

Essential Water 2026-31 Pricing Proposal



September 2025

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CEO Foreword

I am pleased to submit Essential Water's Pricing Proposal (Proposal) to the NSW Independent Pricing and Regulatory Tribunal (IPART) for water and wastewater services to our customers in Broken Hill and the surrounding areas of Menindee, Sunset Strip and Silverton.

We have prepared this Proposal in line with IPART's updated regulatory framework for water, which is focussed on delivering customer value. Recognising the central role of customers in our business, we have significantly stepped up our customer engagement for this Proposal to ensure it reflects our customers' priorities. Our focus is on providing the essential water and wastewater services our customers require as efficiently as possible, adopting a risk-based approach and a long-term perspective. Our size and operating environment means a proportionate approach is required to avoid imposing unnecessary regulatory costs on our customers.

This Proposal has been informed by consultation with our customers and community, and is aimed at ensuring we can continue to efficiently deliver safe and reliable water and wastewater services, meet our legislative and environmental obligations, and maintain customer service standards. It outlines the outcomes we propose to deliver, the expenditure plans required to deliver those outcomes at lowest long-term cost and the resulting cost-reflective prices to customers over five years, from 1 July 2026 to 30 June 2031.

The Wentworth to Broken Hill Pipeline continues to provide us with a steady and reliable supply of water. Over the next five years we must efficiently maintain and invest in our water and wastewater network, with many critical assets ageing and in need of repair or replacement. We have prioritised expenditure in line with our environmental and regulatory requirements, reflecting the feedback we received from customers during our engagement sessions. We forecast prudent and efficient capital expenditure of \$252 million over 1 July 2026 to 30 June 2031, which includes expenditure on building a new wastewater treatment plant in Broken Hill, and upgrades and replacements of our water and sewer mains. These investments will ensure we can continue to comply with our environmental and other regulatory requirements, and deliver the services our customers want and need.

Our operating and maintenance expenditure over the next five years is forecast to remain broadly consistent with current levels. Our forecasts reflect our complex operating environment and the cost pressures that our business is facing, whilst incorporating efficiencies where possible. We face practical constraints in serving a small customer base, across a large area in a remote location, and the efficient costs of operating and maintaining our network and supplying services reflect those constraints.

This cost pressure is reflected in our proposed revenue requirement. Relative to IPART's 2022 price determination, our 2026-31 Proposal would increase our required revenue per year (our 'Notional Revenue Requirement' or NRR) from about \$51 million in 2025-26 to approximately \$72 million on average across 2026-31 (a 42% increase over this period). To recover this revenue requirement, annual bills for our typical residential customers would need to increase by around 15% on average each year from 2025-26 to 2030-31, excluding inflation.

We understand the cost pressures that the community is facing and are aware of the need to ensure our essential services are affordable to our customers. We have worked hard to deliver efficiencies, so this Proposal includes no more than the prudent and efficient expenditure required to ensure we can continue to reliably deliver the water and wastewater services our customers want and need. We propose to smooth price increases over the 2026-31 period, to minimise bill shock for our customers. However, we recognise the bill impact for our customers is significant.

Many customers in our community are vulnerable. We have undertaken analysis on what is affordable for our customers. We suggest there may be a case for a greater share of costs to be recovered via further government support to enable more affordable customer bills.

We encourage our customers and community to participate in IPART's price review process, and we look forward to ongoing engagement with all our stakeholders.



John Cleland

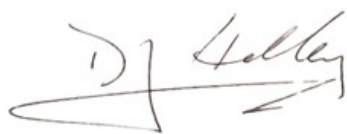
Chief Executive Officer

Board Attestation

In accordance with the *Water Regulation Handbook*, July 2023, of the Independent Pricing and Regulatory Tribunal of New South Wales, the directors of Essential Energy, having made such reasonable inquiries of management as we considered necessary (or having satisfied ourselves that we have no query), attest that, to the best of our knowledge and for the purpose of proposing prices for the Independent Pricing and Regulatory Tribunal's review of Essential Water's prices:

- > The pricing proposal would best promote the long-term interests of its customers
- > The pricing proposal:
 - Is the business's best customer value proposition and is consistent with our customer engagement strategy.
 - Would deliver services at the lowest sustainable cost and is consistent with our cost efficiency strategy.
- > The information provided in the pricing proposal submitted on 30 September 2025 is the best available information of the financial and operational affairs of Essential Water and has been checked in accordance with the *Water Regulation Handbook*; and
- > The pricing proposal has been subject to a quality assurance check, which certifies the accuracy and consistency of all data, including confirmation of the following:
 - Information in the pricing proposal is consistent with the business's information return (AIR and SIR), the business's financial accounts, and reports against output measures, as relevant.
 - Figures in the business's pricing proposal are accurate and correctly sourced.
 - The pricing proposal includes proposed prices for all the business's regulated services.
- > There are no circumstances of which we are aware that would render the information provided to be misleading or inaccurate.

Certified by the Chair of the Board



Doug Halley
Chair

29 September 2025

Dated

Executive summary

This submission presents Essential Water's proposed prices for water, wastewater, and related services to our customers in Broken Hill and the surrounding areas of Menindee, Sunset Strip and Silverton, to apply from 1 July 2026 (the Proposal).

Essential Water is a fraction of the size of the other regulated water businesses in New South Wales (NSW). The population we service is about 5% of the population supplied by the Central Coast Council, 3% of the population supplied by Hunter Water and about 0.3% of the population supplied by Sydney Water. However, the need for efficient and effective water and wastewater services is the same for Essential Water's communities, even though our location is remote and, at times, challenging.

This Proposal reflects the critical role of water and wastewater treatment services for public health and prosperous communities and has been shaped by extensive customer and stakeholder feedback.

Our customers told us they need and value secure and reliable water and wastewater services, consistent with current service standards reflecting public health requirements. Delivering these outcomes requires efficient investment in an ageing network, but the cost needs to be paid for by a small population which is also one of the most disadvantaged in NSW with limited capacity to pay.

Our Proposal is consistent with the key principles of IPART's new regulatory framework, although tailored to reflect Essential Water's size and operating environment. Overall, we consider our Proposal should receive a 'Standard' rating.

Notably, the Proposal includes some significant capital expenditure to deliver the following:

- > Wills Steet Wastewater Treatment Plant (WWTP) – A new WWTP that will align with the requirements of the Environmental Protection Authority (EPA). The current WWTP has been in operation since 1939, and there are numerous issues – it is constantly undergoing emergency repairs for leaks and cannot process sewerage in accordance with modern treatment standards as required by the EPA. The replacement of this plant has been deferred for a number of years, and the work is now critical in order for us to meet our EPA compliance requirements and to ensure our treatment processes run efficiently.
- > Replacement of parts of the water reticulation network – We need to upgrade the oldest parts of our water mains which are more than 60 years old. We currently have to reduce the level of water in our storage tanks to relieve pressure on the system and minimise increasing numbers of water bursts. This is not a feasible long-term strategy, particularly in times of drought. Even with reducing water levels in storage tanks, continual maintenance and renewals of water is required to minimise leaks and blockages.
- > Replacement of parts of the wastewater reticulation network – We need to upgrade the oldest parts of our sewer mains, which are a similar age to and suffer from similar issues as our water mains. This work is needed so that wastewater can continue to be reliably and cost-effectively transported to our treatment plants. We need to increase the level of renewals, so we are spending less time and money on reactive emergency repairs and more on planned maintenance. This will produce better outcomes for customers.

Our circumstances support a five-year determination period

We propose a five-year determination period, from 1 July 2026 to 30 June 2031. The Wentworth to Broken Hill Pipeline (the Broken Hill Pipeline) continues to provide stability and certainty to our operating environment. We have a reliable bulk water supply, accurate forecast water sales volumes, and our bulk water costs are relatively steady and predictable. Any fluctuations in demand during the upcoming determination can be managed through the demand volatility adjustment mechanism (DVAM).

Furthermore, a five-year determination period aligns with the default length of a determination under the regulatory framework and would avoid unnecessary regulatory costs. This will allow Essential Water to focus on delivering its services as efficiently as possible and create a longer time-series of data and experience for the next price review.

Relative to the size and location of Essential Water, our forecast costs are efficient and reflect the need for critical investment in key assets and our practical constraints

From current levels, our annual NRR in 2030-31 is increasing by about 43% in real terms (excluding the effects of inflation) from 2025-26 (see Table 1). Key drivers include increased capital expenditure for the replacement of infrastructure, as outlined above. Our operating expenditure is forecast to remain steady in real terms relative to current levels over the 2026-31 determination period; this is higher than the allowance set by IPART in its 2022 determination. This is because Essential Water delivers water and wastewater services to a relatively small customer base.

Our challenging physical environment influences the way we work. Our remote and arid location brings with it unique safety and logistical challenges. Our ageing system requires investment and renewal to deliver services to the required standards. However, these aspects place pressure on the prices we charge our customers, many of which are vulnerable or disadvantaged.

Table 1: Proposed Notional Revenue Requirement (NRR) (\$'000, \$2025-26)

	2025-26 ^a	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Operating expenditure (excluding bulk water)	14,311	20,244	20,243	21,230	20,246	20,248	102,210
Bulk water purchases	23,590	25,228	26,482	27,695	29,022	30,394	138,820
Regulatory depreciation	5,255	5,236	6,275	6,903	7,393	7,820	33,626
Return on assets	6,927	8,266	10,577	11,839	12,517	13,113	56,311
Return on working capital	274	-185	-27	181	181	222	371
Tax allowance	190	184	257	338	394	458	1,630
Revenue adjustments ^b	-	24,901	-12	-12	-12	-12	24,851
Total NRR^c	50,548	83,873	63,794	68,173	69,739	72,241	357,821
Revenue from customers	27,206	32,998	38,093	43,728	50,177	57,590	222,586
Proposed continuation of current Govt Pipeline contribution	23,342	25,228	26,482	27,695	29,022	30,394	138,820

a: Amounts for 2025-26 presented in this table are based on the 2022 determination allowance, adjusted for inflation.

b: Includes adjustments for cost of debt true-up, gifted assets true-up and 50% share of non-regulated treated effluent revenue.

c: The difference between Total NRR and Revenue from customers plus Proposed continuation of current Govt Pipeline contribution year on year, is due to price smoothing to manage customer bill impacts. In NPV terms, the Total NRR equals Revenue from customers plus Proposed continuation of current Govt Pipeline over the 2026 determination period.

We propose to maintain our existing two-part tariff structure as it is efficient and supported by customers

Our proposed prices are listed in Chapter 12. We propose maintaining our two-part tariff structure, with usage prices remaining at current levels in real terms and service charges increasing as required to recover our NRR.

As IPART recognised in its 2022 Determination Final Report, our water and wastewater usage prices are within a reasonable range of the long run marginal costs of supply. This means they provide appropriate price signals (i.e., usage prices that are not too high or too low), which is particularly important given the role of water in managing lead dust in our community. Our existing two-part tariff structure is understood and supported by our customers.

Our usage prices for water and wastewater will remain the same in real terms over the 2026-31 determination period (except for untreated water for pipeline customers, which will continue to transition towards the price for other untreated water, in line with IPART's 2019 determination). This will maintain our usage prices within the reasonable range of estimates of the marginal cost of supply.

However, there will be significant increases in fixed service charges to recover the efficient expenditure required to deliver the outcomes our customers value. We will smooth price increases over the 2026 determination period to manage the bill shock for our customers. To recover our revenue requirement, our service charges (\$2026-27) for water for residential, non-residential customers and mining customers would require a compounding average annual increase of 26% per over the 2026 determination period. Our service charges (\$2026-27) for wastewater would require compounding average annual increases of 17% per annum for residential customers and 21% for non-residential customers over the 2026 determination period to recover our revenue requirement. The resulting cost-reflective bill impacts are presented for residential and non-residential customers in Table 2 and Table 3.

Table 2: Residential annual water and wastewater bills (\$2026-27)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Compound ave growth rate (%)
Residential - treated water - non pensioner							
160kL	1,463	1,724	2,023	2,367	2,764	3,222	17%
250kL	1,671	1,933	2,231	2,576	2,973	3,431	15%
400kL	2,019	2,281	2,579	2,924	3,321	3,779	13%
Residential - treated water - pensioner							
160kL	1,283	1,549	1,852	2,200	2,602	3,064	19%
250kL	1,491	1,758	2,061	2,409	2,811	3,272	17%
400kL	1,839	2,106	2,409	2,757	3,159	3,620	15%
Residential - chlorinated water (water bills only, no wastewater)							
160kL	624	760	922	1,107	1,319	1,561	20%
250kL	746	878	1,040	1,225	1,437	1,680	18%
400kL	928	1,056	1,217	1,403	1,615	1,857	15%

Table 3: Non-residential annual water and wastewater bills (\$2026-27)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Compound ave growth rate (%)
Non-residential - treated water (Note 1)							
20mm with 250kL usage	1,811	2,075	2,377	2,726	3,129	3,593	15%
25mm with 1,000kL usage	4,943	5,359	5,832	6,378	7,007	7,732	9%
40mm with 2,100kL usage	11,060	12,121	13,332	14,728	16,340	18,196	10%
80mm with 21,000kL usage	84,464	88,794	93,640	99,224	105,669	113,096	6%
Non-residential - untreated water, pipeline customers (water only, no wastewater)							
20mm with 250kL usage	851	1,006	1,192	1,403	1,615	1,857	17%
25mm with 1,000kL usage	2,377	2,650	3,003	3,392	3,723	4,102	12%
40mm with 2,100kL usage	5,294	5,969	6,827	7,777	8,626	9,595	13%
80mm with 21,000kL usage	42,827	46,178	50,870	55,931	59,325	63,201	8%
Non-residential - untreated water, non-pipeline customers (water only, no wastewater)							
20mm with 250kL usage	928	1,055	1,217	1,402	1,614	1,856	15%
25mm with 1,000kL usage	2,685	2,848	3,101	3,390	3,721	4,100	9%
40mm with 2,100kL usage	5,942	6,385	7,033	7,773	8,621	9,591	10%
80mm with 21,000kL usage	49,310	50,336	52,928	55,889	59,283	63,159	5%

Note 1: Wastewater service charges for non-residential customers are based on water meter size. The applicable meter charge is set using the formula: (meter size)² x 20mm meter charge / 400 x discharge factor. For the purpose of showing indicative bills, we have calculated service charges for larger meter sizes based on this formula using a discharge factor of 70%. Actual bills will depend on discharge factors for individual customers.

Our customers need and value secure, reliable services, but they have limited capacity to pay

Our proposed prices have been developed to recover our efficient costs. The NSW Government has indicated its commitment to continue the affordability subsidy for the Broken Hill Pipeline and our price modelling has included this assumption. Despite this our proposed price increases are significant, and we recognise that the bill impacts will be an issue for our community, which is one of the most disadvantaged in NSW. Any necessary investment in the network is spread over a small and stable population.

We have therefore undertaken further analysis of water and wastewater affordability for our customers using IPART's approach of considering water and wastewater bills as a proportion of households' pre-tax income. Our analysis indicates there may be a case for an additional subsidy to support the affordability of essential water and wastewater services for our customers.

1. About this Proposal

Essential Energy is a State-Owned Corporation, 100% owned by the NSW Government. As well as providing electricity distribution network services across 95% of NSW, it also provides water and wastewater services to the communities of Broken Hill, Menindee, Sunset Strip and Silverton, through its water business - Essential Water.

The prices charged by Essential Water for the provision of water and wastewater services to Broken Hill and surrounding communities are regulated by the Independent Pricing and Regulatory Tribunal of NSW (IPART) under the NSW *Independent Pricing and Regulatory Tribunal Act 1992* (the IPART Act). IPART's 2022 determination set maximum prices for Essential Water for the four-year period from 1 July 2022 to 30 June 2026 (the 2022 determination period). This Proposal covers prices that will apply from 1 July 2026 to 30 June 2031 (the 2026 determination period).

1.1 Our approach to developing this submission

We have applied IPART's new water regulatory framework, but a proportionate approach is required

Since the 2022 determination, IPART has implemented a new regulatory framework which seeks to support water businesses to invest prudently in the infrastructure and technology needed for the future, and to provide services that their customers value and can afford. The framework focuses on customers, costs, and credibility (the 3Cs) and is underpinned by 12 principles (see Figure 1), which have guided us in developing this Proposal.

Essential Water is a fraction of the size of the other water businesses regulated by IPART. The population we service is about 5% of the population supplied by the Central Coast Council, 3% of the population supplied by Hunter Water and only about 0.3% of the population supplied by Sydney Water. This necessitates a proportionate approach that seeks to avoid any unnecessary regulatory costs that would impose additional costs on our customers.

In applying the 3Cs framework we have adopted a proportionate approach, reflecting the size and characteristics of our business, community and customers. Overall, we consider our Proposal should receive a 'Standard' rating.

Figure 1 The 3Cs framework and guiding principles



Source: IPART, Water Regulation Handbook, July 2023, p.2

Our Proposal focuses on our customers and our costs

We have identified focus principles for our Proposal, which align with customer preferences and our long-term plans. We have selected our focus principles based on feedback from our customers. They have told us that they want us to focus on delivering essential services, that is maintaining water quality and security, in an environmentally sustainable and cost-effective manner. Our focus principles therefore are:

Customers

Deliver services and expenditures that:

- > Are customer centric
- > Reflect customer engagement feedback

Costs

Pricing proposal demonstrates:

- > Robust costs
- > Balance of risk and long-term performance.

Although we have not selected credibility as a focus principle, we have worked hard to deliver on our plans for the 2022 determination period and prepare a credible Proposal for the 2026 determination period. Our unique operating environment means we face significant challenges. Our Proposal explains how we plan to address those challenges to efficiently deliver the outcomes our customers value over the 2026 determination period.

We have adopted a systematic approach to developing this submission, informed by sound long-term planning

We have adopted a long-term perspective in developing this submission, recognising the importance of acting in the long-term interests of our customers. We have significantly stepped up the level of our customer engagement, in line with the expectations of IPART's new regulatory framework and we have shaped our Proposal around what our customers have told us is important to them.

We have confirmed appropriate outcomes and targets in consultation with our customers. We have forecast our consumption and customer numbers considering recent demand and population trends.

We have developed robust estimates of our prudent and efficient expenditure requirements, which are consistent with our regulatory obligations, our customers' preferences, and our long-term planning and Integrated Water Cycle Management Strategy (IWCM Strategy).

The revenue we require to efficiently deliver our services and meet customer expectations while complying with our regulatory obligations is higher than current levels and is reflected in increases in proposed prices. We recognise that our customers have limited capacity to pay, however without higher levels of expenditure, we cannot appropriately deliver the essential water and wastewater services needed for our community.

We have consulted with our customers and stakeholders in the development of this submission

We have consulted widely with our customers and stakeholders in the development of this submission and our IWCM Strategy. We established the Essential Water Customer Panel (EWCP) to enable us to engage closely with a representative group of customers on a regular basis whilst developing our Proposal. We also held meetings with key stakeholders, such as the Broken Hill City Council and local businesses, as well as using a customer-wide survey, community pop-ups and the Essential Water website.

We have worked with WaterNSW to provide it with our demand forecasts required to estimate bulk water prices for the Broken Hill Pipeline over the 2026 determination period. Our submission is consistent with the bulk water prices proposed by WaterNSW in its submission to its concurrent IPART price review.

Many of Essential Water's residential customers are vulnerable. The difficult economic environment in the Broken Hill area creates a challenging operating environment for Essential Water's business customers. Our submission reflects the limited capacity of our customers to manage price rises over the determination period.

We have engaged with the NSW Government to discuss its contribution to prevent unaffordable price rises for our customers over the proposed 2026 determination period. We anticipate that there may be a case for an increased government contribution, beyond covering the bulk water costs via the Broken Hill Pipeline – however, that is a matter to be determined following IPART's review of this Proposal.

How consultation with our customers and stakeholders has shaped our submission

Our customers have told us that key priorities for them are having access to a secure, high-quality supply of water and maintaining current service standards in an environmentally sustainable and cost-effective manner.

Our focus principles reflect this feedback from customers, shaping our emphasis on efficient long-term service delivery to meet the needs of our customers and community.

Our customer outcomes and performance measures reflect our customer preferences for reliable services, set realistic targets and ensure reporting so we can be held accountable for our performance.

Our expenditure reflects our customers' preferences that we focus on providing essential services to customers efficiently over the long-term, appropriately balancing risk and long-term performance.

1.2 Structure of this Proposal

This submission presents our Proposal for the period from 1 July 2026 to 30 June 2031

This submission sets out the outcomes our customers and community require, the efficient capital expenditure ('capex') and operating expenditure ('opex') required to deliver those outcomes, and the resulting revenue requirements and prices for water and wastewater services. We describe our performance over the 2022 determination period (2022-23 to 2025-26) before presenting our Proposal for the 2026 determination period (2026-27 to 2030-31) in each chapter.

This submission is structured as follows:

- > Chapter 2 describes who we are and what we do
- > Chapter 3 discusses meeting the needs of our customers
- > Chapter 4 details our proposed performance outcomes and measures
- > Chapter 5 outlines our proposed form of regulation and other matters
- > Chapter 6 sets out our capital expenditure requirements
- > Chapter 7 outlines our operating expenditure requirements (excluding bulk water pipeline costs)
- > Chapter 8 presents our bulk water pipeline costs
- > Chapter 9 sets out our forecast consumption and customer numbers
- > Chapter 10 sets out our proposed allowances for return on assets, regulatory depreciation, tax, revenue adjustments and working capital
- > Chapter 11 presents our proposed revenue requirement and the amount to be recovered from customers
- > Chapter 12 sets out our proposed price structures and price path
- > Chapter 13 presents the impacts of our Proposal on customer bills, our operations and financial position, and the case for affordability subsidies.

Additional information is contained in the appendices, including our self-assessment against IPART's 3Cs grading rubric, climate change considerations, our performance outcomes over the period, and our proposed miscellaneous charges. We also urge readers to review our Cost Efficiency Strategy (see Attachment 1) and Customer Engagement Strategy (see Attachment 2) that support this Proposal.

All historical costs and revenues in this Proposal are in nominal dollars, except for aggregates over the 2022 determination period which are reported in 2025-26 dollars. All forecast costs and revenues are in 2025-26 dollars and all prices and bills in this Proposal are in 2026-27 dollars, unless stated otherwise.

2. Who we are and what we do

2.1 Overview

Essential Water is a small business operating in a unique and remote operating environment. Understanding our customers' needs and how this shapes who we are and what we do is a fundamental starting point for our submission. This chapter describes our system, services, and the customers we serve. It considers recent changes in our operating environment and key challenges for our business.

Key messages

- > Essential Energy provides water and wastewater services to the communities of Broken Hill, Menindee, Sunset Strip and Silverton, through its water business - Essential Water.
- > Essential Water is a small business providing an essential service to customers in a remote and challenging environment.
- > Our system is ageing, with many of our critical assets nearing the end of their useful life. This threatens our capacity to deliver the outcomes our customers value.
- > Our customers have told us that key priorities for them are having access to a secure, high-quality supply of water, provided in an environmentally sustainable and cost-effective manner. They support investment in a new wastewater treatment plant, increased levels of mains renewal and smart meters.
- > We are required to comply with a wide range of legislative and regulatory requirements in delivering our services, including environmental, public health and safety obligations, as well as any relevant regulatory requirements that apply to Essential Energy.
- > Our community is one of the most socio-economically disadvantaged in NSW and faces ongoing risks from cost-of-living increases. Most of our customers cannot afford substantial bill increases.
- > At the same time, the unique environment of Broken Hill and surrounding areas means that it is imperative that our customers have access to reliable, safe, and affordable water services.
- > Climate change poses a number of risks, with the increased frequency and severity of heat waves, droughts, and flooding. However, water security and reliability risks from drought have been substantially mitigated since 2019, with the commissioning of the Broken Hill Pipeline. After years of drought and severe water restrictions, we can reliably access water to supply our customers. Our customer demand, and the efficient costs associated with meeting that demand, are now relatively predictable.

2.2 Our area of operations

Essential Water provides water and wastewater services in Broken Hill and surrounding areas

Essential Water provides potable (drinking quality) water to around 18,000 people in Broken Hill and Menindee, and non-potable water to the settlements of Silverton and Sunset Strip. Essential Water provides wastewater services to Broken Hill, where we operate two wastewater treatment plants. Essential Water also provides non-potable water to 48 rural users for stock and domestic purposes.

Essential Water carries approximately 6 gegalitres (GL) of water per year in its network to around 10,000 residential customers and around 900 non-residential customers. Our two largest customers are mines, which together account for approximately one-third of our customers' total water consumption.

Figure 2: Essential Water's services

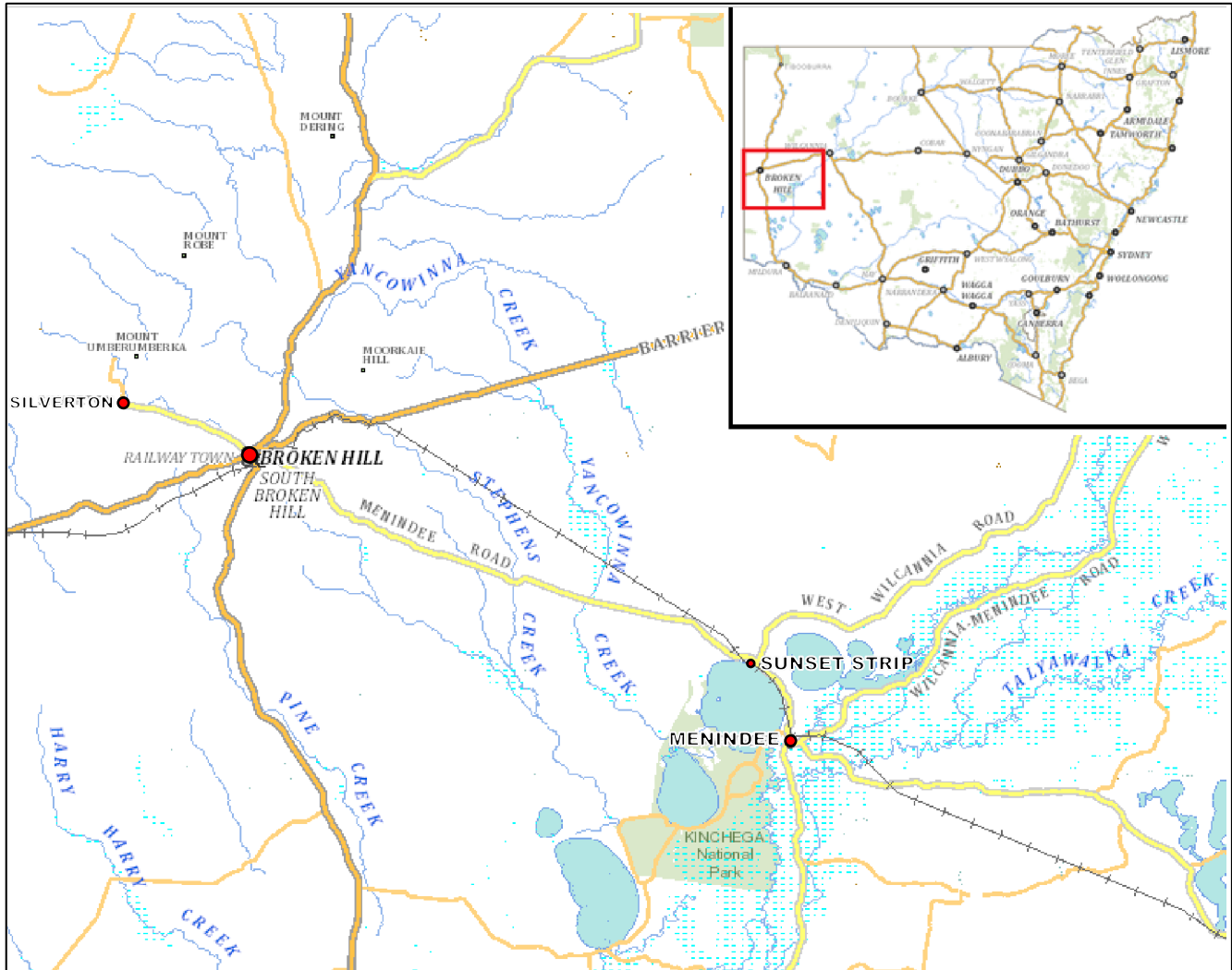
	Broken Hill	Menindee	Sunset Strip	Silverton
 Sewerage services				
 Potable Water				
 Non-potable water				

Our area of operations is the most arid in the state

Our service area covers:

- > First Nations countries in the region encompassing Wiljali, Danggali and Barkindji nations
- > the local government area of Broken Hill City Council
- > the Stephens Creek, Umberumberka Creek and Yancowinna Creek areas
- > the localities of Menindee and Sunset Strip, and
- > the land over which the Menindee to Stephens Creek pipeline is situated.

