

28 March 2024

NSW Productivity Commission

Response to Issues Paper – Alternative funding models for Local Water Utilities

By email to: LWUReview@treasury.nsw.gov.au

NSW Water Directorate submission – March 2024

Thank you for the opportunity to provide a submission. The NSW Water Directorate is the peak industry body for 87 out of 90 local government owned water utilities (LWU's) in regional NSW. Further information about us can be found at: <https://www.waterdirectorate.asn.au/AboutUs.aspx>.

Local Water Infrastructure in regional NSW 'at a glance'

Local water utilities in NSW have the following attributes 'at a glance':

Table 1 - Features of the regional NSW urban water industry

• 92 Local Water Utilities (LWU's)	• 1.9 million population served in 890,000 homes and businesses
• 782,000 square kilometres in aggregate catchment area	
• 380 water supply schemes	• 300 sewerage schemes
• 49 recycled water schemes	•
• 31,500 km of water mains	• 20,600 km of sewerage mains
• 312 GL per annum of water supplied	• 160 GL of sewage treated
• \$30 Billion total replacement cost of assets	• \$1.9 Billion in annual revenue
• 2400 water operators*	• 400 engineers, technicians and managers*

** Estimate extrapolated from 2016 operator survey*

The data indicates extensive critical infrastructure operated over an expansive catchment area by a relatively small cohort of dedicated local government staff. In fact more than 30 Local Water Utilities have a water team of less than 10 staff. This significantly affects the ability of these utilities to support specialist staff in-house, such as an in house water quality specialist.

In the last few years, regional NSW has experienced unprecedented impacts on water security and water quality arising from drought, bushfire, water quality challenges and the COVID-19 pandemic. By the end of 2019, the worst drought in 130 years of records saw 50 regional community water supplies at high risk of failure.

The Water Directorate calls on all water related agencies to collaborate and invest in water utility resilience for regional water providers through capacity building, improved water utility risk management and non-asset solutions such as digital technology and improved access to water operator training in regional NSW. While capital projects have an important part to play, these are invariably long-term solutions. Short term non-asset solutions are required to effectively monitor, predict, and mitigate risk.

One size doesn't fit all, and context is the key – not all high charging councils are small councils. At one end of the spectrum is the inability to recover costs due to diseconomies of scale. Many larger LWU's are making tangible steps to invest to achieve higher levels of service. Investment trends for large long-lived infrastructure such as dams and treatment plants can be multi-decadal, with a funding model that needs to account for long term payoff.

Context is the key to finding and fairly analysing key drivers of operational and financial performance. Findings from data should lead to further exploratory questions to avoid jumping to flawed conclusions. A suite of indicators will be required supported by contextual data addressing a LWU's operating environment. Effective metrics will be difficult to identify due to the diversity of LWU's and the complexity of their respective operating environments. However, this should not prevent funding being targeted at overcoming particular gaps or risks.

Safe and affordable water and sewerage services is the goal. Service levels need to be examined first before price because of the widely varying operating environment(s) experienced in the regional NSW water sector. Service levels will likely need to be adaptable to a community's context and need.

Our submission

Challenges from current funding models

1. What are the key factors that affect local water utilities' ability to recover costs through user charges?

It should be acknowledged that implementation of user charges in the water sector needs a balance. If all water charges were fixed charges then there would be no price signal to influence customer demand for the service, and demand for water would significantly increase. However a higher proportion of usage charges will lead to more financial risk due to the inherent variability in revenue from variable demand for water.

There are a number of variables that can significantly impact the ability of usage charges to cover LWU costs, and therefore the financial sustainability of an LWU:

Climate impacts on water usage and sewerage system performance

Water restrictions during drought reduces income from water usage charges. In some cases, water conservation can be seen as 'bad for business' – the LWU is in the business of selling water.

Extended wet weather reduces outdoor demand for water, which is significant proportion of the residential water usage and has the same impact as water restrictions. Generally sewerage system costs increase during wet climate years due to an increase in stormwater ingress to sewerage systems which must be transported and treated safely.

High fixed costs

Many LWU's will have a high proportion of fixed costs due to the infrastructure heavy nature of water utilities. This includes servicing long-term borrowings, principal and interest, in the delivery of major capital projects. Inevitably, core business is to meet the Australian Drinking Water Guidelines and Environmental Protection Licences (EPL's) to address minimum regulatory expectations. These costs cannot be avoided.

Depreciation of a relatively expensive infrastructure base - water and sewerage assets is probably the most difficult fixed cost to manage. Assets were mostly created many decades ago with 50 to 80 year design lives. Impacts of depreciation are perceived to be 'on paper'. Service levels can decline almost

imperceptibly over a 10 to 20 year period. An 'infrastructure cliff' is looming where a town was previously serviced with donated assets that reach the end of their useful life all at the one time, and asset renewal has not been progressively undertaken in advance.

Impacts of climate extremes on regional water and sewerage infrastructure

Major climate events including bushfire and flooding has serious impacts on infrastructure. Water and sewerage infrastructure excluded from funding under the Disaster Recovery Funding Arrangements (DRFA) Category B¹ even though water and sewerage services are an essential service to any regional community.

