



Australian Government

FWPSIL4001 Plan for and coordinate forest site preparation operations

Release: 1

FWPSIL4001 Plan for and coordinate forest site preparation operations

Modification History

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

Application

This unit of competency describes the skills and knowledge required to plan for and coordinate forest site preparation activities to create favourable growing areas for seedlings and good germination spots for seeds.

The unit applies to individuals involved in planning and supervising site preparation activities as part of forestry operations.

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

Silviculture (SIL)

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 for site preparation	1.1 Confirm site location and site preparation requirements according to site preparation plan 1.2 Confirm local authority coverage, forest establishment boundaries

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	and forest design plan 1.3 Confirm site environmental protection measures to minimise detrimental or excessive soil disturbance and other adverse environmental impacts 1.4 Confirm fire prevention measures to minimise risk of fire in ground vegetation and logging debris 1.5 Review site characteristics and confirm site preparation methods and equipment to be used according to site preparation plan 1.6 Schedule personnel, site preparation activities, materials and equipment 1.7 Determine cost of site preparation operations
2. Coordinate site preparation	2.1 Direct personnel undertaking site preparation activities 2.2 Schedule implementation of site preparation activities according to site preparation plan 2.3 Review and adjust planned site preparation activities, taking into account actual site conditions 2.4 Select treatment pattern, taking into account time restraints, site characteristics, planter access and aspect according to site preparation plan 2.5 Communicate with forestry management company personnel and operational staff, including fire management personnel, to ensure that work is coordinated effectively on site 2.6 Coordinate implementation of fire prevention and control measures according to workplace procedures
3. Monitor site preparation	3.1 Coordinate implementation of sampling techniques to monitor site preparation operations according to workplace procedures and contract requirements 3.2 Communicate with operational staff to collect and collate data from sample plots 3.3 Review data from sample plots and coordinate remedial action as required 3.4 Report on site preparation operations to appropriate personnel

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	Interpret familiar and detailed organisational policies and procedures and complex documents such as forest site preparation plans
Writing	Produce detailed reports on the outcomes of forest site preparation activities
Oral communication	Ask open and closed questions and use active listening techniques to gather information related to forest establishment activities
Numeracy	Use mathematical skills to estimate and calculate costs associated with site preparation operations

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
FWPSIL4001 Plan for and coordinate forest site preparation operations	FWPFGM2202 Prepare seedbed	New title Updated Application Statement Updated Elements and added new Performance Criteria Updated and added new Knowledge Evidence and Performance Evidence Updated Foundation Skills Updated Assessment Conditions	Not equivalent

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 FWPSIL4001 Plan for and coordinate forest site preparation 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 planned, coordinated and monitored one site preparation operation in one of the following types of forested areas:

- native forest
- plantation.

In undertaking this activity, the individual has:

- reviewed the site preparation plan and confirmed the site location, preparation requirements, local authority coverage, forest establishment boundaries, forest design plan, fire prevention and site environmental protection measures
- confirmed site characteristics, site preparation methods and personnel, equipment and materials requirements
- determined the cost of site preparation operations
- coordinated and monitored site preparation activities
- reviewed sampling data and reported on site preparation operations according to workplace procedures.

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:

- soil profile:
 - vegetation
 - humus
 - mineral soil
- purpose of site preparation:
 - quick development of the root system (good establishment)
 - high survival

- good growth
- ways in which site preparation improves growing conditions:
 - temperature in root zone increased
 - available oxygen in soil increased
 - risk of frost damage decreased
 - moisture problems can be overcome
 - competing vegetation reduced
 - nutrient availability increased
 - risk of insect attack decreased
 - planting can be easier
- consequences of use of incorrect site preparation methods
- environmental impact of site preparation:
 - soil compaction and displacement
 - sedimentation of waterways
 - habitat loss
- characteristics of sites not suitable for mechanised site preparation:
 - dry nutrient-poor soils
 - naturally regenerated sites
 - small wet pockets
- procedure for site preparation planning, including determination of cost of site preparation operations
- equipment and site preparation methods:
 - mounding
 - scaling
 - scarification
 - disc trenching
 - shearing
 - piling
 - bedding
 - ploughing
 - raking
 - ripping
 - drum chopping
 - disking
 - scalping
 - mulching
- criteria for choosing site preparation method
- methods for matching the site preparation method to the actual site, taking into account:
 - soil texture
 - slash and obstacles

- humus layer
- slope
- treatment patterns:
 - concentric pattern
 - back and forth pattern
- monitoring site preparation:
 - sampling methods used for different soil preparation methods
 - remediation treatments.

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:
 - a site preparation plan
 - a section of native forest or plantation where site preparation operations are to be implemented
 - required equipment and materials for planned site preparation operations
 - personnel to undertake forest site preparation operations
- specifications:
 - workplace health, safety and environmental policies and procedures applicable to forestry operations
 - workplace policies and procedures relevant to forest site preparation activities.

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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