Figure 3: Essential Water serviced communities – map



Our community is unique

Broken Hill is the gateway to the Australian Outback and supports mining operations and a vibrant artist community. Silverton, as the original settlement site, is a historic village that is often home to film crews from around the world. The villages of Menindee and Sunset Strip are located on the edges of the Menindee Lakes. The City of Broken Hill was listed as a National Heritage Place in 2015, recognising its unique mix of architecture and mining infrastructure, set in a vast arid landscape.

Our system is significant and ageing

Essential Water supplies potable water from the Mica Street water treatment plant at Broken Hill and from the Menindee water treatment plant. Broken Hill receives water from the Murray Pipeline Bulk Water Storage and Stephens Creeks balance storage reservoir. Menindee sources raw water from the Darling River at Menindee and the Menindee Common Bore.

Essential Water also operates two wastewater treatment plants in Broken Hill: the Wills Street WWTP and the South Broken Hill WWTP.

In addition, we operate a network comprising 220 kilometres of reticulation mains pipelines.

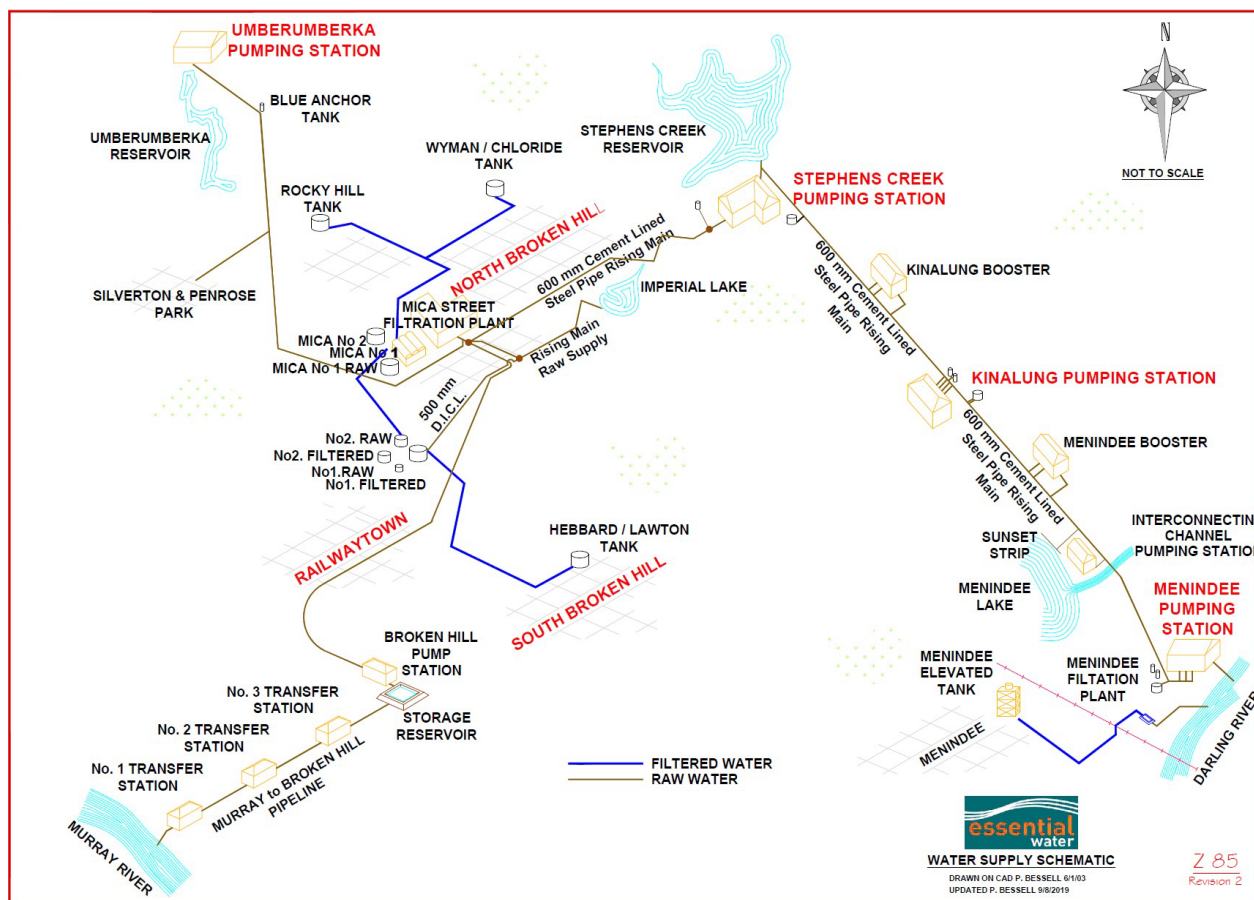
While our Mica Street water treatment plant is relatively new, the remainder of our infrastructure is ageing. Many of our critical assets including wastewater treatment plants, water mains and wastewater mains are nearing or beyond their useful life.

The Wills Street WWTP was commissioned in 1939 and whilst the plant has operated well, environmental standards have changed, and a replacement is now overdue. The 1960's-built South Broken Hill plant is also nearing end of life and that treatment capacity can be incorporated into the changes for the Wills Street plant. The South Broken Hill WWTP can then be decommissioned, along with the existing Wills St WWTP.

Most of the water and wastewater mains in our network were installed in the 1960s and have reached the end of their life. Mains bursts are becoming much more frequent and threatening our capacity to meet our mandatory standards and the service levels that customers expect. Significant investment is required over this decade to upgrade these mains.

The addition of the Wentworth to Broken Hill Pipeline to our network in 2019 resulted in the decoupling of Broken Hill's water supply from the Darling River and the Menindee Lakes, apart from Menindee which retains it as its primary source of supply. The Menindee Pipeline is now gravity fed from Broken Hill and supplies Sunset Strip as well as the Graziers. Our 2022 Proposal included investment in a new Grazier's pipeline to replace the existing Menindee pipeline to continue providing untreated water to 11 graziers. The current supply is adequate and given the pipeline is now gravity fed and not under pumping pressure, we have efficiently deferred the investment in its replacement to beyond 2031.

Figure 4: Essential Water system – map



2.3 Our roles and responsibilities

Essential Water has a complex operating environment with a range of economic, environmental, public health and safety obligations

Essential Water operates under the *Water Management Act 2000* and the *Water Management (General) Regulation 2011*. We are required to comply with a wide range of other legislative and regulatory requirements in delivering our services, including environmental, public health and safety obligations (see Figure 5).

Essential Water would face operational risks if we reduced labour expenses beyond our proposed efficient levels for the upcoming determination period, as our climate, size and location create challenges in attracting and retaining the skilled labour required to maintain, operate and renew our systems.

Safety is a key priority for Essential Energy and Essential Water. We take the safety of our employees and customers seriously. Our expenditure requirements reflect this commitment, recognising our remote and expansive service area.

Figure 5: Essential Water key legislative obligations

 Water Management Act 2000 Regulates Water Utilities, outlines functions of both water and sewer services/infrastructure, creates special areas, provides for Water Access Licences to be issued, legislates EW area of operations, allows levying of service charges and enforcement proceedings.	 Water Management (General) Regulation 2011 Categorises Water Access Licences, provides detailed powers for Sewerage and Water, provides functions of special areas, service charges and pensioner concessions, penalty notice offences.
 Dam Safety Act 1978 Constitutes the Dam Safety Committee, which is tasked with surveillance, investigation and formulates measures to ensure the safety of prescribed dams.	 Protection of the Environment Operations Act 1997 Regulates our Wastewater Treatment Plants which are under an Environmental Protection Licence. The Act imposes significant regulatory constraints on EW operations which include potential penalties in the event of a pollution incident.
 Fluoridation of the Water Supplies Act 1957 Creation of the Fluoridation of Public Water Supplies Advisory Committee, which makes proposals for the addition of fluoride to public water supplies. Committee also enforces the continuation of fluoridation and associated penalties	 Environmental Planning and Assessment Act 1979 Allows EW to operate as a determining authority.
 Public Health Act 2010 and Public Health Regulation 2012 Legislate safety measures for drinking water and if not complied with penalties apply. Also compels compliance with the Australian Drinking Water guidelines.	 Independent Pricing and Regulatory Tribunal Act 1992 The Independent Pricing and Regulatory Tribunal (IPART) determines the allowed customer charges.
 Work Health and Safety Act 2011 and WHS Regulation 2011 This Act has an objective to provide a consistent framework to secure the health and safety of workers and workplaces.	 Local Government Act (1993) This Act aims to provide the legal framework for an effective, efficient, environmentally responsible, and open system of Local Government including the provision, management and operation of water supply and sewerage works and facilities.

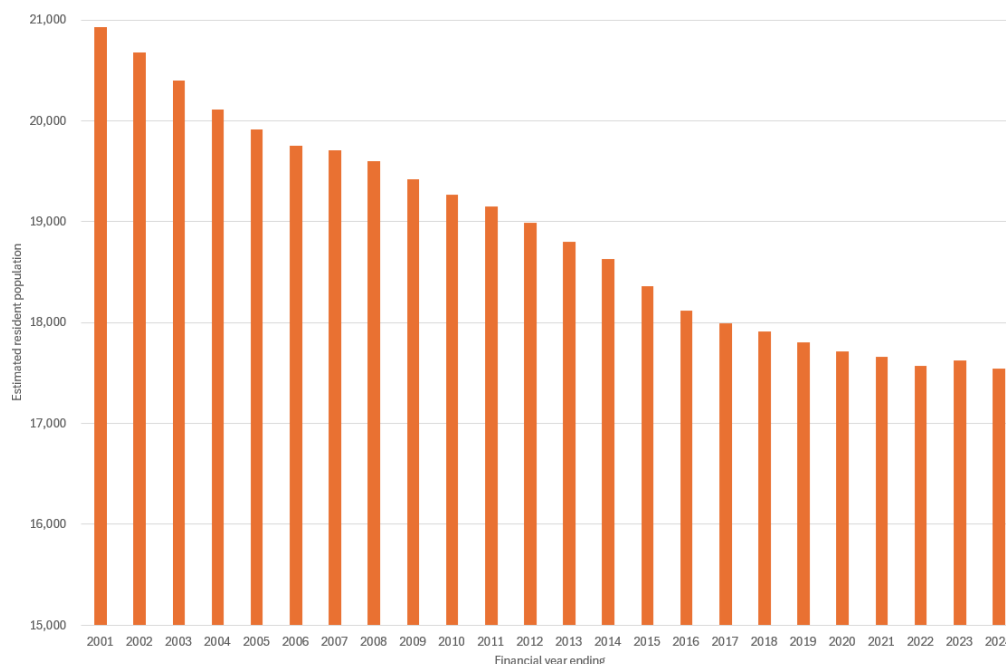
Recognising our complex operating environment, our objectives are to:

- > provide safe and reliable drinking water in accordance with the Australian Drinking Water Guidelines (ADWG)
- > provide water and wastewater services that meet customers' needs for reliability, quality, environmental protection, and performance
- > maintain a water and wastewater system that is safe for the community, customers, and employees, and complies with all regulatory requirements
- > provide a high level of customer service
- > minimise costs to Essential Water and the consequential impacts on customer prices and NSW Government funding.

2.4 Our customer base

Our customer base has unique characteristics, reflecting the demographics of the communities we serve

The population of Broken Hill has been in decline, falling by on average –0.8% each year over the period from 2000-01 to 2023-24 (see Figure 6).

Figure 6: Broken Hill estimated resident population 2000-01 to 2023-24

Source: Australian Bureau of Statistics, Regional population 2023-24, Available at: <https://www.abs.gov.au/statistics/people/population/regional-population/latest-release#data-downloads>

The proportion of the population aged 65 years and older in Broken Hill is 23%, significantly higher than the NSW and national averages of 17.7% and 17.2%, respectively.¹ This means a large proportion of Essential Water's customers are on a fixed income.

Aboriginal and/or Torres Strait Islander people make up 10% of the population.² The Wiljali people traditionally occupied the lands of the Broken Hill region in far western NSW and jointly manage the Mutawintji National Park alongside the government. This partnership reflects the Wiljali's enduring connection to the lands and their ongoing role in its stewardship.

Many of our customers are vulnerable, with limited capacity to pay for essential water services

Broken Hill is rated in the lowest 11% of communities in Australia, according to Australian Bureau of Statistics analysis of Relative Socio-economic disadvantage.³ Under this measure, a component of the Socio-Economic Indexes for Areas (SEIFA) index, Broken Hill is ranked 1,552 out of 14,462 state suburbs in Australia and 373 out of 4,311 suburbs in NSW for relative socio-economic disadvantage.⁴ Broken Hill also has a similar ranking for other components of the SEIFA index.

As at July 2025, Broken Hill had more than double the proportion of its working age population (aged 15-64) receiving JobSeeker and Youth Allowance (12.0%) relative to NSW overall (5.4%).⁵ Around 16% of the Broken Hill population is receiving the Age Pension compared to 10% across NSW.⁶

¹ Australian Bureau of Statistics, Broken Hill 2021 All persons QuickStats, Available at: <https://www.abs.gov.au/census/find-census-data/quickstats/2021/LGA11250>

² Australian Bureau of Statistics, Broken Hill 2021 All persons QuickStats, Available at: <https://www.abs.gov.au/census/find-census-data/quickstats/2021/LGA11250>

³ Australian Bureau of Statistics, Socio-Economic Indexes for Areas (SEIFA), 2021, Table 2 Suburbs and Localities (SAL) Index of Relative Socio-economic Disadvantage, 2021.

⁴ Australian Bureau of Statistics, Socio-Economic Indexes for Areas (SEIFA), 2021, Table 2 Suburbs and Localities (SAL) Index of Relative Socio-economic Disadvantage, 2021.

⁵ ID community profile for Broken Hills, Available at: <https://profile.id.com.au/broken-hill/job-seeker>

⁶ Department of Social Services (2025), DSS Benefit and Payment Recipient Demographics – March Quarter 2025, Available at: <https://data.gov.au/data/dataset/dss-payment-demographic-data>

Broken Hill's median weekly household income of \$1,173 is 36% less than the median weekly NSW household income.⁷

As we discuss in Chapter 13, the unique demographics of our community place very real constraints on our customers' ability to afford essential water and wastewater services.

2.5 Essential Water's operating environment

The Broken Hill Pipeline has facilitated a stable operating environment

The commissioning of the Broken Hill Pipeline significantly changed our operations – with implications for our services and costs.

Before 2019, town water supply was dependent on water sourced from the Darling River and pumped to Broken Hill via more than 120 km of pipeline. In 2019, the Murray River to Broken Hill Pipeline was commissioned. This 280 km pipeline and 760 ML bulk water storage connects the Murray River at Wentworth to Essential Water's system.

We now take most of our bulk storage requirements from the Murray River via the Broken Hill Pipeline, with Stephen's Creek reservoir currently acting as an emergency backup supply. The Broken Hill Pipeline has improved water security for our customers.

Our customers water consumption is no longer affected by drought

After years of drought and severe water restrictions, Essential Water is now able to reliably access water to supply our customers. Our customer demand is now relatively steady.

Government contributes funds to help keep prices affordable for our customers

We pay bulk water charges to WaterNSW, which owns the Broken Hill pipeline and delivers our water via the pipeline. Since 2019, the NSW Government has made a financial contribution to Essential Water to ensure that customer prices do not increase by more than inflation as a result of the pipeline. The NSW Government's current funding commitment goes to the end of the 2022 determination period. Following recent discussions with the NSW Government, we have assumed a continuation of this subsidy for the pipeline costs and have prepared our Proposal on this basis.

Section 13.5 discusses the case for additional subsidies to assist with customer affordability, in light of bill impacts from our proposed expenditure in the 2026-31 period.

2.6 Long term planning – Our IWCM Strategy

Our expenditure and proposed expenditure allowances have been informed by sound long-term planning, primarily through the development of our IWCM Strategy.

Our IWCM Strategy is a 30-year plan for the supply of our water and wastewater services. Its objective is to ensure that water services are appropriate, affordable and sustainable while meeting community needs and protecting public health and the environment.

Our current IWCM Strategy was developed in 2022. It covers the water supply and sewer catchments of Essential Water including Broken Hill and the surrounding townships of Menindee, Silverton, Sunset Strip as well as bulk water transfer pipeline customers.

The IWCM Strategy has identified several short to medium term initiatives to ensure Essential Water continues to provide high quality water and wastewater services. These include:

- > replacement of the Wills St and South WWTP's (Short term – in progress)
- > investigating the feasibility and options to provide potable water supply to Silverton (Medium term)
- > improving reticulated water reliability at Menindee (Medium Term).

⁷ Australian Bureau of Statistics, Broken Hill 2021 All persons QuickStats, Available at: <https://www.abs.gov.au/census/find-census-data/quickstats/2021/LGA11250>

It has also identified several longer-term initiatives, including:

- > review of reticulated water supply reliability at Broken Hill, including the role of Stephens Creek reservoir
- > increased water mains renewal
- > increased sewer reticulation pipeline renewal.

We are in the process of updating our IWCM Strategy, which aligns with this Proposal. We sought feedback from our customers and community, and this feedback has been used to inform the final update to the IWCM Strategy. Once finalised, we will submit our IWCM Strategy to the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW) for approval. We will then publish the updated IWCM Strategy on our website.

2.7 Climate change considerations

Essential Water is responding to climate change with our adaptation and resilience strategies

The region served by Essential Water is the most arid in the state and experiences extreme climatic variations, including more frequent droughts than coastal areas. Physical risks of climate change that are relevant for Essential Water's business include impacts on water supply and quality from a changing climate and increased frequency and severity of heat waves, droughts, and flooding.

There are also climate-related transition risks that could impact Essential Water's business, including increased regulatory compliance costs with increased climate and sustainability reporting requirements, increased insurance costs, and supply chain risks and impacts, which could lead to delays and higher costs.

Climate-related transition opportunities include transitioning to renewable energy sources, electrifying fleet, and resilience and adaptation strategies.

We have a comprehensive approach to considering climate change:

- > Our IWCM Strategy includes a 30-year Total Asset Management Plan (TAMP) that addresses the impacts of climate change on infrastructure. The strategy accounts for the impact of a 1°C warming scenario on water demand projections for Broken Hill and Menindee.
- > Our IWCM strategy includes an assessment of the security of the Menindee and Sunset Strip water supply. Additionally, the strategy covers supplementary storages like Stephens Creek and Umberumberka reservoirs.
- > Essential Water's drought management plan⁸ establishes how water supply will be managed during periods of drought. It outlines minimum water supply requirements, trigger levels, corresponding actions and water restriction levels. Emergency water sources and treatment options are identified.
- > Our proposed capital expenditure plans (see Chapter 6) will enhance resilience, reduce leakage of water and reduce emissions. Projects include accelerated water mains replacement, a replacement wastewater treatment plant, Mica Street service reservoir replacement and the rollout of smart meters.
- > We are actively working on reducing our emissions and reporting our greenhouse gas emissions to the National Greenhouse and Energy Reporting (NGER) Scheme as part of Essential Energy's reporting. This includes complying with Essential Energy's Sustainability Strategy and emissions reduction target of Scope 1 and 2 emissions reduction of 50% by 2030 from a base year of 2020-21.
- > Essential Water's emission reduction activities include energy-efficient operations and maintenance of water treatment plants and pumping stations, fleet electrification and the upgrading of the WWTP.
- > In addition to the IWCM Strategy, Essential Water has several documented plans that consider future, short and long term requirements in regard to the to the reliability of water supply and climate change including our Asset Management Plan, our Strategic Plan, our Drinking Water Management System, our Drought Management Plan and our Operational Procedure.

More information on climate change considerations is available at Appendix B: Climate change considerations.

⁸ <https://essentialwater.com.au/water-insights/drought-management-plan/>

2.8 Key challenges and opportunities

We face significant challenges

We face a series of key challenges in providing water and wastewater services to our customers. This impacts the services we provide and the prudent and efficient cost of providing those services:

- > We serve a small population over a large geographic area, with the population in Broken Hill stable or decreasing for at least the last 50 years. This means we are unable to achieve the economies of scale accessible to many other water businesses. It also means that any expenditure on our network will have an impact on prices.
- > Our ageing system requires investment and renewal to ensure we meet our mandatory standards and provide adequate services to our customers. However, this places pressure on the prices we charge to our customer base, which has a high proportion of vulnerable customers.
- > Our challenging physical environment influences and constrains the way we work. Our remote and arid location means we must undertake significant works over winter and retain core skill sets in-house, but it also makes it challenging to attract and retain skilled labour. It also introduces additional safety challenges.

We see significant opportunity

Despite these challenges, we have identified significant opportunity. We are taking action to deliver the outcomes our customers require while complying with our regulatory requirements and delivering services efficiently, consistent with the long-term interests of customers. This includes continuing our customer and community consultation, expanding our use of our upgraded asset management and workflow systems, and delivering key investments including the Wills St WWTP and a comprehensive program of renewals. We look forward to our ongoing role in meeting the needs of our customers reliably and efficiently into the future.



3. Meeting the needs of our customers

3.1 Overview

Essential Water has been undertaking extensive engagement with customers and stakeholders to understand their priorities and preferences. A mixture of existing and new engagement channels have been used to seek broad and in-depth feedback from a diverse group of customers and stakeholders. This significantly elevated engagement program has enabled feedback to truly shape this Proposal. Importantly, we have committed to ongoing engagement with customers and stakeholders, which will also help shape the implementation of plans included in this Proposal, and the design of future Proposals.

3.2 How we engaged with our customers

Essential Water has used different channels to engage with a diverse and representative group of customers and community stakeholders. By mapping customer segments and stakeholder groups, Essential Water was able to leverage both existing and new engagement methods tailored to each audience. Essential Water actively included representation from different customer segments in our engagement activities, such as both homeowners and renters, people of different genders, ages and incomes, First Nations peoples, and individuals experiencing vulnerability. The Customer Engagement Strategy outlining this approach is included in Attachment 2.

Channels for Customer and Stakeholder Engagement

Customer Surveys

Between December 2024 and February 2025, Essential Water undertook a survey which was sent to all customers to collect feedback on priorities, services, and preferences for the future. Essential Water received 299 responses to this survey. Essential Water will continue to undertake regular surveys to test customer satisfaction, understand areas for improvement, and ask for customer feedback to inform business decisions.

Community Engagement

Essential Water participated in community events to engage directly with members of the community. Essential Water attended the AgFair in Broken Hill and also set up a pop-up community session in Menindee to engage more directly with Menindee customers which includes a high number of First Nations peoples. These sessions were designed to provide opportunities to hear directly about community priorities and desired outcomes. Essential Water will continue looking for opportunities to attend events and participate in other engagement activities to further our community outreach, including with First Nations communities.

Essential Water Customer Panel

In a first for the business, Essential Water established a new Customer Panel of representative household and small business customers to directly engage on the Proposal. Panel members include homeowners, renters, First Nations peoples, and those of varying ages, genders and incomes, as well as some customers experiencing vulnerability.

The Essential Water Customer Panel met four times between November 2024 and June 2025 during the development of this Proposal, for 2.5 hours each session. The Customer Panel took an in-depth look at issues and options for the Proposal, providing considered guidance to Essential Water on decisions affecting all customers.

For key investment decisions, Panel members were provided with context for the proposed investment and the associated bill impacts, and were then asked whether they thought the investment would deliver value for customers. Customers were provided with the opportunity to consider the value from these individual investments, and then as a total suite of investments.

Essential Water Customer Panel meetings were facilitated and summarised by an independent party, Hall & Partners. Meeting reports are provided at Attachments 3.1 to 3.4.

As this Panel was well-received by its members and delivered valuable feedback for Essential Water, we will look to continue convening this group in the future to enable customer deliberation to inform our business decisions.

Stakeholder Meetings

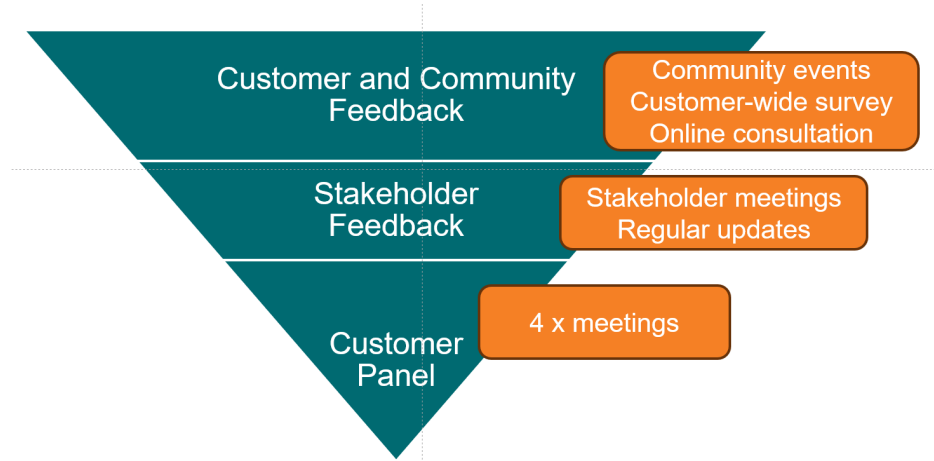
Essential Water has also been engaging with various stakeholders throughout the development of the Proposal. These stakeholders include the Broken Hill City Council, the NSW Member for Barwon, various NSW Government agencies, the Pastoralists' Association of West Darling, NSW Farmers and the Justice and Equity Centre. Essential Water regularly engages with these stakeholders, and throughout the development of the Proposal provided multiple updates and held meetings with these stakeholders.