2. What might be reasons for some local water utilities with similar size and remoteness to perform differently in terms of level of cost recovery?

Some broad factors affecting cost recovery for small local water utilities:

The relative cost of the service. Economies of scale (or lack thereof) are important to identify. It is equally important to note that relative costs in remote/regional NSW are based largely on externalities that are beyond the control of an LWU such as:

- relative remoteness – long distances between small populations, impacting aspects of travel times for operational staff
- diseconomies with the capital and operating costs for very small water and sewerage assets per head of population
- inland NSW generally being more arid than coastal NSW, as well as having greater source water quality challenges. Per capita demand for water is typically higher in inland communities. This can lead to a higher dependence on revenue from usage charges and can lead to the perception that water conservation is 'bad for business'. Higher per capita water consumption isn't necessarily a sign of success and can mean less resilience during extreme events such as drought.
- Per capita cost comparisons are simply more volatile. When population is a smaller denominator, single events such as a wet year, a dry year, a significant asset failure can materially change cost recovery.

A community's ability to pay. – socio-economic indices, such as the ABS's SEIFA score² would be a primary metric. However, the economic profile for ability to pay metrics can be complicated an LWU's ability to service non-residential commercial and industrial development.

Large water users such as heavy industry, or food and beverage producers are usually 'anchor employers' in small towns with significant influence over LWU pricing policies and therefore the LWU's income. Mining, energy, transport and tourism are all sectors with significant influence on water and sewerage servicing. It is imperative that the costs of providing the service are balanced against the benefits to regional and state economies.

The level of service provided and the risks associated with the service. Safe drinking water, resilient against climatic events, appropriate water security (water availability) and a safe, liveable environment. It is important to acknowledge that regulatory requirements are driven by a number of NSW government

¹ The Disaster Recovery Funding Arrangements 2018 (DRFA) is the means through which the Australian Government provides funding to states and territories to share the financial burden of responding to a natural disaster, and supports the provision of urgent financial assistance to disaster affected communities. Source: <https://nema.gov.au/Disaster-Recovery-Funding-Arrangements-DRFA>

² More info: SEIFA – Australian Bureau of Statistics, available at: <https://www.abs.gov.au/websitedbs/censushome.nsf/home/seifa>

agencies, including DPE, NSW Health, NSW EPA and Dam Safety NSW. These agencies have a significant influence on the costs of service provision. Significant cost burdens can accrue on an LWU due to a change in risk appetite from any regulator. A one-size fits all approach to infrastructure provision must be avoided to achieve fit-for-purpose, more cost-effective and sustainable local solutions.

3. What are key challenges with obtaining funding for water and sewerage infrastructure upgrades and investment?

Capital funding under the *Safe and Secure Water Program (SSWP)* has not met the demand for water and sewerage infrastructure in regional NSW. The previous *Country Towns Water and Sewerage Program (CTWSSP)* contributed \$1.27 billion and operated for 24 years between 1994 and 2018, an average of just \$53 million per year. In 2015, the NSW Audit Office found that the CTWSSP “has effectively promoted adoption of better management practices by local water utilities, but will not achieve its objective of eliminating the water supply and sewerage infrastructure backlog in urban areas of country New South Wales.”³

The Safe and Secure Water Program (SSWP) proposed to provide in excess of \$1 billion in further funding between 2018 and 2028. This funding is also well known to be insufficient. Changes to the funding rules (via Version 2 of the program) were very welcome to pivot the program to a needs-based model. However, funding has only been sufficient to address Level 5 risks under the Eligible Risks and Issues List (ERIL), appropriately to communities with the greatest socio-economic disadvantage. The remainder of Risk Level 5 projects were funded to achieve ‘shovel-ready’ status without any commitment to construction funding. It is important to mention that LWU’s are often overlooked as funding partners. Investment in pre-construction investigation and design to achieve shovel-ready status can result in a small LWU having its pre-construction investment stranded for many years, with construction cost escalation inevitable.

In 2022 and 2023, many LWU’s were surprised with an invitation to submit for pre-construction funding on projects that they had not planned to work on, to very tight funding timelines.

There are significant overheads and business case costs for the NSW government (up to 2023 Water Infrastructure NSW) to project manage small regional projects. There is significant delay in achieving regulatory approval during the business case, planning and design stages of projects.

Most concerning is that the calculation of risk for ERIL de-rates risk for towns with population less than 2000 people. This means that the Productivity Commission does not have an accurate picture of risk and underinvestment in essential infrastructure for small populations in remote and regional NSW.

