



WATER SERVICES

*Advice to the Tertiary Education Commission
for training investment in 2027*

Published November 2025

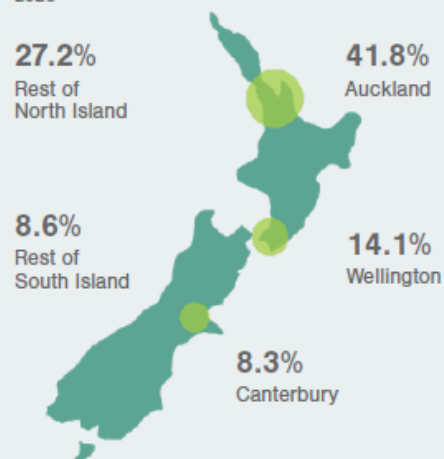


WAIHANGA ARA RAU
Construction and
Infrastructure
Workforce Development Council

WATER SERVICES SECTOR

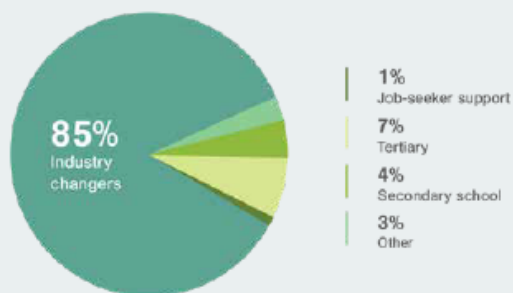
EMPLOYMENT BY REGION¹

2023



NEWCOMERS BY ORIGIN⁴

2023



28.5% of entrants left the workforce within one year.⁶

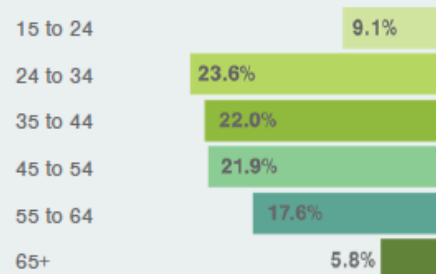
GENDER²

2023

54.6% Men
45.4% Women

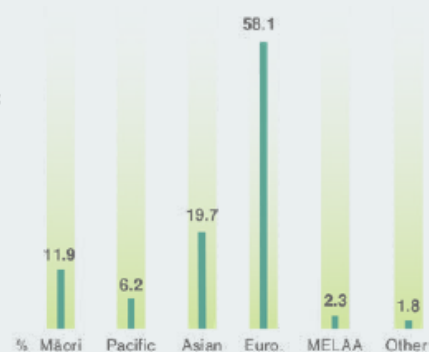
AGE³

2023



ETHNICITY⁵

2023



WATER SERVICES WORKFORCE SIZE

3,721 people

Workforce Information Platform | Total workforce size



197

TOTAL NUMBER OF BUSINESSES⁷

2023



80

TOTAL NUMBER OF SOLE TRADERS⁸

2023

BUSINESS OWNERSHIP BY ETHNICITY⁹

2023



This data is extracted from StatsNZ IDI and IRD and displayed in the Workforce Information Platform. Figures are defined by those who work for or own a business with a relevant ANZSIC (industry) code. The infographic can be found at workforce.nz

WATER SERVICES NARRATIVE

Key insights from the Waihangara Rau Water Services Strategic Reference Group (SRG)

The Water Services SRG¹ welcomes the opportunity to once again provide the TEC with recommendations it believes will enhance the learning and development needs of the nation's water services workforce. SRG group members have met formally four times in 2025 to support various Waihangara Rau workstreams and to progress projects that sit within the SRG's workforce development plan². This has included SRG members contributing to the Waihangara Rau-led comprehensive review of water services qualifications and standards to ensure qualifications are fit for purpose, graduates can meet future industry requirements, and real and/or perceived risks in development and proposed delivery are monitored. The Waihangara Rau findings³ from a May 2024 survey conducted at the Water Industry Operations Group Conference showed that 40% of respondents said the *Level 4 New Zealand Certificate in Drinking Water Treatment, with an optional strand in Multistage Processes*, was not meeting their needs. The Waihangara Rau newly developed pathways are currently out for public consultation⁴.