Ongoing customer engagement

Essential Water actively engages with our community on an ongoing basis via our website and social media presence. Essential Water will also continue to operate its successful Customer Panel, convening as needed to consult on existing or emerging decisions or issues.

Phases of Customer Engagement

Essential Water's engagement approach occurred in phases to align with the development process of the Proposal. Early customer and stakeholder feedback was used to identify priorities and desired outcomes – both in the next pricing period and over the longer term. This provided Essential Water with guidance to then identify potential areas of expenditure to meet these desired outcomes, with Essential Water Customer Panel members then given the opportunity to determine whether these delivered value for money to customers.



3.3 What customers told us and how this Proposal responds

Our Essential Water Customer Panel (EWCP) was our primary source for in-depth customer feedback. They told us that their top two priorities are maintaining water quality and ensuring water security.⁹ These priorities are reflected in our choice of focus principles, the outcomes we propose to deliver and the proposed expenditures we need to deliver those outcomes. Our EWCP identified a number of other priorities and outcomes beyond their top two priorities, which were also important in shaping our Proposal.

Results from our customer survey showed that water quality ranked second, after pricing and affordability, in the list of issues which were of concern to customers.¹⁰ This concern with pricing and affordability has meant that we have undertaken some further work on levels of affordability for our customer base. We hope that this extra analysis assists IPART in its review process and, if warranted, makes the case for further NSW Government support to manage unaffordable bill impacts (Chapter 13).

Table 4 provides a summary of our customer priorities and outcomes, customer feedback and the way we have responded to that feedback in preparing our Proposal, most notably in the development of outcomes and the expenditure required to deliver those outcomes.

⁹ Hall & Partners, Essential Water Customer Panel, Meeting 1 Report, December 2024, p.6, Attachment 3.1

¹⁰ In-house survey of Essential Water Customers, 4 Dec 24 to 14 Feb 25, 299 respondents

Table 4: Summary of customer priorities, feedback and how Essential Water is responding

CUSTOMER PRIORITIES AND OUTCOMES ¹¹	CUSTOMER AND STAKEHOLDER FEEDBACK	HOW ESSENTIAL WATER IS RESPONDING
Water Quality (and Reliability) Reliable access to clean and safe drinking water that: > Is fit for customers' needs > Has minimal contaminants > Is regularly and transparently tested	Customers want reliable water and wastewater services that effectively maintain current standards. The majority of Essential Water Customer Panel members supported paying for a moderate ramp up of the water and sewer mains maintenance program to replace ageing infrastructure. The moderate increase to the program was regarded as a good compromise; Customer Panel members were willing to pay an additional amount to reduce the likelihood of supply interruptions and prevent future generations from bearing a disproportionate burden, but opted against an accelerated program which would have had a bigger bill impact (Attachments 3.2 and 3.4 – Meeting 2 and Meeting 4 reports). Customers want clean and safe drinking water, and access to transparent information about water quality (Attachment 3.1 - Meeting 1 report).	Essential Water has proposed outcomes, performance measures and targets that reflect our customers' preferences for reliable and safe water and wastewater that maintains current standards (Chapter 4). Essential Water has included efficient expenditure for a moderate increase to our current mains and sewer replacement program (Chapter 6) to reduce the likelihood of interruptions to water and wastewater services caused by ageing water and sewerage mains. Essential Water will improve the accessibility of water quality monitoring information on our website.
Water Security > Certainty now about long-term water security > Long-term vision is for an abundant water supply with no water restrictions and increased use of recycled water	Customers want to see collaboration occurring between Essential Water and other NSW government agencies on planning and preparing for long term water supply (Attachment 3.1 - Meeting 1 report). Customers accessing raw water from the Grazier's Pipeline have maintained their preference for Essential Water to build a new pipeline. Most Customer Panel members were comfortable deferring the decision to the next determination period given Essential Water's expectation that acceptable service levels will be maintained for at least the next determination period (Attachments 3.2 and 3.4 – Meeting 2 and Meeting 4 reports).	Essential Water is updating its IWCM Strategy (Section 2.6) in consultation with customers and stakeholders. Essential Water will also continue meeting regularly with government agencies to maintain ongoing engagement on water security and other issues. A Recycled Water Management Plan is currently under development. Essential Water has not included the construction of a new pipeline for Graziers in this Proposal.

¹¹ Hall & Partners, Essential Water Customer Panel, Meeting 1 Report, December 2024, Attachment 3.1

CUSTOMER PRIORITIES AND OUTCOMES¹¹

CUSTOMER AND STAKEHOLDER FEEDBACK

HOW ESSENTIAL WATER IS RESPONDING

Sustainability and Environmental Protection

- > Management and protection of surrounding environment
- > Use of renewable energy
- > Regeneration and opening of waterways for recreation
- > Long-term vision is greener spaces, aquatic recreation, and natural wetlands and healthy waterways

Essential Water Customer Panel members want Essential Water and other water management bodies to manage and protect the surrounding environment (Attachment 3.1 - Meeting 1 report).

Essential Water Customer Panel members want to see renewable energy used where possible (Attachment 3.1 - Meeting 1 report).

Some stakeholders called for Essential Water to encourage greater water use to suppress lead dust in the Broken Hill region. Essential Water Customer Panel members did not support Essential Water using pricing (through higher fixed charges and lower usage costs) as a mechanism to encourage greater water use to suppress lead dust in Broken Hill (Attachments 3.3 and 3.4 – Meeting 3 and Meeting 4 reports).

Essential Water has proposed outcomes, performance measures and targets that reflect our customers' preferences for sustainability and environmental protection (Chapter 4).

Building further on the existing ways we are considering and managing our approach to climate change (outlined in Section 2.7), Essential Energy is assisting in developing a Sustainability Plan for Essential Water, which will examine implementable actions for making our operations more sustainable including consideration of the use of renewable energy.

Essential Water has included the construction of a new wastewater treatment plant to produce effluent which is compliant with current environmental obligations (Section 6.4). The design of the wastewater treatment plant includes a solar system that will be capable of supplying the full load of the plant during daylight hours.

This Proposal maintains two-part tariffs, with usage prices set with reference to the Long Run Marginal Cost of supply (Chapter 12).

Waterways such as creeks and rivers are not something Essential Water can control - these are under the management of other entities. With regard to waterways such as Stephens Creek and Umberumberka, Essential Water will consult with local organisations, authorities, customers and stakeholders when decisions are to be made regarding their future.

CUSTOMER PRIORITIES AND OUTCOMES¹¹

CUSTOMER AND STAKEHOLDER FEEDBACK

HOW ESSENTIAL WATER IS RESPONDING

Cost Efficiency Essential Water to be run cost efficiently with affordable bills This includes: > A transparent breakdown of costs and spending > Stable bills without cost spikes	Customers want to have assurance that Essential Water is operated efficiently, and bills are affordable without cost spikes. Customers also want more transparency about costs and spending (Attachment 3.1 - Meeting 1 report). Stakeholders stressed the importance of clearly communicating which non-discretionary investments are required and why, including the potential impact of these investments on customers. Customer Panel members stressed the need for a broad communications campaign on upcoming projects and bill impacts. Panel members were conscious of providing certainty to customers, so advised that more specific price guidance should only be provided once IPART has made its decision on any price changes (Attachment 3.4 - Meeting 4 report). In the event that any additional government subsidies would be provided to customers, most Customer Panel members supported a blanket subsidy approach given there were other existing targeted rebates (Attachment 3.4 - Meeting 4 report).	Essential Water's Proposal only includes expenditure that is prudent and efficient. Based off outcomes from our engagement with our Customer Panel, discretionary expenditure items were only included if Panel members considered these investments to deliver customer value (e.g. smart meters, moderate increase to mains maintenance program). Essential Water provided the Customer Panel with information and associated bill impacts of the non-discretionary investments to inform these decisions on discretionary expenditure items. Essential Water is undertaking a communications campaign to inform customers about upcoming projects as well as forecast changes to bills once IPART has made its determination. This will include clear information on our website, which will detail specific customer outcomes from these projects.
Customer Service > Easy access to localised customer service > Long-term vision is for more efficient ways to interact with Essential Water for billing and meter readings	Customers recognise that a variety of customer service channels are required. This includes making some in-person customer services available but also moving to digital services for billing and meter readings (Attachment 3.3 - Meeting 3 report). One-third of surveyed customers identified 'digital services' as one of the most important features of their customer experience, wanting the ability to view and pay bills online, monitor water usage in real-time, and receive high usage alerts. Rolling out smart meters in this determination period received unanimous support from Customer Panel	Essential Water has proposed outcomes, performance measures and targets that reflect our customers' preferences for good customer service (Chapter 4). We are investigating whether Essential Water's proposed expenditure on property upgrades could provide the option of enabling in-person customer service. Essential Water will continue to promote the new option to sign-up to electronic billing across our customer base. Essential Water is proposing to replace existing meters with smart meters (Chapter 6).

CUSTOMER PRIORITIES AND OUTCOMES ¹¹	CUSTOMER AND STAKEHOLDER FEEDBACK	HOW ESSENTIAL WATER IS RESPONDING
	members despite the bill impact, due to the number of benefits it will provide customers (Attachment 3.3 - Meeting 3 report).	
Consultation, Communication and Transparency > Transparency and information to better inform the community > Increased face-to face community consultation on decisions > Specific consultation with Indigenous community	Customers want access to more information about key projects and initiatives and want to see customer and community involvement in decisions that affect them (Attachment 3.3 - Meeting 3 report).	Essential Water will provide transparent information about upcoming projects and initiatives. Essential Water will also continue to operate its successful Customer Panel, convening as needed to consult on existing or emerging decisions or issues. Essential Water's Sustainability Plan will also consider how Essential Water can engage with local communities, including First Nations' community members.
Encourage Water Efficient Behaviours > Youth and community education about water issues and 'water wise' communications	Customers want to see community members educated and empowered to be efficient with their water use to minimise wastage (Attachment 3.1 - Meeting 1 report).	Essential Water will look for opportunities to further promote 'water wise' information, including to school-aged children. Essential Water's proposed rollout of smart meters will provide customer access to real-time data and help to identify water leaks, further empowering customers to use their water more efficiently. This Proposal maintains two-part tariffs, with usage prices set with reference to the Long Run Marginal Cost of supply (Chapter 12) – to promote optimal consumption.

4. Customer and community outcomes

4.1 Overview

To determine our efficient costs, and the prices to recover them, we have to first identify the performance outcomes that will meet the needs of our customers and community and will ensure we comply with our regulatory requirements.

The chapter describes:

- > how we performed against the current performance outcomes for the 2022-26 determination period.
- > our proposed performance outcomes, measures and targets for the 2026-31 determination period.
- > how we will be held accountable for our performance over the 2026-31 determination period.

Key messages

- > We strive to meet all industry standards required of water utilities and provide a standard of service that reflects community expectations and customers' willingness to pay.
- > We have continued to meet performance outcomes in the 2022 determination period. These outcomes cover our regulatory requirements for water quality as well as customers' expectations on the availability and reliability of water supply and wastewater services.
- > We have implemented procedures to improve how we measure and report our performance on output measures, as recommended by IPART in its 2022 Determination, as well as proposing performance targets for water availability going forward.
- > We have identified the key outcomes our customers and community value. We propose expanding our current performance measures and targets in response to customer engagement to ensure we meet these outcomes for the 2026 determination period. We will report annually on our performance over the 2026-31 determination period.

4.2 Performance outcomes were met in the 2022 determination period

Essential Water met our customers' and community's needs in the 2022 determination period and improved information collection and reporting of our service levels

As part of the 2022 determination, IPART recommended that Essential Water expand its output measures to collect and report on information about duration of service interruptions (both planned and unplanned) and the number of customers affected, to enable it to better understand the quality of services received by its customers.¹² Essential Water has started collecting this information and reporting on it each month to the Executive Leadership Team.

Table 5 sets out the IPART decision for each output measure and whether it has been implemented by Essential Water in the 2022 determination period. Appendix C (Performance outcomes) provides more detail on our performance against each of these output measures over the 2022 determination period.

¹² IPART, Review of Essential Water's prices for water and wastewater services in Broken Hill, Final Technical Report, November 2022 p.54

Table 5: Response to IPART's 2022 Decision on expanding Essential Water's existing output measures to align with current best practice

OUTPUT MEASURE	IPART'S 2022 DECISION	IMPLEMENTED?
Availability of water supply	> Essential Water to collect information and report on water supply interruptions (frequency, duration and number of customers affected by planned and unplanned interruptions).	> Yes
Water quality	> Essential Water to collect information and report on water quality events (frequency and duration of all events out of specification, frequency and duration of selected specific events (such as colour) out of specification).	> Yes
Wastewater performance	> Essential Water to collect information and report on wastewater service interruptions (frequency, duration and number of customers affected by planned and unplanned interruptions).	> Yes
Customer complaints	> Essential Water to collect information and report on customer complaints (number by type (as reportable to BOM): response time.	> Yes
Notice periods	> Essential Water to continue to collect information and report on notice periods.	> Yes
Notifiable environmental impacts	> Essential Water to collect information and report on notifiable environmental impacts (number by type (as reportable to BOM)) response time.	> Yes

4.3 Outcomes, performance measures and targets for the 2026 determination period

Our proposed outcomes, performance measures and targets reflect our customer's preferences

Our proposed outcomes, performance measures and targets provide standards of service that reflect industry best practice and our community's expectations and customers' willingness to pay. Our small size and geographic location means there is a strong overlap between our customers and community, and inherently means that there is more interaction with Essential Water employees, as well as via formal and informal engagements – see Section 3.2. We understand our customers and community and our proposed outcomes have been developed to meet their needs.

Our outcomes focus on the priorities identified by our EWCP and customer survey (maintaining water quality and ensuring water security), as well as environmental outcomes and customer service. Our performance measures are based on the output measures identified by IPART to ensure we align to current best practice. These are set out in Table 6 along with our proposed targets.

Our targets have been set with the aim of maintaining our current performance against these measures (presented in Appendix C), recognising our customers' preference to maintain service and performance levels rather than increase them for an additional cost. This reflects our customers' satisfaction with water quality and security since the commissioning of the Broken Hill Pipeline. Our ageing network impacts our ability to maintain current performance. In response to customer feedback, we have increased our water mains replacement and sewer relining to ensure our network remains reliable.

Our proposed capital and operating expenditure allowances have been set for each year over the 2026 determination period that allow us to efficiently achieve these outcomes. These proposed allowances represent our expenditure performance targets.

These targets will be challenging for Essential Water but will focus our efforts on delivering what our customers have told us they value.

Table 6: Summary of customer and community outcomes, performance measures and targets

CUSTOMER AND COMMUNITY OUTCOMES	PERFORMANCE MEASURES	TARGETS
Water Reliability - reliable access to drinking water	Average number of unplanned interruptions per customer	0.04 per annum (See Box 1 below)
	Average number of customer minutes lost from unplanned interruptions	15.4 in 2026-27, reducing gradually to 12.5 in 2030-31 (See Box 1 below)
Water Quality - clean and safe drinking water	Percentage compliance with Australian Drinking Water Guidelines	100% compliance with Australian Drinking Water Guidelines
Sustainability and environmental protection	Wastewater service interruptions (frequency, duration and number of customers affected by planned and unplanned interruptions)	No wastewater service interruptions
	Notifiable environmental impacts (number by type and response time)	No notifiable environmental impacts
Good customer service	Number and type of customer complaints	No increase in complaints
	Response time for customer complaints	Maintain response times - respond to 95% of complaints or enquiries within four working days of receipt.
	Notify customers of planned outages within agreed notice periods	Continue to notify customers within agreed timeframes – 2 days written notice for residential customers and 7 days' written notice for non-residential customers.

Box 1: Performance targets for unplanned supply interruptions to our water service

Building on the output measures we already capture for unplanned interruptions to water supply, we will introduce targets for:

- > Average number of unplanned interruptions per customer
- > Average number of customer minutes lost from unplanned interruptions

Our customer engagement indicated that service interruptions are of high importance to customers. We have decided to focus on performance targets for water supply only, as our data on unplanned interruptions to our wastewater service (**Appendix C**) shows that we have had no interruptions since we began reporting the data in 2022-23.

We have defined an **interruption** to the water supply as:

- > the complete isolation of the customer's water supply which is typically either via the water service to the premise or the reticulation main supplying the area.

We have defined an **unplanned interruption** as:

- > any interruption that impacts one or more customers for any duration, where there was no advance notice of the intent to interrupt the service per the required notice periods.

Table 8 below set out our proposed performance targets for water. These targets have been set with reference to our performance in the current determination period as shown in Table 7 and reflects the existing condition of our mains – noting that we are looking to increase the level of renewals which will maintain a better level of performance in the long run. We will report on our performance against these targets as part of our public reporting on output measures. We propose concentrating on these two measures initially, to enable us to focus on establishing this area before extending targets to other output measures.

Table 7: Current period performance for unplanned interruptions to water supply

	2022-23	2023-24	2024-25
Unplanned water interruptions	321	380	356
Number of customer minutes lost	122,634	130,445	154,280
Average number of unplanned interruptions per customer*	0.03	0.04	0.04
Average number of customer minutes lost from unplanned interruptions	12.3	13.0	15.4

*Customer base of 10,000

Table 8: Proposed performance targets for water supply

	2026-27	2027-28	2028-29	2029-30	2030-31
Average number of unplanned interruptions per customer	0.04	0.04	0.04	0.04	0.04
Average number of customer minutes lost from unplanned interruptions	15.4	15.0	14.0	13.0	12.5

We will be accountable to customers for our performance

Our EWCP told us that they believed it was important for us to report publicly on all our output measures, but of particular importance to them for public reporting are:

- > customer notification timeframes for water supply interruptions
- > water and wastewater supply interruptions (frequency, duration and number of customers affected by planned and unplanned interruptions)

- > notifiable environmental impacts and response times, and
- > water quality events.

We will report annually on our performance outcomes to ensure we are held accountable to customers and the broader community for delivering on them. We already publish quarterly and annual drinking water quality reports on our website, which show our compliance with ADWG. In addition, from October 2024 we commenced publishing reports on our website on per- and poly-fluoroalkyl substances (PFAS) testing of our water. This is done in consultation with NSW Health and in line with the Food Standards Australia New Zealand (FSANZ) drinking water guidelines for PFAS. Essential Water was found to be 100% compliant with the PFAS guidelines.

We will ensure our reporting is transparent and accessible to customers and the community by publishing PFAS reports annually on the Essential Water website.



5. Form of regulation and other matters

5.1 Overview

The first step in determining prices for Essential Water's services is to decide on the form of regulation. This includes matters such as:

- > the length of the determination period
- > the method used to determine how prices move over time (e.g., whether to use a price cap or a different form of price control such as revenue cap or weighted average price cap)
- > the method used to calculate how much revenue should be recovered through prices over the determination period (e.g., a building block approach)
- > mechanisms to promote future efficiency savings and manage revenue and cost risks

Key messages

We propose:

- > Adopting a 5-year determination period from 1 July 2026 to 30 June 2031, which aligns with the 3Cs framework.
- > Retaining 'price caps' that set prices for each of Essential Water's services in each year of the determination period.
- > Retaining a 'building block approach' to calculating Essential Water's revenue requirements to recover its efficient costs of providing services, through a combination of prices to customers and a government contribution.
- > We do not propose to trigger the efficiency carryover mechanism for the 2022 determination period, nor do we propose to continue it for the 2026 determination period, due to the unique and challenging circumstances of Essential Water.
- > We do not propose to trigger the demand volatility adjustment mechanism for the 2022 determination period, although we are proposing that the demand volatility adjustment mechanism continues for the 2026 determination period.
- > Not to introduce incentive schemes in the 2026 determination period, but to use this time to assess how best they could be introduced in the subsequent period. We will, however, remain focused on achieving cost efficiencies and enhancing customer value.
- > We do not propose to include any cost pass-throughs for 2026-31 and instead will rely on the remaining tools available within IPART's regulatory framework to manage revenue or cost uncertainty within the determination period.
- > A self-assessment grading of Standard against the 3Cs framework.

5.2 Adopting a five-year determination period

We propose a five-year determination period

Under IPART's 3Cs framework, the default term length of a determination period is five years. We consider that this is an appropriate length of time for Essential Water as our outlook is relatively stable and all stakeholders, including our customers, benefit from price certainty and stability. Population growth is flat, demand forecasts are relatively stable, and our proposed expenditure allowances have been informed by sound asset management and planning, and comprehensive long-term planning. In addition, Essential Water has a secure supply of water from the Broken Hill Pipeline.

IPART's 3Cs Handbook includes several potential mechanisms to manage cost and revenue risks if there are unforeseen changes in costs and/or revenues over the determination period. We would look to IPART and its 3Cs Handbook for guidance if the need arises to potentially apply such measures in the 2026 determination period.

5.3 Setting maximum prices provides certainty to customers and Essential Water

We propose a price cap

There are several forms of price control that can be used to review or adjust prices for regulated businesses. These include price caps, revenue caps and hybrids of these two approaches.

We propose that a 'price cap' should continue as the form of price control for the 2026 determination period. We consider that this approach continues to be fit-for-purpose for Broken Hill as it provides certainty and stability for both customers and Essential Water. In our view, other forms of price control would be too complex and costly to develop and apply, particularly given the inclusion of subsidies and the relatively small size of our water and wastewater business.

5.4 A building block approach is IPART's standard method for calculating a notional revenue requirement

We propose to adopt IPART's building block approach to determine our notional revenue requirement

IPART typically adopts the building block approach to establish the regulated utility's efficient costs, or notional revenue requirement (NRR), of providing its regulated services. This involves separately estimating the underlying components (or building blocks) of efficient costs (or revenue requirements), having regard to projections of efficient capital and operating costs of providing regulated services.

We support IPART continuing to use the building block approach to calculate NRR for providing Essential Water's services. Under this approach, the building block components are:

- > Operating expenditure, which represents an estimate of the efficient level forecast operating, maintenance and administration costs incurred in providing Essential Water's regulated water and wastewater services.
- > A return on the assets required to efficiently provide Essential Water's regulated services. This amount represents an assessment of the opportunity cost of the capital invested in Essential Water and ensures that it can continue to make efficient capital investments in the future. To calculate this amount, IPART decides on the efficient and prudent levels of Essential Water's past and forecast capital expenditure, incorporates this capital expenditure into Essential Water's regulatory asset base (RAB), and calculates the return on assets by multiplying the RAB by the appropriate weighted average cost of capital (WACC).
- > A return of those assets (regulatory depreciation). This allowance recognises that through the provision of services to customers, Essential Water's capital infrastructure will wear out (or be consumed) over time, and therefore regulatory depreciation allows the value of assets to be recovered over their expected useful lives. To calculate this allowance, IPART applies the 'straight-line' method, which means that the value of assets is recovered evenly over their useful lives.
- > An allowance for meeting tax obligations – which, for competitive neutrality purposes, reflects the tax liability of a comparable commercial business.
- > An allowance for working capital, which represents the holding cost of net current assets.

Figure 7 shows how the sum of these building blocks results in our revenue requirement, and where each of these building blocks are discussed in this submission.

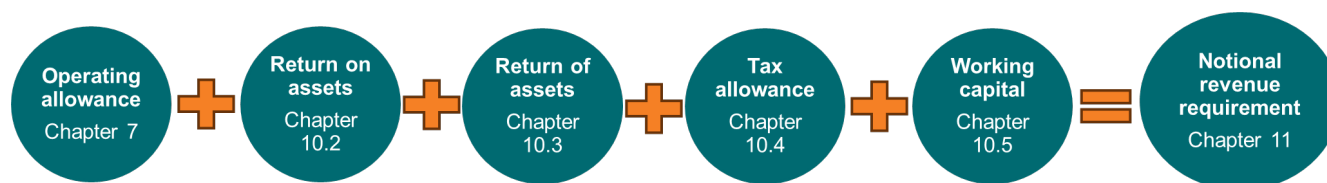
Under IPART's application of the building block approach, other components of Essential Water's NRR typically include true-ups or adjustments to:

- > Reflect changes in the trailing average cost of debt, as part of the WACC to calculate a return on the assets. Under IPART's approach, this can occur via an annual update to prices or at the next price determination. We propose to continue to apply the cost of debt true-up at the next determination period, as discussed in Chapter 10.

- > Reflect the Demand Volatility Adjustment Mechanism (DVAM), which makes adjustments to the NRR to account for any differences between forecast demand used to set prices in the previous determination period, and actual demand over this period, subject to a $\pm 5\%$ materiality threshold. This is discussed in Section 5.6 below.

Efficiency incentive schemes can also result in adjustments to the NRR. However, as outlined in Section 5.5 below, we do not propose these schemes will apply to Essential Water for the 2026 determination period.

Figure 7: Building block approach to calculating the notional revenue requirement



5.5 Efficiency carryover mechanism

In its 2022 determination, IPART decided to maintain the efficiency carryover mechanism for operating expenditure which it had introduced in 2019. This mechanism allows Essential Water to retain permanent efficiency savings for a fixed period regardless of when in the determination period they are achieved. This mechanism aims to remove the incentive for a regulated business to delay efficiency savings from the end of one determination period to the beginning of the next.

The efficiency carryover mechanism is akin to the Efficiency Benefit Sharing Scheme (EBSS) in IPART's 3Cs framework. The efficiency carryover mechanism allows Essential Water to retain efficiency savings for a fixed period; whereas the EBSS allows the regulated business to retain a fixed share of efficiency gains. However, they both have the same objective: to provide enhanced incentives for the water utility to pursue opex efficiency gains, including to make the utility indifferent as to when it pursues these gains within the determination period.

We will not activate the efficiency carryover mechanism for the 2022 determination period

As we discuss in Chapter 7, our operating expenditure for the 2022 determination period has exceeded the IPART allowances. We are a small business operating within a challenging physical environment and unable to achieve the economies of scale accessible to many other water businesses. As a result of this, we have not been able to realise efficiencies relative to the allowance provided and therefore do not propose to activate the efficiency carryover mechanism for the 2022 determination period.