It is acknowledged that larger utilities receive the least proportion of capital subsidy for eligible projects under the Safe and Secure Water Program funding rules, without regard to the financial impact on the communities they serve:

³ Source: NSW Audit Office (2015), *Performance Audit – Country Towns Water Supply and Sewerage Program*, available at: https://web-archive.cloud.audit.nsw.gov.au/articledocuments/106/amended_country_towns_water_supply_and_sewerage_program_full_report.pdf.aspx@embed=y

Table 1. SSWP funding bands

Annual revenue of proponent (from water and sewerage)	Safe and Secure Water Program funding band
> \$20 million (m)	Up to 25%
> 10m to \$20m	Up to 50%
> \$5m to \$10m	Up to 60%
> \$2.5m to \$5m	Up to 75%
<=\$2.5m	Up to 90%

Figure 1 - Safe and Secure Water Program funding bands⁴

There can also be perverse consequences with the above approach where a Local Water Utility increases revenue to improve cost recovery but reduces its eligibility for capital funding by moving into a lesser funding band. Using combined income from water and sewerage annual revenue to set the funding bands is also problematic as it isn't relevant to the burdens projects place on either a water fund or a sewer fund, but revenue and loans for water or sewerage businesses are never combined.

Funding model principles

4. What factors should be taken into account in calculating government subsidies for local water utilities?

There are a few factors that should be considered with equitable distribution of financial assistance for everyday operation of a Local Water Utility, if it becomes available (note that this answer also overlaps with our answer to Question 2):

- Socio-economic status of customers and community – the ability to pay
- Risk of service level failure compared with the ability to self-fund solutions
- The relative cost of the service (economies of scale and remoteness)
- Local Water Utility capacity to deliver operational and capital work

Water Directorate agrees with the approach DCCEEW takes with the socio-economic status of communities referencing indices such as SEIFA, especially for small regional and remote communities. There are much higher costs for operation and capital delivery in remote parts of NSW.

A risk based approach is important to prioritise funding toward the highest need. There is a different level of risk that emerges with the socio-economic impact on state of NSW from the risk of a major service failure, especially a drought, on a large regional community such as Tamworth, Orange, the Mid North Coast, or the Far North Coast. The consequences of failure are high whilst the proportion of project funding support is lower under the current criteria for the *Safe and Secure Water Program*, as indicated in Figure 2 above. This presents a constraint for larger LWU's to meet service levels in the long term.

5. What might be the typical costs for delivering water and sewerage services for a well-run local water utility?

Although median and average values can be extracted from any data, there is no typical cost to deliver water and sewerage services due to the wide range of operating environment that is beyond the control of the LWU. This

⁴ Source: DPE website, available at: <https://www.industry.nsw.gov.au/water/plans-programs/infrastructure-programs/safe-and-secure-water-program/program-funding-information>

includes geographic distance between population centres served, climate, hydrology, management of shared water sources, infrastructure required per capita, short term servicing needs such as tourism.

Water utility costs are dependent on climate impacts and therefore vary significantly between wet years and dry years. It also should be noted that many LWU's are delivering a lower level of service due to funding constraints.

6. What indicators could be linked to funding to drive ongoing performance improvements and deliver value for money for customers?

Delivering value for money water and sewerage services can't easily be compared due to the unique and complex circumstances between small and large towns, coastal and inland catchments.

Context is the key when interpreting performance data. A performance result relies on a number of factors that are beyond the control of an LWU, such as climate, geographic distance, catchment features. DCCEEW require more than 600 data points for performance reporting that is geographically aggregated, annualised and represents a time lag of 9 months for benchmarking against other LWU's.

Continuous improvement needs to be incentivised for LWU's, doing better every day, month and year whilst acknowledging that wet, dry, and stormy climate plays a huge part in year-to-year performance. Real time data will play a very important part going forward – empowering engineers and operators to intervene immediately on performance issues. Prevention is far better than the cure in service failures – reactive maintenance can cost up to 3 times as much as planned maintenance and asset renewal programs.

Minimum service levels

7. Should the minimum service levels be applied universally to all towns within the area serviced by a local water utility, irrespective of size, remoteness or cost?

The idea that there should be different service levels between different communities in Australia is morally very challenging. We have diverse communities in regional NSW, one size does not fit all. Water Directorate believes that everyone deserves access to safe, secure and affordable water services, whilst acknowledging that the manner in which that service could be delivered will vary.

Realistically it is acknowledged that not all small communities have access to reticulated water and sewerage services, with a basic service level being a roof-connected rainwater tank for their water supply and an on-site sewage management system (such as a septic tank) for managing wastewater. These basic services inherently have a higher risk of failure to meet drinking water health standards or environmental protection standards respectively. More attention could be paid to mitigating risk for unserved communities, which doesn't necessarily involve imposing reticulated systems with unsustainable financial impacts.

Towns less than 2000 population can be supported by trucked water in a drought. There is one example in 2019-2020 where a town of 3000 people managed on trucked water for 3 months. The costs of this form of incident management need to be factored in to decision making on funding and approving capital works. It also should be noted that drought isn't formally recognised as an emergency in the way that major floods and fires can be declared an emergency.

The standards applied to wastewater returns to the environment vary greatly across NSW and can depend greatly on the risk appetite of the environmental regulator at the time rather than the costs to a community for environmental compliance.

8. What metrics should be considered in minimum service levels?

There is no reason the concepts shouldn't align with the Operating Licences applied to Sydney Water and Hunter Water with regard to reliability and quality. It is imperative to account for matters beyond an LWU's control. For example, upstream catchment water quality needs a whole-of-catchment, multi-agency and community oriented approach. For most regional LWU's, water crosses many boundaries. WaterNSW has a significant part to play to assist LWU's with real-time water quality data and an awareness of water quality impacts from operation to mitigate drinking water quality risk in regional NSW towns.

