

# 1XXXXX Carry out an irrigation system performance assessment

<b>Kaupae   Level</b>	4
<b>Whiwhinga   Credit</b>	15
<b>Whāinga   Purpose</b>	<p>This skill standard is for people who work in the irrigation industry.</p> <p>People credited with this skill standard will be able to carry out an on-site irrigation system performance assessment. It ensures ākonga/learners have the necessary skills and knowledge to perform these tasks effectively.</p> <p>The skill standard has been developed to align with the New Zealand Certificate in Irrigation System Performance Assessment. [Ref: 2555]</p>

## Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako   Learning outcomes	Paearu aromatawai   Assessment criteria
1. Carry out pre-start checks.	a. Identify and inspect key components of the system prior to operation looking at condition, functionality and safety readiness.
	b. Confirm system is ready to operate, people are briefed on roles, and test conditions are still suitable.
	c. Carry out documentation of pre-start checks
2. Carry out the system performance assessment.	a. Set up measuring equipment in accordance with approved methods.
	b. Measure system parameters using approved methods.
3. Record data and observations from assessment.	a. Record data received from carrying out the assessment.
	b. Note any observations relevant to the assessment that may affect performance.

## Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

### Assessment specifications:

Ākonga/learners must be assessed using naturally occurring evidence.

Activities can be assessed against existing, new or modified irrigation system.

The irrigation system is for an agricultural or horticultural property, sports turf surface, landscape, golf course, or public grounds. *All activities* and evidence must meet the requirements of accepted industry practice, worksite safety procedures, and any subsequent amendments to legislation.

Providers must give due consideration to embedding ngā kaupapa (principles) o Te Tiriti o Waitangi when designing delivery activities relevant to this standard. These principles are outlined in [Guidelines for Providers: Embedding Tirohanga Māori](#).

Providers must give due consideration to the needs and values of Pacific peoples and other cultural groups when designing delivery activities relevant to this standard, ensuring practices are inclusive and equitable.

### *Range*

*Evidence* for practical component must be collected from two separate commercial irrigation systems.

*Evidence* for all outcomes must be presented in accordance with; the relevant New Zealand codes of practice and any subsequent amendments; available from the Irrigation New Zealand website, <http://irrigationnz.co.nz/>.

### *Definition*

*Accepted industry practice* refers to codes of practice and standardised procedures adopted by the irrigation industries as standards for best practice.

*System Performance Assessment* is the process of evaluating how effectively a system functions in relation to its intended purpose, objectives, and performance criteria.

## **Ngā momo whiwhinga | Grades available**

Achieved

## **Ihirangi waitohu | Indicative content**

### **Carry out an on-site irrigation system performance assessment**

- Conducting pre-start checks on system condition, functionality, and safety readiness. For example:
  - Take water meter readings
  - Take power meter readings
  - Check headworks components and layout as prescribed
  - Assess filter condition and record contaminant type and amount
  - Check sprinkler package is correctly installed
  - Assess sprinklers or emitters for blockages or wear

### **Measuring system parameters**

- Pressure flow rate, speed and water collected in catch cans to determine uniformity using approved methods.

### **Recording observations**

- Using field notes and photographs.
- Ensuring data accuracy, traceability, and compliance with accepted industry practice.

## **Rauemi | Resource**

Codes of Practice relevant to this skill standard include but are not limited to:

- The New Zealand Piped Irrigation System Performance Assessment Code of Practice
- Irrigation New Zealand Technical Glossary
  - Available from the Irrigation New Zealand website, <http://irrigationnz.co.nz/>

Legislation relevant to this skill standard

- Site specific water resource consent or water supply agreement, weather data (e.g. Earth Science New Zealand), crop descriptions and soil profile data sheets (e.g. SMap)

- Health and Safety at Work Act 2015;
- Resource Management Act 1991;
- National Policy Statement for Freshwater Management 2020;
- Various Regional Council Land and Water Regulations
- Resource Management (Freshwater Farm Plans) Regulations 2023

and any subsequent amendments or replacements.

### Pārongo Whakaū Kouna | Quality assurance information

<b>Ngā rōpū whakatau-paerewa  </b> Standard Setting Body	Muka Tangata – People, Food and Fibre Workforce Development Council
<b>Whakaritenga Rārangi Paetae Aromatawai  </b> DASS classification	Field > Water Industry > Irrigation
<b>Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga  </b> CMR	0052

<b>Hātepe  </b> Process	<b>Putanga  </b> Version	<b>Rā whakaputa  </b> Review Date	<b>Rā whakamutunga mō te aromatawai  </b> Last date for assessment
<b>Rēhitatanga  </b> Registration	<type here>	[dd mm yyyy]	[dd mm yyyy]
<b>Arotakenga  </b> Review	<type here>	[dd mm yyyy]	[dd mm yyyy]
<b>Kōrero whakakapinga  </b> Replacement information	This skill standard will replace Unit standard 28925 Carry out an irrigation system performance assessment		
<b>Rā arotake  </b> Planned review date	31 December 2030		

Please contact Muka Tangata – People Food and Fibre Workforce Development Council at [qualifications@mukatangata.nz](mailto:qualifications@mukatangata.nz) to suggest changes to the content of this skill standard.