

30 September 2026

Department of Climate Change, Energy,
the Environment and Water
GPO Box 3090
Canberra. ACT 2601

Via email: nwg@dcceew.gov.au

To Whom It May Concern

Re: National Water Grid Fund Review, September 2026

The Queensland Water Directorate (**qldwater**) is Queensland's central advisory and advocacy body for urban water (drinking water, sanitation, wastewater, networks), working with our members to provide safe, secure and sustainable water services to Queensland communities. We work actively with State and Federal Governments in the delivery of policy, regulation and programs that support Queensland's Water Service Providers (WSPs).

We represent all Queensland WSPs with domestic connections: the two Torres Strait Island Councils, the 15 Aboriginal Councils, all 53 non-Indigenous Councils, the council owned Statutory Authorities in south-east Queensland (Urban Utilities and Unitywater) and a state-government owned corporation (Gladstone Area Water Board).

There are 370 water supply schemes and 265 sewage schemes across Queensland. Our members currently service 1,982,442 sewerage and 2,145,835 drinking water connections. These numbers are set to substantially increase with current and projected population growth and will require expansion and optimisation of existing water and wastewater treatment infrastructure as well as the construction of new infrastructure. This essential water infrastructure and associated services requires the continuous oversight of trained, competent personnel to operate safely and sustainably, and manage risk.

The growing population is driving the delivery of critical urban water infrastructure and growing capital delivery programs. In providing these essential services, the urban water sector owns and operates sewer lines, water and wastewater treatment plants, pumping stations, dams, reservoirs, and a range of other critical water technologies/infrastructure.

Much of Queensland's urban water infrastructure is also nearing end of life and requires substantial replacement. The [Infrastructure Cliff](#) faced by the sector is well documented by **qldwater** and, more recently by the LGAQ Report – [The Last Drop: Fixing Queensland's Infrastructure Cliff](#).

The Directorate welcomes the opportunity to provide a submission to the National Water Grid Fund (NWGF) stakeholder review. **qldwater** recognises that the NWGF is a key Australian Government investment program supporting water infrastructure that contributes to water security, regional development and economic and environmental outcomes across Australia and this review seeks to

assess its ongoing role, effectiveness and alignment with contemporary government priorities; whether current investment settings remain appropriate and how future Commonwealth involvement in water infrastructure investment can best complement the broader national funding landscape.

We draw the Department's attention to a submission that we made to the House of Representatives Standing Committee on Regional Development, Infrastructure and Transport on their ***Inquiry into Local Government Funding and Fiscal Sustainability (3 February 2026)***, which is relevant to the responses provided in this submission.

We note that we have provided feedback to the review via email as we were unable to provide feedback through the NWGF Review Response Form given the lack of time from being made aware of this review via a third-party (on 17 September). As such, we note that many of our members were unable to actively participate in the review, which encompassed a major school holiday (Term 3, Spring) in Queensland.

qldwater provides this submission without prejudice to any submissions from our members or other urban water service providers.

Response

1. Capital Funding for Water, Wastewater and Network Infrastructure

Whilst numerous reports and reviews have identified the ageing of Queensland's urban water infrastructure and a lack of maintenance and renewal, the short-term focus on keeping water prices and rates low has taken priority. As a result, even larger-sized water utilities and businesses have produced little to no operating surplus with which the businesses could have built a financial buffer.

The delivery of water services in Queensland is primarily undertaken by Local Councils. In 2024–25, the Queensland Audit Office¹ reported that 46 councils (60 per cent of the sector) had operating surpluses, meaning they earned more revenue than they spent on their operations. This reversed the results from the prior year where the 61 councils reported operating deficits. However, a key driver for the improvement in 2024–25 was the timing of the receipt of the federal financial assistance grants, which increased council revenues. We note that the asset consumption ratio² for water assets is continuing to track negatively.

According to the LGAQ [Queensland State of the Assets Report](#) (2025), water and wastewater infrastructure represents approximately 21% of Queensland's total local government infrastructure assets, with a combined replacement cost of \$51 billion. Furthermore, water and wastewater assets represent one of the highest value asset classes in poor condition (\$5.6 bn are in poor condition).

