individuals and organisations in the supply chain, work in regional areas, and to have practical knowledge of the forest and wood products industry.

Key training requirements

The key work requirements described above cannot be performed without the right skills mix. The forest and forest products industry focuses on a number of key training requirements.

Safety

Managers need to be well versed in a wide range of legislative, regulatory and licensing requirements, particularly in relation to Workplace Health and Safety (WHS). Timber growing, harvesting and haulage contracting, sawmill operations and timber products production all contain high risk activities.

Owners and managers are responsible for ensuring workers are aware of their WHS rights and obligations; that safe work procedures are developed, implemented and followed; that equipment is safe to use and that the work environment is safe. Managers, supervisors and WHS representatives require significant and ongoing training in carrying out risk assessments and, in the case of an incident, investigation, injury management and rehabilitation procedures. To minimise the risk of incidents, emphasis is placed on practical training such as site inductions, manual handling, hazard identification, Personal Protective Equipment (PPE) use, emergency and first aid procedures and equipment use. Fatigue and heat stress management is now recognised as a key safety imperative. Managers and supervisors are responsible for ensuring employees can recognise the causes and signs of fatigue and can take action to minimise its effects.

Forest operations and the production of wood products require the use of vehicles, heavy machinery and other equipment. Trees and logs can weigh many tonnes, and there is inherent risk in felling, handling and haulage activities. Safety training for haulage focusses on loading, unloading, load restraint and safe transport.

ForestWorks has developed several resources to support safe forestry operations, including a Log Haulage Manual, Tree Faller’s Manual and Chainsaw Operators Manual.

Regional training delivery
Forestry work is often based in specific geographic regions, such as the Green Triangle region of Victoria and South Australia, areas of Tasmania, the South West of Western Australia, far North Queensland and forest and plantations throughout New South Wales. Mills are often located close to the wood source to minimise costs and aid in production. The majority of training is undertaken by existing workers and is hands-on, utilising on-site materials, such as trees, logs and sawn timber, as well as resources, such as products, machines and human resources. Training therefore needs to occur on site, or at facilities convenient to the workplace. The high investment cost of machinery and equipment also means that, to be economically viable, some training needs to be workplace based.

**Just in time**

Whilst training is often spread thinly across states and regions, there is a consistent demand for skilled personnel, from operators through to senior management. Demand occurs at all times of the year, so it is important that training takes place not only where it is needed, but when it is needed. Public and private training providers often work with small groups of learners to fulfil a particular demand, such as chainsaw operation, sawdoctoring, or harvesting machinery operation.

**Regulation and licencing implications for implementation**

In several states licences are required for a range of operations. These are aimed at securing consistent operating standards for individuals in high risk activities such as tree felling, tree harvesting and haulage, with a focus on safety and the environment. Managers are required to ensure all operators are adequately licensed to operate tree felling and harvesting equipment, some of which includes, chainsaws, bulldozers and excavators, skid steer loaders, mobile chippers and splitters, and a range of trucks and vehicles.

The Forest Operator Assessment and Licensing scheme (FOLS) supports enterprises in our industry to work safely and efficiently. The system ensures that individual workers hold current qualifications, are trained to regulatory standards and are using the latest knowledge and work practices to ensure the highest level of safety and environmental outcomes.

In some States, there are regulations which require anyone engaged in timber harvesting to hold a Forest Operator Licence. For example a Tasmanian Forest Operator Licence is required for workers in the Tasmanian forest industry. In Victoria, FOLS has recently replaced the THOL system managed by DEPI.

Anyone engaged in timber harvesting should hold a Forest Operators Licence. Activities include:

<table>
<thead>
<tr>
<th>Skilled activity</th>
<th>Corresponding unit of competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chainsaw Operator</td>
<td>FPIHAR2207A - Trim and cut harvested trees</td>
</tr>
<tr>
<td>Faller Basic</td>
<td>FPIHAR2236 - Fall trees manually - basic</td>
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<tr>
<td>Faller Intermediate</td>
<td>FPIHAR3220 - Harvest trees manually - intermediate</td>
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<tr>
<td>Faller Advanced</td>
<td>FPIHAR3221 - Harvest trees manually - advanced</td>
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<tr>
<td>Machine Operator (Wheel Tractor)</td>
<td>RIIMP0315A - Conduct tractor operations</td>
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<tr>
<td>Machine Operator (Crawler Tractor)</td>
<td>FPIHAR3216A - Conduct forestry operations using a crawler tractor</td>
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<tr>
<td>Machine Operator (Skidder)</td>
<td>FPIHAR3217A - Conduct skidder operations</td>
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<tr>
<td>Machine Operator (Loader)</td>
<td>FPIHAR3218A - Conduct loader operations</td>
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<tr>
<td>---------------------------------</td>
<td>-----------------------------------------------------------</td>
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<tr>
<td>Machine Operator (Forwarder)</td>
<td>FPIHAR3206C - Conduct forwarder operations</td>
</tr>
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<td>Machine Operator (Mechanical</td>
<td>FPIHAR3210C - Conduct mechanical processor operations</td>
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<tr>
<td>Processor)</td>
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<td>Machine Operator (Excavator)</td>
<td>FPIHAR3219A - Conduct excavator operations with grabs</td>
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<td>Machine Operator (Feller Buncher)</td>
<td>FPIHAR3207C - Conduct feller buncher operations</td>
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<tr>
<td>Truck Driver</td>
<td>FPICOT3261 - Shift forestry logs using trucks</td>
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<tr>
<td>Tree Climber (Basic)</td>
<td>AHCARB204A - Undertake standard climbing techniques</td>
</tr>
<tr>
<td>Tree Climber (Advanced)</td>
<td>AHCARB307A - Undertake complex tree climbing</td>
</tr>
</tbody>
</table>

Where units of competency contain regulatory information or align to licensing, RTOs, trainers and assessors must be suitably qualified to deliver the training. This usually means that trainers and assessors must have the relevant vocational competencies, at least to the level being delivered or assessed, and can demonstrate current industry skills directly relevant to the training/assessment being undertaken.

Licensing/registration requirements for particular job functions described in Units of Competency vary significantly. There are variations between States and Territories, and also between individual workplaces, depending on the equipment and processes being used.

Organisations delivering training must determine the applicable licensing requirements associated with the equipment being used, and in the relevant States and Territories.

To assist this process, units of competency will contain one of the following statements:

In the case of no licensing requirements:

*No licensing, legislative, regulatory, or certification requirements apply to this unit at the time of publication.*

In cases where a licence, certification or other regulatory/legislative compliance is required:

*Licensing, legislative, regulatory or certification requirements apply to this unit in some states and territories at the time of publication, and may differ according to jurisdiction.*

For more information about licensing visit the ForestWorks website: www.forestworks.com.au/ltd or the Forest Operator Licensing System website: fols.forestworks.com.au
Implementation information

What is a training package?

Training packages specify the skills and knowledge required to perform effectively in the workplace. It is the trainers and supervisors who develop the learning strategies, which take into consideration learner needs, abilities and circumstances.

Training packages include nationally endorsed competency standards, assessment requirements and qualifications for a specific industry’s use.

Training packages also include skill sets, which are made up of a combination of units of competency that link to a licence or regulatory requirement, or a specific industry need. Skill sets are most useful when acquired to build upon a qualification.

Each training package:
- Provides a consistent set of criteria for performance on the job as well as performance knowledge and evidence requirements
- Enables national recognition of workplace competencies
- Supports work related learning and assessment

Compliance with the Australian Qualifications Framework (AQF)

Units of competency within the Forest and Wood Products (FWP) Training Package are aligned to levels within the Australian Qualifications Framework (AQF). The AQF provides a comprehensive, nationally consistent framework for all qualifications in Australia.

For a full explanation of the AQF, see the AQF Implementation Handbook:

AQF Qualifications Pathways Policy

In line with requirements of the AQF Pathways Policy, all qualifications within the Forest and Wood Products (FWP) Training Package can be achieved by a variety of pathways and delivery methods, either on-the-job or through a combination of on and off-the-job training and recognition processes. The AQF Qualifications Pathways Policy builds into the Australian Qualifications Framework’s capacity to genuinely support students’ lifelong learning. It is Australia’s national policy on qualifications pathways.

The purpose of the policy is to maximise the credit that students can gain for learning already undertaken. It aims to:
- Enhance student progression into and between AQF qualifications
- Recognise the multiple pathways that students take to gain AQF qualifications and that learning can be formal, non-formal or informal
- Support the development of pathways in qualifications design

Entry requirements are the knowledge, skills or experience required to enter a qualification. They may be expressed as units of competency or vocational experience or a combination of both and must be demonstrated prior to commencing the qualification.

The qualification in the Forest and Wood Products (FWP) Training Package is only available at AQF level 6. This qualification is able to support strong industry leadership and change management skills as well as entry to other vocational pathways. The qualification in the Forest and Wood Products (FWP) Training Package is not intended as a mandatory preparation for a vocational pathway but as an enabling mechanism. It is suited primarily for workers engaged by the industry and undertaking a relevant job role.