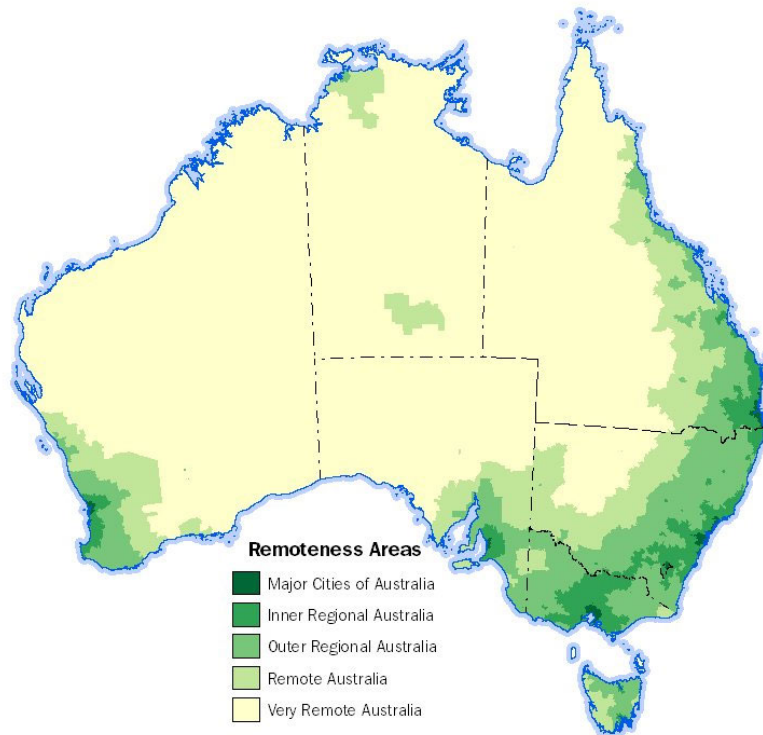


Figure 2 - Remoteness areas in Australia. The ABS reports on remoteness derived as the road distance to the nearest urban centre⁵

Water Directorate suggests that it isn't optimal to simply impose a higher regulatory standard without multi-agency technical and funding support. This support – especially access to specialist skills – will be required regardless of the funding model or institutional structure.

9. What is the existing evidence on current basic service levels, customers' needs for minimum service levels and willingness to pay in regional and remote communities?

There is not enough evidence publicly available. Customer service surveys are unreliable for small populations, but this must not detract from the need for basic water and sewerage services at an affordable price. Referring to our answer to question 7, the key to achieving safe and secure water and sanitation outcomes is by addressing risks rather than traditional approaches of high cost water supply and wastewater reticulated systems. Equity needs to be considered, but it is in the access to safe and affordable services and the solution does not need to be the same as it looks in our large urban centres.

Regional communities generally pay higher charges whilst not achieving full cost recovery that addresses the total cost of ownership of water and sewerage infrastructure. This is a problem that is unfortunately exacerbated in some communities through the Safe and Secure Water Program due to the donation of large expensive assets that increase costs for operation and subsequent investment in their upkeep.

⁵ Source: <https://www.abs.gov.au/websitedbs/D3310114.nsf/home/remoteness+structure>

Although there are requirements to meet the Australian Drinking Water Guidelines (ADWG) under the Public Health Act 2010 (NSW) there otherwise aren't explicit service levels for LWU's. There is also a comparatively wide spectrum of capacity, performance and risk between large regional councils and small rural/remote councils.

Solutions for small and remote communities need to be sustainable for that community, not only in relation to their financial ability to pay, but also their capacity to operate, maintain and manage the risks of the supply or service.

10. What are the barriers to setting measurable service levels?

The infrastructure, and the financial and technical capacity of LWU's to meet the service levels are not known. A State of the Assets report for LWU's, reporting on technical and financial performance would be important first steps on the way. This should include the costs to provide water and sewerage infrastructure for unserved communities.

Before this is done, a consistent multi-agency regulatory approach is required to compare the socio-economic costs against the benefits of increasing regulatory standards year-on-year. Trade offs are inevitably required between social, financial and environmental requirements. Impact assessment should avoid desktop scenarios wherever possible and use real-world examples and data.

Equitable access to water, a service that is essential to human life, should be managed to a service level appropriate for a particular community to safely manage risk.

11. What are challenges with monitoring and reporting against minimum service levels?

There are already significant burdens on LWU's in monitoring and reporting performance to numerous regulators, with provision of accurate and timely data remaining a significant challenge for small LWU's. Another challenge is context – the operating environment faced by an individual LWU and its local challenges.

It isn't immediately clear from existing operating data that some communities are provided with a lower level of service due to an LWU spending within its means – the ability to make strategic investment into asset upkeep and long term sustainability can be unaffordable for small LWU's.