¹ Queensland Audit Office. Local Government 2025: Report 12. (19 March 2026)

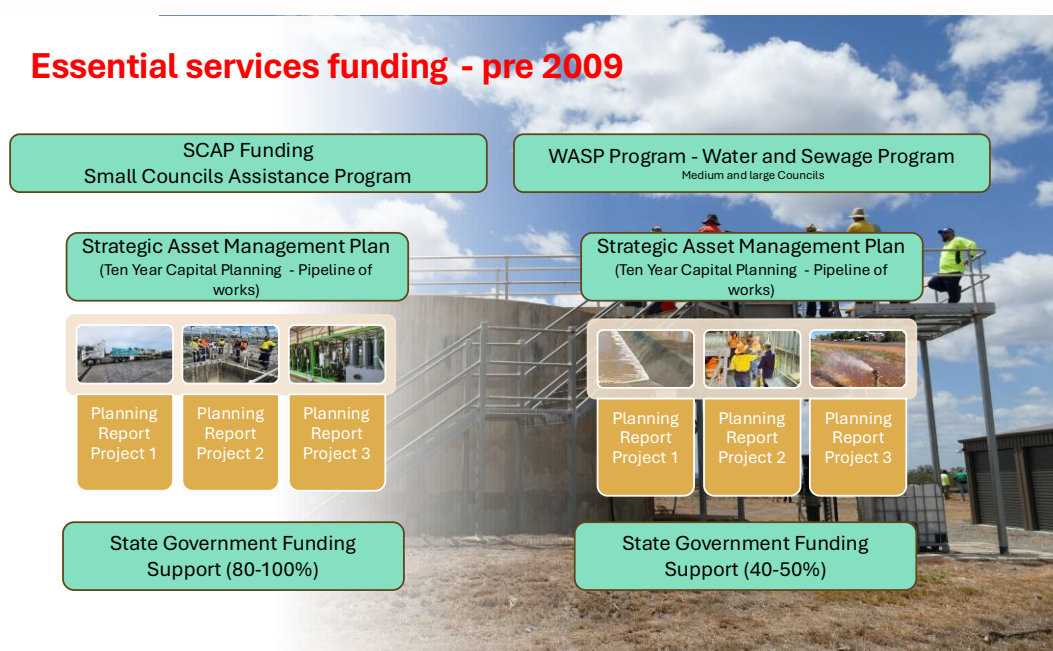
² The Asset Consumption Ratio measures how much of an asset has been consumed/used by council. It measures the current value of a council's assets relative to what it would cost to build new assets with the same benefit to the community

A more recent report by the LGAQ (July 2026) – [The Last Drop: Fixing Queensland's Infrastructure Cliff](#) noted that \$5 billion is needed for critical water and wastewater infrastructure renewals and to fix failing or poor-condition assets with a further \$45.3 billion of an estimated total replacement value for all local government-owned water and wastewater infrastructure in Queensland (which has an asset base currently valued at about \$30 billion).

Historically the Queensland Government agencies involved in water and local government functions had an active partnership with local government WSPs across Queensland. Whilst this partnership changed across the decades, key foundational principles that underpinned the arrangements were:

1. Long term asset planning, and
2. Grant funding of essential water and sewage services as a policy priority of government.

The funding arrangements differed depending on the capability and size of communities to pay to achieve basic levels of service. The Figure below explains the arrangements in circa 2007-2008.



The global financial crisis in 2009 led the Queensland Government to change arrangements from a partnership model with guaranteed funding to ensure equality of essential water service across the state to a model involving:

1. The state as a regulator, and
2. Competition-based grant funding programs.

The outcome for the water sector has been that larger councils with the ability to borrow have gone into debt to fund infrastructure services for their communities, and smaller councils have run their assets to failure.

In December 2024, the Queensland Audit Office (QAO) released their report [Performance Audit Report, Managing Queensland's Regional Water Quality Report #7](#). This report recommended a return to long term asset management planning.

The Directorate suggests that to genuinely manage the drinking water risks identified in the QAO report (*December 2024*), collectively the Queensland and Australian Government must prioritise essential water and sewage services through the restoration of guaranteed funding for this work, and the return to essential water and sewer services being a public policy priority.