We do not propose to continue the efficiency carryover mechanism for the 2026 determination period

We do not propose to continue the efficiency carryover mechanism for the 2026 determination period. We consider that an appropriate operating expenditure allowance – which reflects the efficient costs of delivering our services, in our environment, with our regulatory requirements – should provide sufficient incentives for Essential Water to pursue sustainable efficiency gains. Our Cost Efficiency Strategy (see Attachment 1) sets out our plan to identify, deliver and monitor cost-efficiency initiatives throughout our business, as well as our proposed efficiency target. This demonstrates our intent to strive for efficient operating expenditure as much as possible within our unique and challenging physical operating environment.

Further, IPART's Water Regulation Handbook states that an efficiency benefit sharing scheme (EBSS) should be accompanied by a capital expenditure sharing scheme (CESS) and outcome delivery incentive scheme (ODI) to equalise incentives between operating expenditure, capital expenditure and service levels; and that each business can decide whether they wish to propose these schemes. As outlined below, we do not propose these incentive schemes apply to Essential Water for the 2026 determination period.

5.6 Demand volatility adjustment mechanism

Actual water sales will depend on a number of factors that will vary, including weather patterns and population changes. This creates a risk in setting prices based on forecast water sales, as actual sales may vary and are difficult to predict accurately.

The demand volatility faced by Essential Water is not limited to the normal deviations from average weather conditions and demand. The small size of Essential Water and its customer base means that if one or more large customers leaves or enters the network (e.g. a mine), actual water sales could deviate substantially from forecast water sales.

The demand volatility adjustment mechanism addresses this risk by enabling us to adjust our revenue at the start of the subsequent determination period, based on the variation between actual water sales over the determination period and the forecasts used by IPART to make the determination, subject to a $\pm 5\%$ materiality threshold.

We do not propose to trigger the demand volatility adjustment mechanism for the 2022 determination period

As we discuss in Chapter 9, our forecast water sales for the 2022 determination period are broadly in line with the forecast approved by IPART in the 2022 determination. We therefore do not propose to activate the demand volatility adjustment mechanism for the 2022 determination period in determining our NRR for the 2026 determination period.

We propose continuing with the demand volatility adjustment mechanism for the 2026 determination period

For the 2026 determination period, we propose maintaining the demand volatility adjustment mechanism, subject to a $\pm 5\%$ materiality threshold. This will enable us to adjust our revenue at the start of the subsequent determination period for any significant variation between actual and forecast water sales over the 2026 determination period, including the potential commissioning of the Hydrostor generator (discussed in more detail in Chapter 9). The continued application of this adjustment mechanism will ensure our prices and revenue are consistent with any unexpected changes in demand over the 2026 determination period.

5.7 Incentive schemes

We do not propose to introduce the 3Cs cost and outcomes incentive schemes in the 2026 determination period

The 3Cs framework includes three schemes to provide financial incentives to regulated water businesses to pursue cost efficiencies and service outcome enhancements: the EBSS, the CESS and the ODI.

IPART's Water Regulation Handbook states that each business can decide whether it wishes to propose these three schemes, stating that they should be considered a package if they are to be proposed and applied. The Water Regulation Handbook notes, however, that IPART expects the incentive schemes will be applied by businesses with self-assessed Advanced or Leading proposals.

In line with our self-assessment grading of Standard, we do not propose the application of the EBSS, CESS and ODI for the 2026 determination period. Rather, our cost allowances and reporting against output measures will provide us with a strong incentive to pursue cost efficiencies and appropriate service outcomes over the 2026 determination period.

We raised performance measures with the Essential Water Customer Panel (EWCP) members in June 2025, and there was strong support for public reporting on a range of performance measures to provide transparency to customers. Our proposed output measures and targets for the 2026 determination period, reflecting our customer feedback, together with our proposed accountability framework, were discussed in Chapter 4.

5.8 Cost pass-throughs

We do not propose any cost pass-throughs for 2026-31

Essential Energy is not aware of any events that would be eligible to propose as cost pass-throughs for inclusion in this Proposal.

Essential Water's expenditure program for 2026-31 has been developed in response to the priorities of our customers to maintain our ageing infrastructure, so that it can continue to deliver the outcomes that they need and expect. Security and quality of supply for water and wastewater services means that we need to invest in significant levels of capital infrastructure over the next five years, such as to replace the Wills St WWTP, and to increase renewals of water and sewer mains. As good risk managers we understand that these investments cannot be

deferred any longer. We stand behind our expenditure forecasts, as they are based on the best information available to us at this time. As good risk managers we expect to manage cost uncertainty within the envelope of expenditures/revenues proposed for 2026-31.

We appreciate that the following tools are available to manage significant changes, that are unforeseen at the time of a proposal:

- > True-ups – material changes in costs can be applied for as an ex-post adjustment at the next review period
- > Targeted reviews and letters of comfort – official IPART feedback to prevent postponing, of necessary efficient additional expenditures, to the next price review
- > Partial or full re-openers – a last resort option when there is a material change in costs that warrant the replacement of the determination (in whole, or in part) – and which cannot be delayed to the next price review.

We appreciate that price certainty is important to our customers, and with the expenditures and revenues included in this Proposal, we intend to manage uncertainty risk within our business until the next price review.

5.9 Self-assessment grading

We have assessed our Proposal as Standard

According to IPART's 3Cs framework, a business must self-assess the extent to which its proposal promotes customer value, encourages cost efficiency and is able to be credibly delivered. The 3 grades in the 3Cs framework are:

- > Leading – for businesses that excel in understanding their customers, innovating to deliver services customers want and driving cost efficiencies. The business also demonstrates how it delivers significant improvement in customer value through a combination of quantitative and qualitative evidence.
- > Advanced – for businesses that demonstrate very strong understanding of their customers and are broadly at the cost efficiency frontier.
- > Standard – for businesses that conduct meaningful customer engagement and have a credible path towards the cost efficiency frontier. This grade is consistent with good practice in the NSW water sector.

IPART notes that, in deciding on its grade, each business should refer to the 12 guiding principles that sit under the 3Cs, with particular emphasis on the focus principles agreed during early engagement.

We have self-assessed our Proposal as Standard. We believe that this grading is appropriate – it is also proportionate to the size of Essential Water and the characteristics of its operating environment. We discuss our self-assessment further in Appendix A: 3Cs grading self-assessment.

6. Capital expenditure

6.1 Overview

Under the building block approach, prudent actual capital expenditure over the 2022 determination period and efficient forecast capital expenditure for the 2026 determination period is added to the RAB and recovered through a return on assets and regulatory depreciation.

This chapter sets out our proposed levels of capital expenditure. The section below provides an overview of the capital expenditure required to deliver our proposed outcomes, set out in Chapter 4. We then discuss our risk-based approach to asset management that applies to all capital expenditure. Finally, we set out our efficient capital expenditure for the 2022 determination period and our forecasts of efficient capital expenditure for the 2026 determination period.

Our expenditure delivers on the outcomes customers want, at lowest long-term cost.

Key Messages

- > Our capex proposals are efficient, while also supporting safe and secure water and wastewater services to our customers. We are focused on adopting a risk-based approach to maintaining and replacing assets where necessary to meet our mandatory requirements and service standards. Our actual and forecast capital expenditure is also informed by sound long-term planning, reflecting priorities outlined in our IWCM Strategy.
- > By the end of the 2022 determination period, we expect total capital expenditure to be 31% below the total allowance provided by IPART over this period. The main driver of the difference is that our key capital expenditure project – replacement of the Wills Street WWTP – has been re-phased to allow us to finalise a design that will meet our objectives and ensure the most efficient delivery of services to customers over the long-term.
- > Over the five-year 2026 determination period (2026-31), we forecast total capital expenditure of \$252 million. Our forecasts are made up of ongoing maintenance works as well as several key projects and programs including:
 - Replacement of the Wills St WWTP – which is now critical to ensure we can comply with our environmental regulatory requirements and deliver wastewater services to an appropriate standard to our customers and community
 - Replacement of water mains and sewer mains renewal and relining – this urgent work is required to continue to upgrade our ageing network and enable us to put greater focus on planned rather than unplanned maintenance, which will result in more efficient management of our infrastructure and cost savings to customers over time
- > These and other programs of work have been planned to address the priorities of our customers – they made it clear that they were satisfied with the current levels of water quality and security. In order to maintain these levels, capital expenditure increases are needed over the next five years to upgrade the ageing infrastructure.

6.2 Our capital expenditure reflects our customer expectations and risk-based management approach

The expectations of our customers underpin our expenditure plans

Customer outcomes are a key driver of our expenditure plans. As we have described in Chapter 3, the key priorities for our customers are security and quality (reliability) of supply. The ability to maintain the satisfaction that our customers currently have in our service levels for water and wastewater means that we need to invest in upgrading our ageing infrastructure. We spent time with our EWCP to ensure that they understood the challenges that our business faces and the obligations that we have in providing quality water and wastewater services to our customers. We discussed the investments that were 'must-do' and then those that were more discretionary. Their feedback has informed our expenditure plans for the 2026-31 regulatory period.

Our expenditure forecasts are informed by sound long-term planning

Our expenditure forecasts are informed by our IWCM Strategy. As outlined in Section 2.6, our IWCM provides direction for our water and wastewater service needs for 30 years in a balanced and sustainable manner. It ensures our services are delivered cost-effectively and sustainably while meeting our customers' and community's needs and protecting public health and the environment.

In alignment with this Proposal, we have recently consulted with our customers and community in updating our IWCM Strategy.

Our robust systems and approaches ensure capital expenditure is prudent and efficient

We have established a sound asset management system and processes to ensure that our expenditure programs are prudent and efficient. Our asset management system takes into account opex and capex trade-offs to ensure cost effective and commercial asset replacement is compared to ongoing maintenance of aging assets. This has informed how we have developed our proposal for the capital projects outlined in this chapter. For example, our water and sewerage mains replacement programs will enable us to replace ageing infrastructure and allow us to put greater focus on planned rather than unplanned maintenance.

Essential Water follows a risk-based approach to asset management and uses several inter-related processes to ensure expenditure is prudent and efficient. These processes relate to water and wastewater network augmentation, asset renewal and maintenance, demand management, and reliability, quality and security of supply.

Our asset management system covers our processes for planning, developing, operating, inspecting, conducting condition assessments and maintaining all components of our water distribution and wastewater collection and disposal network.

Through this system, the physical water and wastewater system assets and other resources are efficiently and effectively managed, to cost effectively deliver services to required standards while ensuring risks are optimally managed and the economic lives of our assets are maximised.

The system incorporates a detailed Water Asset Management Plan and Strategic Business Plan. These plans are reviewed and updated periodically, to ensure they reflect the current priorities and challenges for Essential Water. Together, these form an operational framework that enables us to monitor cost risks and reprioritise expenditures and asset management strategies as necessary. This allows us to consistently provide customers with high quality, safe and reliable water and wastewater services at the lowest possible price.

Our general asset management approach is reflected in our capital expenditure program, through our planned investments in capacity, security and reliability-driven asset augmentation, asset replacement, asset refurbishment and asset maintenance.

Our assessment of asset condition as part of our risk-based approach

To underpin our asset management and planning process, we record the condition of assets in the field during periodic inspections and subsequently download the data into an integrated asset management system. This enables us to track asset inspection and maintenance work. By relating the data to system performance, we can identify and prioritise problem areas for maintenance and / or capital investment. By analysing data captured in the system, Essential Water can develop more efficient and effective asset management strategies and practices.

We continue to strive for improvements to our asset management and planning practices. Over the current determination period we have invested and implemented improved asset management tools and training to ensure our capital expenditure is driven by condition-based assessment. For example, our asset management system, MainPac, provides a platform for scheduling, tracking and reporting works, including inspections. This enables us to efficiently plan and execute capital expenditure, while minimising the costs and disruptions of reactive activities. This is particularly important as renewal of our ageing network becomes more urgent.

We have a robust approval process to ensure prudent and efficient investment

Following the risk assessment, we develop business cases to ensure appropriate justification of projects for all future investments. There are several approval 'Gates' before we incur expenditure (see Figure 8):

- > Gate 1: The total proposed program requires Gate 1 approval

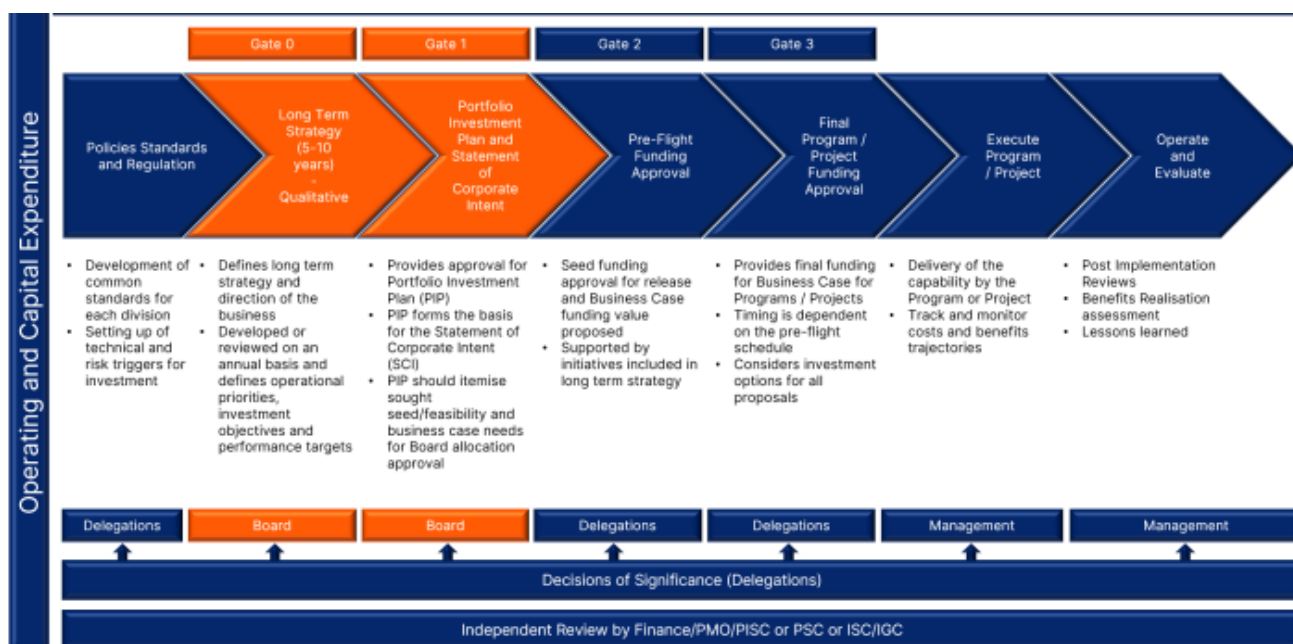
- > Gate 2: Larger projects are placed before Essential Energy's Investment Steering Committee (ISC) for Gate 2 approval.
- > Gate 3: When final tender prices are obtained, Gate 3 approval is required prior to final approval to proceed.

Essential Water follows a defined investment governance process to ensure that expenditure is prudent, reasonable, and efficient.

The ISC oversees Essential Water's investment governance process. The purpose, duties and responsibilities of this committee are contained in the Committee's charter.

This ensures our capital expenditure program delivers value for money for our customers and community. The figure below shows the high-level approvals process for all approvals in the Essential Energy business (including Essential Water).

Figure 8: Essential Energy's gateway approvals process



We are guided by best practice management

Essential Water continues to be guided by the six criteria set by the NSW Government for the best practice management of water supply and wastewater services:

- > strategic business planning
- > pricing
- > water conservation
- > drought management
- > performance reporting, and
- > integrated water cycle management.

Best practice management helps to ensure the effective and efficient delivery of services and promotes sustainable water practices and demand management.

Our ageing infrastructure will affect our capacity to meet the service outcomes required by our customers in the future

Our ageing water and sewerage mains are becoming increasingly unreliable. Addressing this will enable us to adopt a proactive approach to maintenance and is a key driver of our expenditure proposed in this submission. For example, in recent years, we have been reducing the water levels in our storage tanks to reduce water pressures. This is to prevent bursts of end-of-life pipes (and unplanned interruptions and extra costs). However, it is a short-term risk mitigation measure and must be balanced with ensuring the network does not run out of water (given our storage tanks are an important supply contingency measure). The reliable supply of water is a key outcome and requirement for our customers, therefore this reduction in water levels is not a feasible long-term strategy, particularly in times of drought. Further, even with reducing water levels in storage tanks, continual maintenance and renewals of water and sewer mains is required to minimise leaks and blockages – which could interrupt the water supply, impact the local environment and community, and lead to more costly repairs.

Three options were considered for the rate of mains replacements with our EWCP and the estimated annual bill impact of each option – see section 3.3. The options were: (1) maintain the current rate; (2) a moderate increase in rate of replacement; or (3) a large increase. Option 1 would minimise bill impacts but result in a prolonged period for completing replacements and result in an increased risk of breaks and bursts. At the other end of the scale, option 3 would ensure more timely replacement of mains but with the disadvantage of significant bill impacts and future renewals would be close together. A moderate increase in the rate of replacements was favoured by most participants, as this was seen to offer a satisfactory trade-off between affordability and benefits (reduced risk) to customers.

6.3 Capital expenditure during the 2022 determination period is efficient

We expect total capital expenditure over the 2022 determination period to be approximately \$61 million (\$2025-26), which is about \$28 million or 31% less than IPART's allowances for this period (see Table 9). In terms of the phasing of expenditure over the 2022 determination period, our capital expenditure was significantly lower than IPART's allowances for the first three years of the determination period and then above IPART's allowances for the final year of the determination period. This inversion of the phasing profile between the actual and expected expenditures (predominantly due to delays in the Wills St WWTP), means that annual differences are disproportionately large.

Table 9: Essential Water's capital expenditure relative to its IPART allowances (\$'000, 2025-26)

	2022-23	2023-24	2024-25	2025-26	Total
IPART allowance	33,196	29,358	18,801	7,694	89,049
Actual	8,393	4,560	14,533	33,588	61,074

The main differences, between our actual capital expenditure program over the 2022 determination period and our capital expenditure program planned at the time of IPART's 2022 determination and reflected in our allowances, are:

- > **Wills Street Wastewater Treatment Plant** replacement: IPART's 2022 determination allowed \$30 million for the replacement of the Wills St WWTP over the four-year 2022 determination period. The design, for an efficient and fit-for-purpose structure, is in its final stages of completion. An expression-of-interest stage is imminent, and selected suppliers will then be invited to tender. Some additional costs associated with this process will be incurred in 2025-26. We have been realistic about when equipment ordering and construction costs may actually be needed and deferred these expenditures into 2026-27 and 2027-28, as it is due to be completed by mid-2028 (as discussed below).
- > **Graziers pipeline:** Funding was provided to build a new pipeline for graziers receiving supply from the Menindee pipeline. Heritage studies placed this program on hold. In addition, no grant was forthcoming from federal government. The current supply from the existing Menindee pipeline is gravity fed and recent investigations have shown that the pipeline (without pressure) should function appropriately for several more years before this needs to be re-assessed again. We therefore efficiently deferred this expenditure.

As discussed in Chapter 3, our Customer Panel was comfortable if we review this project again as part of the 2031 Pricing Proposal.

- > **Water supply optimisation study:** We are currently awaiting an optimisation report for our water reticulation system and storages (including Stephen's Creek). The report will provide critical guidance on optimal storage levels and the role of back-up supply options, amongst other considerations. Given that this has the potential to provide significant savings, depending on the solutions advised, we have deferred some of our planned expenditure on the following infrastructure programs to prevent any duplication and unnecessary expenditure, and to provide for better logistical coordination of contractors given the distances they need to travel and costs incurred:
 - Stephens Creek reservoir dam wall rehabilitation
 - Mica Street service reservoir replacement
 - Rocky Hill service reservoir refurbishment and replacement.
- > We will be undertaking a new combined business case for these reservoirs, following our assessment of the optimisation report. The Mica Street water treatment plant concrete remediation is also affected. Whilst the planning and preliminary work has now been completed, there is a limited window to undertake this work - a 3-month period during winter. The completion of this project has been delayed until winter 2026 so that it can occur at the same time as works on the reservoirs, to minimise interruptions to our customers.
- > **Broken Hill water and sewer reticulation repair and replacement:** The planned work for this period is on track for delivery and relatively close to budget over the four years. Consolidation of work has meant fewer visits by contractors, saving travel costs. The use of an innovative technology (expandable fibreglass sock) meant that customer interruptions were minimised whilst this work was undertaken.
- > **Block 10 communications tower:** The existing tower is at Mica Street and enables our Supervisory Control and Data Acquisition (SCADA) systems to communicate between remote sites, which is crucial for both water and wastewater operations. A new tower is proposed at Block 10 to replace the existing ageing tower which is prone to lightning strike due to its position atop an existing concrete building, which cannot be effectively earthed to prevent the impact of lightning strikes. It also lacks safety systems. The expenditure will cover the build of the new tower and the decommissioning of the old tower. It was not planned for in our 2022 determination but is anticipated to be completed in 2026.
- > **Menindee water treatment plant works:** There are follow on works required at Menindee during 2025-26, which were not included in our 2022 determination. The works are needed to better integrate the new water treatment plant. In the construction of the new treatment plant some old assets were retained and some temporary assets installed. This infrastructure and assets now need to be replaced or upgraded to provide a permanent and optimal solution to further enhance the operation of the treatment plant. A new, larger, clear water storage tank is needed to ensure supply to customers, when the plant is offline. The sludge dams, retained from the old water treatment plant, require upgrading to accommodate the higher volumes of sludge produced by the new treatment plant due to the improved process. Additionally, the existing raw water and clear water pumps need upgrading and updating. The raw water pump was installed as a temporary solution to supply the new water treatment plant, and the clear water pumps are at the end of their asset life and require updating.
- > **Non-system expenditure on IT, motor vehicles, buildings, fittings, furniture, plant and equipment:** This category includes general maintenance costs on items such as property, tools etc. The actuals costs are not significantly different to the IPART allowance for this category apart from some abnormal expenditures on digital services upgrades/renewals for our systems - SCADA, asset management and Geographic Information System (GIS).
- > **Corporate overheads:** these have been applied directly using the Australian Energy Regulator (AER) approved Cost Allocation Methodology (CAM). As recommended by IPART in our 2022 determination, we have undertaken further work to ensure the accuracy of overheads coming through to Essential Water. We have been direct costing more items and undertaken a review of corporate costs that can be allocated to the water business. The fluctuation in the overheads during the 2022 determination period is a function of the expenditures being undertaken by the water business – earlier years are lower than forecast and then increase in line with increasing capital expenditure, in particular. We make the case in section 7.2 that our corporate overheads are efficient for a business in our circumstances, with regard to similar sized and located water businesses.

Table 10: Essential Water's capital expenditure relative to its IPART allowances (\$'000, 2025-26)

	2022-23	2023-24	2024-25	2025-26	Total
Total					
IPART allowance	33,196	29,358	18,801	7,694	89,049
Actual	8,393	4,560	14,533	33,588	61,074
Difference (%)	-75%	-84%	-23%	337%	-31%
Water					
IPART allowance	11,977	7,407	4,543	4,199	28,126
Actual	1,706	1,837	2,134	11,737	17,415
Difference	-86%	-75%	-53%	180%	-38%
Wastewater					
IPART allowance	14,685	16,194	10,787	1,629	43,295
Actual	2,827	364	5,393	8,369	16,954
Difference (%)	-81%	-98%	-50%	414%	-61%
Non-system					
IPART allowance	2,225	1,683	963	959	5,830
Actual	2,380	1,326	1,559	4,177	9,442
Difference (%)	7%	-21%	62%	335%	62%
Corporate overheads					
IPART allowance	4,309	4,074	2,508	907	11,798
Actual	1,479	1,033	5,446	9,305	17,264
Difference (%)	-66%	-75%	117%	926%	46%

6.4 Proposed capital expenditure for the 2026 determination period is efficient

Our forecast capital expenditure for the 2026 determination period is \$252 million, comprising \$50.3 million for water services, \$106.7 million for wastewater services, \$24.0 million for non-system assets and \$71.3 million for corporate overheads (see Table 11). This expenditure is required to ensure we efficiently comply with our regulatory obligations and supply the services our customers need.

Table 11: Essential Water's proposed capital expenditure for the 2026 determination period (\$'000, 2025-26)

Service or category	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Water	12,148	14,737	7,661	6,937	8,801	50,285
Wastewater	55,472	34,532	5,502	5,643	5,525	106,674
Non-system	1,696	3,355	7,342	10,299	1,263	23,955
Corporate overheads	28,297	19,704	7,694	7,370	8,203	71,268
Total	97,612	72,329	28,199	30,250	23,792	252,182

6.4.1 We have the capacity to efficiently deliver this capital program

We have the systems and processes in place to deliver this capex program efficiently and effectively. Our capex forecasts reflect our high priority assets and programs, consistent with our customers' priorities and expected outcomes, our risk-based approach, our asset management system and our IWCM Strategy.

The delivery of most of our major projects, such as the Wills St WWTP, will be outsourced, with Essential Water focused on the delivery of smaller projects and day-to-day operations. NSW Public Works Advisory (PWA) will provide project management expertise to ensure we are able to deliver the significant investment in the Wills St WWTP, while focusing our internal capacity on our ongoing renewal and maintenance programs. This makes the most of our in-house capability, manages risk efficiently, and allows for more efficient management of ongoing capex programs alongside operating expenditure.

The small size of the Essential Water management team to undertake project planning, coordination and management in addition to business as usual work means that their capacity to assist is necessarily restricted. The outsourcing of large projects is therefore an efficient outcome. Smaller projects are run by the Essential Water team on the ground. For larger projects we invite contractors to consolidate work and group projects in a way that minimises travel costs of contractors and impacts on customers, as the work can be undertaken in a single period rather than requiring multiple service interruptions. These practices mean our efficient capex is often lumpy.

We will periodically report to the EWCP on our progress in delivering key investments.

Below we outline our key capital projects by service or category.

6.4.2 Water capital expenditure

Key elements of our proposed capital expenditure program on our water network over the 2026 determination period are outlined below.

Water mains replacement

There is a need to replace approximately 200km of water mains within the next 40 years, as recognised in our IWCM Strategy. This is necessary to ensure that water can be supplied to our customers reliably and cost-effectively over time.

This urgent work, which continues our program over the 2022 determination period, is required to upgrade ageing infrastructure and enable us to put greater focus on planned rather than unplanned maintenance, which will result in more efficient management of our network and cost savings for customers over time. This will help us achieve the customer and community outcome of water reliability.

In our 2022 Proposal, we showed evidence of increasing mains bursts. In recent years we have adjusted for this new normal (of working with old pipes) and reduced the levels of water in our tanks to reduce water pressure in the system, to minimise the number of bursts. Whilst this increases the risk of running out of water, it is a mitigation against interruptions to customers and additional costs of emergency repairs from burst pipes. Our planned increased levels of mains replacements will ensure we can maintain the required quality, reliability and security of water services for customers and the community. Consideration has been given to the greater use of contractors to support our team in the planned uplift in delivery during the 2026 determination period.

