



24 April 2026

Australian Government – Productivity Commission
National Water Reform Inquiry
Lodgement via: www.pc.gov.au/inquiries-and-research/water-reform-2026

Dear Commissioners

Submission to the National Water Reform Inquiry 2026

Thank you for the opportunity for the Water Industry Operations Association of Australia (WIOA) to provide comments to the Productivity Commission's Inquiry into the National Water Initiative (NWI), and to contribute to the assessment of policy and regulatory settings that support a secure, resilient and sustainable water services industry.

WIOA's submission primarily responds to Information Request Part B on page 5 and focuses on risks to the ongoing provision of safe and reliable water services. Our interest centres on the capability of all Australian water service providers to consistently deliver safe drinking water and effective environmental management, and in particular, on the training and competency of operational staff who perform these critical functions.

We would welcome the opportunity to discuss any aspect of our submission in more detail or to provide further information to assist the Commission.

Yours sincerely

Chief Executive Officer
Water Industry Operations Association of Australia



WIOA Submission to the Productivity Commission – National Water Reform 2026 Inquiry

Executive Summary

The Water Industry Operations Association of Australia (WIOA) welcomes the opportunity to contribute to the Productivity Commission's National Water Reform 2026 Inquiry. Our submission focuses on critical risks and structural weaknesses affecting the ongoing delivery of safe, reliable and sustainable water services across Australia. These risks arise primarily from the absence of mandatory operator competency standards, declining access to specialised training, and inadequate funding arrangements for frontline operational staff.

Frontline water treatment operators are the final barrier protecting communities from waterborne disease and environmental harm. Yet, as our submission notes, *no Australian jurisdiction has a minimum mandatory training standard for water treatment operators*. This regulatory gap is inconsistent with risk-based management principles embedded in the Australian Drinking Water Guidelines and state legislation.

To address this gap, the water industry developed the Water Industry Operator Registration Framework, which defines minimum competency requirements aligned to the national Water Training Package. However, participation is voluntary, and without regulatory support, uptake has been extremely low—*only around 250 of an estimated 15,000 operators have registered*. As a result, WIOA has been forced to suspend the scheme from 2026.

Compounding this issue is a growing training market failure. The specialised nature of water treatment skills, small operator numbers, and the geographically dispersed workforce have led to a steady withdrawal of RTOs—particularly TAFEs—from delivering water operations qualifications. This makes it increasingly difficult for water service providers, especially regional and local government utilities, to access essential training. Inadequate funding further limits the ability of operators to obtain the full suite of competencies required for safe and reliable service delivery.

These systemic issues create material risks, inefficiencies and misalignments within the national water sector. They undermine the ability of utilities to meet regulatory expectations, reduce workforce mobility, and increase vulnerability to human-error-driven incidents—risks that will intensify as treatment processes become more complex and experienced operators retire.

WIOA strongly supports a nationally consistent, mandatory approach to operator competency. Defined minimum standards, mapped to treatment processes, supported by ongoing professional development and independent validation, would significantly strengthen public health protection and service reliability. The National Operator Registration Framework provides a ready-made mechanism to deliver this outcome.

To achieve this, substantial and sustained investment in operator training is urgently required.

WIOA would welcome the opportunity to discuss these issues further and to support the Commission in developing reforms that enhance the safety, resilience and capability of Australia's water services sector.



Introduction

The Water Industry Operations Association of Australia (WIOA) is a national not-for-profit organisation representing more than 5,600 individual, corporate, and utility corporate members across all Australian states and territories. Most individual members work in operational roles within the urban water sector, and our corporate membership includes (utility corporate) water utilities and private sector organisations that employ operational staff.

As the peak body for operational personnel in the water industry, WIOA's Vision is to be a trusted partner with the water industry operations sector, via knowledge sharing, networking, and professional development.

Although not a Registered Training Organisation, WIOA delivers non-accredited skill-development programs and has a long history of contributing to the development and maintenance of the nationally accredited Water Training Package (NWP). Ensuring strong training standards is essential given the critical role operators play in protecting public health and the environment.

Treatment plant operators are often the final barrier preventing waterborne disease outbreaks. International experience—including Milwaukee (1993), Walkerton (2000), and Havelock North (2016)—demonstrates the catastrophic consequences of human error in water treatment. These incidents, and others documented in Hrudehy & Hrudehy (2014), highlight the importance of a competent, well-trained operational workforce.

Background

WIOA made a submission to the 2020 National Water Reform Inquiry outlining concerns about the absence of regulatory guidance on the training and competency requirements for operational staff. Six years later, little progress has been made. The risks we identified remain, and in some cases have intensified.

This submission responds to the Inquiry's "Overall questions," particularly those relating to risks, inefficiencies, and misalignments in current water service arrangements. We highlight three systemic issues that materially increase risk to communities:

1. **No Australian jurisdiction has a minimum mandatory training standard for water treatment operators.**
2. **Access to training is increasingly constrained due to limited training providers, geographic dispersion, and the specialised nature of the skills required.**
3. **Funding arrangements for operator training are inadequate, particularly for regional and local government-based providers.**



WIOA Submission

1. Risks and Misalignments in Current Arrangements

1.1 Absence of Mandatory Competency Standards

Australia's drinking water management framework is built on the Australian Drinking Water Guidelines (ADWG) and state-based Safe Drinking Water legislation. These frameworks adopt a risk-based "catchment to tap" approach but do not prescribe minimum competency requirements for frontline operators.

