



Australian Government

FWPHAR5201 Design harvesting plans

Release: 1

FWPHAR5201 Design harvesting plans

Modification History

Release	Comment
1	Replaces equivalent unit FPIHAR5201B Design harvesting plans, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format.

Application

This unit of competency describes the outcomes required to design forest or farm forest harvesting plans for established coupes to maximise output and cost efficiencies across multiple coupes in a number of locations.

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

Pre-requisite Unit

Nil

Unit Sector

Harvesting and Haulage

Forest Growing and Management

Elements and Performance Criteria

<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.</i>
1. Prepare for coupe harvest design	1.1 Analyse workplace health and safety (WHS), environmental and regulatory requirements for the design and operation of harvest activities. 1.2 Determine coupe locations using map and grid references and establish boundaries. 1.3 Identify local authority coverage, approved land use zonings and

	apply for additional approvals. 1.4 Obtain land ownings. 1.5 Analyse and consider ramifications of environmental issues documented in previous harvesting plans.
2. Design harvesting plans	2.1 Analyse and record topography, forest types and available species. 2.2 Calculate gross area of each coupe and determine nett area to be harvested. 2.3 Calculate and record volume estimates for each coupe. 2.4 Analyse and calculate harvesting and cartage requirements. 2.5 Assess environmental conditions and plan site preparation, access and operational activities. 2.6 Produce, check and communicate written harvesting plans in line with organisational formats and procedures.
3. Review harvesting plans	3.1 Review harvesting plans with other harvest plan designers. 3.2 Test and modify harvesting plans to suit each coupe. 3.3 Record and report final harvesting plans to appropriate personnel.

Foundation Skills

This section describes those core and employment skills that are essential to performance and are not explicit in the performance criteria.

Learning skills to:	collaborate with and consider feedback and advice from other harvest plan designers.
Numeracy skills to:	- identify grid measurements on maps to determine coupe locations and calculate boundaries - interpret topographical maps to identify slope and elevation of site - complete calculations involving gross and nett spatial areas, volumes of extraction and weight for cartage.
Oral communication skills to:	- clearly represent harvest plans to other harvest plan designers - ask questions and actively listen to: - engage in a collaborative process with other harvest plan designers to generate and refine ideas - seek feedback on proposed plan inclusions.
Reading skills to:	- interpret: - regulatory and environmental information affecting harvest

	plans • local authority zoning and approval documents • topographic maps.
Writing skills to:	• complete detailed approval applications • document detailed and accurate harvesting plans.
Initiative and enterprise skills to:	• initiate and determine the most time and cost effective plan for harvesting.
Planning and organising skills to:	• plan and organise collection of all required information and manage own timing and productivity to complete plans within deadlines
Problem-solving skills to:	• identify environmental and operational issues during planning and make appropriate modifications to plans.
Self-management skills to:	• self-manage completion of harvesting plans from inception through to documenting final plans.
Teamwork skills to:	• work as part of a team to develop plans and provide feedback and advice to other harvest plan designers
Technology skills to:	• use computers and software programs for documenting harvest plans.

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Range of Conditions

Not Applicable

Unit Mapping Information

FPIHAR5201B Design harvesting plans

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47>

Assessment Requirements for FWPHAR5201 Design harvesting plans

Modification History

Release	Comment
1	Replaces equivalent unit FPIHAR5201B Design harvesting plans, which was first released with FPI11 Forest and Forest Products Training Package Version 2.2. This is the first release of this unit in the new standards format. Assessment requirements now specify the performance and knowledge evidence, as well as assessment conditions for this unit of competency. These sections simplify and replace components used in the previous unit format, including Required Skills and Knowledge, Evidence Guide and Range Statement.

Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. If a specific volume or frequency is not stated below, then evidence must be provided that the following requirements have been performed on at least one occasion:

- design and produce harvesting plans for coupes
- participate in the review and modification of harvesting plans produced by other harvest plan designers.
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Knowledge Evidence

A person competent in this unit must be able to demonstrate knowledge of:

- content and application of applicable commonwealth, state, territory or local government regulations and codes of practice relevant to harvest operations
- principles of harvest planning and contents of plans
- land use zoning and land owning approval processes
- harvesting and extraction methods
- key features of operational issues for harvesting coupes:
 - site preparation
 - operation of landings and snig tracks
 - cartage operations
 - environmental hazards and protection practices:

- minimising temporary, short-term, long-term and permanent damage to natural vegetation and landscape
- soil and water protection
- safe disposal of waste material
- cleaning of plant, tools and equipment
- workplace health and safety hazards, risks and control measures
- fire protection requirements
- wet weather operations and restrictions
- organisational standards, policies and procedures for the design and operation of harvest activities:
 - workplace health and safety for harvesting operations
 - environmental protection
 - documenting harvesting plans
 - communication reporting lines for plan content.
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Assessment Conditions

The following resources must be made available:

- computers and software programs used for documenting harvesting plans
- applicable commonwealth, state, territory or local government regulations and codes of practice relevant to harvest operations
- topographic maps for the site
- information on land use zonings and application forms
- template harvesting plans
- organisational standards, policies and procedures for the design and operation of harvest activities
- a team of harvest plan designers with whom the individual can interact.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting.

Assessor requirements

Assessors must:

- hold the appropriate assessor competency standards as outlined in regulations; and
- be able to demonstrate vocational competencies at least to the level being assessed; and
- be able to demonstrate how they are continuing to develop their VET knowledge and skills as well as maintaining their industry currency and assessor competence.
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