Essential Water has 120kms of cement water mains that were installed before 1965 and require replacement. This subset of mains are the most critical ones for us to focus on. Customers supported an increase in the level of renewals compared to current rates. The program will be delivered by contractors.

Stephens Creek Pumping Station and Dam Safety Works

As discussed in section 6.3, Essential Water is currently reviewing its approach to the use of Stephens Creek (and water reticulation and storages). An optimisation report, due within the next month or so, will inform final investment plans to be undertaken over the 2026 determination period. For this Proposal, the forecast expenditure is based on the current use of Stephens Creek, which plays a critical role as a back-up water supply in Essential Water's network. The expenditure is for compliance upgrades to the pumping stations and safety works for the dam walls, to ensure they meet current standards. These works are both needed within the next five years for compliance reasons.

Smart meter replacement program

Smart meters offer several benefits to customers, including improved leak detection, more accurate billing, and real time data so they can better monitor their water consumption.

With the installation of smart meters, Essential Water will also be able to:

- > determine the losses in the water reticulation network and more quickly identify and respond to leaks.
- > automatically collect data, reducing the need for manual meter reads and allowing for efficiency gains over time.

The introduction of smart meters was unanimously supported by our Customer Panel. Despite the upfront costs, customers valued the long-term benefits of smart meters and it is one of two discretionary expenditures included in our Proposal. This program will help us achieve the customer and community outcome of good customer service.

Other various water projects, renewals relating to pipelines/network

There are various other smaller water expenditure programs related to renewals and compliance such as upgrading ladders and platforms at the service reservoirs, re-painting of the internal and external surfaces of the service reservoirs, and periodic refurbishing of service reservoirs. These works are required to ensure that the service reservoirs meet current standards and to continue to supply a safe and secure potable water supply to Essential Water's customers. The outcomes of the optimisation report may affect the delivery of some of these investment plans. However, in the interim, the current expenditure plans reflect our estimates of the efficient costs required to deliver required services to customers while complying with our regulatory requirements.

6.4.3 Wastewater capital expenditure

Key elements of our proposed capital expenditure program on our wastewater network over the 2026 determination period are outlined below.

Wills Street Wastewater Treatment Plant

The replacement of the Wills St WWTP is our largest and most significant capital expenditure project for the 2026 determination period and will help achieve the customer and community outcome of sustainability and environmental protection. As we flagged in our 2022 Proposal, this plant was built in the 1930s, is nearing the end of its life and no longer complies with contemporary environmental obligations and service standards. Urgent action to upgrade Wills St is therefore required.

We discussed in section 6.3, that there have been delays to ensure we designed the most efficient and fit-for-purpose structure. We have prepared a detailed updated business case, consistent with IPART's recommendation in its 2022 determination (Box 2). In 2022 we went out to market, and subsequently appointed advisors to prepare the detailed design: Beca HunterH2O, one of Asia Pacific's largest independent engineering consultancies and recognised water sector experts.

This design is now nearly complete, and we are expecting to issue an expression of interest for construction in October 2025, after which selected suppliers will be requested to tender for the work. We anticipate we should be able to award the construction contract before the end of 2025-26 and construction to commence shortly after, with a delivery date of June 2028. Our capex forecasts reflect the delivery schedule prepared by Beca HunterH2O with additional input from PWA. Some early expenditure will be needed for long lead time equipment for the WWTP, such as the screw press - made offshore and only manufactured when ordered. Delays in this phase will impact the required commissioning date. The bulk of the expenditure will be incurred in 2026-27, when most of the construction takes place. The balance of the capex will be incurred in 2027-28 before the project is completed in June 2028, and final decommissioning costs (opex) in 2028-29.

This revised timeline reflects the ongoing impact of COVID-19 and delays associated with the refinement of the design. This refinement included addressing some known issues with concept design, as well as options analysis to ensure the project provides value for money to our customers. Throughout this refinement, we worked closely with the NSW DCCEE and the EPA to ensure the detailed design meets our regulatory obligations at least cost.

We have developed a delivery strategy to ensure that we are able to complete the upgrade prudently and efficiently within the estimated timeframes. As part of our preparatory work, we have confirmed a procurement strategy using a traditional design and construction approach that will deliver best value for money. The preliminary design and

tendering documentation is on track to enable tendering in October 2025. PWA will draw on its significant expertise to project manage the tendering phase as well as the construction phase. We have commenced engagement with construction companies, who have expressed high levels of interest.

Box 2: Wills Street WWTP business case

Broken Hill currently has two wastewater treatment plants (WWTPs), at Wills St and in South Broken Hill. The Wills St WWTP was commissioned in 1939, upgraded in 1956 and again in the 1980s. This WWTP is at the end of its serviceable life and requires replacement to ensure compliance with its NSW Environment EPA Licence for discharges. Treated effluent from the Wills St WWTP is reused by local mines and the Broken Hill Golf Course. Excess effluent is piped to the White Leeds wetland.

The South Broken Hill WWTP was built in the 1960s and is in a relatively poor condition, reflecting the age of the plant. This WWTP now requires significant remedial works to ensure reliable ongoing service and compliance with its EPA Licence for discharges.

The EPA has issued an Environmental Improvement Plan (EIP) requiring the Wills St WWTP to comply with the contemporary discharge parameters and limitations set out in its EPA licence by July 2025. After this time Essential Water will be in violation of its EPA licence.

The objectives of this project are to:

- > Ensure compliance with the EPA Licence requirements
- > Minimise the life cycle costs of sewage treatment in Broken Hill
- > Provide opportunity for greater use of recycled water within Broken Hill and reduce the use of potable water on parks, gardens, and commercial use where appropriate.

In our 2022 Proposal we indicated the adopted upgrade strategy is a consolidation of the two WWTPs at the Wills St site. The Intermittently Decanted Extended Aeration (IDEA) process has been selected as the preferred technology based on the PWA Option Study. Further options analysis has been undertaken to ensure a cost-effective design, including an analysis of sludge management and recycled water reuse options. We consulted extensively with DCCEEW during the design phase, and final approvals are in progress.

Sewer mains renewal and relining

The nature of and need for this capital expenditure project is similar to the water mains program outlined above, and a moderate increase in sewer mains supported by our Customer Panel.

Similar to our renewal program for water mains, there is a need to reline approximately 210km of sewer mains within the next 40 years. This is necessary to ensure that wastewater can continue to be reliably and cost-effectively transported to our treatment plants. It will also help us achieve the customer and community outcome of sustainability and environmental protection.

This work continues our program over the 2022 determination period, which is required to upgrade ageing infrastructure and enable us to put greater focus on planned rather than unplanned maintenance, which will result in more efficient management of our network and cost savings for customers over time.

In our 2022 Proposal we showed evidence of increasing blockages, which resulted in an increase in our unplanned maintenance program. Since increasing the sewer relining program in this determination period, there has been a minor decrease in blockages in the sewer reticulation offset by a minor increase in planned maintenance or rodding of the network.

Increasing the rate of relining of the sewer network will result in reductions in unplanned maintenance and increases in planned maintenance – with better outcomes for customers in terms of impact and value over time.

6.4.4 Non-system assets

Non-system expenditure is an important support cost associated with providing network infrastructure. Over the 2026 determination period, there is expenditure forecast for recurrent capital expenditures on non-system assets such as tools and equipment, furniture and fittings, property maintenance and digital solutions related to upgrades/renewals of systems for asset management, SCADA and GIS.

Block 10 property upgrade

The headquarters for Essential Water is located at Block 10 in Broken Hill, which includes a variety of offices, workshops and storages. The buildings are old and in poor condition, they fail to meet current Building Codes, as well as presenting operational and safety risks for employees. Over the years, a variety of temporary fixes have been undertaken but this continued practice is not sustainable. The property team at Essential Energy has developed a business case to upgrade the facilities so that they are compliant and can provide the appropriate facilities expected of a modern business. That team will also project manage the building work.

6.4.5 Corporate overheads

We have allocated corporate overheads to our capex in accordance with our CAM, which is outlined in section 6.3 above. Based on the application of our CAM, we have allocated \$71 million in corporate overheads to capex for the 2026 determination period.

7. Operating expenditure (excluding pipeline bulk water costs)

7.1 Overview

Operating costs (excluding bulk water purchases) make up around 29% of our NRR in the 2026 determination period. These costs include labour, energy, hire services, materials, plant, fleet and corporate overheads.

This chapter sets out the operating expenditure required to deliver the outcomes our customers want at lowest long-term cost for the 2026 determination period. The section below provides an overview of our Proposal. We then discuss our efficient operating capital expenditure for the 2022 determination period and our forecasts of efficient operating expenditure for the 2026 determination period based on IPART's preferred base-trend-step (BTS) approach for recurrent controllable expenditure.

Key Messages

- > Our operating expenditure (opex) forecasts reflect the efficient costs of delivering safe and reliable water and wastewater services to our customers in remote NSW. The forecasts are needed to deliver the outcomes that customers value including their top two priorities of maintaining water quality and ensuring water security.
- > Over the 4-year 2022 determination period, we expect to incur operating expenditure (excluding bulk water pipeline costs) of \$77.6 million. These costs are around \$14.7 million or 23% higher than IPART's allowances, largely because of higher labour and corporate costs that would be faced by any efficient business delivering services in Broken Hill.
- > Actual expenditure in 2024-25 (the 'base year') reflects the efficient recurrent level of operating expenditure associated with delivering services in Broken Hill. Although our costs have been higher than IPART's allowances, they reflect the challenging environment in which we operate and are relatively low compared to other water utilities across NSW.
- > We forecast efficient operating expenditure (excluding bulk water pipeline costs) of \$102.2 million over the 5-year 2026 determination period. Average annual operating expenditure is around 5% higher than in the 2022 determination. The key drivers of these increases are an increase in labour costs above CPI, which reflect the labour market conditions associated with delivering services in Broken Hill and one-off costs associated with decommissioning the existing Wills St and South Broken Hill wastewater treatment plants.

7.2 Operating expenditure over the 2022 determination period

Our actual operating expenditure excluding bulk water charges for the 2022 determination period is compared to IPART's allowances in Table 12.

Table 12: Essential Water's actual opex (excluding bulk water charges) compared to IPART's allowances, current period (\$2025-26, \$'000)

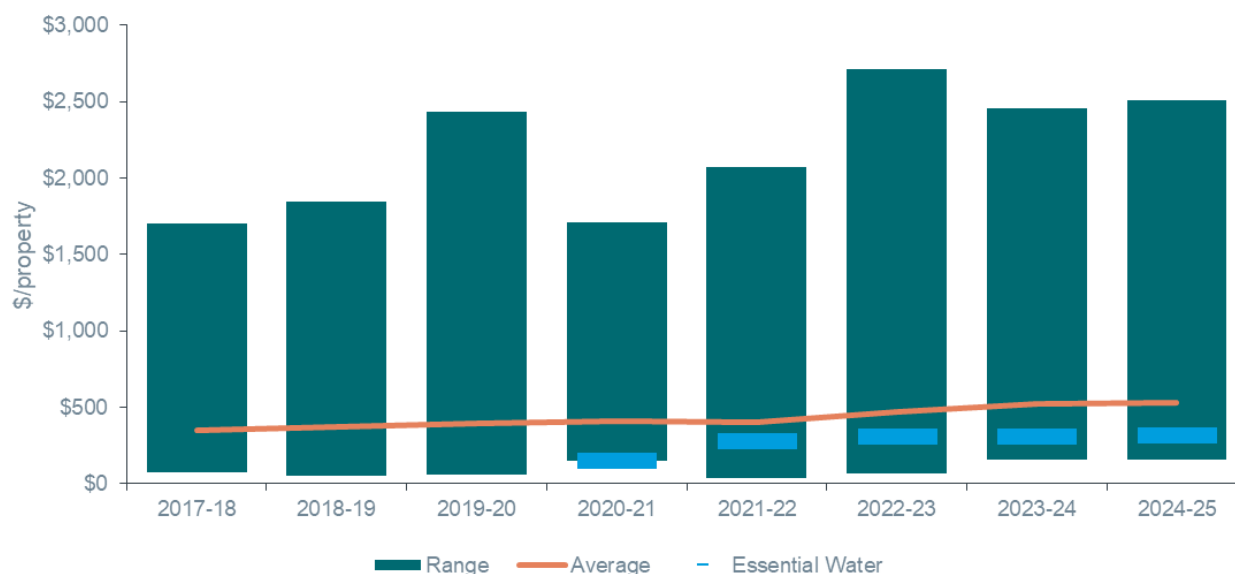
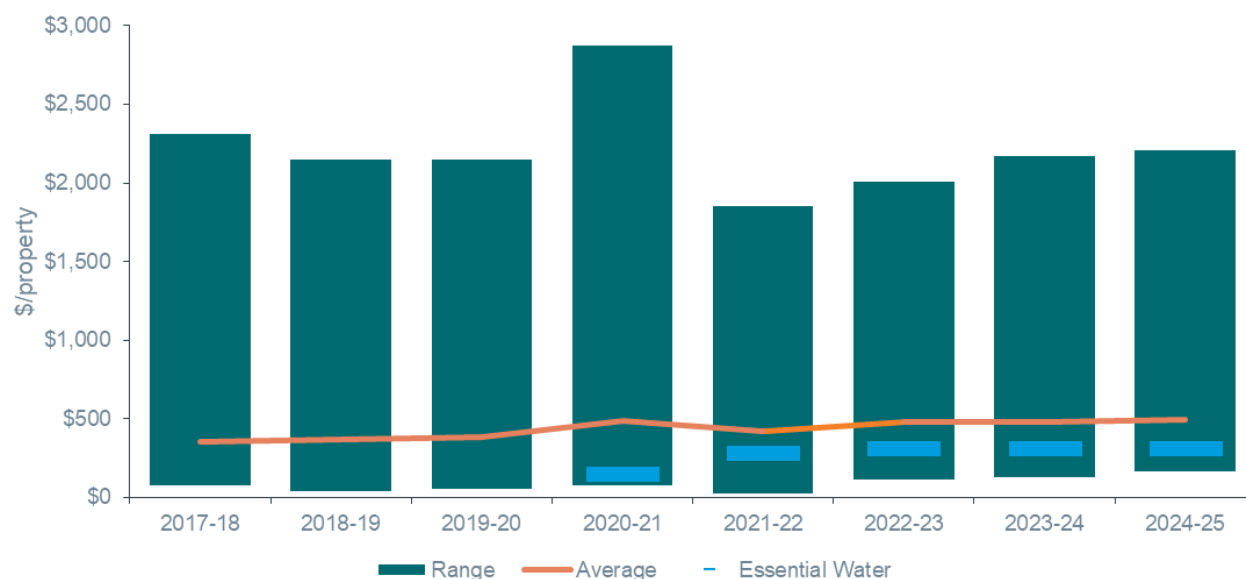
	2022-23	2023-24	2024-25	2025-26*	Total
IPART allowances					
Water	11,870	11,040	10,819	9,979	43,708
Wastewater	2,443	2,419	2,465	2,212	9,539
Corporate overheads	2,726	2,492	2,373	2,121	9,712

	2022-23	2023-24	2024-25	2025-26*	Total
Total	17,039	15,951	15,658	14,311	62,959
Essential Water actuals					
Water	10,912	11,284	12,195	12,330	46,721
Wastewater	3,313	3,229	3,469	3,476	13,487
Corporate overheads	4,450	4,321	4,300	4,340	17,411
Total	18,675	18,834	19,964	20,145	77,619

*2025-26 'actuals' are forecasts at the time of submission

Our water and wastewater operating expenditure including corporate overheads have been higher than IPART's allowances. The main drivers of these variances are:

- > We have continued to incur higher labour costs relative to IPART's allowances. While our number of full-time equivalent (FTE) employees is slightly lower than we anticipated when preparing our 2022 determination period forecasts, it remains higher than the levels assumed in IPART's allowances, particularly in 2024-25 and 2025-26. Essential Water continues to face operating constraints associated with an aging workforce in a remote location. These constraints would also be faced by any efficient business providing services in Broken Hill. In addition, IPART's allowance was based on a reduced number of FTEs that IPART's expenditure consultant (AECOM) considered could be achieved following the decommissioning of the Menindee Pipeline and completion of the Wills St WWTP. The efficient deferral of these two projects has limited our ability to reduce our number of FTEs.
- > IPART recommended that Essential Water explore all cost saving opportunities, including the sharing of resources with Essential Energy in the future. We have investigated the potential for sharing resources between Essential Water and Essential Energy to help address barriers in attracting and retaining skilled staff in the region. However, there is limited overlap between the specialist electrical work required by Essential Energy and the specialist water and sewerage work required by Essential Water. For example, Essential Energy does not have plumbing inspectors that could help undertake the inspections required to levy trade waste charges. In practice, any overlap would be limited to a small number of activities that are general in nature, but we are not experiencing staff shortages in those areas – skills and expertise is needed in the water technical and specialist roles. The energy transition has also substantially increased the workload for Essential Energy, further limiting the potential to share resources that could benefit Essential Water such as project managers. However, it is important to note there are numerous other benefits that Essential Water obtains through its use of shared corporate services, including robust investment governance and shared services procurement – refer to our Cost Efficiency Strategy in Attachment 1.
- > Corporate overheads have been allocated to Essential Water using Essential Energy's CAM that has been approved by the AER. In the 2022 determination period, IPART set allowances with reference to forecasts for corporate overheads provided by Essential Water that did not include the full amount determined by our CAM. We have continued incurring the level of overheads allocated using the CAM.
- > During the 2022 determination period, our overheads have continued to be lower than the average of local water utilities operating in western NSW and local water utilities with a comparable number of connections. The NSW DCCEEW publishes performance data on NSW local water utilities administration and management costs (or corporate overheads). It can be difficult to benchmark and compare water utilities because of different locations, physical environments, customer numbers/densities and service levels – which are amongst a range of factors that can impact on the efficient costs of service provision. Nevertheless, Figure 9 and Figure 10 show that our water overheads during the 2022 determination period have been below the average for local water utilities operating in western NSW and local water utilities with a comparable number of connections.

Figure 9: Water corporate overheads per property for NSW LWUs 5,000-15,000 water connections**Figure 10: Water corporate overheads per property for Western NSW LWUs**

7.3 Proposed operating expenditure for the 2026 determination period

7.3.1 Overview of our proposed expenditure

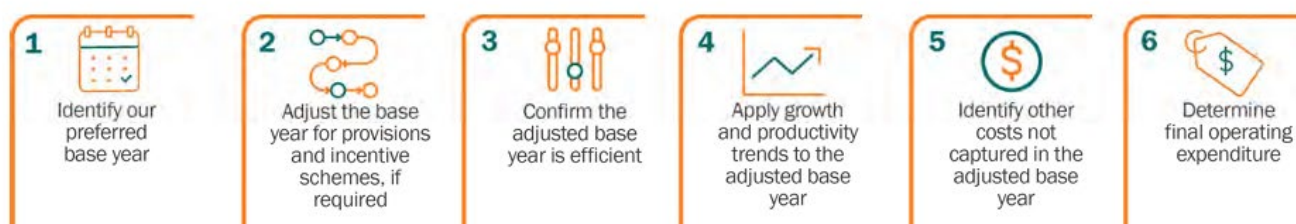
Table 13 sets out our forecast efficient operating expenditure for our water and wastewater services for the 2026 determination period, excluding bulk water purchases. We forecast efficient operating expenditure of \$79 million for water and \$23 million for wastewater over the 2026 determination period – averaging \$20 million per year.

Table 13: Essential Water's proposed operating expenditure (excluding bulk water charges) for the 2026 determination period (\$2025-26, \$'000)

	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Water						
Baseline controllable	15,512	15,512	15,512	15,512	15,512	77,558
Trend	312	309	308	306	305	1,540
Step	-	-	-	-	-	-
Total operating expenditure	15,824	15,820	15,819	15,818	15,816	79,098
Wastewater						
Baseline controllable	4,313	4,313	4,313	4,313	4,313	21,564
Trend	107	110	113	116	119	564
Step	-	-	985	-	-	985
Total operating expenditure	4,420	4,422	5,411	4,428	4,431	23,113

7.3.2 Approach to establish operating expenditure forecasts

We applied IPART's preferred methodology for forecasting recurrent controllable expenditure – the BTS approach – using a 6-stage process. This is consistent with the approach that Essential Energy uses when preparing its operating expenditure forecasts for the AER. We have applied common underlying assumptions to real input price growth changes, productivity growth and the application of our CAM to ensure consistency between the approaches used to forecast operating expenditure for Essential Water and Essential Energy. The BTS approach has been applied to prepare separate forecasts of efficient operating expenditure for our water and wastewater services.



7.3.3 Our preferred base year

We have selected 2024-25 as our base year for developing opex forecasts for the 2026 determination period. This is the most recent year with a full 12 months of data available. We have included all recurrent operating costs associated with delivering services in our base year. The costs in our base year include all water and wastewater operating costs as well as corporate overheads. Including corporate overheads in our base year is consistent with the AER's approach to assessing operating expenditure forecasts for Essential Energy.

7.3.4 Adjusting the base year, if required

We have adjusted our base year for a one-off labour related amount. Our base year did not exclude any normally occurring items that would need to be added back to ensure that the base year reflects our efficient recurrent controllable opex.

7.3.5 Our base year is efficient

We consider that our actual operating expenditure in the base year reflects the efficient recurrent level of operating expenditure associated with delivering services in Broken Hill.

DCCEEW publishes performance data on NSW local water utilities, including water and sewerage operating costs per property. It can be difficult to benchmark and compare water utilities because of different locations, physical environments, customer numbers/densities and service levels – which are amongst a range of factors that can impact on the efficient costs of service provision. Nevertheless, our expenditure in 2024-25 is low compared to other major water utilities.

Figure 11 and Figure 12 show that our water and wastewater expenditure is in line with local water utilities of comparable size (measured by the number of water connections), and local water utilities operating in the western region of NSW and facing comparable remote and challenging operating environments to Essential Water.

Figure 11: 2024-25 water and wastewater operating expenditure per property for NSW LWUs 5,000-15,000 water connections (\$nominal)

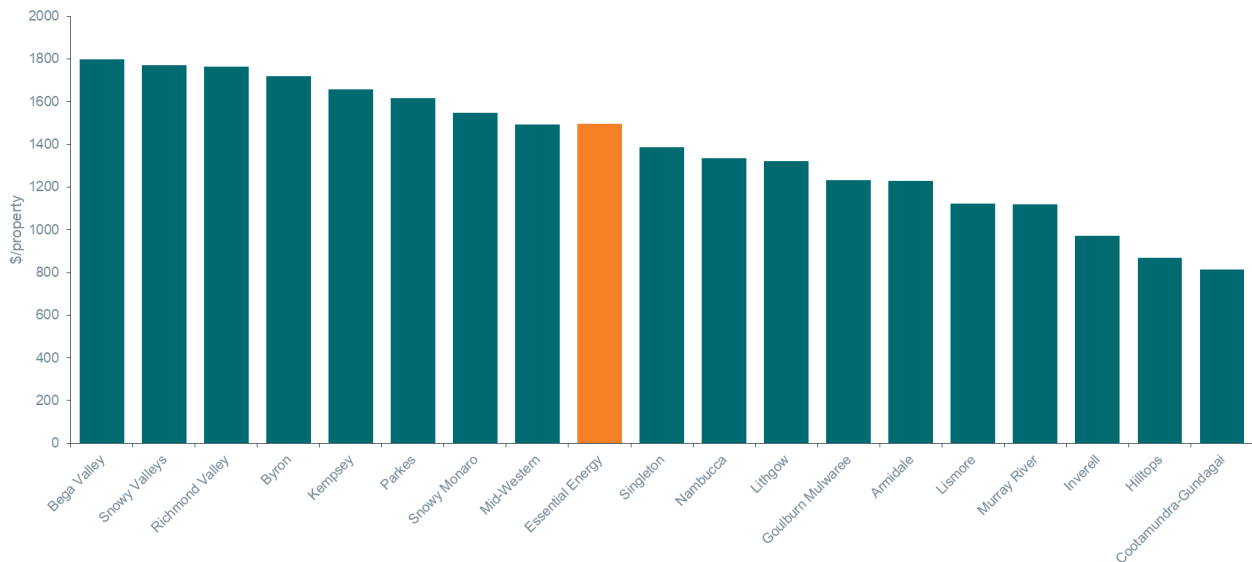
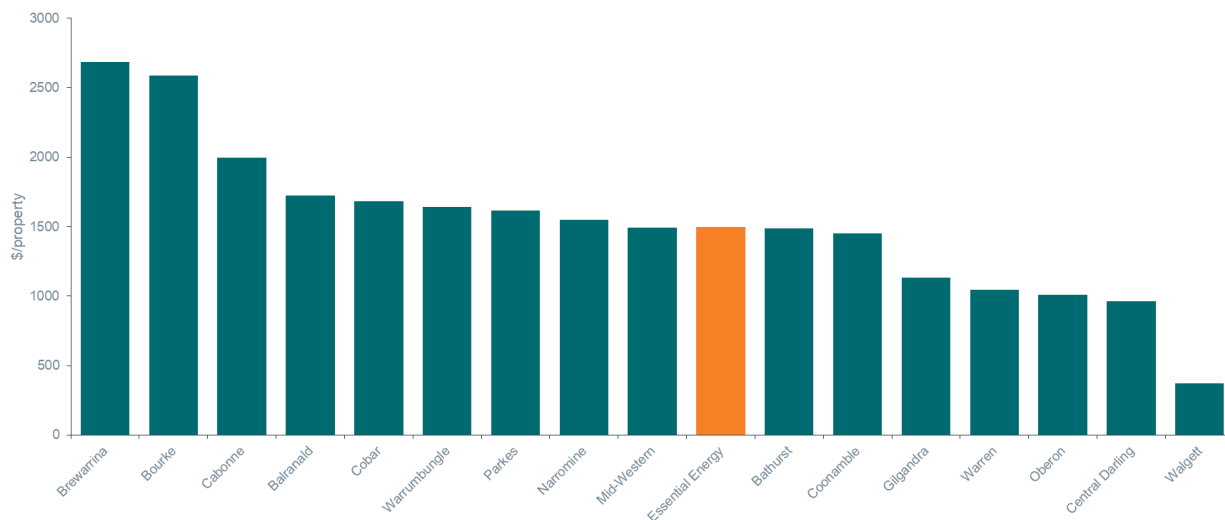


Figure 12: 2024-25 water and wastewater operating expenditure per property for Western NSW LWUs (\$nominal)



In 2024-25, our corporate overheads are relatively low compared to other water utilities across NSW, despite higher levels of expenditure compared to IPART's allowances. Our corporate overheads per property are the 5th lowest for water utilities with 10,000-30,000 water and wastewater connections and 6th lowest for water utilities in the western region of NSW.

