



**Australian Government**

# **FWPFOM5011 Assist with calculating costs and production targets for forestry operations**

**Release: 1**

## FWPFOM5011 Assist with calculating costs and production targets for forestry operations

### Modification History

| Release   | Comments                                                                          |
|-----------|-----------------------------------------------------------------------------------|
| Release 1 | This version released with Forest and Wood Products Training Package Version 7.0. |

### Application

This unit of competency describes the skills and knowledge required to source information and calculate costs and production targets for forestry operations.

The unit applies to individuals who undertake forester or forestry field officer job roles in the forest industry.

All work must be carried out to comply with workplace procedures according to state/territory health and safety regulations, legislation and standards that apply to the workplace.

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

### Pre-requisite Unit

Nil

### Unit Sector

Forest Operations Management (FOM)

### Elements and Performance Criteria

| Elements                                                                      | Performance Criteria                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>                              | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                   |
| 1. Prepare to calculate costs and production targets for a forestry operation | 1.1 Determine production requirements of forestry operations in terms of quantity, quality, timelines and delivery of product<br>1.2 Assess production site, labour cost and availability, equipment requirements and other factors that may impact production<br>1.3 Assess logistic support contracts, supply agreements or equivalent |

| Elements                                           | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>   | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                    | <p>that may impact production</p> <p>1.4 Assess legislative, regulatory and environmental requirements that may impact production</p> <p>1.5 Convert information gathered on forestry operation to usable form, and stored ready for retrieval and application according to workplace information management procedures</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2. Set production targets for a forestry operation | <p>2.1 Identify factors affecting production output of forestry operation</p> <p>2.2 Estimate time requirements for forestry operation, including lead times, according to workplace procedures</p> <p>2.3 Set production targets for a forestry operation according to workplace procedures</p> <p>2.4 Determine the impact of operational variables on proposed production targets according to workplace procedures</p> <p>2.5 Liaise with and seek support from senior personnel during preparation of draft production targets, as required</p> <p>2.6 Document draft production targets according to workplace procedures</p> <p>2.7 Verify draft production targets with appropriate personnel as required</p> <p>2.8 Document and store details of production targets for future reference according to workplace procedures</p> |
| 3. Calculate the cost of a forestry operation      | <p>3.1 Estimate labour, equipment and material requirements for proposed forestry operation</p> <p>3.2 Calculate total labour, equipment and material costs, including contingency, according to workplace procedures</p> <p>3.3 Identify components contributing to overhead costs</p> <p>3.4 Determine and calculate overhead costs to be attributed to forestry operation in accordance with workplace procedures</p> <p>3.5 Calculate total cost of forestry operation, including overheads, margins and allowance for profit, according to workplace procedures</p> <p>3.6 Apply procedures to calculate unit/daily rate from element costing according to workplace procedures</p> <p>3.7 Document details of costs according to workplace procedures</p> <p>3.8 Verify costs, calculations and other details with appropriate</p> |

| Elements                                                     | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>             | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                         |
|                                                              | personnel as required<br>3.9 Document and store details of cost of forestry operation for future reference enterprise information management procedures                                                                                                                                                                                                                                                                                                        |
| 4. Apply the contract costing method to a forestry operation | 4.1 Calculate costs of forestry operations using the contract method<br>4.2 Compare the costs of forestry operations using this method with the unit cost model<br>4.3 Identify and report on implications of applying the contract cost model for a forestry operation                                                                                                                                                                                        |
| 5. Compare calculations with actual cost and production data | 5.1 Review calculated costs and production targets for forestry operation<br>5.2 Collate data on actual costs and production and compare with calculations<br>5.3 Identify and account for discrepancies between calculations and actual costs and production data<br>5.4 Report on comparison of calculations and actual costs and production data to appropriate personnel, noting potential implications for future setting of costs and production targets |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.*

| Skill              | Description                                                                                                                                                                                |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading            | <ul style="list-style-type: none"> <li>Interpret complex written, technical information in source documents related to the costs and production targets for forestry operations</li> </ul> |
| Writing            | <ul style="list-style-type: none"> <li>Design, develop and revise strategic documents appropriate to audience and context</li> </ul>                                                       |
| Oral communication | <ul style="list-style-type: none"> <li>Use active listening and questioning techniques to convey and clarify information</li> </ul>                                                        |
| Numeracy           | <ul style="list-style-type: none"> <li>Calculate costs of forestry operations and compare actual and predicted costs</li> </ul>                                                            |

## Unit Mapping Information

| Code and title<br>current version                                                       | Code and title<br>previous version | Comments                                                                                                          | Equivalence status |
|-----------------------------------------------------------------------------------------|------------------------------------|-------------------------------------------------------------------------------------------------------------------|--------------------|
| FWPFOM5011 Assist with calculating costs and production targets for forestry operations | Not applicable                     | The unit has been created to address a skill or task required by industry that is not covered by an existing unit | Newly created      |

## Links

Companion Volumes, including Implementation Guides, are available at VETNet: -  
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

## Assessment Requirements for FWPFOM5011 Assist with calculating costs and production targets for forestry operations

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### Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has calculated the costs and set production targets for one forestry operation.

In undertaking this activity, the individual has:

- gathered and collated information required to calculate costs and set production targets for one forestry operation
- set production targets for the forestry operation and identified operational variables that may impact on the achievement of set targets
- identified fixed and variable costs of the forestry operation
- identified and assessed the impact of using different costing methods
- determined the total estimated cost of the forestry operation
- prepared written reports on the actual and estimated cost and production of the forestry operation.

### Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- factors affecting production output of forestry operations:
  - site access and conditions
  - weather conditions
  - tree characteristics
  - environmental protection measures
  - equipment
  - labour
  - communications
- procedures for setting production targets for forestry operations

- operational variables that may impact on production targets
- components of labour costs
- overhead costs:
  - office and administration costs
  - business insurance
  - fees and charges
  - training costs
  - capital equipment
  - machinery
  - personnel transport
- contract cost method as applied to forestry operations
- fixed and variable costs of a forestry operation
- costing procedures for a forestry operation
- mathematical formulae and processes relevant to costing a forestry operation
- workplace approach to overhead costs, margins and allowances for profit
- workplace procedures for calculating unit/daily rate
- workplace information management processes, including storage requirements.

## Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:
  - skills must be demonstrated in a forest work environment or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - computing hardware and software required for costing and setting production targets for forestry operations
  - data required for costing and setting production targets for forestry operations
- specifications:
  - workplace policies and procedures regarding costing and setting production targets for forestry operations
  - access to workplace environmental policies and procedures applicable to forestry operations.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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