

## 41032 Plan and coordinate irrigation system testing and commissioning

<b>Kaupae   Level</b>	5
<b>Whiwhinga   Credit</b>	15
<b>Whāinga   Purpose</b>	<p>This skill standard is for people working in, or intending to gain skills in, planning and coordinating irrigation system testing, commissioning, and client handover, including preparing accurate documentation for compliance and future maintenance.</p> <p>People credited with this skill standard will be able to develop irrigation system testing plans and irrigation system commissioning plans to meet operational performance benchmarks, coordinate commissioning activities with stakeholders, and complete documentation and provide full client handover.</p> <p>This standard provides a foundation for further training in advanced irrigation system commissioning, operational verification, and client support. This skill standard has been developed to align with the New Zealand Certificate in Irrigation System Design (Level 4) [Ref: 2557].</p>

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

<b>Hua o te ako   Learning outcomes</b>	<b>Paearu aromatawai   Assessment criteria</b>
1. Develop irrigation system testing plans	a. Create a detailed testing procedures for individual components.
	b. Test and confirm the functionality and safety of all system components within the irrigation setup.
2. Develop irrigation system commissioning plans.	a. Prepare commissioning plans that outline procedures to confirm correct installation, configuration, and integrated operation of all system components (pipes, pumps, and controls) prior to handover.
	b. Verify that all safety circuits and procedures operate correctly.
3. Coordinate field testing and commissioning processes with relevant parties.	a. Organise and oversee field testing activities according to the approved plan.
	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. Complete documentation and full client handover.	a. Document operational performance benchmarks demonstrating efficiency and reliability of the integrated system during commissioning.
	b. Complete full handover to the system operator, including training and documentation.

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

#### Assessment specifications:

Akōnga/learners must be assessed in the context of a commercial irrigation system, using naturally occurring evidence.

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

The irrigation system is for an agricultural or horticultural property, sports turf surface, landscape, golf course, amenities and wastewater.

All assessment 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

- Testing procedures for all components.
- Safety design.
- Operational requirements.

### Commissioning Plans

- Commissioning procedures.
- Installation.
- Configuration.
- Safe operation.

### Field Testing and Coordination

- Field testing.
- Commissioning activities.
- Coordinate with engineers, contractors, clients.
- Efficient processes.

### Performance Verification

- Measure operational benchmarks.
- Efficiency and reliability.
- Record test results.
- Document adjustments made during commissioning.

### Documentation and Handover

- Commissioning documentation as-built records.
- Conduct full system handover.
- Training of system operators.

### 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**

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

<b>Hātepe   Process</b>	<b>Putanga   Version</b>	<b>Rā whakaputa   Review Date</b>	<b>Rā whakamutunga mō te aromatawai   Last date for assessment</b>
<b>Rēhitatanga   Registration</b>	1	18 December 2025	N/A
<b>Kōrero whakakapinga   Replacement information</b>	N/A		
<b>Rā arotake   Planned review date</b>	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.