This funding must also support whole-of-life asset management, not just new projects; and asset management plans aligned with long-term financial plans are essential.

1.1 Specific Matters Impacting the Cost of Building, Operating and Managing Urban Water in Queensland

There are uncoordinated and competing water demands (population growth, Green Hydrogen, critical minerals, sustainable liquid fuels, the 2032 Games) overlaid with climate change. Despite having the best Water Plans and water planning framework in Australia, Queensland has no Water Development Planning leading to poor water security and water reliability outcomes for many water catchments³, including those in South East Queensland. The [Queensland Government's Regional Water Assessments](#) have not delivered viable answers for the communities that they have serviced.

Urban water providers are facing a growing and increasingly complex regulatory burden, driving both infrastructure and operational cost increases. This is particularly evident in the expanding regulation of *known and emerging contaminants of concern*. Water service providers are bearing increasing liability despite being passive receivers (of both drinking water sources and wastewater) with no control over the sources of these contaminants entering Australia. The current regulatory emphasis on managing contaminants at the end of pipe, rather than at source, is inherently inefficient and significantly more costly.

Wastewater treatment plants provide a critical public service. Existing wastewater treatment plants are unable to control much of the emerging and persistent contaminants (such as PFAS and microplastics) that enter the infrastructure and which are not destroyed by standard technologies and processes. The costs associated with advanced treatment processes to manage these contaminants to regulated levels (current and future) are extraordinarily high.

The contamination of biosolids products with these known and emerging contaminants is also jeopardising their beneficial reuse. If biosolids cannot be beneficially reused, they will need to be

³ Bradfield Development and Assessment Report. (December 2023)
<https://www.dlgwv.qld.gov.au/water/consultations-initiatives/bradfield-regional-assessment-development-panel>

disposed of, and the costs of that disposal and any (landfill or disposal) tax liability will also be met by customers.

Catchment quality across Queensland and indeed Australia has been deteriorating, despite increasing regulation and enforcement. For example, since 2021 there has been a general decline in South East Queensland (SEQ) catchments and Bay zone conditions. According to the latest Healthy Land and Water Report Card for SEQ (2025)⁴,

“... high catchment pollutant loads in recent years, as a result of high rainfall and flood events, has placed increasing pressures on waterways. The overall water quality of many estuaries in the region has also declined in 2025 as a result of increased nutrients (total nitrogen and total phosphorus) and algal growth (chlorophyll a). Unusually high phosphorus levels were observed in many estuaries and bay zones in 2025.”

This negative trend is continuing to drive both complex and costly treatment systems (both in capital and operating costs) as specified by regulators and also increasing costs to safely manage these contaminant risks to drinking water services.

WSPs are increasingly being tasked with the management (and quality) of catchments and water security measures. In Queensland, this is becoming more complex as climate events increase in frequency and intensity, there is increased development within catchments impairing their quality; and existing drinking water sources are being limited by catchment quality impacts and increasing regulatory requirements.

qldwater suggests that a possible compromise agreement may consider the Federal Government meeting the capital funding needs for drinking water provision given the greatest level of risk (and given that **Australia has politically and morally committed to achieving Sustainable Development Goal 6 by 2030**); and the states cover the costs associated with wastewater management.

2. Prioritise Funding to Highest Risk

There must be a focus on public health and water security risks that support communities with the least capacity to pay.

Queensland has the most distributed population in Australia ([ABS 2026, Distribution of Population by States](#)) with most of these populations qualifying as remote or very remote ([Remote scale - FNQROC](#)). For remote and regional areas, local government areas are substantial, yet the rate payer base is limited. These areas will never achieve cost reflective pricing for their water services.

Criticality assessments of water, wastewater and network assets undertaken by the South West Queensland Water and Sewerage Alliance (SWQWSA), have systematically evaluated and prioritised risk based on the asset's strategic importance and potential impact (i.e. from a community health perspective) if it were to fail. SWQWSA recognised that most of their (water) assets and infrastructure were beyond the operational design life. **The SWQWSA advocacy report is attached**

⁴ <https://reportcard.hlw.org.au/>

to this email as evidence of the current challenges – further information and detailed asset data can be provided upon request.