The impact of water reforms on future workforce requirements

2024 (which has been used as the learner data baseline year for this Advice) was a year of reduced investment in water infrastructure due to uncertainty with the future timing of water reform following the repeal of the previous Government's Three Waters reforms⁵ and the beginning of Local Water Done Well. These levels of uncertainty were referenced in the WaterNZ Pulse Surveys conducted in 2024 and 2025⁶. For example, the November 2024 Pulse Survey stated that *"nearly 40 percent of respondents' contracts were either paused, deferred or cancelled."* Consequently, it was no surprise that during this period, Councils and contractors showed a reluctance to invest in infrastructure and formal workforce training. However, Local Water Done Well is expected to deliver *"much-needed investment nationally in water services infrastructure while providing local council decision-makers the options that suit the communities they serve."*⁷

The Local Government (Water Services) Act 2025⁸ requires Councils to choose either an in-house, single, or joint council-controlled organisation (CCO) and submit their water service delivery plans to the Department of Internal Affairs by 3 September 2025. There are also expectations for central government-owned suppliers, as well as privately owned and commercial suppliers, to continue building their ability to manage risks to drinking water safety. Section 69 of the

¹ <https://www.waihangaraarau.nz/strategic-reference-groups/water-services-srg/>

² <https://www.workforce.nz/water-services>

³ <https://www.waihangaraarau.nz/wp-content/uploads/2024/11/Waihangara-Ara-Rau-Water-Review-Stage1-Report.pdf>

⁴ <https://www.waihangaraarau.nz/for-industry/qualifications-work-in-progress/water-review/>

⁵ <https://www.beehive.govt.nz/release/labour%E2%80%99s-three-waters-legislation-repealed>

⁶ <https://www.waternz.org.nz/PulseSurvey>

⁷ <https://www.beehive.govt.nz/release/local-water-done-well-delivering-kiwis>

⁸ [Local Government \(Water Services\) Act 2025 No 42, Public Act Contents – New Zealand Legislation](#)

Water Services Act 2021⁹ (Version as at 27 August 2025) states that a person must not certify, assess, test, design, operate, or carry out an activity relating to maintaining, repairing, upgrading, or renewing a drinking water supply, a wastewater network if they do not have the “*prescribed skills, qualifications, or experience in respect of drinking water supply or wastewater network*”. These requirements, known as ‘authorisations’ (including licences, certifications, registrations, and permits), have been pushed back from 2026 to 2031.

There are expected to be 42 water services providers (CCO water service organisations and Council in-house business units), and by 2027/2028, Council suppliers will need to be fully compliant with the Water Services Authority Taumata Arowai (The Authority) Drinking Water Quality Assurance Rules¹⁰ or by way of the adoption of an acceptable solution as an alternative compliance pathway. This includes a requirement that “*All work (planned or unplanned) on a water supply must be completed by suitably trained or experienced personnel.*” However, the definition of suitably trained has been debated, and until authorisations come into force, there is no clear indication that this means that people must be trained. It is expected that the authorisation framework will reference training and minimum training requirements for those working on a supply. Through both the Water Services Act and The Authority, there will need to be an increase in suitably authorised personnel in the next five years. However, this changing regulatory landscape has led to uncertainty about who needs to be trained and to what level, which has dampened Councils’ commitment and their service contract providers’ engagement in formal training.

While drinking water is often the focus of the regulatory discussions, The Authority in an April 2025 publication¹¹ said, “*upgrading and renewing New Zealand’s aging public wastewater treatment systems (which serve just over 4 million people) is one of the biggest infrastructure challenges facing our country ... and the proposed national wastewater environmental performance standards would streamline the process for future consents...*”. The SRG believes these proposed standards will also nudge wastewater service providers into prioritising formal training for their workforce.