Alternative funding options

12. What are the desired outcomes for addressing the challenges currently faced by local water utilities?

The goal should be for all communities to have access to safe and affordable water supply and sewerage services across NSW. In achieving this, there needs to be a clear understanding of what service level is to be provided to each community and how it is to be funded.

Recognition that context is the key. One size does not fit all in regulating LWU performance or in the provision of services to each specific community. There is significant diversity in operating environment for LWU's in regional NSW and a large disparity in the service levels delivered to communities across regional NSW.

13. What are obstacles to greater use of loans from financial institutions to fund infrastructure investments in water and sewerage services?

Debt is often underutilised by LWU's due to the perceived long term financial and political risks to a small LWU. Debt taken on by LWU's affects the whole council financial position. In 2015/16 this affected Fit for the Future metrics that drove amalgamation of councils. Another obstacle is the size of an LWU relative to size of debt being

taken on for a major project, most commonly to match the funding mix required by the Safe and Secure Water Program.

Councils are often subjected to stricter borrowing rules than state owned entities and council debt is not guaranteed by the state.

14. What measures would drive investment planning that takes account of climate change risks and ongoing costs of infrastructure maintenance?

LWU's have already been severely affected by climate events in the last 5 years between the Black Summer bushfires in 2019-2020, coinciding with the worst drought in 130 years of measurements and subsequent record flooding in 2021 and 2022. The NSW Government through AdaptNSW was assessing climate change impacts on infrastructure through XDI, the Cross Dependency Initiative⁶, which measures climate risk and adaptation analytics. This would drive the recognition of cost impacts on regional infrastructure from climate events. Grant funding should target the mitigation of high-risk services or communities.

Infrastructure standards should be reviewed and updated to improve resilience against climate events based on lessons learned from the last 5 years, including drought management and contingency planning.

15. Who are most at risk from high water bills in regional, remote and metropolitan New South Wales?

There is a significant inequity in pensioner rebates between the two SOCs of Sydney Water and Hunter Water, and the regional LWUs. The SOCs have \$650 and \$380 pensioner rebates respectively, which are both 100% covered by the NSW Government through a CSO payment, yet regional LWU's have a capped pensioner rebate of \$175 per customer (\$87.50 each for water and sewer) with the NSW Government only covering 55% of this. There has been no increase in this rebate since 1993. The Issues Paper notes that if this rebate had been increased with CPI it would be worth around \$390 per year in today's dollars. The NSW Government should fully fund the pensioner rebates for all LWU's across NSW consistent with the assistance provided to the SOC's and their customers.

There are hidden risks based on other factors:

- When LWU's take on new large assets there are increased costs of operation, depreciation and servicing of borrowings that need to be covered with higher bills
- The 'infrastructure cliff'⁷ where a town has been provided with services via donated assets at a point in time some decades ago and the assets reach the end of their useful life at a similar point in time.
- Disaster recovery costs with water and sewer assets ineligible for DRFA funding if the service charges are more than 50% of the cost of delivering the service.
- The demand for increased service levels due to increased regulatory expectations and standards

16. What are examples of projects or operations associated with a funding model based on regional collaboration for local water utilities? What were the challenges?

There are many examples of successful regional collaboration across regional NSW using County Councils, JO's or alliances. The Central NSW Joint Organisation water utilities alliance⁸, and Orana Water Utilities Alliance⁹ have been very successful in their regions.

⁶ More information: <https://xdi.systems/>

⁷ Refer to research by the Queensland Water Regional Alliance Program: [Infrastructure Cliff? Queensland's aging Water and Sewerage Assets](https://qldwater.com.au/qwrap_research), available at: https://qldwater.com.au/qwrap_research

⁸ More info: <https://www.centraljo.nsw.gov.au/regional-water-security/>

⁹ More info: <https://owua.net/>

The challenges are insufficient resources and funding to promote regional collaboration. In some parts of NSW there is a lack of political will to drive and facilitate regional collaboration between Local Water Utilities. This is evident in coastal NSW in particular where there are few shared catchments or common interests.

Moving water between regional communities can be expensive and energy intensive. Collaboration on its own will not reduce the basic capital and operational costs of water and sewerage infrastructure, but it will enable better access to knowledge, skills and strategic capacity.

17. What has worked well and what have been challenges for local water utilities in leveraging the scale and expertise of State Owned Corporations?

Assisting LWU's is (in most cases) not clearly authorised for State Owned Corporations (SOC's) through instruments such as their Operating Licence as it isn't 'core business' for a corporation. The SOC's need to have a clear role and mandate to assist LWU's and the mechanism in place for this support to be provided when needed. In addition, there is a lack of problem definition – clearly defined strategies and assistance programs that inform SOC's on LWU needs.

18. How could government and local water utilities better partner with Aboriginal communities to improve their water and sewerage services?

The Aboriginal Communities Water and Sewerage Program (ACWSP) is a \$200 million program¹⁰ operating since 2008 partnering between the NSW government, NSW Aboriginal Land Council and Local Water Utilities to improve water and sewerage infrastructure for 63 eligible Aboriginal communities. THE ACWSP provides a platform for further partnerships to deliver improved service levels and increase Aboriginal participation in the program.

