



Australian Government

AHCPER204 Check and operate permaculture water systems

Release: 1

AHCPER204 Check and operate permaculture water systems

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to check and operate permaculture water systems.

All work is carried out to comply with workplace procedures.

This unit applies to individuals who work under general supervision and exercise limited autonomy with some accountability for their own work. They undertake defined activities and work in a structured context.

No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.

Pre-requisite Unit

Nil.

Unit Sector

Permaculture (PER)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare for working with permaculture water systems	1.1 Discuss work requirements with supervisor and seek clarification where necessary 1.2 Assess requirements for water and natural water flows 1.3 Conduct checks on tools and equipment to be used 1.4 Prepare materials required for water systems work
2. Set up water systems equipment	2.1 Handle water systems equipment 2.2 Position water systems equipment

Element	Performance criteria
	2.3 Check pumps, bores and other water delivery mechanisms and report any issues 2.4 Position and secure water control devices
3. Carry out water systems operations	3.1 Operate water systems as required 3.2 Check required head and water levels are achieved and maintained in active systems to ensure sufficient water flow 3.3 Monitor progress of water flow in passive systems 3.4 Carry out water system changes and record 3.5 Shift water system equipment
4. Clean and store water system equipment	4.1 Clean equipment and prepare for storage 4.2 Load equipment for transport 4.3 Store equipment

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

New unit - equivalent to QLD842WAT04B.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCPER204 Check and operate permaculture water systems

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Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- prepare to set up a permaculture water system
- set up water systems
- monitor water flows
- place system components in a way that gives most effect and greatest yield
- inspect earthworks for passive water catchment, storage and movement

Knowledge Evidence

The candidate must demonstrate knowledge of:

- permaculture principles and practices in relation to water systems
- behaviour of water in the natural environment
- reading natural water flows
- operation of permaculture water systems, such as:
 - irrigation systems
 - water collection and storage containers (tanks, dams)
 - recycling
 - waste-water systems
 - water conservation approaches
 - swales
 - contour banks
 - mulch pit and path systems
 - dams
 - chinampas
 - free-flowing water (streams, rivers)

- aquaculture systems
- aquaponics systems
- productive water bodies (lakes, the sea)
- earthworks for passive water catchment, storage and yield
- components of a water system and their cleaning and storage requirements
- water conservation and management principles and practices including working with passive systems, swales, terraces, dams and other earthworks
- passive harvesting, movement and nutrient adding systems including appropriate earthworks
- biological filtering of water into and out of a permaculture water system

Assessment Conditions

Assessors must satisfy current standards for RTOs. Assessors must also hold a nationally accredited Certificate III (or higher) in Permaculture to assess this unit of competency and/or have completed a Permaculture Design Course (PDC) and/or have completed the Permaculture Demonstrator Skill Set.

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