Lifting sector capability

The Authority’s 2024 Drinking Water Regulation Report¹² provides examples of the main causes of notifications that drinking water is, or may be, unsafe. These include maintenance or equipment failure, process control issues, human error, environmental issues, poor sampling techniques, and a lack of appropriate infrastructure. Gillian Blythe, Chief Executive of Water NZ (and SRG member), believes many of these examples point to the need for appropriately trained staff, and the Report states that sector capability was a likely contributing factor or cause of drinking water safety incidents. The Authority is working with the support of others in the sector to address sector capability gaps. The Report highlights the need for “*appropriate training, experience and/or supervision that enables staff to perform effectively ... staffing deficiency can impact on delivered water quality by reducing the ability of staff to undertake proactive improvements, respond quickly to incidents and events, and provide adequate oversight or supervision.*” Indeed, in the 2025-2028 compliance monitoring enforcement strategy, the Authority specifies that, by 2028, it will focus on ensuring that drinking water suppliers have the right processes in place, including trained

⁹ [Water Services Act 2021 No 36 \(as at 27 August 2025\), Public Act 69 Requirement for prescribed skills, qualifications, or experience in respect of drinking water supply or wastewater network – New Zealand Legislation](#)

¹⁰ [Compliance-Monitoring-and-Enforcement-Strategy-2025-28-Water-Services-Authority-Taumata-Arowai.pdf](#)

¹¹ [Help shape New Zealand’s wastewater future - Taumata Arowai - Citizen Space](#)

¹² [Drinking-Water-Regulation-Report-2024.pdf](#)

personnel. As work begins on this and water entities join CCOs and other groupings, training will need to be benchmarked and standardised, which will likely increase the need for formal training pathways.

Training provision in 2027

With the combination of all these factors, SRG group members believe that by 2027, there will be increased demand for formal training, including micro-credentials to support workforce mobility and standardisation across water service providers. The scale of these future workforce requirements was outlined in the opening session of the Water NZ Conference on 29 September in Christchurch by Lori Hand, Executive Director of the Water Services Reform Programme at the Department of Internal Affairs (DIA). Ms Hand's comments included that there will be:

- \$47.9 billion in new water infrastructure projects over the next 10 years and \$16 billion in growth-related projects.
- Upgraded infrastructure will create jobs and stimulate local economies.
- Apprentice and structured training programs are key to creating this new workforce.
- About 9,000 additional jobs in the water industry¹³ and subsequent advice emailed to Gillian Blythe (CE Water NZ) from DIA indicates Council WSDP capex is expected to be a 19% increase on LTP figures for the FY26/27 and FY27/28 (unable to provide data for 2027 calendar year).

Voice of industry

The SRG is considering how to ensure the voice of industry is retained in the transition from Waihangā Ara Rau (WDC) to the Infrastructure Industry Skills Board (ISB). How the transition of Connexis (the work-based learning division) from Te Pūkenga to the newly formed ISB, and then into a private training establishment structure, will occur will require industry input. The water services industry expects to be consulted on the future structure of work-based learning.

Priority areas for training investment

To support the Government's water reforms and current and future workforce needs, the SRG asks the TEC to consider the following priority areas for training investment:

1. **Work-based learning across** the country, with block courses (as applicable) available and in more than one region. The SRG supports learning that occurs mainly in the workplace and may include block courses, supported self-directed learning, and/or e-learning. The SRG expects learners to be supported in their training by both the training provider and their employer.
2. **Delivery of the new micro-credentials and qualifications** (once approved), which are under development by Waihangā Ara Rau. The SRG expects to see a Programme Guidance Document produced to guide training providers in their planning and delivery, so programmes meet industry expectations and are in line with NZQA requirements. Key features of the proposed changes include:

¹³ https://www.waternz.org.nz/Article?Action=View&Article_id=3352

- A shift to a base qualification at Level 4 for drinking water treatment and wastewater plant operations that meets apprenticeship requirements.
- The addition of treatment-process-specific strands to the Level 4 apprenticeship qualifications increases flexibility, allowing learners to tailor training to their specific treatment processes.
- New direct-entry Level 4 micro-credentials aligning with the treatment process strands to facilitate upskilling in treatment-specific processes and technologies
- New entry-level Level 3 qualification designed for entry-level learners or those beginning their water sector journey. This pre-trade qualification facilitates a pathway into the water services industry.
- Updated Level 5 Diploma pathways for management and operational leadership roles across the water services industry.
- A specific new Level 4 qualification supporting Trade Waste compliance management and the interface with wastewater operations.