Further Queensland regions (leveraging the Queensland Government funded QWRAP Model⁵) are also completing criticality assessments of their infrastructure. These assessments are limited given the cost of such assessments (particularly in regional and remote areas) and the funding available. However, asset assessments finalised to date are showing high levels of asset failure and asset risk.

3. Independent Scheme Assessments

The SWQWSA report shows the importance of, and insight provided by criticality assessments for water infrastructure. The work was seed funded through initial [QWRAP Bid Pool Funds](#) and proceeded to secure a \$1.6 million grant from the Queensland Government's Building Our Regions 6 funding round.

qldwater proposes the urgent funding of condition and capacity assessments of water schemes by the NWGF to inform prioritisation and guide targeted investments.

In 2023-2024, the Queensland Department of Local Government, Water and Volunteers, undertook an Urban Water Risk Assessment which was a multi-million-dollar review. This assessment considered all WSPs outside of South East Queensland and provided insight on the current risks and sector wide challenges. The assessment was predominantly desk-top based, however, it provided insight into the highest levels of (drinking water) risk across Queensland. Whilst it remains unpublished, it could inform prioritisation for scheme assessments.

4. Operation and Maintenance Costs

qldwater seeks to expand current funding eligibility to cover ongoing operation and maintenance expenses for communities with the least capacity to pay.

The following figure shows cash flow after operating cash flow and expenditure using National Performance Reporting (NPR) data. The *blue coast* could potentially fund their (water) capital programs from income (if the income could be ring-fenced and not utilised for other essential council services). The *red interior* cannot with 34 of 75 authorities going backwards every year.

⁵ The Queensland Water Regional Alliances Program (**QWRAP**) is an industry-led initiative to investigate regional collaboration on water and sewerage services in regional Queensland. It is a partnership between the Queensland Government, Queensland Water Directorate, LGAQ and local councils to deliver sustainable, safe, secure and reliable urban water and sewerage services to regional and remote communities.

Queensland Water Authorities — Cash Flow After Operating & Capital Expenditure

Income minus Operating & Capital Expenditure (\$000s AUD) · NPR 2024-25 · Blue = positive | Red = negative | Log-scaled colour intensity

Queensland Water Authorities — Cash Flow After Operating & Capital Expenditure

Income minus Operating & Capital Expenditure (\$000s AUD) · National Performance Report 2024-25

