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 X.0 |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0 |

| AHCPER3X2 | Use characteristics of plant resilience in a permaculture system |
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| Application | This unit of competency describes the skills and knowledge required to use the characteristics of plant resilience in a permaculture system, including controlling resilient plant species and plants deemed weeds through the process of succession and harvesting in a permaculture system.  The unit applies to individuals who take responsibility for their own work and for the quality of the work of others. They use discretion and judgement in the selection, allocation and use of available resources.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Permaculture (PER) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Conduct observations of resilient plants for a permaculture site | 1.1 Identify resilient plant species and record in field notes for permaculture site  1.2 Assess scope and size of resilient plant populations  1.3 Investigate soil characteristics, water availability and terrain of site  1.4 Investigate history of land use and management strategies of site  1.5 Observe biological processes attributed to resilient plant species  1.6 Record identities and observations in field notes |
| 2. Assess the implications of resilient plants in permaculture system | 2.1 Identify beneficial characteristics of resilient plants for a permaculture system  2.2 Determine plant species and population density of resilient plants according to permaculture management plan  2.3 Determine plant population levels at which resilient plant would be deemed a weed  2.4 Obtain professional advice to support determinations |
| 3. Plan the implementation of permaculture resilient plant management | 3.1 Identify control measures for resilient plants and weeds in a permaculture system  3.2 Select, check and prepare tools and equipment required for maintaining resilient plants and weeds  3.3 Select, use and maintain safety equipment and personal protective equipment (PPE) |
| 4. Implement the permaculture resilient plant management plan | 4.1 Coordinate and schedule work team and control animals according to permaculture system management plan  4.2 Implement permaculture plant and weed management  4.3 Use by-products of plant and weed management according to permaculture system plan  4.4 Maintain records of resilient plant management activity according to workplace procedures |
| 5. Monitor the permaculture resilient plant management plan | 5.1 Monitor progress of permaculture resilient plants and weeds  5.2 Identify unintended effects to permaculture system from management activity  5.3 Assess effectiveness of the permaculture resilient plant and weed management plan  5.4 Adjust resilient plant and weeds management plan to meet permaculture system objectives |

| 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 |
| Writing | * Accurately records information and documents outcomes on the management of resilient plants using industry specific language and organisational formatting and protocols |
| Oral communication | * Clearly explains detailed information on work requirements and standards to work team using appropriate language, tone and pace to ensure understanding and compliance |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCPER3X2 Use characteristics of plant resilience in a permaculture system | AHCPER306 Use weedy plants in a permaculture system | Change to title for clarity  Changes to Application, Elements and Performance Criteria for clarity  Changed sequence of Performance Criteria to better reflect process | Equivalent |

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

| TITLE | Assessment requirements for AHCPER3X2 Use characteristics of plant resilience in a permaculture system |
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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:   * investigated and recorded field notes of resilient plants, weeds and conditions for a permaculture site, which must include: * plant name * scope and size of populations * soil characteristics, * water availability * terrain * historical land use and management * associated biological processes * identified characteristics and uses of resilient plants in a permaculture system, including the benefits for: * permaculture system * potential for produce * environment * determined acceptable population density of resilient plants and levels at which resilient plant would be deemed a weed * identified control methods used to control resilient plants and weeds * implemented a permaculture resilient plants and weed management plan * used by-products, waste materials and debris according to permaculture system plan * monitored and updated resilient plants and weed management plan for a permaculture system. | |

| 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:   * permaculture principles and practices in relation to the management of resilient plants and weeds plants * plant recognition * strategies used in managing resilient plants and weeds, including: * organic chemical, biological and cultural control methods and treatments * range and use of tools, equipment and machinery * animal systems used to manage resilient plants and weeds * plants and planting strategies to out-compete resilient plants or weeds * site observations, monitoring and analysis techniques * role that resilient plants and weeds play in an ecological system, including: * soil stabilisers * fodder for wild and domestic animals * nutrient traps * nutrient mining from subsoil * hosts for beneficial and pest insects * identification of a range of edible weeds * uses for resilient plants and weeds including commercial uses, including: * animal fodder * basket making * compost teas * food and medicinal products. * workplace health and safety practices * records used in field observations and reporting. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a permaculture system or an environment that accurately represents workplace conditions * resources, equipment and materials: * use of tools and equipment * use of personal protective equipment * specifications: * use of workplace procedures and processes * use of manufacturer operating instructions for equipment * access to safety data sheets * access to permaculture principles * access to permaculture system plan * relationships: * work team   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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