



Australian Government

Department of Education, Employment and Workplace Relations

AHCNAR506A Develop and implement sustainable land use strategies

Release: 1

AHCNAR506A Develop and implement sustainable land use strategies

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers developing and implementing sustainable land use strategies and defines the standard required to: assess the threats to sustainability for an area or region; manage water resources and riparian zones; manage vegetation and plant succession for an area; manage the health and sustainability of soils; incorporate sustainability principles into land use practices.
------------------------	---

Application of the Unit

Application of the unit	This unit applies to managers of agricultural and production horticulture enterprises whose job role includes developing land use strategies that lead to improved ecological sustainability of land under production.
--------------------------------	--

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
-----------------------------	--

Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Assess requirements for improved land use	<p>1.1. The natural resource base of the area is audited and threats to sustainability identified.</p> <p>1.2. The organisation's production and management plans are reviewed to incorporate sustainable land use principles.</p> <p>1.3. Water quality and impacts of run off are assessed for risk of erosion.</p> <p>1.4. Soil health and fertility is assessed according to the requirements of the organisations production and management plans.</p> <p>1.5. Vegetation types and coverage is assessed and required changes identified.</p> <p>1.6. Land protection measures and structures are planned and prioritised to address threats to sustainability.</p>
2. Carry out structural improvements to address threats to sustainability	<p>2.1. Sites are inspected and measured, key features noted, and pegs or markers are placed as appropriate for structural improvements if required.</p> <p>2.2. Occupational Health and Safety (OHS) hazards are identified, risks assessed and risk controls are implemented, monitored and reviewed.</p> <p>2.3. Materials required for the construction of the improvement(s) are calculated from the plans, observations and discussions with colleagues.</p> <p>2.4. Materials, personnel and equipment are obtained and organised to be on site at the appropriate times.</p> <p>2.5. Equipment to be used is checked and calibrated, if necessary, prior to commencement.</p> <p>2.6. Structural works are constructed and the area is revegetated and secured from livestock if required.</p>
3. Integrate sustainable land use principles into production	<p>3.1. Fences or boundaries are realigned to land classes and soil conservation works.</p> <p>3.2. Contour banks are protected and repaired as necessary.</p> <p>3.3. Water carrying structures are constructed or repaired as necessary.</p> <p>3.4. Tree, other vegetation and shelter belts are established for crop and stock protection.</p> <p>3.5. Soil cultivation and planting practices are reviewed and amended to prevent erosion and minimise soil run-off.</p> <p>3.6. Grazing strategies are planned to maximise ground cover and avoid damage through foot tracks or</p>

ELEMENT	PERFORMANCE CRITERIA
	damage to banks.
4. Treat areas of land degradation	4.1. Fences or boundaries are realigned to land classes and soil conservation works. 4.2. Contour banks are protected and repaired as necessary. 4.3. Water carrying structures are constructed or repaired as necessary. 4.4. Tree, other vegetation and shelter belts are established for crop and stock protection. 4.5. Soil cultivation and planting practices are reviewed and amended to prevent erosion and minimise soil run-off.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- handle and manoeuvre equipment
- assess soil health and stability in a landscape
- assess vegetative cover in a landscape
- assess water resources and threats to water quality or soil erosion
- incorporate principles of sustainability into land use planning
- read and interpret manufacturers specifications, work and maintenance plans, and Materials Safety Data Sheets (MSDSs)
- use literacy skills to fulfil job roles as required by the organisation. The level of skill may range from reading and understanding documentation to completion of written reports
- use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views
- use numeracy skills to estimate, calculate and record complex workplace measures
- use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- the role of biodiversity in farming systems

REQUIRED SKILLS AND KNOWLEDGE

- sustainable land and water use principles and practices applicable in the region
- sustainable soil management
- soil appraisal and remediation strategies
- environmental controls and codes of practice applicable to the business and to the improvement works
- the whole farm plan
- relevant legislation and regulations relating to soil and water degradation issues and chemical use, building construction
- relevant OHS and environmental protection legislation, regulations and codes of practice
- causes of land degradation.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	<p>The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following:</p> <ul style="list-style-type: none"> • assess the threats to sustainability for an area or region • manage water resources and riparian zones • manage vegetation and plant succession for an area • manage the health and sustainability of soils • incorporate sustainability principles into land use practices.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Causes of land degradation may include:	<ul style="list-style-type: none"> • rising water tables • wind eroded areas • saline areas • weed infestations • unstable soils • poorly drained areas • shelter requirements.

Unit Sector(s)

Unit sector	Natural area restoration
--------------------	--------------------------

Co-requisite units

Co-requisite units		

Competency field

Competency field	
-------------------------	--