Additional comments

Has a de-facto Community Service Obligation already been set in some parts of NSW?

IPART NSW already determine the customer share of capital and operating costs for the Fish River Scheme in Central West NSW (WaterNSW)¹¹ and Broken Hill in Far West NSW (Essential Water)¹². In Broken Hill for example:

The full cost of providing water and wastewater services in Broken Hill is around \$4,100 per customer on average per year, but customers currently contribute around half that cost. The remaining half is the cost Essential Water incurs from transporting water through the WaterNSW Pipeline, which the NSW Government currently subsidises and is paid for by NSW taxpayers. Our draft prices assume the existing WaterNSW Pipeline subsidy will continue for the next 4 years. With the existing subsidy, typical residential water and wastewater bills in Broken Hill would remain in line with (or lower than) bills in other regional areas with similar demographics to Broken Hill. If this subsidy did not continue, bills would increase substantially. (p1)

Taking inflation into account, a typical household would pay an annual water and wastewater bill of \$1,527 in 2022-23. (p3)

The weighted median typical residential bill (TRB) for the provision of water and sewerage services across all regional NSW LWU's is \$1,405.87 in 2020-21, compared with the National median \$1,395:

¹⁰ Source: <https://water.dpie.nsw.gov.au/our-work/projects-and-programs/aboriginal-water-program/aboriginal-communities-water-and-sewerage-program>

¹¹ IPART, *Draft decision on costs for the Fish River Scheme*, available at: <https://www.ipart.nsw.gov.au/Home/Industries/Water/Reviews/Rural-Water/WaterNSW-rural-bulk-water-prices-from-1-July-2021/16-Mar-2021-Fact-sheets-on-draft-report/Fish-River-Scheme>

¹² IPART, *Draft Report - Review of Essential Water's prices for water and wastewater services in Broken Hill - June 2022*, available at: <https://www.ipart.nsw.gov.au/Home/Industries/Water/Reviews/Metro-Pricing/Prices-for-Essential-Energy%E2%80%99s-water-and-sewerage-services-in-Broken-Hill-from-1-July-2022>

Typical Residential Bill - Usage - W&S

Units: \$ per connected property

Sum of water and sewerage Typical Residential Bills (using the actual year's usage).

The data shows the nominal value of the selected report year

The weighted median is the median of the available validated data for the indicator with the number of connected properties applied as weights.

The national median is the median of available data from the latest national performance report. The included data is only for the LWUs with more than 10,000 connected properties.

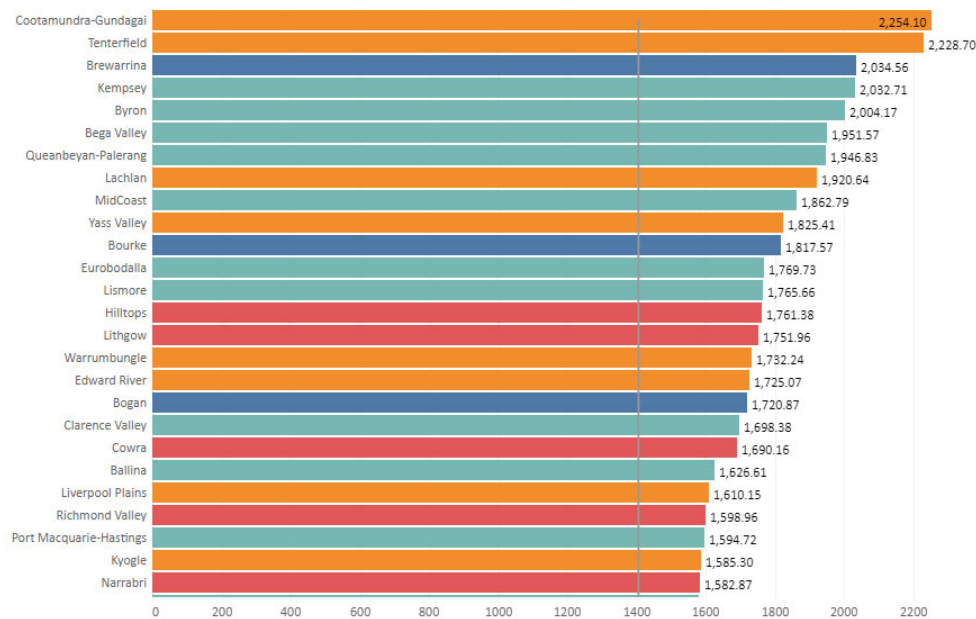


Figure 3 - Typical Residential Bill - Usage - W&S¹³

There are 30 LWU's with a combined TRB above IPART's Broken Hill draft price determination of \$1,527. As indicated in the chart, size of LWU hasn't been a major determinant of price. In fact, half of the 'top ten' in DPE's data are in the largest category of LWU's, greater than 10,000 connections.

Most probably, this is an indication of many LWU's needing to invest in significant service level improvements – new assets to improve drinking water quality, water security and environmental protection, with a consequent need to cover the costs of servicing borrowings, asset depreciation and increased operating costs resulting from these new investments.

