



Australian Government

AHCLPW410 Produce maps for land management purposes

Release: 1

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Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to access geographical information and incorporate it into maps for use in land management.

The unit applies to individuals whose job role includes preparing maps by hand or by using geographical information systems (GIS) for land management purposes, and applying specialist skills to provide solutions to technical and unpredictable problems. They work autonomously, instruct, and monitor the work of others within a team. They use discretion and judgment in the selection, allocation and use of available resources.

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

Pre-requisite Unit

Nil

Unit Sector

Lands, Parks and Wildlife (LPW)

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. Obtain information for a specific land management purpose	1.1 Define information required from data sets 1.2 Collect and record information from stakeholders consistent with local area management strategy 1.3 Collect temporal and spatial data 1.4 Review information for relevance and accuracy

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
2. Assess data availability	2.1 Ascertain availability of data sets 2.2 Establish intellectual property ownership of data and access requirements 2.3 Obtain data in accordance with industry standards, statutory requirements and enterprise policy 2.4 Develop procedures to capture data
3. Assess data quality	3.1 Assess data for integrity and suitability for task 3.2 Investigate and resolve disparities between data sets
4. Format and present data	4.1 Identify compatible formats for data 4.2 Assemble data elements according to proposed map purpose 4.3 Select data formats to meet user's requirements 4.4 Present information using suitable media 4.5 Present information according to workplace requirements and Australian Standards
5. Incorporate data onto maps	5.1 Use computer applications to manipulate data onto maps 5.2 Produce draft maps showing spatial and temporal data according to land management strategy 5.3 Review and edit maps to ensure accuracy 5.4 Develop a key to identify map elements according to purpose 5.5 Analyse map for data required in land management planning
6. Review stakeholder satisfaction	6.1 Seek feedback on suitability for purpose from stakeholders 6.2 Review and modify map to resolve concerns raised in feedback

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
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Skill	Description
Reading	Critically interpret and analyse complex data and information for integration into map of a specific design
Writing	Use technology to produce, edit and proofread maps to ensure accuracy, clarity of meaning and consistency of information
Numeracy	Extract and manipulate mathematical information from data sets to produce accurate maps for scale and distances

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCLPW410 Produce maps for land management purposes	AHCLPW404 Produce maps for land management purposes	Updated Application Minor edits to Performance Criteria for clarity and brevity Updated Performance Evidence, Knowledge Evidence and Assessment Conditions	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCLPW410 Produce maps for land management purposes

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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 produced at least one map, for any three of the following land management purposes:

- land use map
- vegetation or fauna survey map
- walking trail
- cultural heritage site map
- fishing or fishing exclusion map or chart
- land or sea navigation map or chart
- fire trail or fire management map
- other map specified by workplace.

There must be evidence that the individual has:

- sourced data sets that provide the required information, ensuring data complies with intellectual property (IP) and copyright legislation
- validated data for currency and compared to ground observations
- presented data according to workplace requirements
- incorporated data onto a map
- used computer software for drafting and editing maps and checking and managing data according to workplace standards
- provided a map key and any supporting information required
- reviewed and assessed maps suitability for purpose and value with stakeholders.

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:

- types of mapping and mapping styles for use in land management and production systems

- sources of information and data sets required for map development:
 - spatial data
 - temporal data
 - internally generated data
 - external data sets and IP and copyright
 - access and restrictions
- equipment used for obtaining and checking mapping data, including:
 - cameras, scanners and drones for capturing digital images
 - basic survey equipment for checking direction and distances
 - global positioning systems (GPS)
 - computers for accessing satellite and other data sets
- land management processes relevant to map being prepared
- mapping principles and conventions, including:
 - layout
 - keys and legends
 - scale
 - media
 - printing and presentation styles
- use of software and hardware, including:
 - GPS
 - geographic information systems (GIS)
 - computer-aided design (CAD)
 - desktop publishing
 - desktop mapping
 - multimedia and graphic animation
 - plotters and printers
- assessing and evaluating processes for map and map design, including:
 - soliciting feedback from stakeholders
 - analysing and integrating feedback in map editing.

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 land management environment or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - digital technology with mapping and data access software
 - basic survey equipment for verifying mapping data

- specifications:
 - workplace policies, procedures, processes for mapping tasks
 - workplace specifications for mapping requirements
 - specific standards for map making.

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

Links

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