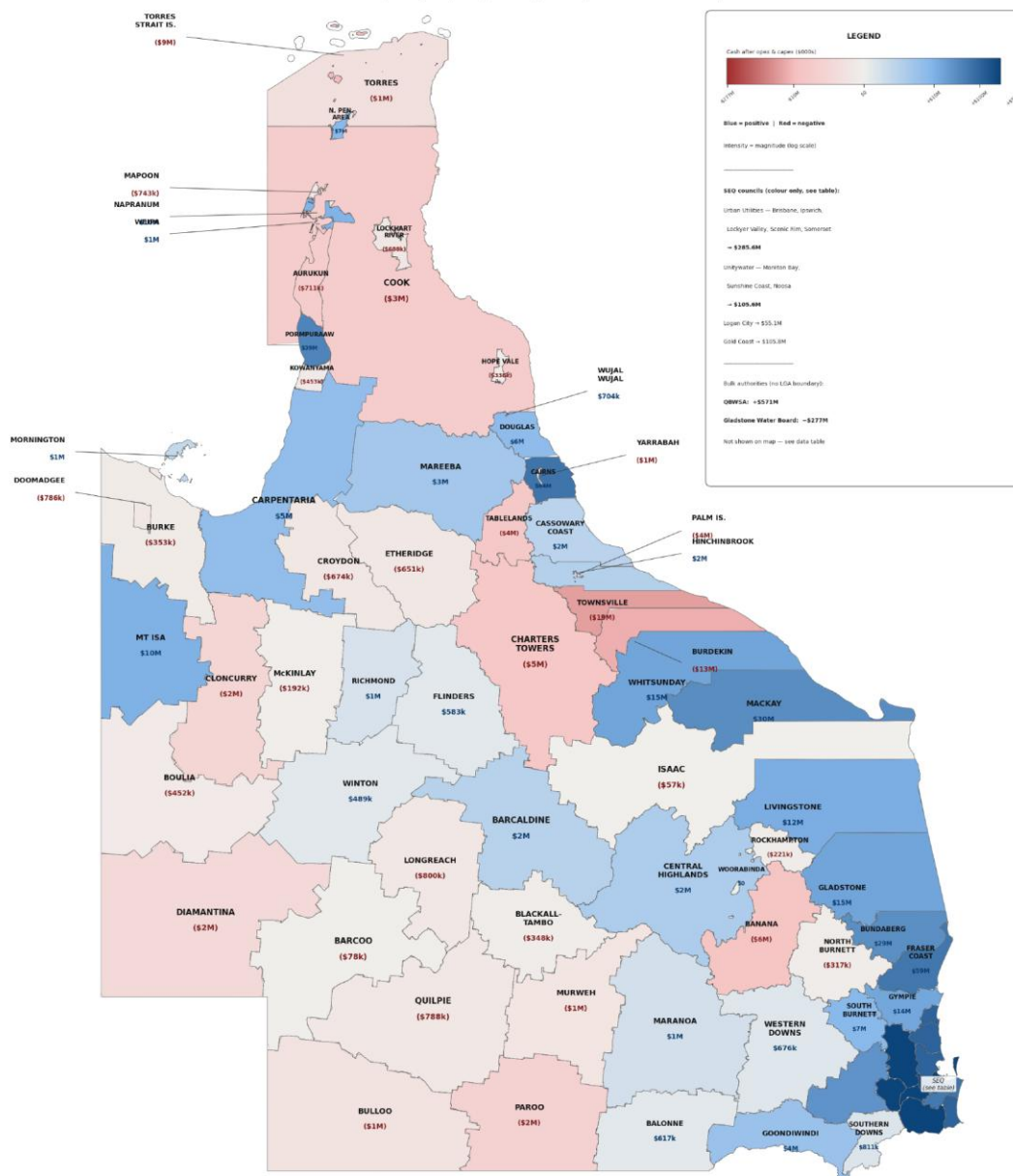


Figure: Queensland LGA boundaries from the Queensland Spatial Catalogue. Ocean shown in blue-grey. Labels and values shown inside each polygon where space permits; leader lines used for smaller or coastal shires. The SEQ cluster is colour-coded but unlabelled on the map — refer to the legend box and data table for individual figures. Queensland Bulk Water Supply Authority (+\$571,133k) and Gladstone Area Water Board (-\$277,181k) are bulk wholesale authorities with no single LGA boundary and are not mapped; refer to the table overlay.

5. Minimum Operator Qualifications

The urban water in Queensland is highly regulated. The largest urban water provider has around 670,000 connections while the smallest has 142 connections. Drinking water, public health and environmental regulation (in addition to other statutory obligations from WHS to Employment) is the same for all, regardless of organisational size and complexity, the number of connections or geographical location. A raft of additional regulations applies to those service providers in the Reef catchment and the Murray Darling Basin catchment.

The worker environment is also increasing in complexity (from Supervisory Control and Data Acquisition - SCADA systems to Artificial Intelligence) and risk (chemical handling, working in confined spaces, working at heights etc).

qldwater has one of the largest longitudinal datasets relating to [skills and workforce](#) for the urban water sector, having completed a series of comprehensive workforce surveys over the past 16 years. This research along with other initiatives demonstrates that skills and worker shortages are now a major barrier to infrastructure delivery and operational performance across Queensland's urban water sector. These deficits are considerably worse in regional and remote areas, further disadvantaging Queensland given that it has the most geographically dispersed population (and therefore service delivery) in Australia.

NPR data suggests these authorities are also being asked to run their networks with far more people than their income could ever fund on a commercial basis. Poorer authorities carry 4–12 times the workforce their income can fund (~128% average) — the shortfall lands on general revenue and on our people doing the work.

A small number of matched examples is shown below (treat these as indicative rather than definitive — please see the data note):

Authority	Income-affordable ("potential") FTE	Actual FTE
Torres Strait Island Regional Council	7	85 (≈12×)
Richmond Shire Council	4	33 (≈8.6×)
Burke Shire Council	2	14 (≈6.3×)

Data quality note: actual FTE figures are known for only 42 of 75 authorities, definitions of "water FTE" vary between councils, and the underlying survey response was partial. The direction of the pattern — wealthy authorities carrying spare income capacity, poor authorities structurally overstretched — is credible, but the precise multiples should not yet be treated as reliable enough to publish without a proper, consistent census.