Entry into higher education qualifications may be gained through progression from a lower level FPI qualification or recognition of existing industry experience or qualifications. This is particularly relevant with respect to Forestry Management programs offered by Melbourne University, Southern Cross University and the Australian National University.

This qualification provides a reciprocal pathway from VET into higher education and from higher education into VET. An example of a pathway from higher education to VET would be a technical forester, holding a university qualification, gaining leadership and sustainability skills through the Advanced Diploma of Forest Industry Sustainability qualification.

The following chart details the multiple pathways students can take to progress into and between qualifications.

Pathways chart
Industry sectors and occupational outcomes of qualification

The forest and wood products industry is characterised by a mix of small, medium and large enterprises. Some enterprises show a high degree of vertical integration, being involved in activities across the six industry sectors. The industry sectors are:

1. Forest Growing and Management
2. Harvesting and Haulage
3. Sawmilling and Processing
4. Wood Panel and Board Production
5. Timber Manufactured Products
6. Timber Merchandising

The units of competency, skill sets and qualification in the Forest and Wood Products (FWP) Training Package cover a diverse range of work activities within the industry. Job roles include: Community Liaison Officer; Designer (Manufacturing and Engineered Wood Products); Environmental Manager; Environmental Planner; Forest/Timber Harvester; Forest Auditor (e.g. certification provider); Forest Planner; Forest Sustainability Manager; Forestry Manager; General Manager; Plantation Manager; Sustainability Manager; Technical Forester; Technical Services Officer; Technical Services Manager; and Value Recovery Officer.

The table over the page illustrates the different occupational outcomes of qualifications in the industry and the pathways for progression. Generally, Certificate I and II are used for the induction to the industry; Certificate III is used to skill up operators in each sector; Certificate IV is for supervisors; and the Diploma and Advanced Diploma are for managers and leaders across the industry. However, the skills covered by the Advanced Diploma also form part of other broader job roles, at a strategic level within the industry.

Typically, higher educated foresters with experience in the field would undertake the Advanced Diploma to gain skills in leadership and current sustainability initiatives.
### Industry sectors and occupational outcomes of qualifications

<table>
<thead>
<tr>
<th>AQF Level</th>
<th>Forest Growing and Management</th>
<th>Harvesting and Haulage</th>
<th>Sawmilling and Processing</th>
<th>Wood Panel and Board Production</th>
<th>Timber Manufactured Products</th>
<th>Timber Merchandising</th>
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<td>I</td>
<td>Arboriculture Worker</td>
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<td>Kiln Worker</td>
<td>Production Worker (Laminates)</td>
<td>Grader</td>
<td>Customer Service / Sales Assistant (Retail or Wholesale)</td>
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<td>Farm Forestry Worker</td>
<td>Chainsaw Operator</td>
<td>Chipper Operator</td>
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<td>Forest Harvester</td>
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<td>Timber Manufacturing Products</td>
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<td>Forestry Supervisor</td>
<td>Propagation and Stand Health Supervisor</td>
<td>Production Supervisor</td>
<td>Timber Advisor Supervisor</td>
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<td>Value Recovery Officer</td>
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</tbody>
</table>

Companion Volume Release 1.0
Endorsed and non-endorsed components

Training packages consist of Australian Government endorsed components and non-endorsed quality assured Companion Volume Implementation Guides.

The endorsed components include the following:

- Units of competency
- Assessment requirements (associated with each unit of competency)
- Qualifications
- Credit arrangements

The endorsed components of training packages can be found on the national register http://training.gov.au.


Explanation of any mandatory entry requirements for qualifications

There are no mandatory entry requirements for the Forest and Wood Products (FWP) Training Package qualification. Entry requirements have been removed unless there is evidence of a mandatory industry requirement for one job role to be held before commencing another. This is to ensure that qualifications stand alone and that they promote equitable access and progression for learners.

The majority of training in the forestry industry is undertaken in conjunction with an existing workplace role. It involves competency based training with the aim for the learner to be able to do specified tasks to a specified standard. Work skills can be formally recognised, no matter whether they are gained through training or through direct work activity.

Credit arrangements

Entry into higher education qualifications may be gained through progression from a lower level FPI qualification or recognition of existing industry experience or qualifications. This is particularly relevant with respect to Forestry Management programs offered by Melbourne University, Southern Cross University and the Australian National University.

Although no national credit arrangements exist, FWP60116 Advanced Diploma of Forest Industry Sustainability provides a reciprocal pathway from VET into higher education and from higher education into VET. An example of a pathway from higher education to VET would be a technical forester, holding a university qualification, gaining leadership and sustainability skills through the Advanced Diploma of Forest Industry Sustainability qualification.
Access and equity considerations

Equity is about ensuring that all people and all groups of people are able to participate, to have the opportunity to reach their potential, make choices and receive responsive and appropriate products and services. In other words, the destination for all learners is the same but the journey may be different.