This gap is a significant misalignment between regulatory expectations and operational practice. As your document notes, *"no Australian jurisdiction has a minimum mandatory training standard for water treatment operators."* In any other high-risk industry—aviation, electricity, gas—this would be unacceptable. The community would not board an aircraft if the pilot were unlicensed; yet the supply of safe drinking water relies on operators whose competency is not assured through regulation.

1.2 Failure of the Voluntary Registration Framework

To address this gap, the industry developed the Water Industry Operator Registration Framework (formerly the Certification Framework). It defines minimum competency requirements aligned to the NWP Training Package and provides a mechanism for utilities to demonstrate compliance with risk-based legislation.

However, participation is voluntary. Despite support from some regulators—most notably Victoria and New South Wales—no jurisdiction has mandated the scheme. As a result, uptake has been extremely low: *"only around 250 of an estimated 15,000 treatment operators Australia wide have applied for registered status."*

This is a classic example of a voluntary scheme failing in a low-visibility, high-risk sector. Without regulatory backing, the scheme is not viable, and WIOA has been forced to suspend it from 2026.

1.3 Training Market Failure

The water industry faces a thin training market:

- Operator numbers are small relative to other sectors.
- Skills required are highly specialised.
- The workforce is geographically dispersed.
- TAFEs and RTOs increasingly prioritise higher-volume, more commercially viable qualifications.

TAFE providers in Victoria, Queensland, and in some parts of New South Wales have withdrawn from niche training areas like the water sector. This reduces access to essential training and creates inequities between regions and employers.

1.4 Inadequate Funding for Operator Training

Local government-based water providers—particularly in Queensland and New South Wales—rely heavily on subsidised training. Many employ multi-skilled operators responsible for water treatment, wastewater treatment, and network operations. A single Certificate III in Water Operations does not cover the full scope of required skills, and insufficient funding leads to partially trained or untrained operators.



This represents a material risk to public health and service reliability.

2. Consequences Observed

The consequences of these systemic issues include:

- **Inconsistent operator competency** across jurisdictions and utilities.
- **Increased vulnerability to human-error-driven incidents**, particularly as treatment processes become more complex.
- **Reduced workforce mobility**, as skills are not consistently recognised nationally.
- **Declining training capacity**, as TAFE's and RTOs exit the market.
- **Inability for utilities to demonstrate compliance** with risk-based regulatory frameworks.

These consequences affect communities, regulators, utilities, and the broader economy.

3. Future Risks

Without intervention, risks will escalate due to:

- **Increasing treatment complexity**, including advanced treatment and automation.
- **Workforce turnover and ageing**, with many experienced operators nearing retirement.
- **Growing reliance on multi-skilled staff** in regional and remote areas.
- **Continued contraction of the training market.**
- **Climate-driven pressures** on water quality and treatment processes.

The absence of mandatory competency standards will become increasingly untenable.

Case Study: Water Research Australia – Value of Operator Competency Project

Water Research Australia's 2019 study demonstrated the value of a competent frontline operator workforce. The report emphasised that inadequate operator competency introduces a significant vulnerability to service delivery and public health.

Key benefits of a competent workforce include:

- Assurance that operators possess the skills required to manage water quality risks.
- Increased community trust through professional credentialing.
- Maintenance of service standards amid increasing technological complexity.
- Improved workforce mobility and labour market resilience.
- Enhanced staff confidence, engagement, and innovation.
- Clear career pathways and professional development structures.

The study concluded that the Australian water industry cannot guarantee that every organisation has an appropriately trained workforce. For an industry with a high duty of care, this is a critical risk.

Despite the report being provided to all regulators, little action has been taken.



Key Message

The water industry is essential to public health, environmental protection, and economic productivity. A nationally consistent, mandatory operator competency requirement—supported by defined minimum standards, ongoing professional development, and independent validation—is urgently needed.

Conclusion and Recommendations

A regulatory requirement for operational staff to meet defined minimum competency standards, aligned to the treatment processes they operate, would deliver significant risk-mitigation benefits. It would also stimulate training demand, strengthen the training market, and support workforce capability.

WIOA recommends:

1. **Mandating minimum competency standards** for all water treatment operators across Australia.
2. **Recognising or mandating a National Operator Registration Framework** as the mechanism for demonstrating competency.
3. **Providing dedicated, sustainable funding** for operator training, particularly for regional and local government providers.
4. **Supporting the training market** to ensure ongoing delivery of NWP qualifications.
5. **Aligning regulatory oversight** with the findings of the Water Research Australia study to ensure consistent governance of operator competency.

Significant additional investment in operator training is required to ensure the safety, reliability, and resilience of Australia's water services.