Modification history

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

| AHCSOL504 | Develop and manage a plan to reclaim land affected by salinity |
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| Application | This unit of competency describes the skills and knowledge required to review the saline area, manage water use and movement, protect and manage natural areas, implement a strategy to reduce salinity and document a long term plan to reclaim land affected by salinity.  The unit applies to individuals who apply specialist skills and knowledge to the development and management of a plan to reclaim land affected by salinity, and take personal responsibility and exercise autonomy in undertaking complex work. They analyse and synthesise information and analyse, design and communicate solutions to sometimes complex problems.  All work must be carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, and sustainability and biosecurity practices.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Soils and media (SOL) |

| 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. Review the saline area to increase productivity | 1.1 Map the property and determine the type and severity of the salinity  1.2 Select, fit and use safety and personal protective equipment applicable to the task being undertaken  1.3 Install fencing to subdivide classes of land and salt affected areas for appropriate management of each area  1.4 Assess area for water logging, determine cause and recommend strategies to divert water or drain water from the area  1.5 Review and select suitable plant and pasture species and management options available to reclaim saline area  1.6 Calculate cost and beneficial returns of reclaiming the area including financial, environmental and social benefits  1.7 Outline reclaimed area management to protect it at vulnerable times of the year and certain times in the plant reproduction cycle |
| 2. Manage water use and movement | 2.1 Install fencing to protect the watercourses through the property  2.2 Test and modify salinity and pH of the water entering and leaving the property  2.3 Calculate water use and establish targets to reduce the quantity by improving irrigation methods and general management practices |
| 3. Protect and manage natural areas | 3.1 Plan a strategy to protect the natural area from increased salinity and other stresses  3.2 Develop strategies to increase biodiversity  3.3 Plan to manage soil structure and fertility to improve soil biota  3.4 Identify and document review indicators |
| 4. Implement a strategy to reduce salinity in the area and document the plan | 4.1 Communicate with adjacent property landowners, relevant authorities and community groups to reduce extent and cause of local saline areas by monitoring quality and quantity of water  4.2 Monitor and review productivity against current innovations and salinity management techniques  4.3 Document long term plan to reclaim land affected by salinity |

| 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 | * Research current innovations and salinity management techniques |
| Writing | * Develop and document a long term plan to reclaim land affected by salinity |
| Oral communication | * Initiate discussions with landowners, relevant authorities and community groups using clear language to discuss reducing salinity by monitoring water quality and quantity |
| Numeracy | * Calculate financial, environmental and social benefit cost and beneficial returns of reclaiming the area * Calculate water use and establish targets |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCSOL504 Develop and manage a plan to reclaim land affected by salinity  Release 2 | AHCSOL504 Develop and manage a plan to reclaim land affected by salinity  Release 1 | Performance criteria clarified  Foundation skills added  Assessment requirements updated | 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 AHCSOL504 Develop and manage a plan to reclaim land affected by salinity |
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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 developed and managed a plan to reclaim land affected by salinity on at least one occasion and has:   * assessed land forms and soil types * determined categories of saline land * taken soil and water samples for testing * calculated optimum stocking rate * identified salinity indicator plant species * assessed the level of degradation and damage through salinity * managed the crop and animal selected for the farm to utilise the saline area * calculated the costs of the project * calculated benefits of salinity reduction to the property * communicated with adjacent property landowners, relevant authorities and community groups * researched the latest innovations and salinity management techniques * documented a long term plan to reclaim land affected by salinity. | |

| 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:   * principles and practices for reclaiming land affected by salinity, including: * salt tolerant plant and pasture species and the management of each * range of methods for reclaiming saline land * strategies to profit from the saline area * value of using natural species and natural systems to improve farm production * benefits of biodiversity on plant production and the animal enterprise * strategic and responsible use of susceptible land * consequences of poor management or removal of vegetation on the land. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a workplace setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * principles and practices for reclaiming land affected by salinity * fencing tools and equipment * water sampling and testing tools and equipment * safety and personal protective equipment applicable to reclaiming land affected by salinity * industry publications and internet sources of information relevant to researching the latest innovations and salinity management techniques * relationships: * adjacent property landowners, relevant authorities and community groups * timeframes: * according to job requirements.   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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