It is also notable that larger utilities receive the least proportion of capital subsidy for eligible projects under the Safe and Secure Water Program funding rules as discussed earlier in this submission.

Need for continued regulatory reform

Local Water Utilities are governed by councils empowered by the NSW Local Government Act 1993 and the NSW Water Management Act 2000.

The Minister for Water issues guidelines for managing the provision of water supply and sewerage services by councils under [Section 409\(6\)](#) of the Local Government Act. These guidelines were recently reviewed and approved effective from July 2022 in a [Regulatory and assurance framework](#). The Water Directorate has for many years submitted to the NSW government that the previous Best Practice Management Framework Guidelines for Water Supply and Sewerage were too prescriptive, inflexible and not fit-for-purpose. We welcome more strategic support and continuous improvement, moving away from the previous more prescriptive focus on day-to-day operations.

¹³ DPE, *Local water utility monitoring, Typical Residential Bill – Usage – W&S*, available at: <https://www.industry.nsw.gov.au/water/water-utilities/lwu-performance-monitoring-data>

The new Regulatory and Assurance Framework (RAF) is a credit to the Department of Planning and Environment, Water. The Department listened to the experience of Local Water Utilities and crafted new guidance from the ground up. Notably the RAF removed much of the duplication that occurred between DPE's water utility requirements and the requirements of the NSW Office of Local Government through the Integrated Planning and Reporting framework, eliminating the need for LWU's to 'report twice' on their activities in the future.

The new RAF is in its infancy. It will take time for LWU's to work out how to implement the new regime with less prescriptive guidance. The RAF has 12 strategic outcomes to address. Water Directorate believes that the outcomes could be consolidated to a degree due to some overlap between outcomes and guidance material. However the principles and direction of the RAF are sound and a vast improvement on the past guidance as they are intended to provide the flexibility to allow LWU's to choose how they will comply depending on their operating circumstances.

Just like the larger metropolitan utilities, Local Water Utilities operate in a complex web of governing legislation. Apart from their powers and duties under the above two Acts, LWU's also have additional regulatory responsibilities:

- **Public Health Act 2010** with regard to maintaining a Drinking Water Management System for safe drinking water
- **Protection of the Environment Operations Act 1997** with regard to holding Environmental Protection Licences Pollution Incident Response Plans (PIRMP's)
- **Environmental Planning and Assessment Act 1979** with regard to determining approvals to construct water and sewerage infrastructure and ensure appropriate servicing plans for land.
- **Dams Safety Act 2015** – to ensure that any risks from dams owned by councils are managed to an acceptable level
- **Work Health and Safety Act 2011** – to ensure the safety of water and sewerage workers
- **Water Act 2007 (Commonwealth)** – with regard to national performance reporting requirements for water utilities

Water Directorate recommends increased attention be paid to a more 'joined-up', whole of government approach to its oversight and support for water service provision in NSW. There are significant regulatory hurdles in water service provision. A streamlined, coordinated, strategic regulatory approach would be very welcome.

Strategic opportunities – Water Directorate's recommendations for short term targeted support

The Water Directorate acknowledges that the provision of water and sewerage services in regional NSW is subject to a complex range of challenges. There are a number of short term 'no regrets' actions and investments that can be prioritised by the NSW government.

1. Incentivise Regional Collaboration between LWU's

There are a multitude of benefits in regional collaboration, which lessens the burden on individual council resources and measurably improves service levels for the communities served. Collaboration can occur in a range of models, which is best described by Queensland Water Directorate in their Collaboration Maturity Model¹⁴. Benefits are pooled between member councils (LWU's) to:

- Address skills and capability shortages
- Deliver strategic water planning at a regional/catchment scale
- Develop business cases for regional water security infrastructure across council boundaries

¹⁴ More info: https://qldwater.com.au/qwrap_governance

- Procure more efficient access to specialist contractors
- Deliver performance improvement through regional benchmarking and continuous improvement programs
- Develop consistent asset management practices
- Developed shared service arrangements where mutually agreed
- Increase resilience with the ability for neighbouring councils to support each other during emergencies and incidents such as flooding or water quality events.

In 2021, the Queensland government extended funding for regional water utilities permanently, in the amount of \$2 million per year for local government outside of South-East Queensland deliver efficient water and sewerage services¹⁵. The program was piloted for a number of years and demonstrated year-on-year benefits that culminated in the announcement of permanent funding. There are numerous intangible benefits with agency-to-LWU relationships that could be harnessed for strategic improvement, or emergency and incident management.