3. **Apprenticeship Boost (AB)** must be reinstated for the Water sector

Employers with Water sector apprentices were excluded from AB payments from 1 January 2025¹⁴ despite these programmes providing a clear and valued career pathway, which is understood and valued by industry. Water sector employers believe their efforts to induct, on-board and up-skill new and existing staff remain unseen and undervalued. AB must be reinstated.

¹⁴ [Changes to Apprenticeship Boost 2025 » Connexis | Infrastructure Training](#)

INVESTMENT ADVICE

Overarching Narrative

This document should be read alongside the overarching narrative document, which provides the introduction and overarching assumptions for Waihangā Ara Rau's 2025 investment advice to the Tertiary Education Commission (TEC), focused on training provision for 2027.

The sector versions outline our approach to qualifications relevant to each sector, regardless of whether they meet TEC's investment threshold. This ensures that all stakeholders, from policymakers to industry leaders, can engage with advice that aligns with their areas of interest.

2027 Investment advice baseline year

We're applying a similar approach to last year's. **The baseline year is 2024**, which provides the most recent full year of training data. All active learners across the 2024 calendar year set the minimum level of provision we expect in 2027, with any recommended growth, reduction, or no change based on that starting point.

Investment advice threshold (for 2027 delivery)

The threshold is intended to ensure our advice prioritises qualifications that could materially impact current TEC funding. Qualifications below the threshold generally fall within the margins of existing funding activity and therefore do not significantly affect funding availability. It is made explicit throughout that the overall growth percentage should be applied to all relevant qualifications, regardless of whether they meet the threshold. Publishing our approach for all qualifications under our coverage also enables providers to understand the provision landscape.

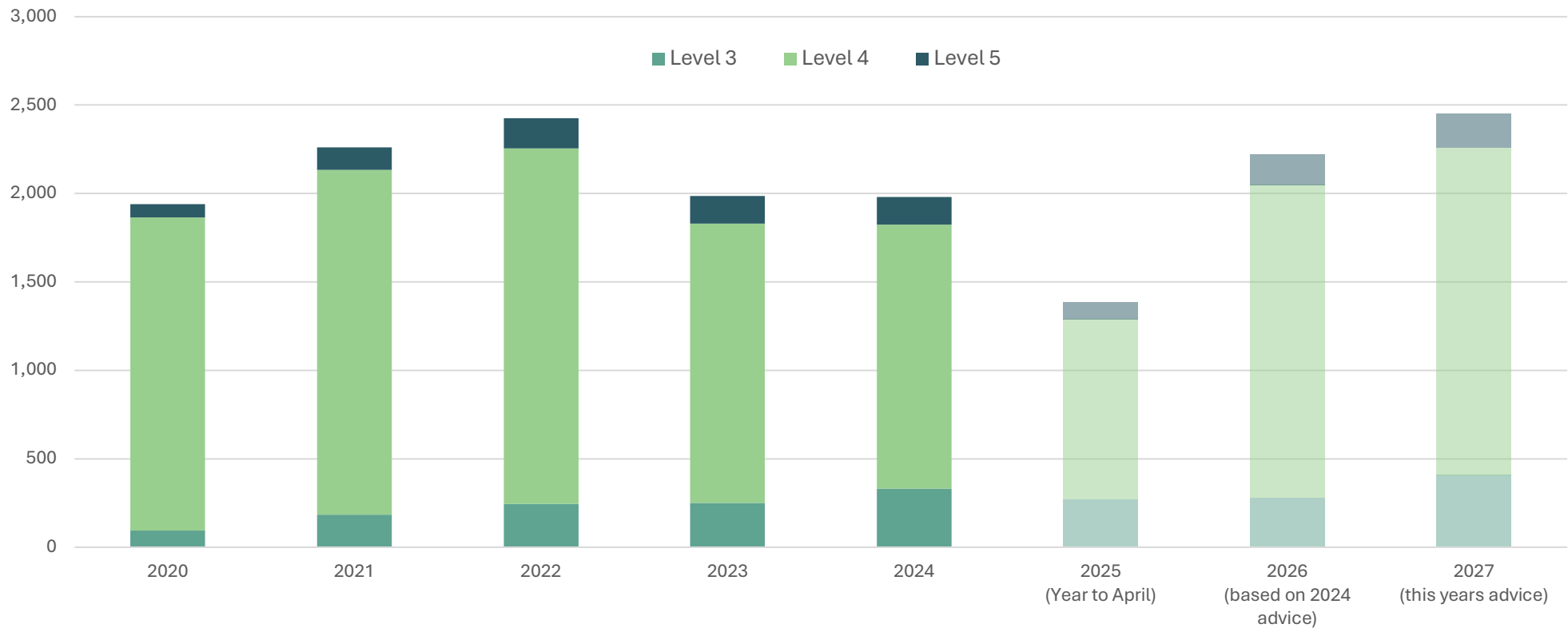
For qualifications within our scope, only those meeting the threshold are included in our formal submission to the Tertiary Education Commission (TEC). The 2027 threshold includes:

