

1XXXXX Plan an irrigation system performance assessment

Kaupae Level	4
Whiwhinga Credit	10
Whāinga Purpose	<p>This skill standard is for people working in the irrigation industry.</p> <p>People credited with this skill standard will be able to plan an on-site irrigation system performance assessment. It ensures ākonga/learners have the necessary skills and knowledge to perform these tasks effectively.</p> <p>This 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. Plan an on-site irrigation system performance assessment visit.	a. Engage with the client to identify the nature of the performance test required. Collate system performance information prior to the assessment visit.
	b. Collate system performance information prior to the assessment visit.
	c. Produce an irrigation system map identifying key system features.
	d. Produce an on-site irrigation system methodology plan for a performance assessment visit.
2. Identify and select appropriate resources for the performance assessment	a. Identify performance assessment tools and equipment to be used matched to the irrigation system to be tested.
	b. Record logistical and safety arrangements for site access.

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

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

Plan an on-site irrigation system performance assessment visit

- Identify location, contact details and date of assessment
- Purpose and value of performance assessments (e.g. efficiency, compliance, maintenance planning).
- Overview of irrigation system types and components (e.g. pumps, pipes, valves, emitters).
- Gathering documentation: system plans, consents, crop and soil data, maintenance logs.
- Identifying key performance indicators (e.g. flow rate, pressure, distribution uniformity).
- Developing an assessment plan: location mapping, scheduling, tools required
- Describe the methodology for field testing (e.g. catch can placement, pressure reading locations, speed tests and observations)
- Health and safety planning: risk identification, PPE, access, and emergency protocols.
- Alignment with industry codes of practice and environmental regulations.

Ensuring data accuracy, traceability, and compliance with accepted industry practice.

Rauemi | Resources

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

- 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 Kōunga | Quality assurance information

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

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

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