

1XXXXX**Document irrigation testing and commissioning process**

Kaupae Level	5
Whiwhinga Credit	15
Whāinga Purpose	<p>This skill standard is for people working in, or intending to gain skills in, preparing documentation and undertaking irrigation system testing, commissioning, and client handover training.</p> <p>People credited with this skill standard will be able to ensure irrigation systems are properly commissioned, meet performance expectations, and are supported by clear, accurate commissioning documentation for client use, future maintenance, and regulatory compliance.</p> <p>This standard provides a foundation for further training in advanced irrigation system commissioning, operational verification, and client support.</p> <p>This skill standard has been developed to align with the New Zealand Certificate in Irrigation System Design (Level 5).</p>

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Develop irrigation system testing plans	a. Create detailed testing procedures
	b. Verify the functionality and safety of all system components within the irrigation setup.
2. Develop irrigation system commissioning plans	a. Develop commissioning plans that ensure all system components in combination (pipes, pumps and controls) are correctly installed, configured, and operational before system handover.
	b. Ensure all safety circuits and procedures operate correctly
3. Coordinate field testing and commissioning processes with relevant parties.	a. Organise and oversee field testing
	b. Organise and oversee Commissioning activities, ensuring collaboration among all stakeholders and adherence to safety and operational protocols.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
4. Document the outcome of the commissioning process	a. Confirm and document the operational performance benchmarks showing the efficiency and reliability of the integrated systems during commissioning.
	b. Undertake full handover to the system operator

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

Assessment specifications:

Akōnga/learners must be collected from commercial irrigation systems, using naturally occurring evidence.

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

The irrigation system is for an agricultural or horticultural property, sports turf surface, landscape, golf course, amenities and irrigated wastewater but are not limited to.

All activities and evidence must meet the requirements of worksite procedures, accepted industry practice and any subsequent amendments to legislation.

Evidence for all outcomes must be presented in accordance with; New Zealand Piped Irrigation Systems Design Code of Practice; and Irrigation; available from the Irrigation New Zealand website, <http://irrigationnz.co.nz/> and any subsequent amendments.

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.

Definitions:

Accepted industry practice refers to approved codes of practice and standardised procedures accepted by the wider tree felling industries as examples of best practice.

Worksite procedures refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Testing Plans

- Develop detailed testing procedures for all system components.

- Verify functionality and safety against design and operational requirements.

Commissioning Plans

- Prepare commissioning procedures for integrated system operation (pipes, pumps, controls).
- Confirm correct installation, configuration, and safe operation.

Field Testing & Coordination

- Organise and oversee field testing and commissioning activities.
- Coordinate with engineers, contractors, and clients to ensure safe, efficient processes.

Performance Verification

- Measure operational benchmarks for efficiency and reliability.
- Record test results and document any adjustments made during commissioning.

Documentation & Handover

- Produce clear commissioning documentation and as-built records.
- Conduct full system handover with training for the system operator.

Rauemi | Resources

Legislation relevant to this skill standard includes but is not limited to:

- Irrigation New Zealand website (codes of practice), <http://irrigationnz.co.nz/>
- Health and Safety at Work Act 2015 [Health and Safety at Work Act 2015 No 70 \(as at 05 April 2025\), Public Act Contents – New Zealand Legislation](#)
- Resource Management Act 1991 [Resource Management Act 1991 No 69 \(as at 05 April 2025\), Public Act Contents – New Zealand Legislation](#)
- National Policy Statement for Freshwater Management 2014 [National Policy Statement for Freshwater Management | Ministry for the Environment](#)
- Public Works Act 1981 [Public Works Act 1981 No 35 \(as at 05 April 2025\), Public Act Contents – New Zealand Legislation](#)
- Resource Management (National Environmental Standards for Freshwater) Regulations 2020 [Resource Management \(National Environmental Standards for Freshwater\) Regulations 2020 \(LI 2020/174\) \(as at 01 January 2025\) Contents – New Zealand Legislation](#)
- National Environmental Monitoring Standards (NEMS) [National Environmental Monitoring Standards » National Environmental Monitoring Standards \(NEMS\)](#)
- Site specific water resource consent or water supply agreement, weather data [Home | NIWA](#)
- Descriptions and soil profile data sheets [S-Map Online | Manaaki Whenua - Landcare Research](#)

and any subsequent amendments or replacements.

Pārongo Whakaū Kounga | 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	Agriculture, Forestry and Fisheries > Water Industry > Irrigation

Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0052
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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]
Kōrero whakakapinga Replacement information	This skill standard replaced Unit standard 28933.		
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.