Modification history

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| 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. |

| AHCNAR503 | Design a natural area restoration project |
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| Application | This unit of competency describes the skills and knowledge required to prepare a design brief design with a client, investigate and assess a natural area site and develop a design for a restoration project.  The unit applies to individuals who work in conservation and land management and who analyse information and exercise judgement to complete a range of skilled design and development activities, demonstrating a deep knowledge in technical areas within land management. They have accountability for the work of others and analyse, design and communicate solutions to 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 |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Develop a natural area restoration project design brief | 1.1 Consult with client to establish purpose, scope and budget of design  1.2 Develop and confirm ecological objectives for project  1.3 Develop design brief and agree on extent of project  1.4 Prepare project budget with the client  1.5 Obtain or prepare a site base plan  1.6 Review existing site data and information before site visit |
| 2. Undertake a site analysis | 2.1 Inspect project site in preparation for design work  2.2 Quantify and indicate on base plan, elements and features required by the design brief  2.3 Record biophysical components of the site in base plan and site report  2.4 Assess legal requirements and constraints on restoration work  2.5 Assess and record limiting factors for natural regeneration  2.6 Determine options for passive and active interventions  2.7 Assess and record information as specified in the design brief |
| 3. Develop a concept design for the natural area restoration project | 3.1 Discuss options and approaches to achieve ecological aims and goals with client  3.2 Prepare concept design illustrating location and layout of project  3.3 Present concept design with supporting documentation for the proposed actions |
| 4. Produce a final design for the natural area restoration project | 4.1 Draft a detailed plan according to design brief and concept design  4.2 Develop specifications for materials required  4.3 Specify standard and responsibilities of labour contracted for works  4.4 Apply construction and engineering principles to design work  4.5 Complete design documentation according to design brief and 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. | |
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| Skill | Description |
| Reading | * Organise, assess and critique data and information including legislation and regulations for incorporation in design |
| Writing | * Select appropriate conventions and stylistic devices to express precise meaning in design briefs and supporting design documents |
| Oral communication | * Establish and maintain complex and effective communications when negotiating and agreeing on design brief and options for design |
| Numeracy | * Use highly-developed numeracy skills to interpret financial information and costs, and perform calculations to translate estimates of operational costs and budget development for inclusion in natural area restoration designs |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCNAR503 Design a natural area restoration project  Release 2 | AHCNAR503 Design a natural area restoration project  Release 1 | Changes to Application, Performance Criteria for clarity  Updated Performance Evidence, Knowledge Evidence and Assessment Conditions | Equivalent unit |

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| 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 AHCNAR503 Design a natural area restoration project |
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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 on at least one occasion designed a natural area restoration project according to client brief and workplace and legislative requirements.  There must also be evidence that the individual has:   * established project scope including: * purpose * scope * extent * costs * benefits * conducted an onsite analysis and assessment * prepared a base plan incorporating the following: * landforms * soil types * fauna and habitat * flora * presence of threats * determined options for natural area restoration and incorporated into a concept design * negotiated the design brief and agreement on options and final design with client * produced a final design with supporting documentation, including: * costings * annotated plans and drawings * specifications * quality and standards of materials * labour requirements * responsibilities of the contractor * use professional graphic formats to present concept design. | |

| Knowledge Evidence |
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| 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:   * design process * construction principles and practices including graphical presentation and drafting techniques * recognition of plant species and a range of ecological communities * biophysical components of site, including: * atmosphere - climatic conditions * hydrosphere conditions - water, rain * lithosphere - geology, soils * biosphere - flora, fauna, * natural regeneration potential and limitations * ecological restoration principles and techniques * developing and managing budgets * calculations of materials, labour, machinery and equipment * environmental implications of restoration works * legislative requirements for natural area restoration works. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * skills must be demonstrated on a natural area requiring restoration or an environment that accurately represents workplace conditions * resources, equipment and materials: * computers for research and development of plans and documents * specifications: * use of workplace policies and procedures for design development and documentation * access to legislation, regulations and codes of practice for revegetation works * relationships: * client   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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