- Growth or reduction of more than 20 learners compared to the 2024 baseline.
- Not registered or not TEC-funded learners in 2024, but expected activity in 2027.
- Fewer than 20 learners in 2024, with projected growth that more than doubles by 2027.
- Qualifications where specific context and narrative are important to articulate are treated with particular attention.

This advice covers **13 qualifications and programmes within Waihangā Ara Rau's Water Services sector. Together, these show a projected growth of 481 learners in 2027 based on the 2024 baseline.** Of these, 5 qualifications meet the TEC advice threshold and are included in the formal advice document submitted to TEC. These account for 439 of the total projected learner growth.

Learner trends and projections (2020-2027)

Like many parts of the C&I sector, Water Services saw a significant increase in learner numbers during 2021–22, largely driven by Government interventions such as Targeted Training and Apprenticeship Fund, First Year Fees Free, and Apprenticeship Boost. With the conclusion of most of these initiatives, aside from Fees Free shifting to final years, learner volumes have returned to more ‘normal’ levels.



Notes:

- Learner data is sourced from TEC’s Ngā Kete as of April 2025. It includes all active TEC-funded learners within a calendar year and excludes non-TEC funded training.
- **2025** data reflects learner numbers as of April. Based on sector conversations, end-of-year figures are expected to be similar to 2024 levels or slightly lower.
- **2026** figures are based on advice provided in 2024, which projected 12% growth on 2023 learner numbers.
- **2027** figures represent projected provision based on this year’s advice.

Context: Investment Advice Table

The general **growth** in provision for qualifications under the Water Service sector is **23.8%**, unless specifically stated otherwise. The qualifications that meet the threshold are shown below, with additional context given to qualifications that sit outside the overall sector growth percentage:

- **3856:** This qualification is also covered under Civil Infrastructure. The provisions highlighted below are for those who undertook the water-specific strands. The qualification is, however, expiring at the end of 2025, with the numbers transferred to 4440 for the 2027 training provision.
- **3858:** This qualification is also covered under Civil Infrastructure. The provisions highlighted below are for those who undertook the water-specific strands.
- **4440:** This qualification is also covered under Civil Infrastructure. The provisions highlighted below are for those who undertook the water-specific strands.
- **No activity** qualifications either had no learner activity in 2024 or data has been suppressed due to low numbers (less than 5 learners).