Figure 13: 2024-25 water and wastewater overheads per property for NSW LWUs 10,000-30,000 water and sewer connections (\$nominal)

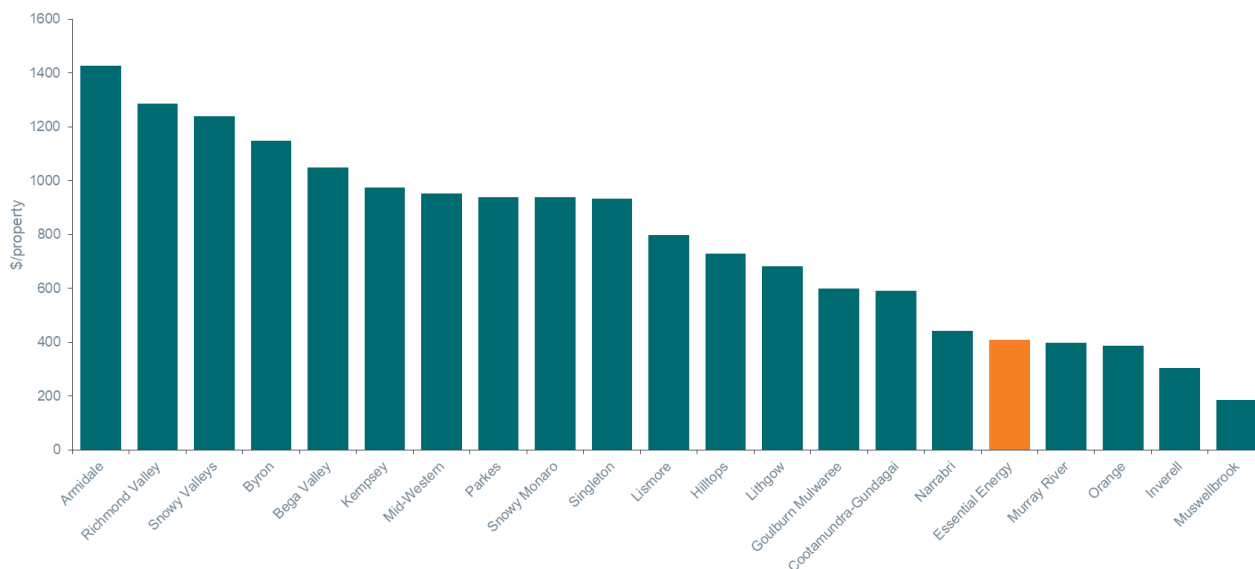
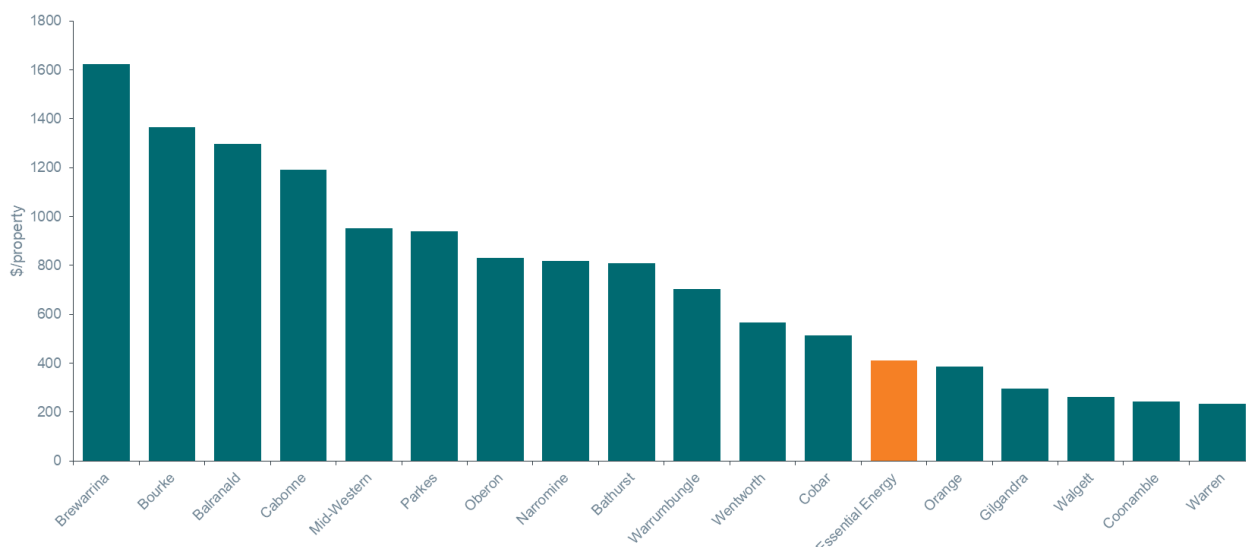


Figure 14: 2024-25 water and wastewater overheads per property for Western NSW LWUs (\$nominal)

7.3.6 Applying trends to the base year

Once we determined our efficient base year opex, we applied trends to reflect the following:

- > Price growth: this accounts for the contribution of labour and materials to total prices. We applied a forecast real labour price trend to the labour component of our base year opex based on the 5-year historical average of the proportion of labour-related costs within our water and wastewater operating expenditure.
- > Efficiency factor: this accounts for our commitment to improve the efficiency of Essential Water. We have applied an annual productivity improvement of 0.5% for each year of the 2026 determination period. This is consistent with the productivity improvement we apply when forecasting efficient opex to the AER and the long-term level of productivity growth achieved by water and electricity infrastructure businesses in the Australian Economy. Further information on how we set our efficiency factor is contained in our *Cost Efficiency Strategy*.

We have not included any output growth in our trend factor. This is because we expect a stable population and number of billable entities for the 2026 determination period (see Chapter 9 for further information on demand).

7.3.7 Identifying other costs not captured in the base year - step changes and non-controllable costs

Step changes are forward-looking changes to the recurrent controllable operating costs of providing services. We have identified one step-change related to delivering wastewater services:

- > Decommissioning costs for existing wastewater treatment plants: We plan on decommissioning the current WWTPs at Wills St and South Broken Hill in 2028-29, when the Wills St replacement is complete. Decommissioning the existing plants will result in additional one-off operating expenses of \$1 million that are not captured in base plus trend components.

We have not included non-controllable costs in our cost forecasts.

8. Broken Hill Pipeline bulk water costs

8.1 Overview

Pipeline bulk water costs are forecast to make up around 55-60% of our operating expenditure each year for the 2026 determination period. Over the 2022 determination period, actual pipeline costs and volumes have been broadly in line with the IPART allowance. Our forecasts for the 2026 determination period reflect our expected demand and WaterNSW's estimates of bulk water prices.

Key messages

- > Over the 2022 determination period, we are expecting pipeline bulk water costs of \$98 million, which is in line with the 2022 IPART allowance.
- > Pipeline bulk water volumes were 1% higher than IPART's forecast for the 2022 determination period. Volumes were lower in 2022-23 due to a black water event in the Murray River, which required. Essential Water to switch to water from Stephens Creek until the water quality from the Murray River improved. This has been more than offset by higher volumes than forecast in 2024-25 and 2025-26.
- > We forecast efficient bulk water costs of \$139 million over the 2026 determination period or an average of \$28 million per annum over this period. These forecasts are higher than our actual costs over the 2022 determination period (noting that we are now proposing a 5-year determination period), reflecting higher expected volumes, and are based on continuing to source the majority of our water demand from the Pipeline.

8.2 Bulk water costs over the 2022 determination period

Pipeline bulk water volumes are similar to IPART's 2022 determination forecasts

Essential Water's purchases from WaterNSW were 1% higher than IPART's forecasts over the 2022 determination period (see Table 14). This reflects:

- > Lower than expected Pipeline purchases in 2022-23. The majority of Essential Water's water demand is met by the Broken Hill Pipeline. Stephens Creek serves as a back-up supply on the rare occasions that there are issues with the Pipeline supply. In 2022-23, such an occasion arose when the supply from the Pipeline was impacted by a black water event in the Murray River from mid-January to the beginning of May 2023. Essential Water was able to switch supply to Stephens Creek to meet customer demand to ensure an uninterrupted supply of water for customers. Table 14 shows the lower volumes from the Pipeline in 2022-23, compared to IPART's forecast.
- > Higher than expected purchases from WaterNSW in 2024-25 and 2025-26 due to lower than expected rainfall. Looking at the trend (see Figure 15 and Figure 16), the region may be heading into drought, though not at a level where water restrictions have been implemented to date.

Table 14: Actual and forecast water sales (ML)

	2022-23	2023-24	2024-25	2025-26	Total
IPART's forecast of Essential Water's purchases from WaterNSW	5,549	5,527	5,505	5,483	22,066
Essential Water's actual purchases from WaterNSW	4,247	5,587	6,250	6,250	22,334
Variation	-23%	1%	14%	14%	1%

Bulk water expenditure is slightly higher than IPART's forecast in the 2022 determination period

The price Essential Water pays to WaterNSW for bulk water comprises two components:

- > a fixed service price (\$ per day)
- > a usage price (\$ per kL of water supplied).

Most of the bulk water charges paid by Essential Water are fixed. In 2025-26, fixed charges are expected to account for 89% of Essential Water's bulk water expenditure. Actual bulk water costs are broadly in line with the IPART allowance (see Table 15) across the 2022 determination period.

Table 15: Actual bulk water expenditure and IPART allowances (\$2025-26)

	2022-23	2023-24	2024-25	2025-26	Total
IPART's allowed bulk water supply charge	27,135	23,999	23,594	23,590	98,318
Actual bulk water supply charge	26,111	22,776	24,895	23,916	97,699
Variation	-3.8%	-5.1%	5.5%	1.4%	-0.6%

8.3 Forecast bulk water costs over the 2026 determination period

We expect to continue sourcing the majority of bulk water from the Pipeline

For the 2026 determination period we propose to source close to all of our water needs from the Broken Hill Pipeline. This reflects:

- > Our expectation we will continue to use Stephens Creek sparingly, reflecting the unreliable nature of this water source and the treatment risks associated with frequently changing water sources. Moreover, the infrastructure at Stephens Creek is ageing, and by using it this way we hope to extend its usable life with minimal investment. We are currently undertaking an option analysis to review how we will use Stephens Creek in the future. Options include either using it as an emergency supply, an alternate supply or decommissioning. However, regardless of the option chosen, the majority of water will be sourced from the Broken Hill Pipeline.
- > The continued supply of Menindee from the Darling River.

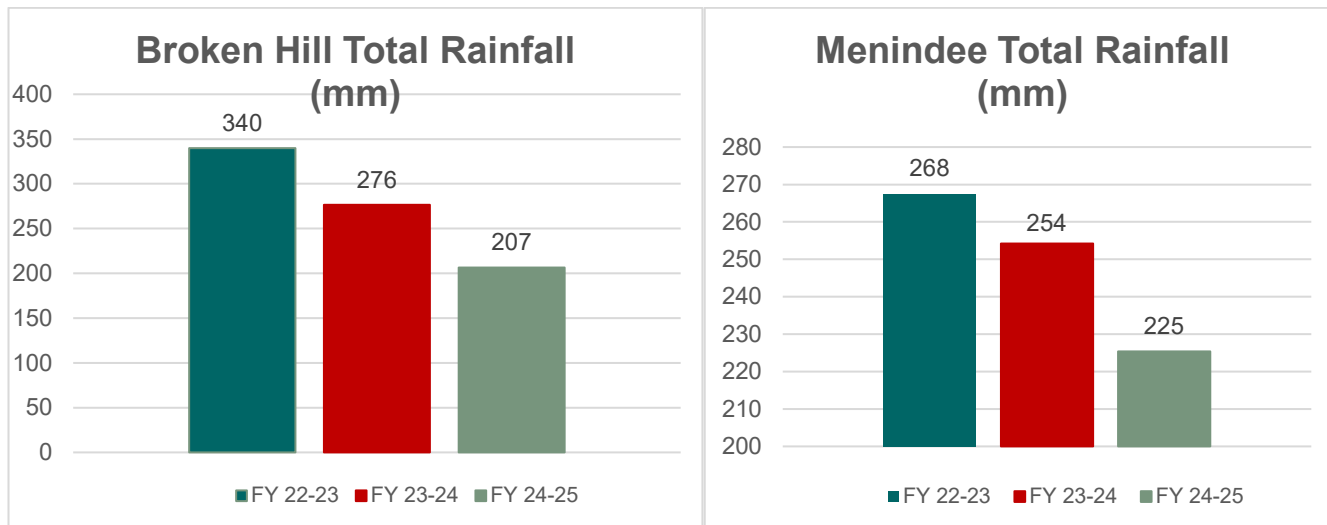
We forecast our bulk water to be around 6.3GL per year across the 2026 determination period as shown in Table 16. This takes into account the losses associated with treating and transporting water through our network to deliver it to customers. These annual volumes are line with the upward volume trends in 2024-25 and 2025-26, shown in Table 14, and reflect a reduction in rainfall levels as shown in Figure 15.

Figure 16 shows the Department of Primary Industries and Regional Development (DPIRD) drought forecast for NSW for 31 August 2025. Broken Hill and Menindee are highlighted as drought affected areas, supporting the forecast assumption of greater water usage.

Table 16: Proposed bulk water volumes (ML)

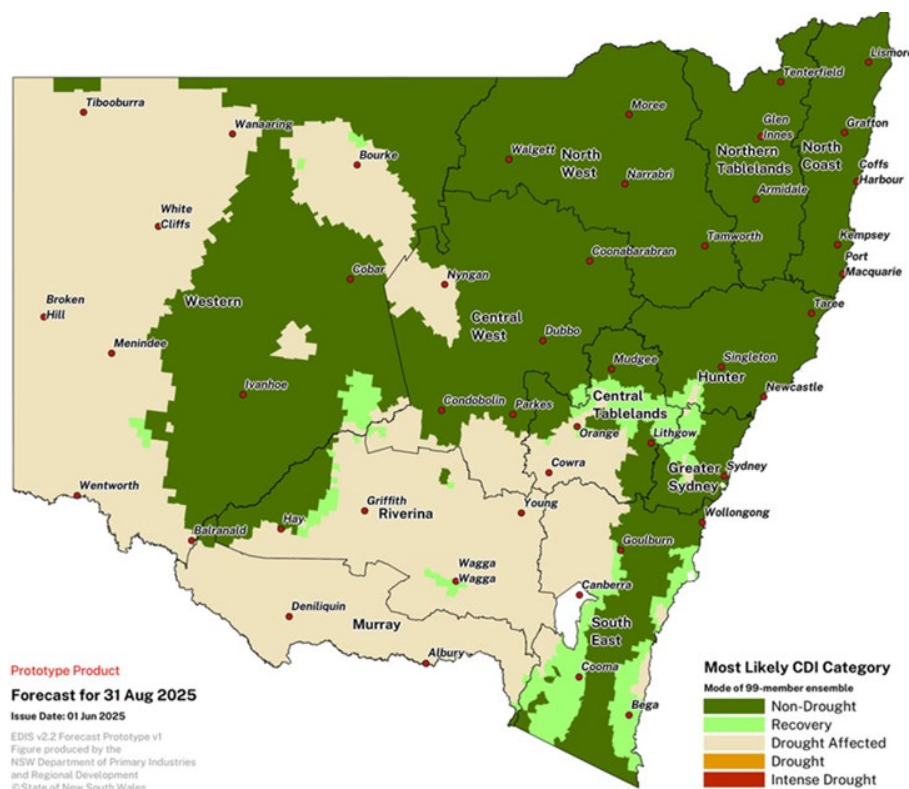
	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Pipeline volumes	6,250	6,252	6,254	6,255	6,257	6,259	31,277

Figure 15: Broken Hill and Menindee Rainfall – 1 July 2022 to 30 June 2025



Source: Bureau of Meteorology

Figure 16: Department of Primary Industries and Regional Development – Drought Forecast for 31 August 2025



Source: https://www.dpi.nsw.gov.au/climate_applications/state-seasonal-update/drought-forecast

We expect bulk water costs to rise over the 2026 determination period

We have worked with WaterNSW to estimate bulk water prices for the Broken Hill pipeline over the 2026 determination period. We provided WaterNSW with our proposed Pipeline bulk water volumes. WaterNSW then

estimated bulk water prices based on our proposed Pipeline bulk water volumes. Our Proposal is consistent with the bulk water prices provided by WaterNSW¹³. These prices are presented in Table 17.

Table 17: Proposed bulk water prices (\$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Fixed service price (\$ per day)	60,650	63,780	67,072	70,534	74,175	78,003
Usage price (\$ per kL)	0.420	0.312	0.309	0.312	0.311	0.307

Due to pipeline volumes remaining similar to current volumes and the largely fixed price structure, we expect bulk water usage costs to remain relatively stable over the 2026 determination period, with an increase in fixed charges as shown in Table 17. Any changes in WaterNSW prices as a result of IPART's determination of its prices will affect our bulk water costs. Based on our forecast volumes, total bulk water costs for the 2026-31 period are shown in Table 18.

Table 18: Proposed bulk water costs (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Pipeline costs	24,762	25,228	26,482	27,695	29,022	30,394	138,820

¹³ Provided by WaterNSW on 1 August 2025, with subsequent email confirmation on 11 September 2025, that these were the final prices that they would be including in their pricing proposal for 2026-31.

9. Forecast sales and customer numbers

9.1 Overview

Forecast water demand, wastewater volumes and customer numbers are key inputs to calculating the water and wastewater price levels to allow Essential Water to recover its NRR, less any NSW Government contribution. It is important these forecasts are reasonable, to ensure Essential Water can recover its costs over the determination period.

Key messages

- > Water sales over the 2022 determination period are broadly in line with the forecasts approved by IPART in the 2022 determination.
- > We expect a continuation of the trend of a stable population across the service area, with marginally more connections.
- > Given the reduction in rainfall over the last couple of years in Broken Hill and Menindee, and the higher water demand resulting from this, we expect water sales over the 2026 Determination period to follow the current trend.
- > We expect non-residential water sales and wastewater volumes over the 2026 determination period to remain relatively consistent with actual volumes over the 2022 determination period.

9.2 Sales over the 2022 determination period

Water sales over the 2022 determination period have been slightly higher than forecast

Total water sales have been broadly in line with the forecast approved by IPART in the 2022 determination. Table 19 compares actual water sales to the forecasts IPART used to set prices in 2022. Actual treated water sales are above forecast, but this is partly offset by untreated water sales volumes being below forecast. Contributing to lower untreated water sales volumes, was lower sales to the CBH mine (now renamed as Broken Hill Mines or BHM), which has been restructuring over the 2022 determination period. In aggregate, during the 2022 determination period, our water sales are 4.9% higher than the IPART forecast.

Table 19: Actual water sales and IPART forecasts (ML)

	2022-23	2023-24	2024-25	2025-26	Total
Treated water sales					
IPART's forecast treated water sales	4,040	4,020	4,000	3,981	16,040
Actual treated water sales	4,075	4,429	4,490	4,462	17,456
Variation	1%	10%	12%	12%	9%
Chlorinated water sales					
IPART's forecast chlorinated water sales	43	43	43	43	174
Actual chlorinated water sales	37	41	49	46	173
Variation	-15%	-6%	13%	6%	0%
Untreated water sales					
IPART's forecast untreated water sales	1,006	1,006	1,006	1,006	4,025

	2022-23	2023-24	2024-25	2025-26	Total
Actual untreated water sales	852	947	881	916	3,596
Variation	-15%	-6%	-12%	-9%	-11%
Total water sales					
IPART's forecast	5,089	5,069	5,050	5,030	20,239
Actual	4,964	5,417	5,420	5,424	21,225
Variation	-2.5%	6.9%	7.3%	7.8%	4.9%

Note: Actuals for 2021-22 to 2024-25, forecast for 2025-26

Our non-residential wastewater volumes are 6% lower than IPART's forecasts for the 2022 determination period

Over the 2022 determination period, IPART expected non-residential wastewater volumes to be on average 559 ML a year over the 4-year period. Our average annual actual volumes are tracking 6% below these volumes at 524 ML. The forecast was based on the assumption of a steady state volume for non-residential wastewater volumes, but the actual volumes were lower.

9.3 Forecast sales and customer numbers for the 2026 determination period

9.3.1 Customer number forecasts

We expect a stable population for the 2026 determination period

In developing forecasts, we have made the following assumptions:

- > Population is stable, in line with the projections of the NSW Department of Planning, Housing and Infrastructure¹⁴
- > The number of residential dwellings is increasing slightly by an average of 6 per annum across the 2026 determination period. This is the same as our assumption in the 2022 Proposal which drew on the analysis of the 2022 IWCM strategy. The demand forecasts of the IWCM strategy have not changed since then.
- > All new dwellings will be served with reticulated water and wastewater.

We expect a continuation of the trend of a stable population across the service area, with minimal change in connections.

We forecast non-residential customers to remain constant.

Table 20: Forecast customer numbers for treated and chlorinated water

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Total population	18,133	18,140	18,147	18,153	18,160	18,166
Total residential billable entities	10,082	10,088	10,094	10,100	10,106	10,112
Number of non-residential customers	824	824	824	824	824	824
Number of non-residential customers 20mm meter equivalents	1,991	1,991	1,991	1,991	1,991	1,991

Note: This table shows the number of customers at year end. Non-residential customers include the mines and refers to the number of metered connections.

¹⁴ NSW Department of Planning, Housing and Infrastructure, Population Projections 2024, Broken Hill and Central Darling, <https://www.planning.nsw.gov.au/data-and-insights/population-projections/explore-the-data>

Table 21: Forecast customer connections for untreated water

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Non-residential customers	33	33	33	33	33	33
Pipeline connections	50	50	50	50	50	50
Mines	7	7	7	7	7	7
Number of non-residential customers 20mm meter equivalents	603	603	603	603	603	603

Note: The table shows the number of customers at year end.

9.3.2 Water demand forecasts

We expect demand in the 2026 determination period to continue the trend of 2023-24 and 2024-25

We have forecast treated water, chlorinated water and untreated water sales to remain generally consistent with actual sales over 2023-24 and 2024-25. We have forecast demand over the 2026 determination with reference to the average annual demand per customer over the 2-year period from 2023-24 to 2024-25, multiplied by the number of forecast customers per annum over the 2026 determination period. This is an appropriate methodology because, as discussed in Section 8.3, rainfall has been declining in 2023-24 and 2024-25, with predictions of Broken Hill becoming drought affected by the end of August 2025.

The following tables summarise Essential Water's forecast water sales by water type and customer category.

Table 22: Treated water sales (ML)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Residential	2,441	2,443	2,444	2,446	2,447	2,449
Non-residential (excl. mines and exempt customers)	327	327	327	327	327	327
Mines	1,370	1,370	1,370	1,370	1,370	1,370
Exempt customers	325	325	325	325	325	325
Total	4,462	4,463	4,465	4,466	4,468	4,469

Table 23: Chlorinated water sales (ML)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Total chlorinated	46	46	46	46	46	46

Table 24: Untreated water sales (ML)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Pipeline customers	113	113	113	113	113	113
Mines	439	439	439	439	439	439
Other non-residential	365	365	365	365	365	365
Total	916	916	916	916	916	916

New demand is too uncertain to include in forecasts

We have been approached by Hydrostor, who are interested in the construction of a generator to provide backup support to Transgrid in the Broken Hill area. The technology requires water to be stored, and when released it turns turbines to generate electricity. If this generator is constructed, water requirements are expected to be for untreated and potable water. At this stage, however, there is uncertainty about the volumes that would be required, but it has the potential to be significant. It is anticipated that Hydrostor's operations would come online towards the end of the 2026 determination period.

There is insufficient information at this stage to include any additional demand in our forecasts for this Proposal. The demand volatility adjustment mechanism provides a mechanism for returning revenue to customers if demand is materially higher than forecast during the 2026 determination period.

9.3.3 Forecast wastewater customers

We expect wastewater customer numbers and volumes to remain relatively stable over the 2026 determination period

The number of residential wastewater connections is expected to marginally increase over the 2026 determination period, driven by the small increase in dwellings as shown in Table 25.

Table 25: Forecast wastewater customer numbers

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Total population	17,595	17,602	17,609	17,615	17,622	17,628
Total residential billable entities	9,378	9,382	9,387	9,391	9,396	9,400
Number of non-residential customers	675	675	675	675	675	675
Number of non-residential customers 20mm meter equivalents	1,677	1,677	1,677	1,677	1,677	1,677

Note: This table shows the number of customers at year end. Non-residential customers include the mines and refers to the number of metered connections.

9.3.4 Forecast wastewater demand volumes

We expect steady state demand in the 2026 determination period

We have forecast wastewater volumes of 534 ML per annum for the 2026 determination period based on the average of the annual volumes from 2023-24 to 2024-25.

Non-residential customers' discharges to the wastewater network are charged at the wastewater usage price. Residential customers are also charged a deemed sewerage usage amount, currently 100kL per annum, which we propose to maintain for the 2026 determination period.

Table 26: Forecast non-residential wastewater volumes (ML)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Non-residential	228	228	228	228	228	228
Mines	37	37	37	37	37	37
Exempt customers	270	270	270	270	270	270
Total	534	534	534	534	534	534

10. Allowances for return on assets, regulatory depreciation, tax and working capital

10.1 Overview

Essential Water needs to be able to earn an adequate rate of return on capital to continue to invest, operate and maintain water and wastewater services in Broken Hill. It also needs to recover the capital invested in the business over the period in which there is likely to be demand for regulated services.

Key messages

To establish Essential Water's NRR, we propose:

- > To set an allowance for the return on assets of \$56 million over the 2026 determination period. This is based on:
 - > Setting the opening RAB at 1 July 2026 at \$223 million
 - > Adopting the value of the RAB in each year of the 2026 Determination Period as shown in Table 28.
 - > Applying a placeholder real post-tax WACC of 3.1% (real, vanilla) for the purposes of calculating the appropriate rate of return on Essential Water's assets
 - > Accounting for annual changes in the cost of debt over the 2026 determination period through a regulatory true up at the 2031 Determination.
- > To set an allowance for regulatory depreciation of \$34 million over the 2026 determination period. This is based on:
 - > Adopting a straight-line depreciation method for the 2026 Determination Period.
 - > Adopting the asset lives as set out in Table 34 and Table 35.
- > To set an allowance for tax of \$1.6 million over the 2026 determination period.
- > To set an allowance for working capital of \$0.4 million over the 2026 determination period.
- > To include a positive adjustment for the cost of debt true-up for the 2022 determination period of \$2.3 million.

The building block approach that we propose using to calculate Essential Water's NRR includes several components. While Chapter 7 discusses the operating and maintenance cost allowance, this section discusses the remaining building block components or allowances. These are:

- > capital allowance, consisting of the return on assets and regulatory depreciation (return of assets)
- > tax allowance
- > working capital allowance, and
- > revenue adjustment allowances

To calculate these allowances, we propose applying:

- > A value of the regulatory asset base in each year of the determination period. This represents the economic value of the assets used to deliver our services and includes any adjustments for asset disposals and capital cash contributions
- > An appropriate rate of return (e.g. using the WACC) on the regulatory asset base
- > The appropriate asset lives and depreciation method for the regulatory asset base

- > The appropriate tax rate
- > IPART's working capital allowance methodology
- > The cost of debt true-up for the 2022 determination period
- > A tax allowance true-up from the 2022 determination period.

