Title	Determine irrigation system requirements for a commercial enterprise		
Level	4	Credits	10

Purpose	People credited with this unit standard are able to: describe the Resource Management Act and the implications for sustainable use of water for irrigation; describe soil, crop and climate characteristics and their impacts on an irrigation system; prepare a design brief for an irrigation system.

Classification	Water Industry > Irrigation

Available grade	Achieved
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#### **Guidance Information**

- 1 Legislation and the policy statement relevant to this unit standard include but are not limited to:
  - Building Act 2004;
  - Health and Safety at Work Act 2015;
  - Resource Management Act 1991;
  - National Policy Statement for Freshwater Management 2014; and any subsequent amendments.
- 2 For the purposes of assessment:
  - evidence for this unit standard must be collected from two separate commercial irrigation systems;
  - the irrigation system performance assessment is for an agricultural or horticultural property, sports turf, or public ground; and
  - evidence for all outcomes must be presented in accordance with New Zealand Piped Irrigation System Performance Assessment Code of Practice; New Zealand Piped Irrigation Systems Design Code of Practice; New Zealand Water Measurement Code of Practice; and Irrigation New Zealand Technical Glossary; available from the Irrigation New Zealand website, <a href="http://irrigationnz.co.nz/">http://irrigationnz.co.nz/</a>.

# Outcomes and performance criteria

## Outcome 1

Describe the Resource Management Act and its implications for sustainable use of water for irrigation.

#### Performance criteria

- 1.1 Describe the impacts of the Resource Management Act on irrigation systems.
- 1.2 Describe the consenting requirements and the impacts on irrigation systems.

## Outcome 2

Describe soil, crop and climate characteristics and their impacts on an irrigation system.

#### Performance criteria

- 2.1 Describe the impacts of soil characteristics and profile soil types on an irrigation site.
- 2.2 Describe the implications of climate and weather features on an irrigation site.
- 2.3 Describe the implications of crop features on an irrigation system.
- 2.4 Describe how the characteristics of soil, crop, and climate impact on one another and in relation to an irrigation system.

#### **Outcome 3**

Prepare a design brief for an irrigation system.

## Performance criteria

- 3.1 Collect site-specific information and identify implications and limitations for an irrigation system.
- 3.2 Calculate key performance indicators for the design brief for an irrigation system.
- 3.3 Compile a design brief that will determine irrigation system requirements.

Planned review date	31 December 2024
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	20 August 2015	31 December 2022
Review	2	27 February 2020	N/A

Consent and Moderation Requirements (CMR) reference	0179
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This CMR can be accessed at http://www.nzga.govt.nz/framework/search/index.do.

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# Comments on this unit standard

Please contact the Primary Industry Training Organisation <u>standards@primaryito.ac.nz</u> if you wish to suggest changes to the content of this unit standard.