Investment advice table

Code	NZQA Qualification Title	2027 Total Provision	Growth on 2024 base	Meets threshold
2240	New Zealand Certificate in Water Treatment (Small Scale Systems) (Level 3) with strands in Drinking-water, and Wastewater	No activity	No activity	No
3856	New Zealand Certificate in Infrastructure Works (Level 3) with optional strand in Plant Operation - <i>expiring at the end of 2025</i>	N/A	N/A	No
3858	New Zealand Certificate in Infrastructure Works (Pipeline Construction and Maintenance) (Level 4) with strands in Drinking-Water, Stormwater and Wastewater, and Trenchless Technologies	1,325	255	Yes
4138	New Zealand Certificate in Drinking-water Treatment (Level 4) with optional strand in Multistage Processes	241	47	Yes
4139	New Zealand Diploma in Drinking-water Treatment (Level 5)	80	16	No
4142	New Zealand Certificate in Wastewater Treatment (Level 4) with optional strand in Multistage Processes	161	31	Yes
4143	New Zealand Diploma in Wastewater Treatment (Level 5)	111	22	Yes

4216	New Zealand Certificate in On-site Wastewater Management Systems Design (Level 4)	56	11	No
4223	New Zealand Certificate in Drinking-water Supply (Assessment)	No activity	No activity	No
4399	Onsite Wastewater Management Systems (Level 4) (Micro-credential)	6	2	No
4412	CCTV Inspection of Water Services Assets (Micro-credential)	19	4	No
4440	New Zealand Certificate in Infrastructure Works (Level 3)	402	78	Yes
4441	New Zealand Certificate in Infrastructure Works Pipe Installation (Level 4)	43	9	No
Total		2,451	481	

Products in development

The list below includes all of the currently proposed new qualifications and micro-credentials emerging from the Water Services review. These are expected to replace 2240, 4138, 4139, 4142, 4143, 4216 and 4223.

Reference	Title	Type	Status	Likely Year
TBC	Water - Level 5 MC Tradewaste Policy Development	Micro-credential	Developing Idea	2027
TBC	Water - Level 3 MC Introduction to Water	Micro-credential	In Development	2027
TBC	Water - Level 3 MC Sampling and Compliance	Micro-credential	In Development	2027
TBC	Water - Level 3 MC Working with small onsite DW supply	Micro-credential	In Development	2027
TBC	Water - Level 4 MC 1 Treatment Process 1	Micro-credential	In Development	2027
TBC	Water - Level 4 MC 2 Treatment Process 2	Micro-credential	In Development	2027
TBC	Water - Level 4 MC 3 Treatment Process 3	Micro-credential	In Development	2027
TBC	Water - Level 4 MC 4 Treatment Process 4	Micro-credential	In Development	2027

TBC	Water - Level 4 MC 5 Treatment Process 5	Micro-credential	In Development	2027
TBC	Water - Level 4 MC 6 Treatment Process 6	Micro-credential	In Development	2027
TBC	Water - Level 4 MC 7 Treatment Process 7	Micro-credential	In Development	2027
TBC	Water - Level 4 MC 8 Treatment Process 8	Micro-credential	In Development	2027
TBC	Water - Level 4 MC 9 Treatment Process 9	Micro-credential	In Development	2027
TBC	Water - Level 3 New Qual NZC in Water Services w/ strands in DW and WW	Qualification	In Development	2027
TBC	Water - Level 4 New Qual NZC in Water Treatment Operations w/ Strands by Treatment Process Type	Qualification	In Development	2027
TBC	Water - Level 4 New Qual in NZC in Wastewater Plant Operations w/ Strands by Treatment Process Type	Qualification	In Development	2027
TBC	Water - Level 5 New Qual in NZD in Water Services Operations and Management w/ strands in DW, WW, Water Distribution, Water Services	Qualification	In Development	2027
TBC	Water - Level 4 New Qual in NZC in Trade Waste (Consent and Compliance)	Qualification	In Development	2027