¹⁵ Queensland Government media statement 16 Dec 2021: <https://statements.qld.gov.au/statements/94120>

2. Skills and training

In November 2023, the NSW government extended fee-free vocational training for water operators with up to 900 vocational training placements across NSW¹⁶ via the NSW Smart and Skilled program. The announcement is very welcome. There are further challenges that must be addressed with regard to skills shortages with LWU's which include:

- The costs of providing the training 'in region' and 'on country' aren't properly covered by the Smart and Skilled program. A review of regional loading for training would be welcome, the arrangements for regional Queensland are more supportive than those for regional NSW.
- There is an opportunity to create regional water operator training centres which would deliver better quality training at lower cost to LWU's, but their creation needs to be supported by state funding rather than relying on small regional councils to self-fund.
- There is a need to ensure that training is fit-for-purpose and applicable to regional water utility needs. Regional water operators tend to be all-rounders – working in small teams on treatment and networks, water supply and sewerage, whilst metropolitan operators tend to specialise in one facet of water industry operations.
- There are insufficient trainers to meet the demand for water operators. There is market failure because of the relatively small number of water operators required in regional NSW, compared with trades such as building, plumbing or electrical trades. Where there is market failure there needs to be government support, especially where a critical and essential service such as water and sewerage services is involved.
- Remuneration of water operators in the local government sector remains a barrier to attracting and retaining water operators and engineers when compared with the mining and energy sectors.

The Water Directorate is continuing to work closely with DCCEEW to develop a more comprehensive workforce plan to address the above challenges.

3. Digitalisation of local water utilities

DCCEEW is already managing two innovative and successful pilot programs that the Water Directorate recommends should be continued, consolidated and expanded across all LWU's:

- Regional leakage reduction program¹⁷ which focusses on fixing leaks and water loss to efficiently manage existing water networks. The first stage of the program aims to save 7.5 billion litres of water by the end of 2024, which is strategically critical to improving the resilience of LWU's to drought.
- Advanced Operational Support program¹⁸ - which will make a measurable difference to local water utilities through the provision of expert personnel and on-site risk assessment with a focus on online monitoring and training to support the recipient LWU to more effectively manage water quality.

Both programs have ultimately promoted the benefits of digital technology – real-time monitoring and measurement of water leakage and water quality has already led to measurable benefits in water security and drinking water quality in the pilot stages for regional communities.

The Water Directorate recommends that the lessons learned from these two programs be expanded to a comprehensive digital water utilities program for LWU's. A range of un-realised benefits include the potential for

¹⁶ More info: <https://utilitymagazine.com.au/nsw-gov-to-deliver-vocational-water-operator-training-package/>

¹⁷ More info: <https://water.dpie.nsw.gov.au/our-work/projects-and-programs/water-efficiency/regional-leakage-reduction-program>

¹⁸ More info: <https://water.dpie.nsw.gov.au/our-work/local-water-utilities/funding-and-other-programs/advanced-operational-support-program>

remote analysis of data and technical support, remote access to specialists, virtual operations centres to intervene earlier on potential service failures on a predictive basis before failure occurs. Digitalisation represents the opportunity to manage LWU's differently in the future.

Concluding comments

Developing an alternative funding model for regional Local Water Utilities would represent a transformational opportunity for regional communities in NSW. The benefits from sustained long-term state investment in budget support for water and sewerage services to complement capital project subsidies will not only assist regional communities but will ultimately flow back to the state through improved economic development. Optimising the whole-of-life costs for water and sewerage infrastructure is critical.

Regional water services are not solely a resource management concern. It is also a public health concern as a service that is essential to human life as well as an enabler for the regional NSW economy. Regional NSW towns support employment and economic development in the mining sector, agribusiness, tourism and the energy sector to name but a few key economic drivers. A town with inadequate water and sewerage services will struggle to support the NSW economy.

The Water Directorate supports a needs-based, evidence-based approach to assist socio-economically disadvantaged communities that lack access to economies of scale. It is important to generate a better balance between capital and operational support in any alternative funding model. The existing bias toward capital support has led to perverse consequences.

Over time, many studies on water services for regional Australia have implied that the only way to achieve sustainable water supplies for smaller communities is with economies of scale. That can be interpreted to mean that the control of water services must be taken away from local communities. Most communities want to be empowered and supported to solve their problems locally. The question is if an external funding source and external technical support can be provided reliably, and an appropriate regulatory framework is in place, would centralising water service functions be necessary?

There are numerous regulating agencies and regulations in water service provision, and significant issues with the lack of information and engagement with regional communities in water. A whole of government approach needs continued attention to relieve constraints on water service performance.

Context is the key to finding and fairly analysing key drivers of operational and financial performance. There is risk that incorrect conclusions could be drawn from the data. A suite of indicators will be required supported by contextual data addressing a LWU's operating environment. Funding could be targeted at overcoming particular gaps or risks.

Service levels need to be identified with community participation and to identify the capital and operating investment required to achieve the service level. A particular focus on risk reduction through non-capital solutions including but not limited to digital technology and water operator training is essential to make the best use of existing assets. For unserved communities, understanding the risk of failure of their onsite rainwater and septic systems needs to be considered before considering capital intensive solutions that may not be financially sustainable.

Increasing funding to LWU's is not solely the answer. Having access to skills is imperative, along with modern management systems. This would provide the foundation for more resilient, sustainable water and sewerage services including delivering climate independent supplies such as desalination and purified recycled water.

The Water Directorate also recommends that state government funding and technical support should be targeted towards skills and training, digitalisation and regional collaboration between LWU's as an important first step.

Thank you for the opportunity to make this submission. Should any further information be required, I can be contacted on [REDACTED].

Yours sincerely

Brendan Guiney
Executive Officer | NSW Water Directorate