This section discusses these proposals and their impact on the relevant allowances.

10.2 Allowance for the return on assets

The building block approach includes an allowance for a return on assets. This represents our assessment of the opportunity cost of capital invested to provide our water and wastewater services. To calculate this allowance, we determine a value of the regulatory asset base and multiply that value by an appropriate rate of return in each year of the determination period. Our proposed regulatory asset base values and rate of return are discussed further below.

We propose a total allowance for a return on assets over the 2026 determination period of \$56.3 million. Our proposal on the return on assets in each year of the determination period is presented in Table 27.

Table 27: Proposed return on asset allowances (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Water	4,173	4,800	5,335	5,851	6,294	6,681	28,960
Wastewater	2,755	3,466	5,242	5,988	6,223	6,432	27,351
Total	6,927	8,266	10,577	11,839	12,517	13,113	56,311

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

10.2.1 Value of the regulatory asset base used to set allowances

The value of the regulatory asset base changes over time. As we invest in new assets, this expenditure is added to the regulatory asset base. As our assets depreciate, this value is subtracted from the regulatory asset base. If we dispose of assets, these proceeds are also subtracted from the regulatory asset base.

We have calculated these values consistent with IPART's regulatory asset base roll-forward methodology. This involved:

- > taking the opening regulatory asset base for the 2022 determination period and rolling it forward to the start of the 2026 determination period by:
 - > including actual efficient capital expenditure incurred over that period
 - > deducting allowed regulatory depreciation over the 2022 determination period, and
 - > indexing for inflation
- > estimating the regulatory asset base values for each year of the 2026 determination period by:
 - > adding efficient capital expenditure as it is forecast to be incurred
 - > deducting forecast regulatory depreciation.

We do not propose disposing of any assets over the 2026 determination period.

Our proposed opening regulatory asset base at 1 July 2026 and proposed regulatory asset base roll-forward over the 2026 determination period is shown in Table 28

Our forecast efficient capex used to calculate the regulatory asset base was discussed in Chapter 6. Our regulatory depreciation is discussed later in this section.

Table 28: Proposed regulatory asset base (\$'000, nominal to 2025-26, then real \$2025-26)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Opening RAB	174,423	180,914	193,835	223,332	312,828	373,674	394,864	417,607
Plus: Capex net of cash contributions	4,353	14,151	29,197	94,812	67,217	28,199	30,250	23,792
Less: Asset disposals	-	-	-	-	-	-	-	-
Less: Allowed regulatory depreciation	4,574	4,989	5,328	5,316	6,371	7,009	7,506	7,940
Plus: Indexation	6,711	3,760	5,628	-	-	-	-	-
Closing RAB	180,914	193,835	223,332	312,828	373,674	394,864	417,607	433,459

Table 29, Table 30, and Table 31 show this calculation for our water, wastewater and non-system assets, respectively.

Table 29: Proposed regulatory asset base - water (\$'000, nominal to 2025-26, then real \$2025-26)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Opening RAB	112,484	116,994	120,535	138,580	153,183	170,934	179,995	187,791
Plus: Capex net of cash contributions	2,561	3,657	17,169	17,231	20,631	12,139	11,001	13,841
Less: Asset disposals	-	-	-	-	-	-	-	-
Less: Allowed regulatory depreciation	2,375	2,492	2,611	2,627	2,880	3,079	3,204	3,323
Plus: Indexation	4,323	2,376	3,486	-	-	-	-	-
Closing RAB	116,994	120,535	138,580	153,183	170,934	179,995	187,791	198,309

Table 30: Proposed regulatory asset base – wastewater (\$'000, nominal to 2025-26, then real \$2025-26)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Opening RAB	54,934	56,193	64,846	72,902	147,089	187,875	193,823	199,888
Plus: Capex net of cash contributions	527	8,976	7,852	75,885	43,231	8,718	8,950	8,688
Less: Asset disposals	-	-	-	-	-	-	-	-
Less: Allowed regulatory depreciation	1,365	1,536	1,652	1,699	2,444	2,771	2,884	2,997
Plus: Indexation	2,097	1,214	1,857	-	-	-	-	-
Closing RAB	56,193	64,846	72,902	147,089	187,875	193,823	199,888	205,580

Table 31: Proposed regulatory asset base – non-system assets (\$'000, nominal to 2025-26, then real \$2025-26)

	2023-24	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Opening RAB	7,005	7,727	8,454	11,850	12,556	14,864	21,046	29,927
Plus: Capex net of cash contributions	1,266	1,518	4,177	1,696	3,355	7,342	10,299	1,263
Less: Asset disposals	-	-	-	-	-	-	-	-
Less: Allowed regulatory depreciation	834	961	1,065	990	1,047	1,160	1,418	1,620
Plus: Indexation	290	170	285	-	-	-	-	-
Closing RAB	7,727	8,454	11,850	12,556	14,864	21,046	29,927	29,570

10.2.2 The rate of return

The rate of return is a key input used to calculate the return on capital allowance. It represents the costs of funding Essential Water's investments through borrowings from debt markets and investments from equity holders.

Essential Water needs to be able to earn an adequate rate of return on capital to continue to invest, operate and maintain water and wastewater services to Broken Hill customers.

Our proposed rate of return is consistent with the IPART methodology

Our proposed rate of return is based on the rate of return methodology set out by IPART in its 2018 final decision on its most recent WACC methodology review.¹⁵ For the purposes of this Proposal, we have adopted as a placeholder, the rate of return derived using IPART's February 2025 WACC update—recognising that IPART will update the allowed rate of return in its final determination.

Essential Water proposes that the allowed rate of return be set commensurate with a five-year determination period, consistent with our proposed length for the 2026 determination period.

We have adopted IPART's standard approach to estimating inflation expectations, which is to take the geometric mean of the Reserve Bank of Australia's (RBA) 1-year ahead inflation forecast, and the midpoint of the RBA's target range (2.5%) for each other year of the determination.

We propose a placeholder rate of return of 3.1% (real, vanilla)

Essential Water's placeholder rate of return proposal of 3.1% (real, vanilla), is summarised below in Table 32.

Table 32: Proposed rate of return

	Current	Long-term
Nominal return on equity	7.3%	6.9%
Risk free rate	3.0%	2.7%
Equity beta	0.7	0.7
Market risk premium	6.2%	6.0%
Nominal return on debt	5.0%	4.8%
Risk free rate	3.0%	2.7%
Debt margin	2.0%	2.1%
Gearing	60.0%	60.0%
Gamma	0.25	0.25
Nominal vanilla WACC	5.9%	5.6%
Inflation	2.6%	2.6%
Real vanilla WACC	3.0%	3.1%
Point estimate	3.1%	

¹⁵ IPART, Review of our WACC method, Final Report, February 2018

We propose an end of period cost of debt true-up

IPART's 2018 WACC methodology states that IPART will determine — on a case-by-case basis — whether to pass through in prices annual changes to the trailing average return on debt allowance or address the changes in the return on debt allowance through an end-of-period true-up. We propose an end of period cost of debt true-up for the 2026 determination period, consistent with IPART's usual approach.

Our NRR for the 2026 determination period includes the end of period cost of debt true-up for the 2022 determination period, as we discuss in Section 10.6.2.

10.3 Allowance for regulatory depreciation

We propose a total allowance for regulatory depreciation (or return of assets) of \$34 million over the 2026 determination period. Our proposal for the regulatory depreciation allowance in each year of the determination period is presented in Table 33.

Table 33: Proposed regulatory depreciation allowance (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Water	3,314	3,357	3,650	3,934	4,258	4,532	19,730
Wastewater	1,941	1,879	2,625	2,970	3,135	3,288	13,896
Total	5,255	5,236	6,275	6,903	7,393	7,820	33,626

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

An allowance for regulatory depreciation is included in the revenue requirement (and used in calculating the value of the RAB, as discussed above). This ensures that the capital invested in the regulatory assets is returned over the useful life of each asset. To calculate this allowance, we apply the economic lives of our assets that make up the RAB and an appropriate depreciation method. Our proposed asset lives and depreciation method are discussed in the sections below.

10.3.1 Straight line depreciation method

Forecast depreciation is calculated using IPART's straight-line methodology adopted for the current determination. The straight-line depreciation method allows for an equal proportion of the asset's value to be recovered in each year of its useful life. This approach is simple, transparent, cost-reflective and consistent with regulatory practice used by other Australian regulators in the context of water and by the AER in the context of gas and electricity.

10.3.2 Asset lives

Our proposed remaining economic lives of existing water, wastewater and non-system assets are listed in Table 34. Our proposed existing asset lives are based on a roll-forward calculation to reflect the capital expenditure undertaken over the 2022-26 determination period.

Table 34: Proposed remaining asset lives for existing assets (years)

	Water	Wastewater	Non-system
As at 30 June 2026	55.3	59.6	12.2

Our proposed economic lives of new assets are listed in Table 35. These lives are calculated based on the expected useful life of assets in each year of the determination period, weighted by the capital expenditure of each asset class. The useful lives of each class are presented in Table 36.

Table 35: Proposed useful lives for new assets (years)

	2026-27	2027-28	2028-29	2029-30	2030-31
Non-system	41.3	46.8	47.3	28.6	28.6
Water	70.4	79.0	89.7	94.8	114.8
Wastewater	79.9	79.8	78.8	77.3	78.6

Table 36: Proposed useful lives for new assets (years)

Asset class	Category	Expected useful life
Water Pipelines		100 years
Water Pumping Stations	Civil/Structural	80 years
	Mechanical/Electrical	30 years
Water Reservoirs	Civil/Structural	150 years
	Mechanical/Electrical	30 years
Water Reticulation		100 years
Water Storage Tank	Concrete	80 years
	Steel	60 years
Water Treatment Plant	Civil/Structural	80 years
	Mechanical/Electrical	20 years
Wastewater Pumping Station	Civil/Structural	60 years
	Mechanical/Electrical	20 years
Wastewater Reticulation		80 years
Field Service Centres		80 years
Network Communications	Civil/Structural	60 years
	Electrical	10 years
Buildings	Non-system	50 years
Furniture, fittings, plant and equipment	Non-system	13 years
IT Systems	Non-system	5 years

10.4 Allowance for tax

We propose a tax allowance of \$1.6 million over the 2026 determination period. Our proposed tax allowance in each year of the determination period is presented in Table 37. Our proposed tax allowances for our water and wastewater services are presented in Table 38 and Table 39 respectively.

Table 37: Proposed tax allowance (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Water	179	167	194	230	262	299	1,152
Wastewater	11	17	63	108	132	159	478
Total	190	184	257	338	394	458	1,630

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

We calculated the tax allowance for each year using IPART's standard approach. This involved applying the relevant tax rate, adjusted for gamma, to our (nominal) taxable income. For this purpose, taxable income is the

NRR (excluding tax allowance) less operating cost allowances, tax depreciation, and interest expenses. Revenue includes adjustments or true-ups as described in section 10.6. As part of calculating the tax allowance, we also forecast tax depreciation for the determination period. Other items such as interest expenses are based on the parameters used for the rate of return and the value of the regulatory asset base.

Table 38: Proposed tax allowance (\$'000, nominal) - water

	2026-27	2027-28	2028-29	2029-30	2030-31
Notional revenue requirement (excl tax)	24,694	26,190	27,768	29,343	30,886
Less:					
Operating expenditure	16,235	16,654	17,085	17,528	17,982
Tax depreciation	3,131	3,440	3,746	4,106	4,415
Interest expense allowance	4,738	5,391	6,082	6,710	7,319
Taxable income	590	705	855	999	1,170
Less tax accumulated tax losses	0	0	0	0	0
Taxable income after tax losses	590	705	855	999	1,170
Tax before adjustment for franking credits	228	273	331	387	453
Less: Adjustment for franking credits	57	68	83	97	113
Tax net of adjustment for franking credits	171	205	248	290	340

Table 39: Proposed tax allowance (\$'000, nominal) - wastewater

	2026-27	2027-28	2028-29	2029-30	2030-31
Notional revenue requirement (excl tax)	9,739	12,830	15,598	15,355	16,185
Less:					
Operating expenditure	4,535	4,655	5,844	4,907	5,038
Tax depreciation	1,893	2,729	3,132	3,315	3,489
Interest expense allowance	3,250	5,217	6,222	6,629	7,036
Taxable income	61	229	400	503	622
Less tax accumulated tax losses	0	0	0	0	0
Taxable income after tax losses	61	229	400	503	622
Tax before adjustment for franking credits	23	89	155	195	241
Less: Adjustment for franking credits	6	22	39	49	60
Tax net of adjustment for franking credits	18	66	116	146	181

We propose an end of period true-up for a tax allowance for the 2022 determination period

Our NRR for the 2026 determination period includes an end of period tax allowance true-up related to assets gifted in 2019, and for which an income tax liability allowance was not included in the current determination period - as we discuss in Section 10.6.3.

10.5 Allowance for working capital

Our proposed return on working capital allowance is based on IPART's 2018 working capital allowance policy¹⁶ and subsequent updates in section A.4 of IPART's Water Regulation Handbook.¹⁷ Our proposal in each year of the determination is presented in Table 40.

¹⁶ IPART, Working Capital Allowance – Policy Paper, November 2018

¹⁷ IPART, Water Regulation Handbook, July 2023

Table 40: Proposed working capital allowance (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Water	211	88	74	107	110	137	517
Wastewater	63	-273	-101	73	70	84	-146
Total	274	-185	-27	181	181	222	371

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

10.6 Other revenue adjustments

10.6.1 We do not propose to include an adjustment for the demand volatility adjustment mechanism for the 2022 determination period

IPART's 2022 determination set the DVAM threshold at $\pm 5\%$ for Essential Water, over the 4 years from 1 July 2021 to 30 June 2025. This means that Essential Water is only able to recover the difference between its actual sales and forecast demand, if the difference is greater than $\pm 5\%$ over that period. Table 41 demonstrates that, between 2021-22 and 2024-25, Essential Water's actual demand was 3.8% greater than forecast demand. As this is below the 5% threshold, we do not propose to include a demand volatility adjustment in our revenue calculations for the 2026-2031 period.

Table 41: Demand volatility adjustment mechanism – calculation to assess if applicable

	2021-22	2022-23	2023-24	2024-25	Total
Target water consumption (ML)	5,109	5,089	5,069	5,050	20,317
Actual water consumption (ML)	5,291	4,964	5,417	5,420	21,092
Variance (ML)	182	-125	348	370	775
Variance (%)	3.6%	-2.5%	6.9%	7.3%	3.8%

10.6.2 We propose to include an adjustment for the cost of debt true-up for the 2022 determination period

The 2022 determination allowed for an end of period true-up to account for cumulative annual changes in the cost of debt. Overall, the annual updates resulted in a higher cost of debt relative to the allowance. We have calculated the adjustment for the cumulative cost of debt true-up in line with IPART's 2018 WACC Methodology.¹⁸ We propose a positive adjustment to the NRR of \$2.3 million.

10.6.3 We propose to include an adjustment for a tax allowance true-up for the 2022 determination period

In 2019, Essential Water was gifted assets (a solar farm, generator, pipes, water tanks, pumps, motors, building) when the Broken Hill Pipeline was commissioned. Income tax was subsequently paid on these assets received free of charge (AFOC). The water regulatory framework allows for a tax allowance to broadly reflect what a typical entity would face; reflecting the corporate tax rate (30%) and adjusted for gamma.

Essential Water does not typically receive gifted assets and consequently a proposal for tax allowance on the gifted assets was not included in our 2022 Proposal, nor in IPART's 2022 determination. We understand that other water utilities, which routinely receive gifted assets, enter them as AFOC adjustments in the subsequent determination period to capture the equivalent income tax allowance. Having discussed this anomaly with IPART, we therefore propose a true up for the equivalent tax allowance from the 2022 determination period via a positive adjustment to the NRR of \$22.7m.

¹⁸ IPART, Review of our WACC method, Final Report, February 2018

11. Revenue requirement and amount to be recovered from customers

11.1 Overview

This chapter presents the revenue requirement calculated using the building block approach. Our modelling includes the assumption of a continuation of the NSW Government affordability subsidy for the Pipeline but does not include any additional government contribution to assist with the increased costs to be recovered in the 2026-2031 period. We explore avenues to assist with affordability in Chapter 13.

Key messages

We propose:

- > A NRR of \$358 million over the 2026 determination period. This reflects our view of the total efficient costs of providing Essential Water's water, wastewater and other services in each year of the determination period.
- > Recovering \$223 million from customers over the 2026 determination period. This reflects our proposed prices, and our position that service charges for water services will increase by about 26% above inflation each year over the 2026 determination period, and service charges for wastewater services will increase between 17% and 21% above inflation each year over the 2026 determination period.
- > Recovering an increased affordability subsidy of \$139 million for the Pipeline bulk water costs via NSW Government funding contributions.

11.2 Net revenue requirement proposed for 2026 determination period

As outlined in Chapter 5, we propose using IPART's standard building block approach to calculate Essential Water's NRR in each year of the determination period. This represents our view of the total efficient costs over the determination period, including allowances for:

- > Operating expenditure
- > A return on assets
- > A return of assets (or depreciation)
- > Tax obligations
- > Revenue adjustments, and
- > Working capital.

Table 42 presents our proposed NRR for the water and wastewater businesses. We propose an NRR of \$358 million over the 2026 determination period.

Table 42: Proposed notional revenue requirement (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Water	43,173	73,727	51,543	53,623	55,751	57,846	292,491
Wastewater	7,375	10,146	12,251	14,550	13,988	14,395	65,330
Total	50,548	83,873	63,794	68,173	69,739	72,241	357,821

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

Table 43 and Table 44 summarise the proposed building block allowances and NRR to recover Essential Water's total efficient costs over the 2026 determination period for water and wastewater services, respectively.

Table 43: Proposed notional revenue requirement (\$'000, \$2025-26) - water

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Operating expenditure (excluding bulk water)	11,707	15,824	15,820	15,819	15,818	15,816	79,098
Bulk water purchases	23,590	25,228	26,482	27,695	29,022	30,394	138,820
Regulatory depreciation	3,314	3,357	3,650	3,934	4,258	4,532	19,730
Return on assets	4,173	4,800	5,335	5,851	6,294	6,681	28,960
Return on working capital	211	88	74	107	110	137	517
Tax allowance	179	167	194	230	262	299	1,152
Revenue adjustments	-	24,264	-12	-12	-12	-12	24,215
Total	43,173	73,727	51,543	53,623	55,751	57,846	292,491

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

Table 44: Proposed notional revenue requirement (\$'000, \$2025-26) – wastewater

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Operating expenditure	2,605	4,420	4,422	5,411	4,428	4,431	23,113
Regulatory depreciation	1,941	1,879	2,625	2,970	3,135	3,288	13,896
Return on assets	2,755	3,466	5,242	5,988	6,223	6,432	27,351
Return on working capital	63	-273	-101	73	70	84	-146
Tax allowance	11	17	63	108	132	159	478
Revenue adjustments	-	637	-	-	-	-	637
Total	7,375	10,146	12,251	14,550	13,988	14,395	65,330

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

The annual NRR in the 2026 determination period is on average around \$9.6 million higher than during the 2022 determination period. This is largely a result of our higher forecast operating and capital expenditure over the 2026 determination period relative to the allowances set by IPART for the 2022 determination period.

11.3 Revenue to be recovered from customers for the 2026 determination period

We propose to recover \$223 million from customers over the 2026 determination period. This revenue is consistent with the prices set out in Chapter 12. This revenue to be recovered from customers is lower than our NRR, reflecting the limited capacity of our customers to pay, and reflects an assumption that there is continued NSW Government support for costs related to the Broken Hill Pipeline.

Table 45: Proposed revenue from customers (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Revenue from tariffs	26,783	32,895	37,774	43,382	49,828	57,238	221,118
Non-regulated revenue (50%)	13	12	12	12	12	12	62
Trade waste revenue	410	90	307	334	337	340	1,407
Total revenue from customers	27,206	32,998	38,093	43,728	50,177	57,590	222,586

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

11.4 NSW Government contribution

In the current 2022 determination period, we have been receiving a contribution (subsidy) from the NSW Government so that customers do not pay cost-reflective bills. The contribution means that customer bills are reduced by around 50%. The contribution primarily reflects the costs of bulk water supplied through the Broken Hill Pipeline, as well as immaterial amounts to reflect transitional price changes.

For 2026-31 we have assumed a continuation of these subsidies at a level of \$139 million. However, our NRR has increased because of increasing expenditure requirements. Without further subsidies, customers will need to pay more through higher bills.

Table 46 presents the assumed continuation of the NSW Government contribution for the Pipeline costs and transitional pricing elements over the determination period. The annual average NSW Government contribution of \$27.8 million for the 2026 determination period compares to an annual average of \$24.6 million over the 2022 determination period. The higher NSW Government contribution reflects increased prices from WaterNSW for bulk water forecast to be delivered through the Broken Hill Pipeline, and increased volume forecasts.

Table 46: Proposed NSW Government continuing contribution (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
NSW Government continuing contribution	23,342	25,228	26,482	27,695	29,022	30,394	138,820

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

As we discuss in Chapter 13, it is imperative that Essential Water can recover its NRR, from a combination of revenue from customers and Government contributions. This is necessary to ensure that Essential Water is financially viable and able to supply services to required standards to customers, which is in the long-term interests of customers and the broader community. Table 47 summarises our proposed recovery of the NRR over the 2026 determination period. Noting that this proposed recovery is based on smoothing the increase over the period to minimise bill shock for our customers – in net present value terms this table is equivalent to Table 42.

Table 47: Proposed recovery of the notional revenue requirement (\$'000, \$2025-26)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Total
Total revenue from customers	27,206	32,998	38,093	43,728	50,177	57,590	222,586
NSW Government continuing contribution	23,342	25,228	26,482	27,695	29,022	30,394	138,820
Total	50,548	58,226	64,575	71,423	79,199	87,984	361,406

2025-26 is based on IPART's Final 2022 Determination, updated for CPI

The increase in revenue requirements to be recouped from customers via higher bills is of significant concern to us, customers, the Essential Water community and other stakeholders. We have therefore undertaken some analysis of levels of affordability for our customers. We have also considered the broader community and state-wide benefits that are obtained by the provision of water and wastewater services to Broken Hill and surrounding areas.

We provide further discussion on these elements of affordability in Chapter 13.

12. Price structures and price path

12.1 Overview

Key messages

- > We propose to maintain our two-part tariff for water and wastewater services. A two-part tariff is consistent with our existing price structure set by IPART in its 2022 determination. Our usage charges are consistent with our marginal costs of supply and send appropriate signals to customers. Our customers generally support the maintenance of our usage charge at current levels.
- > We propose to maintain our usage charges and adjust fixed charges to recover our efficient costs. To manage bill shock we propose to smooth price increases, so that the fixed charge increases by the same amount each year over the 2026 determination period. This will result in significant increases in fixed charges for water (around 26%) and wastewater (around 17% to 21%) each year over the 2026 determination period.

12.2 Pricing principles

Best practice pricing principles suggest that prices should balance:

- > recovering efficient costs, and sending efficient price signals to customers
- > stability, transparency and ease of understanding for customers
- > administrative efficiency – i.e., not cost too much to implement and administer
- > the views and preferences of customers.¹⁹

We have sought to balance these considerations in putting forward this Proposal.

Our proposed price structures also reflect feedback from our EWCP.

12.3 Water prices

12.3.1 Our current water two-part tariff

Essential Water's prices for water services comprise two components:

- > a fixed service price (\$ per year)
- > a usage price (\$ per kL of water supplied).

Currently, all residential water customers pay a standard service charge, regardless of whether their property is a house or a unit in a multi-premise property (\$421.26 per annum, \$2026-27). For non-residential customers, the service charge depends on a customer's meter size and is set with reference to a 20mm meter (i.e. the service charge for each customer is scaled up from the base 20mm meter charge to reflect the actual size of their meter).

Customers pay a different water usage price depending on whether they receive treated water (\$2.32 per kL, \$2026-27), chlorinated water (\$2.03 per kL, \$2026-27) or untreated water (\$1.72 per kL for pipeline customers, and \$2.03 per kL for other untreated water customers, \$2026-27). This is because there are different costs involved in supplying these different types of water services to customers.

The two mines pay the same water usage prices as all other customers, but their own specific service charge. Under IPART's 2022 determination, a new mine would pay the applicable non-residential service charge, based on its meter size(s) and number of meters.

¹⁹ For example, see National Water Initiative Pricing Principles.

Box 3: IPART's 2022 decisions on water prices and price structures

In its 2022 determination, IPART decided to:

- > Keep the treated water usage price constant and the untreated water usage price constant for most customers over the 4-year 2022 determination period, before inflation
- > Keep fixed water service charges constant over the determination period, before inflation
- > Gradually increase the untreated water usage price for customers who receive water directly from Essential Water's pipelines (i.e., the Menindee, Stephens Creek and Umberumberka pipelines) over the determination period, so that it transitions towards the usage price for other untreated water customers
- > Gradually increase the chlorinated water usage price over the 2022 determination period so that it equals the untreated water usage price by 2025-26.

12.3.2 Our current water two-part tariff balances cost-reflectivity, price stability and customer preferences

Our current water prices are consistent with National Water Initiative (NWI) pricing principles, as usage prices are set with reference to estimates of the Long Run Marginal Cost (LRMC) of supply, and service charges are set to recover residual costs – with variations in service charges between customers depending on service demands and equity considerations.

There is no foreseeable need for future large-scale augmentation of the water supply system for Broken Hill, following the establishment of the Murray River to Broken Hill Pipeline. This means estimates of Essential Water's LRMC and Short Run Marginal Cost (SRMC) of supply should converge, as IPART observed in 2019 and again in 2022. Further, as IPART concluded in its 2022 Determination, our current water usage price is "within a reasonable range of our estimate of SRMC."²⁰

We have continued to transition chlorinated water usage prices and untreated water usage prices for pipeline customers towards untreated water prices for other customers as set out in IPART's 2022 determination. This has moved these prices towards cost-reflective levels, while avoiding bill shock and adverse impacts on affected customers. This transition will be complete for chlorinated water usage customers by 2025-26. We will continue to transition untreated water usage prices for pipeline customers towards untreated water prices over the 2026 determination period, with this transition to be completed by 2028-29.

We propose to maintain our approach to water service charges for mines. Each mine's respective share of total water usage has remained broadly consistent in the last few years. Without any other certain information, we have therefore used recent information as forecasts of usage over the 2026 determination period. Our mine customers did not take up our invitation for consultation, which we take to mean they are satisfied with the current arrangements.

