

Title	Demonstrate and apply knowledge of water conservation and use in a horticulture operation		
Level	4	Credits	5

Purpose	People credited with this unit standard are able to demonstrate and apply knowledge of water conservation and use in a horticulture operation.
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Classification	Horticulture > Production Horticulture
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Available grade	Achieved
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Guidance Information

- 1 Legislation and regulations relevant to this unit standard include but are not limited to:
 - Health and Safety at Work Act 2015;
 - Local regional and territorial authority regulations requirements; and any subsequent amendments.
- 2 Definitions

Workplace procedures refer to verbal or written instructions to staff on procedures for the worksite and equipment. *Workplace procedures* must comply with health and safety legislation and be consistent with the workplace health and safety plan.

Outcomes and performance criteria

Outcome 1

Demonstrate and apply knowledge of water conservation and use in a horticulture operation.

Performance criteria

- 1.1 Describe water conservation methods used in the horticulture sector in terms of improving water availability for plant production.

Range methods may include but are not limited to – closed system, storage, water placement, irrigation technology, water meters, rainwater harvesting, dams, cover crops, cultivation techniques, soil organic matter, crop rotation, mulches; evidence of five methods is required.

- 1.2 Describe environmental risks associated with the misuse of water in terms of water resources.
- Range risks include are not limited to – evapotranspiration, plant micro-climates, surface or ground water resources.
- 1.3 Describe local authority guidelines in terms of water conservation and/or use for plant production.
- Range evidence of two guidelines is required.
- 1.4 Describe activities involved with irrigation management in terms of improving irrigation efficiency.
- Range activities include but are not limited to – routine maintenance, flushing lines, filter cleaning.
- 1.5 Estimate plant water requirements for a horticulture crop in accordance with workplace procedures.
- 1.6 Apply techniques to measure water availability in the soil, growing media or plant tissue in accordance with workplace procedures.
- Range evidence of one technique is required.
- 1.7 Record water events for a horticulture crop in accordance with workplace procedures.
- Range evidence of rainfall and/or irrigation is required.
- 1.8 Identify opportunities to improve water conservation and/or use in a horticulture operation in accordance with workplace procedures.
- Range evidence of two opportunities is required.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 January 2022	N/A

Consent and Moderation Requirements (CMR) reference	0052
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Muka Tangata - People, Food and Fibre Workforce Development Council qualifications@mukatangata.nz if you wish to suggest changes to the content of this unit standard.