Understaffing in cash-strapped authorities is not simply an operational inconvenience. Sustained high demand, low control and professional isolation — the everyday reality for a two- or three-person water team in a remote shire — is the textbook definition of a psychosocial hazard. Since the [Managing the risk of psychosocial hazards at work Code of Practice \(2022\)](#), employers carry a positive legal duty to manage this risk. Chronic stress causes documented, compensable physical harm. An industry that already reports 448 vacancies against a partial survey base, and elsewhere reports 45% of water operator vacancies remaining unfilled for more than 13 months (see **qldwater**

[Workforce Survey 2024](#)), is not currently in a position to discharge that duty in its most exposed communities — not because of poor management, but because of an inability to pay competitive wages or maintain safe rosters on the available revenue.

Queensland's geography also limits access to consistent face-to-face vocational training, especially in regional and remote communities — while current subsidies provide financial coverage for Priority Skills (and the associated training fees), such subsidies do not cover the high travel and accommodation costs associated with attending training. This is especially impactful for the delivery of specialised training that requires the centralised delivery of training at regional centres.

Out of necessity, some councils choose qualifications based on training provider availability (e.g. for plumbing qualifications) rather than operational needs, affecting long-term workforce capability. Inconsistent access also places mentoring pressure on experienced operators and risks loss of critical knowledge.

The [qldwater 2024 workforce data](#) reveals growing structural and workforce pressures across the water sector. While most roles are still dominated by directly employed staff, there are emerging trends — particularly in the Trades and Civil Construction and Maintenance areas, where contract/labour hire reliance sits at 12.71% and 1.96% respectively. This, combined with vacancy rates as high as 13.99%, points to ongoing recruitment challenges in operational fields. This in turn is leading to skills dilution and increased contractor creep resulting in complex works being outsourced, which ultimately impacts costs, ongoing maintenance, emergency response capabilities and system resilience. Thus, it represents an immediate and future risk to smaller WSPs. Immediate funding of workforce and appropriate skilling strategies is required to address these risks before they become too difficult to address.

To address critical skills gaps and improve training outcomes across the sector, targeted actions are needed to ensure more flexible and accessible training delivery, qualification structures, and assessment practices.

In Queensland and across Australia, the urban water sectors network operators, treatment plant staff, and field crews are increasingly being required to work across multiple disciplines, including confined spaces, asbestos management, electrical awareness, high-pressure systems, and advanced digital monitoring. These are not low-skill jobs: they involve significant technical capability, regulatory compliance, and safety responsibility. Yet unlike traditional trades, the water industry does not have an apprenticeship pathway that reflects the scope, complexity, and risk profile of these roles.

The Directorate believes it is time to formally test the feasibility of establishing a trade-equivalent apprenticeship pathway for the water sector. **qldwater** wrote to Hon Andrew Giles MP, Minister for Skills and Training in September (2025) and with support from other organisations requested a **Water Industry Apprenticeship Feasibility** study for the sector (it is currently a Certificate III Traineeship only). Without decisive action on adding an apprenticeship model pathway, the water industry risks severe skills shortages, loss of operational resilience, and an inability to renew its workforce at the scale required. Other sectors, including agriculture, have demonstrated that a



feasibility study (for an apprenticeship) is the critical first step to move beyond ad-hoc solutions and build a sustainable, recognised trade pathway.

qldwater has also undertaken a review of the National Water Package Certificate III (the dominant qualification held by water operators) and identified numerous and significant deficiencies. We are working with BuildSkills to address these matters.

There is much to be done before we can move to Minimum Operator Standards for the sector, however, **qldwater** suggests the immediate commencement of a co-design process with the sector to identify the minimum qualifications for drinking water plant operators with the design of an agreeable transitional compliance window. This will require funding and support across several relevant Federal Government Departments, including specific funding provision within the NWGF.

The Directorate would welcome the opportunity to provide any further information or data.

Yours sincerely

Dr Georgina Davis
Chief Executive Officer