Modification history

|  |  |
| --- | --- |
| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 5.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCNAR506 | Develop and implement sustainable land use strategies |
| --- | --- |
| Application | This unit of competency describes the skills and knowledge required to develop and implement sustainable land use strategies that lead to improved ecological sustainability of land under production.  The unit applies to individuals who manage agricultural and production horticulture enterprises and who analyse information and exercise judgement to complete a range of advanced skilled activities demonstrating a deep knowledge in land management practices. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems.  No licensing, legislative or certification requirements are known to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Natural Area Restoration (NAR) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Assess requirements for improved land use | 1.1 Audit sites natural resources and identify threats to sustainability  1.2 Review the production and management plans for sustainable land use principles  1.3 Assess water resources, quality and impact on erosion  1.4 Assess soil health and fertility against production plan requirements  1.5 Assess vegetation types and coverage and identify required changes  1.6 Plan and prioritise land and water protection measures and structures |
| 2. Carry out structural improvements to address threats to sustainability | 2.1 Follow work health and safety policies and procedures in field work  2.2 Inspect site, record key features and indicate on the site where improvements are required  2.3 Determine materials for the construction from the plans  2.4 Obtain and organise materials, personnel and equipment  2.5 Select and check equipment for safe and environmentally sustainable operation  2.6 Construct structural works, revegetate area and secure area from livestock |
| 3. Treat areas of land degradation | 3.1 Assess land classes and align fences and soil conservation works consistent with class  3.2 Protect and maintain contour banks  3.3 Construct and maintain water carrying structures  3.4 Establish shelter belts for crop and stock protection  3.5 Review and amend soil cultivation and planting practices to prevent erosion  3.6 Plan grazing strategies to avoid localised soil degradation  3.7 Ensure works and plans comply with environmental protection legislation, regulations and codes of practice |

| 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 | * Organise, assess and critique data and information from production plans, management plans, maps, images, legislation and regulations for incorporation into designing land use strategies |

|  |  |  |  |
| --- | --- | --- | --- |
| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCNAR506 Develop and implement sustainable land use strategies  Release 2 | AHCNAR506 Develop and implement sustainable land use strategies  Release 1 | Changes made to Application and Performance Criteria for clarity  Updated Performance Evidence, Knowledge Evidence and Assessment Conditions | Equivalent unit |

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

| TITLE | Assessment requirements for AHCNAR506 Develop and implement sustainable land use strategies |
| --- | --- |
| 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 developed at least 5 sustainable land use strategies for a specified land use and has implemented the strategies over the period of X months. The land use strategies must be directed for any one of the following land uses:   * extractive industry * primary production crops or forestry * primary production live stock * infrastructure and utilities * conservation * public land and recreation   There must also be evidence that the individual has:   * identified the threats to sustainable practices for the specified land use area * managed water resources and impact on riparian zones * managed vegetation and plant succession * managed the health and sustainability of soils * embedded the principles and practices of health, safety and biosecurity legislative requirements into land use strategies. | |

| 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:   * the role of biodiversity in farming systems, including: * importance of biodiversity farming systems * terrestrial plants and basic plant community structures * subsurface water and plant communities and impact on saline environments * methods for preserving biodiversity * sustainable land and water use principles and practices, including: * advantages and limitations * environmental sustainability as a 'whole-system' approach * recognition and management of land classes * sustainable soil management, including: * causes of land degradation * soil type and geology and impact for land use and access * grazing strategies to reduce surface cover on pastures and embankments * soil appraisal and remediation strategies * causes of erosion and erosion control strategies * production practices and soil management * environmental controls and codes of practice applicable to the business and to the improvement works, including: * water use and water catchments * sources and damage of pollutants * waste minimisation and sustainable disposal * natural and human threats to sustainable land use * interactions between production systems and natural areas * legislation and regulations for soil and water degradation, chemical use and structural works * work health and safety and environmental protection legislation, regulations and codes of practice including biosecurity. |

| Assessment Conditions |
| --- |
| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated in the field as specified in the Performance Evidence * resources, equipment and materials: * equipment, machinery, plants and consumables required to implementing the specified land use strategies * specifications: * use of workplace policies and procedures for preparing strategies * access to legislation and regulations relevant to land use and biosecurity   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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