



Australian Government

AHCSAW202 Recognise landforms and soil types

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 recognise commonly encountered landforms and soil, their origins and human and natural influences on their degradation.

The unit applies to individuals who work under general supervision and exercise limited autonomy with some accountability for their own work. They undertake defined activities and work in a structured context.

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

Pre-requisite Unit

Nil

Unit Sector

Soil and Water Conservation (SAW)

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 landform and soil survey	1.1 Identify sources of expertise and references for assisting in landform and soil recognition 1.2 Prepare resources and equipment required for landform and soil survey 1.3 Identify hazards and report to supervisor for controls to implement during field survey work

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Follow workplace procedure for landform and soil field survey
2. Identify regional geology	2.1 Identify geological land forms and associated rock types for a local region 2.2 Conduct geological field tests to identify broad rock types and their characteristics 2.3 Recognise historical geological events that created landforms and soils in a local region
3. Recognise specified landforms and soils	3.1 Carry out a visual inspection of landforms and soil on specified site 3.2 Recognise and name outcropping rocks and parent materials by their identifiable characteristics 3.3 Conduct basic field tests to assist in recognising soil types 3.4 Recognise the association between soil type and local geology 3.5 Record description of landforms and soil for a specified site 3.6 Seek expert advice and consult references to confirm recognition of landform and soil type
4. Recognise and record degrading influences on landforms and soil	4.1 Identify natural and human activity that impacts on identified landforms and soil 4.2 Identify degrading processes associated with natural and human activity on specified site 4.3 Recognise impact of current land use of site on landforms and soil 4.4 Record degrading impact from current and projected future activity on landforms and soil according to workplace procedures

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 reference materials to identify characteristics and assist in the recognition of landforms, rock types and soils

Skill	Description
Oral Communication	Use clear language, vocabulary, tone and pace appropriate for the audience to discuss and confirm recognition of soils and landforms with experts

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCSAW202 Recognise landforms and soil types	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=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCSAW202 Recognise landforms and soil types

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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 performed landform and soil surveys on at least two sites with distinctly different landforms and soil conditions, and has recognised the landforms and basic soil type on each site.

There must also be evidence that the individual has:

- implemented safe work procedures relating to landform and soil field survey
- prepared for landform and soil recognition activities
- selected sampling and testing equipment and materials and:
 - conducted basic field tests on rock samples to assist recognition
 - conducted basic field tests on soil samples to assist recognition
- operated sampling and testing equipment according to safe work practices and manufacturer instructions
- recognised the processes affecting the formation and degradation of common landforms and soil types
- recorded results of landform and soil recognition activity according to supervisor instruction and workplace procedures
- cleaned and stored tools and equipment 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:

- main geological crustal processes and influences in a region
- main rock types, formation, common mineral content and characteristics for identification, including:
 - sedimentary
 - volcanic

- metamorphic
- field tests to assist in identifying rock types
- main soil types, common mineral content, soil characteristics and basic tests used for identification
- weathering, change and degrading processes relating to landforms and soil from both natural and human causes
- sampling and testing equipment
- landforms common to different geological regions, and the processes for their formation
- basic soil survey techniques and the equipment required
- records required for documenting results for rocks, landforms and soils
- sources of expertise and reference materials required for landforms and soil recognition.

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 the field on at least two sites with different landforms and soil types, or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - sampling and testing equipment
 - personal protective equipment
 - access to expertise and reference materials to assist in recognition of soils and landforms
- specifications:
 - workplace instructions and procedures for sampling rocks and soils
 - manufacturer operating instructions for equipment
- relationships:
 - supervisor.

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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