

40892 Plan and coordinate hydrometric station installation

Kaupae Level	5
Whiwhinga Credit	25
Whāinga Purpose	This skill standard is for people working in, or seeking skills in, hydrometry and field water monitoring. Learners will be able to coordinate the installation of a hydrometric station, including stakeholder consultation, site evaluation, design, planning, and construction management. They will apply hydrological, engineering, and project management principles to ensure stations are built in accordance with technical, regulatory, and worksite procedures. This skill standard has been developed to align with the New Zealand Diploma in Field Hydrology (Level 5) [Ref: 2344].

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Scope and design a hydrometric station.	a. Define the purpose of the station and carry out stakeholder consultation to inform design requirements.
	b. Evaluate site options and select the most suitable location.
	c. Investigate selected site conditions including access, hazards, communications, and power supply.
	d. Evaluate structural and instrumentation options for the selected site, considering functional requirements and budget.
	e. Consult on the draft design and develop cost estimates for the construction phase.
	f. Gain final approval for the hydrometric station design and site location.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
2. Develop a construction plan for a hydrometric station.	a. Develop a construction plan for a hydrometric station.
	b. Develop a project specific health and safety plan.
	c. Present and consult on finalised plans with relevant stakeholders.
3. Coordinate the construction of a hydrometric station.	a. Confirm the final station design and construction plan before commencing works.
	b. Source materials, test instrumentation, and allocate construction resources.
	c. Supervise construction to ensure compliance with the approved design and plan.
	d. Commission the station and verify operational functionality.
	e. Compile and store installation documents.

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

Assessment specifications:

Learners/ākonga' evidence must be collected using naturally occurring activities.

All activities and evidence must meet the requirements of worksite procedures, accepted industry practice, legislation 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. This may include treating the Awa as a living entity, engaging with local iwi to understand cultural narratives relevant to the river's behaviour, and arranging a blessing before work commences.

Range

Hydrometric data includes water level and rainfall time series data.

Learners must design and oversee the construction of a hydrometric station with either water level or rainfall monitoring capability.

The scale of the project must require formal planning and involve stakeholder engagement.

Definitions

Construction this could include a new construction or a site upgrade.

Metadata describes data in detail. It has information about how, when, and by whom certain data was collected and the data format.

Worksite procedures refer to the policies and procedures set out in a verbal or written form by the employer or organisation. *Accepted industry practice* refers to approved codes of practice and standardised procedures accepted by the wider industries as examples of best practice.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Design Station Site

- Consultation, iwi, landowners, councils, and engineers to confirm scope.
- Sites topography, access, flow, and telemetry viability.
- Catchment hydrology, river morphology, and sediment transport.
- Selection of sites flow and safe, consistent measurement.
- Land access, legal compliance, and health and safety requirements.

Plan Station Construction

- Station types, rainfall, water level, groundwater, water quality, climate.
- Platforms design, shelters, fencing, and instrument mounting systems.
- Instruments, loggers, gauges, telemetry units.
- Budgets and construction schedules.
- Complete consents, permits, and H&S documentation.
- Align construction plans with NEMS and worksite procedures.

Manage Station Build

- Equipment and materials procurement.
- Construction, safety, installation quality, compliance and supervision.
- Record metadata, site ID, installation notes, consents, legal documentation, as-built plans, and photographic evidence.

Rauemi | Resources

Legislation and codes of practice relevant to this skill standard include but are not limited to:

- NZHS [NZHS | The New Zealand Hydrological Society](#).
- Health and Safety at Work Act 2015, Resource Management Act 1991, Public Works Act 1981, Resource Management (National Environmental, Standards for Freshwater) Regulations 2020 [New Zealand Legislation](#).
- Freshwater Farm Plans [Freshwater farm plans | Ministry for the Environment](#).
- National Environmental Monitoring Standards (NEMS) [National Environmental Monitoring Standards » National Environmental Monitoring Standards \(NEMS\)](#).
- National Policy Statement for Freshwater Management 2014 [National Policy Statement for Freshwater Management | Ministry for the Environment](#).

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	Engineering and Technology > Water Industry > Field Hydrology
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	1	25 September 2025	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 28801.		
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.