Good vocational education, training and assessment includes making adjustments to what is done to meet the learning and assessment needs of individuals. An open mind, common sense and tailoring training and assessment to individual circumstances should ensure individuals achieve the standards employers and RTOs expect.

The design of training packages allows every individual to have access to the assessment process so there are no barriers for learners.

An adjustment is any measure or action that a learner requires because of their disability, which has the effect of assisting the learner to access and participate in education and training on the same basis as learners without a disability. A reasonable adjustment achieves this purpose while taking into account factors such as the nature of the learner’s disability, the views of the learner, the potential effect of the adjustment on the learner and others, and the costs and benefits of making the adjustment.

Reasonable adjustments need only be that – reasonable. It is about identifying what adjustments might reasonably be made and how they may be put into place.

Assessment processes and techniques should be modified for distance-based learners, be culturally appropriate and suitable to the communication skill level, language, literacy and numeracy capacity of the candidate and the work being performed.

Where applicable, physical resources should include equipment modified for people with specific needs as well as assistance to support their participation in the assessment process.

Access and equity adjustments must align with industry’s realistic requirements to undertake the job role.
Foundation skills

Foundation skills describe the language, literacy, numeracy and employment skills that are essential to performance in the workplace.

Foundation skills are now identified explicitly in units of competency to assist trainers in supporting learners to achieve successful outcomes. Foundation skills that are not explicitly described in the performance criteria are listed in the ‘foundation skills’ section of the unit of competency.

The Australian Core Skills Framework (ACSF) can be used wherever performance in the five core skills of learning, reading, writing, oral communication and numeracy is described or discussed. Information about the ACSF can be found on the Department of Industry and Science website: www.industry.gov.au/skills/AssistanceForTrainersAndPractitioners/AustralianCoreSkillsFramework

ForestWorks ISC has mapped the ACSF benchmarks for the five core skills to qualifications and units of competency within the Forest and Wood Products (FWP) Training Package. The summaries are available the ForestWorks ISC website, along with a range of other resources, developed to assist trainers with foundation skill development: www.forestworks.com.au/skills-standards/resources/find-a-resource

Advice on any workplace health and safety implications in the industry

Safety is a major driver for industry training. The area of greatest concern in the forest and wood products industry relates mainly to activities within the forest growing and management and harvesting and haulage sectors, due to the high use of machinery and the nature of the environment. Within all six industry sectors, the following areas are of high risk or compliance:

- Manual tree falling
- Loading and unloading log trucks
- Load restraints
- Stacking timber
- Cable logging
- Fatigue management
- Manual handling
- Forklift in motion/transporting goods
- Chemical hazards
- Other chainsaw or pole saw activities
- Slips, trips, falls

Workplace health and safety requirements need to be in line with applicable Commonwealth, State or Territory legislation and regulations, and organisational safety policies and procedures, which may include:

- Personal protective equipment and clothing
- Safety equipment
- First aid equipment
- Fire fighting equipment
- Hazard and risk control
- Fatigue management
- Elimination of hazardous materials and substances
- Safe forest practices, including required actions relating to forest fire
- Manual handling including shifting, lifting and carrying

Throughout Australia the regulations for workplace health and safety may differ slightly from state to state. A regulating body exists in each state and territory to enforce the local occupational health and safety laws. For further information about workplace health and safety laws and regulations in your local area, please see the corresponding website:

NSW - http://www.workcover.nsw.gov.au

Resource and equipment list

The resources and equipment required for a unit of competency are listed in the assessment requirements of individual units of competency.

Equipment should be made available to the student by the RTO delivering the training. All equipment must meet Australian standards for safety and be well maintained.

Learning resources are available for certain units of competency within the Advanced Diploma of Forest Industry Sustainability. For further information about resources available, please see the ForestWorks website:

Legal considerations for learners in the workplace/on placements

The majority of training in the industry is undertaken by workers once they are employed. As a consequence, the legal considerations of these learners is covered by their employment contract. In the harvesting and haulage sector, sub-contractors may have a contract arrangement in place with the forestry owner and need to be aware of their legal obligations as sub-contractors.
Links

**Innovation hub**

**ForestWorks ISC website**

**ForestWorks website**

**Training.gov.au**
training.gov.au/Home

**ForestWorks resources**

**Forest Operator Licensing System website**
folis.forestworks.com.au
ForestWorks’ activities are assisted by funding provided by the Commonwealth Government through the Department of Education and Training.