We do not expect a new mine to open over the 2026 determination period. However, if a new mine was established over the 2026 determination period, we expect that it would build, own and maintain connection assets and pay for any incremental cost to Essential Water of connecting it to the system (e.g. connection valves). If this occurred, we propose that the new mine pay the applicable new mine (or non-residential) service charge, based on its meter size, and the same water usage charges as all other customers. Any resulting material changes in volumes compared to our forecasts for the 2026 determination period would be trued-up in the subsequent determination period via the DVAM.

Our proposed price structures reflect the preferences of our customers. Our customers told us that they were in favour of maintaining the usage price and making the fixed price the balancing item when setting prices. This feedback is reflected in our proposed price structures.

IPART's 2022 determination identified the need for Essential Water, Broken Hill City Council and key government agencies – including the Department of Planning and Environment (now DCCEW) and NSW Health – to work together to develop a draft water plan with the aim of mitigating health risks posed by lead dust. We are conscious

²⁰ IPART, 2022 Determination, p91.

of the health risks lead dust poses to our community, but also of the need to send signals to our customers for efficient water consumption.

Our EWCP was not in favour of reducing the water usage price to encourage water consumption to help mitigate the health risks associated with lead dust. However, our proposal to maintain rather than increase the usage charge recognises the important role water consumption can play in helping to manage lead dust.

Our customers were in favour of key government agencies leading work in consultation with Broken Hill Council and Essential Water to develop an appropriate response to this issue. Our Head of Essential Water has attended several meetings of the Broken Hill Environmental Lead Response Group, which was set up by the Premier's Department in 2023 to address health, educational and social outcomes caused by environmental lead in Broken Hill. Essential Water in its role as a water service provider can provide water if that is part of any actions or initiatives, but the role of managing the issues posed by lead dust is best suited to the relevant government agencies.

12.3.3 Our proposed water tariff structure for the 2026 determination period

We propose to retain the existing two-part water tariff, with fixed water service charges increasing by a compound average of 26% per annum (before inflation) over the 2026 determination period to recovery necessary increases in efficient costs of service supply. We also proposed to continue transitioning the untreated water usage price for Essential Water Pipeline customers towards the standard untreated water usage price over the 2026 determination period, so that it increases from \$1.72 per kL in 2025-26 to \$2.03 per kL (\$2026-27) by 2028-29, before inflation.

As outlined above, we consider the current structure appropriately balances considerations of cost-reflectivity, equity, administrative efficiency, price stability and customer preferences.

This structure is also consistent with IPART's 2022 determination, which is appropriate as there has been no material change to Essential Water's water supply network and operating environment since the 2022 determination.

We propose to smooth price increases over the period 2026-31, to minimise bill shock for our customers. We have set service charges to increase by a constant percentage for each year over the 2026 determination period. This results in us under-recovering revenue in the early years but is net present value neutral over the determination period. This approach enables a more gradual transition to cost reflective prices.

While it is important customers contribute to the efficient costs of the services they receive, we recognise our proposed price increases may result in some customers facing prices that are unaffordable. We address this concern with further analysis on affordability to assist IPART in its review - see Chapter 13.

Our proposed cost reflective water prices for the 2026 determination period are listed in Table 48 below.

Table 48: Proposed residential, non-residential and mines water prices (\$2026-27)

Charges	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Compound ave growth rate (%)
Service Charges \$/pa							
Residential	421.26	563.03	724.98	910.07	1,122.16	1,364.46	26%
Non-residential							
20mm connection	421.26	563.03	724.98	910.07	1,122.16	1,364.46	26%
25mm connection	658.22	879.73	1,132.78	1,421.99	1,753.38	2,131.97	26%
32mm connection	1,078.43	1,441.35	1,855.94	2,329.79	2,872.73	3,493.02	26%
40mm connection	1,685.05	2,252.11	2,899.91	3,640.30	4,488.65	5,457.84	26%
50mm connection	2,632.89	3,518.93	4,531.11	5,687.96	7,013.51	8,527.87	26%
80mm connection	6,740.20	9,008.45	11,599.64	14,561.19	17,954.58	21,831.35	26%
100mm connection	10,531.56	14,075.71	18,124.44	22,751.86	28,054.04	34,111.49	26%
150mm connection	23,696.00	31,670.35	40,780.00	51,191.68	63,121.58	76,750.85	26%
Mines (\$'000s)							
Perilya Ltd.	2,958.94	3,954.70	5,092.23	6,392.34	7,882.04	9,583.93	26%
CBH Ltd.	713.74	953.93	1,228.32	1,541.92	1,901.26	2,311.78	26%
Usage Charges \$/kL							
Treated	2.32	2.32	2.32	2.32	2.32	2.32	0%
Chlorinated	2.03	2.03	2.03	2.03	2.03	2.03	0%
Untreated - Pipeline	1.72	1.82	1.92	2.03	2.03	2.03	3%
Untreated Non-pipeline	2.03	2.03	2.03	2.03	2.03	2.03	0%

12.4 Wastewater prices

12.4.1 Our current wastewater two-part tariff

Residential customers currently pay a fixed service charge, which is the same for houses and apartments. This is comprised of a base level service charge and a deemed discharge amount (which is the wastewater usage price multiplied by the deemed volume of residential discharge to the wastewater network). Non-residential customers pay a fixed service charge based on their meter size adjusted for each customer's discharge factor, set with reference to a 20mm meter (i.e. the service charge for each customer is scaled up from the base 20mm meter charge to reflect the actual size of their meter, before a discharge factor is applied). Non-residential customers also

pay a wastewater usage price for actual discharges to the wastewater network (with these discharges measured by applying their discharge factor to their metered water consumption).

Each of the current mines pays a service charge equivalent to that of a 100mm meter, with a 100% discharge factor. Like other non-residential customers, they also pay a wastewater usage charge for their estimated discharges to the wastewater network.

We base service charges on water meter sizes (adjusted for discharge factors for wastewater) because they are a readily available indicator of a customer's draw on the capacity of the supply network.

The fixed wastewater service price is calculated as a residual to recover Essential Water's efficient costs of providing wastewater services, after accounting for revenue from wastewater usage prices and trade waste prices.

Box 4: IPART's 2022 decisions on wastewater prices and price structures

In its 2022 determination, IPART decided to:

- > Maintain constant revenue generated from wastewater prices, on average, over the determination period
- > Maintain the current wastewater usage price in real terms over the determination period
- > Apply a deemed wastewater discharge allowance of 100kL per annum for all residential customers
- > Maintain the current approach for setting wastewater prices for mining customers.

IPART's 2022 Determination noted that Essential Water's wastewater usage price is within a reasonable range of the marginal cost of supply.

12.4.2 Our wastewater tariff balances cost-reflectivity, price stability and administrative efficiency

Our current wastewater usage price (\$1.65 per kL in \$2026-27) reflects a reasonable estimate of the marginal costs of supply, as recognised by IPART in its 2022 determination. Hence, it provides appropriate signals to customers. Further, allocating the residual wastewater costs to customers based on their meter size is broadly cost-reflective and equitable – as meter size, adjusted for discharge factors, is a reasonable indicator of a customer's draw on the capacity of the network.

We propose to maintain our approach to wastewater charges for mines. Given the uncertain nature of the mines operating in Broken Hill, the best information for our forecasts of expected share of water and therefore deemed wastewater usage, is a broad level of consistency with recent historical outcomes. Further, Essential Water expects water sales to the two mines to remain constant at current levels over the 2026 determination period. Our mine customers did not take up our invitation for consultation, which we take to mean they are satisfied with the current arrangements.

We consider the wastewater two-part tariff appropriately balances considerations of cost-reflectivity, equity, price stability and administrative efficiency.

12.4.3 Our proposed wastewater tariff structure for the 2026 determination period

We propose to retain the existing wastewater two-part tariff, with fixed sewerage service charges increasing by a compound average 17% per annum (before inflation) for residential customers and 21% for non-residential customers over the 2026 determination period to recover the necessary increases in costs.

As outlined above, we consider this structure appropriately balances considerations of cost-reflectivity, equity, administrative efficiency, price stability and customer preferences. It is also consistent with IPART's 2022 determination.

As for water charges, we propose to smooth the increases in wastewater service charges over the 2026-31 period, to minimise any bill shock for our customers.

While it is important customers contribute to the efficient costs of the services they receive, we recognise our proposed price increases may result in some customers facing prices that are unaffordable. We address this concern with further analysis on affordability to assist IPART in its review - see Chapter 13.

Our proposed cost reflective wastewater prices for the 2026 determination period are listed in Table 49 below.

Table 49: Proposed wastewater prices (\$2026-27)

Charges	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Compound ave growth rate (%)
Service Charges \$/pa							
Residential^a	671.25	789.15	926.00	1,085.23	1,270.49	1,486.03	17%
Non-residential^{bc}							
20mm connection	747.26	918.39	1,119.65	1,353.81	1,626.25	1,943.23	21%
25mm connection	1,167.59	1,434.99	1,749.46	2,115.33	2,541.02	3,036.29	21%
32mm connection	1,912.99	2,351.09	2,866.31	3,465.76	4,163.20	4,974.66	21%
40mm connection	2,989.04	3,673.57	4,478.61	5,415.25	6,505.00	7,772.90	21%
50mm connection	4,670.37	5,739.96	6,997.83	8,461.33	10,164.07	12,145.16	21%
80mm connection	11,956.16	14,694.29	17,914.44	21,660.99	26,020.01	31,091.62	21%
100mm connection	18,681.50	22,959.82	27,991.31	33,845.30	40,656.26	48,580.65	21%
150mm connection	42,033.36	51,659.60	62,980.46	76,151.93	91,476.59	109,306.47	21%
Usage Charges \$/kL							
Non-residential	1.65	1.65	1.65	1.65	1.65	1.65	0%

- We have assumed a deemed residential discharge volume of 100kL per annum. This volume is multiplied by the same wastewater usage charge that is applied to non-residential customers to calculate the residential deemed discharge charge. This is included in the residential service charge.
- Wastewater service charges for non-residential customers and mining customers are based on water meter size. The applicable meter charge is set using the formula: (meter size)² x 20mm meter charge / 400 x discharge factor. We have calculated service charges for larger meter sizes using this formula.
- Non-residential charges listed here assume a 100% discharge factor. Bills will depend on discharge factors for individual customers

12.5 Trade waste prices

Trade waste is any liquid waste other than sewage of a domestic nature. Trade waste discharge places greater demands on the wastewater system and has higher costs of treatment than domestic sewage. Trade waste is largely discharged by commercial and industrial customers. Customers liable for trade waste charges also pay wastewater charges.

While we have made progress in transitioning to a trade waste pricing framework, we have not been able to implement trade waste prices in the current determination period. However, we expect to commence applying trade waste prices from 1 July 2026.

12.5.1 The current structure of trade waste prices

Essential Water's trade waste prices are guided by its Liquid Trade Waste Policy,²¹ which is consistent with DCCEE's Liquid Trade Waste Management Guidelines.²²

Essential Water has four trade waste charging categories:

- > **Category 1** discharges require minimal or limited pre-treatment

²¹ Essential Water (2022), *Water: Discharge of Liquid Trade Waste Policy*, CEOM7046, September.

²² NSW Department of Planning, Industry and Environment (2021), *Liquid Trade Waste Management Guidelines: For councils in regional NSW*, 2021.

- > **Category 1a** discharges require some pre-treatment, but have low impact
- > **Category 2** discharges are medium risk and have prescribed pre-treatment
- > **Category 3** discharges are high risk and are usually large industrial businesses.

Our trade waste prices include fixed charges and variable charges (\$ per kL or \$ per kg discharged).

Fixed charges include:

- > **Application fee** – which recovers the costs of administration and technical services provided in processing a trade waste application
- > **Re-inspection fee** – which recovers the costs of unplanned or re-inspections of premises (e.g., where there may be suspected non-compliance with approval conditions), above and beyond the costs of inspection activities covered by application or annual fees
- > **Annual fees** – which recover the costs for ongoing administration and scheduled inspections (including monitoring), and varies by the different trade waste categories to reflect the varying complexity of the inspection and administration requirements of different types of discharge
- > **Food Waste Disposal Charge** – which applies where Essential Water has approved the use of an existing food waste disposal unit for a hospital, nursing home or other eligible facility, and is charged based on the number of beds in that facility.

Variable charges include:

- > **Volume based charges (\$/kL) for Category 2 customers** – which reflect the additional costs (above domestic-strength sewage) that trade waste discharges impose on the sewerage network
- > **Non-compliant (\$/kL) usage charges (\$/kL) for Categories 1, 1a and 2 customers** – which are higher usage fees that are applied when a discharger has not installed or maintained appropriate pre-treatment equipment (Category 1a and 2)
- > **Excess mass-based charges (\$/kg) for Category 3 customers** – which reflect the additional costs (above domestic-strength sewage) of trade waste discharges imposed on the sewerage network, which vary by waste type
- > **Non-compliance fees for mass-based charges (\$/kg) for Category 3 customers** – which are higher mass-based fees that are applied when a discharger fails to comply with acceptance limits specified in its approval conditions (Category 3).

Although we are required to publish mass-based charges, Essential Water currently does not have any mass-based customers.

12.5.2 IPART's 2022 determination of trade waste prices

IPART's 2022 determination held fixed trade waste prices constant in real terms and set volume-based prices to reflect the transition to usage prices based on with DCCEEW's guideline prices set in IPART's 2019 determination. IPART accepted our proposal to remove usage prices for compliant Category 1 and 1a customers because these are relatively low impact customers, but it required us to continue to publish mass-based charges.

IPART's 2022 determination deducted its forecast of potential revenue we could recover from trade waste customers (if we were charging trade waste prices that aligned with guideline prices) from our wastewater NRR. IPART recommended the shortfall in revenue associated with transitioning trade waste prices towards more cost-reflective levels be funded by the NSW Government. Over the 2022 determination period, the deducted revenue had not been replaced by customer revenue – we discuss this below.

12.5.3 We propose to implement trade waste prices from 1 July 2026

While we remain committed to transitioning to a causer-pays trade waste pricing framework, the roll-out has taken longer than initially anticipated. However, this delay has presented an opportunity to align the implementation of trade waste charging with the launch of our new customer and billing system. This alignment will enable greater automation of trade waste charging and service scheduling, reduce duplication, and simplify implementation compared to using the current system.

The new system will enhance our ability to:

- > Identify, tag, and report on trade waste customers
- > Issue communications such as appointment reminders directly from the platform
- > Set inspection reminders and track agreement status, including access to relevant documents - improving both operational efficiency and customer service.

To support the transition, the following steps are underway:

- > Inspections: Each non-exempt customer facility will be inspected to confirm its trade waste category. The Senior Plumbing Inspector will verify that appropriate pre-treatment or catchment systems are in place (e.g. grease traps for restaurants). The inspection findings, combined with water usage data, will determine the applicable trade waste category.
- > Ongoing Monitoring: Regular inspections will be scheduled to ensure that treatment devices are properly maintained and to identify any changes in customer operations that may affect their trade waste classification.

We anticipate completing all required inspections before July 2026. Our revenue forecasts assume that all trade waste customers will be billed the annual charge from that date, with usage-based pricing phased in over the first year. The trade waste charges and revenue forecasts from 1 July 2026 are based on the transition path outlined in IPART's 2019 Determination. This includes:

- > Charging 80% of the guideline usage prices in 2026-27
- > Full alignment with IPART's guideline prices from 2028-29.

The introduction of trade waste pricing has proven significantly more challenging, resource-intensive, and costly than expected. This is largely due to legacy systems, poor data, and the substantial administrative burden required to establish and manage the framework. These challenges have been further compounded by limited resources with the expertise to undertake this additional work, while also maintaining business-as-usual operations.

Despite these difficulties, Essential Water remains committed to the causer-pays principle. However, we suggest that IPART's continued deduction of 'potential' revenue is no longer appropriate given the scale and complexity of implementation for our business. Without adequate funding support, Essential Water's ability to appropriately deliver and sustain the trade waste pricing framework will be compromised - potentially further delaying implementation, reducing service quality, and limiting our capacity to meet regulatory and customer expectations.

12.6 Miscellaneous charges

Essential Water provides a range of miscellaneous services to its water and sewerage customers, generally for one-off services such as connections and disconnections, replacing damaged services, plumbing inspections, site inspections and building plan approvals. These charges are levied on a fee for service basis – ensuring customers who require the service pay for it, helping us to keep our water and wastewater bills low for our broader customer base.

12.6.1 Our current schedule of miscellaneous charges

Essential Water has historically recovered most of its miscellaneous charges' revenue from three charges:

- > Conveyancing certificates with meter reads
- > Drainage diagrams, and
- > Personal service of final warning notice for late payment, prior to restriction.

Essential Water's current schedule of miscellaneous charges is listed in Appendix D.

12.6.2 IPART's 2022 determination of miscellaneous charges

IPART's 2022 determination held miscellaneous charges constant in real terms, noting they were reviewed in 2019 and there has been no material change since then.

12.6.3 We propose our current miscellaneous charges are increased to cost reflective levels for the 2026 determination period

We reviewed our miscellaneous charges to ensure they:

- > remain cost reflective
- > are clear and simple to understand and levy
- > reflect the miscellaneous services required by our customer base.

We present our proposed miscellaneous charges in Appendix D. We propose our current miscellaneous charges are increased to cost reflective levels. In most cases, this means our miscellaneous charges simply need to increase by the consumer price index.

However, as shown in Appendix D, there are several miscellaneous charges where more material adjustments are required to ensure prices are cost reflective, reflecting material increases in our efficient costs:

- > Our proposed statement of available water pressure charge was adjusted to include the efficient cost of inspection. This charge is currently set below cost reflective levels.
- > Our proposed bitumen repair charge was updated to reflect the efficient cost of bitumen replacement. This charge is currently set below cost reflective levels.
- > Our proposed labour based miscellaneous charges, including backflow prevention device testing and certification, downgrade to meter size, repair damaged water service, asset location and water reconnection charges, were updated to reflect our efficient unit labour rates.

We propose a new fee to reprint a statement and send by mail, reflecting our efficient costs of providing this service to customers.

Finally, we do not propose to continue to publish a fee for a full conveyancing certificate with history search. This category has never been used, and the other conveyancing certificate miscellaneous charges cover all potential requirements.

12.7 Recycled water prices

We currently supply recycled water (or effluent water) to a small number of customers for non-potable uses, following treatment of wastewater collected in our sewerage network.

12.7.1 Recycled water prices are currently unregulated

The current treatment of Essential Water's recycled water (or effluent water) prices is consistent with IPART's approach to 'voluntary' recycled water schemes,²³ which is intended to encourage unregulated pricing agreements (with the possibility that IPART can step in and determine prices via a scheme-specific review if asked by a water utility or customer).

12.7.2 IPART's 2022 determination of recycled water prices

IPART's 2022 determination continued to defer setting recycled water prices and to deduct 50% of the revenue received from recycled water sales from the NRR for regulated services, consistent with Essential Water's Proposal.

12.7.3 We propose to maintain the current price structure for recycled water

We propose that recycled water prices remain unregulated, as these services are provided to customers voluntarily (i.e. the customers could choose to purchase regulated water services instead) and we have been able to reach agreement with our effluent water customers.

We also propose that we continue the current practice of deducting 50% of the revenue received from recycled water sales from the NRR for regulated services – thus, effectively sharing the non-regulated revenue 50/50 between Essential Water and the broader customer base (or the Government, if there is a subsidy in place). We

²³ IPART, *Review of pricing arrangements for recycled water and related services*, Final Report, July 2019.

consider this is a proportionate approach to determining and administering customers' share of this revenue, given the amount of revenue.

12.8 Prices for unmetered properties

12.8.1 Current prices for unmetered properties

Currently, unmetered residential and non-residential customers are subject to:

- > the standard residential water service charge
- > a water usage price for a deemed consumption of 300kL per annum, for the applicable water quality
- > the standard residential sewerage charge (which includes a deemed discharge of 100kL per year).

12.8.2 IPART's 2022 determination for unmetered properties

IPART's 2022 determination required that unmetered properties pay the standard residential water service price plus a usage charge based on deemed water consumption of 300kL.

12.8.3 We propose to maintain the current price structure for unmetered properties

The average level of residential water consumption over the 2022 determination period was around 230 kL per year. Consistent with IPART's 2022 determination, we consider it is appropriate to maintain a deemed consumption of 300kL per year, which potentially provides an incentive for small users to have a meter installed.

We therefore propose to maintain the current price structure for unmetered properties

12.9 Prices for unconnected properties

12.9.1 Current prices for unconnected properties

Unconnected properties, including properties that have been disconnected due to non-payment of fees, are currently not charged water or wastewater service or usage prices.

12.9.2 IPART's 2022 determination for unconnected properties

IPART's 2022 determination maintained the current price structure for unconnected properties, that is unconnected properties should not be charged service and usage prices.

12.9.3 We propose to maintain the current price structure for unconnected properties

We propose to maintain the current price structure for unconnected properties, by not charging water or wastewater service or usage prices, including properties that have been disconnected due to non-payment of fees. Unconnected properties do not directly impose costs on Essential Water's network. Levying fees on unconnected properties is difficult and would impose an unnecessary administrative burden on Essential Water.

13. Customer and financial impacts

13.1 Overview

Key messages

- > The expenditures to be delivered over the next five years are valued by our customers as they will deliver the outcomes expected.
- > The cost-reflective customer bill impacts under our proposal are significant. For example, a customer in a residential house or apartment who uses 250kL of treated water per annum would see a compound average increase in their annual bill of around 15% per annum from 2025-26 to 2030-31, excluding the impacts of CPI inflation. A pensioner who uses the same amount of water would face a compound average increase in their annual bill of around 17% per annum from 2025-26 to 2030-31.
- > Essential Water provides some hardship support, and there are other NSW Government funded rebates for eligible customers
- > We suggest that there may be a case for further government support (in addition to the existing bulk water pipeline subsidy) to support the affordability of water and wastewater services in our community.

13.2 Cost reflective bill impacts

We understand the cost pressures that the community is facing and are aware of the need to ensure our services are affordable to our customers. We have worked hard to deliver efficiencies, so this Proposal includes no more than the prudent and efficient expenditure necessary to ensure we can continue to reliably deliver the water and wastewater services our customers want and need.

Table 50 and Table 51 present indicative equivalent residential and non-residential water and wastewater bills under our Proposal. These figures are in real \$2026-27, therefore they exclude the effects of inflation.

This shows for example that a customer in a residential house or apartment with water and wastewater connections and who uses 250kL of treated water per annum, would see a compound average increase in their annual bill of around 15% from 2025-26 to 2030-31. A pensioner who uses the same amount of water would face a compound average increase in their annual bill of around 17% per annum from 2025-26 to 2030-31.

Pensioners would see their bills increase slightly more, as a percentage, compared to other residential customers. This is because the pensioner rebate is fixed in nominal terms at a maximum of \$175 per annum. The rebate is provided by Essential Water and funded by the NSW Government. Pensioners' bills in dollar terms would still be lower than non-pensioner bills.

The water and wastewater bill for non-residential customers will depend on their meter size, discharge factor and water usage. For example, a non-residential customer with a 25mm meter, a discharge factor of 70% and who uses 1,000 kL of treated water per annum would see a compound average increase in their annual bill of around 9% per annum from 2025-26 to 2030-31.

Our Proposal balances the need to invest in our network to ensure reliable services are provided to our customers at appropriate standards, while ensuring customers contribute to these costs through cost-reflective pricing.

Table 50: Residential annual water and wastewater bills (\$2026-27)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Compound ave growth rate (%)
Residential - treated water - non pensioner							
160kL	1,463	1,724	2,023	2,367	2,764	3,222	17%
250kL	1,671	1,933	2,231	2,576	2,973	3,431	15%
400kL	2,019	2,281	2,579	2,924	3,321	3,779	13%
Residential - treated water - pensioner							
160kL	1,283	1,549	1,852	2,200	2,602	3,064	19%
250kL	1,491	1,758	2,061	2,409	2,811	3,272	17%
400kL	1,839	2,106	2,409	2,757	3,159	3,620	15%
Residential - chlorinated water (water bills only, no wastewater)							
160kL	624	760	922	1,107	1,319	1,561	20%
250kL	746	878	1,040	1,225	1,437	1,680	18%
400kL	928	1,056	1,217	1,403	1,615	1,857	15%

Table 51: Non-residential annual water and wastewater bills (\$2026-27)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Compound ave growth rate (%)
Non-residential - treated water (Note 1)							
20mm with 250kL usage	1,811	2,075	2,377	2,726	3,129	3,593	15%
25mm with 1,000kL usage	4,943	5,359	5,832	6,378	7,007	7,732	9%
40mm with 2,100kL usage	11,060	12,121	13,332	14,728	16,340	18,196	10%
80mm with 21,000kL usage	84,464	88,794	93,640	99,224	105,669	113,096	6%
Non-residential - untreated water, pipeline customers (water only, no wastewater)							
20mm with 250kL usage	851	1,006	1,192	1,403	1,615	1,857	17%
25mm with 1,000kL usage	2,377	2,650	3,003	3,392	3,723	4,102	12%
40mm with 2,100kL usage	5,294	5,969	6,827	7,777	8,626	9,595	13%
80mm with 21,000kL usage	42,827	46,178	50,870	55,931	59,325	63,201	8%
Non-residential - untreated water, non-pipeline customers (water only, no wastewater)							

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31	Compound ave growth rate (%)
20mm with 250kL usage	928	1,055	1,217	1,402	1,614	1,856	15%
25mm with 1,000kL usage	2,685	2,848	3,101	3,390	3,721	4,100	9%
40mm with 2,100kL usage	5,942	6,385	7,033	7,773	8,621	9,591	10%
80mm with 21,000kL usage	49,310	50,336	52,928	55,889	59,283	63,159	5%

Note 1: Wastewater service charges for non-residential customers are based on water meter size. The applicable meter charge is set using the formula: (meter size)² x 20mm meter charge / 400 x discharge factor. For the purpose of showing indicative bills, we have calculated service charges for larger meter sizes based on this formula using a discharge factor of 70%. Actual bills will depend on discharge factors for individual customers.

13.3 Essential Water support for customers

Essential Water has a financial hardship support policy²⁴ for customers who may require assistance to pay their bills and to ensure that their water supply is maintained. Once customers have requested hardship assistance, Essential Water may offer the following:

- > Flexible interest free payment plans to enable customers to pay off outstanding debts over an agreed time
- > Assistance with payments to third parties, where Essential Water requires work to be completed on a customer's private assets for safety or to prevent water wastage, and the customer will need to engage a NSW licensed plumber to complete these works
- > Debt write-off in exceptional circumstances, when a customer is unable to make any payment.

The policy notes that Essential Water does not disconnect supply for non-payment of bills. Water restriction for non-payment occurs as a last resort after all attempts to establish a payment plan have failed.

Essential Water's website has a dedicated section outlining the help available to support customers experiencing financial hardship. As well as the in-house measures outlined above, links to free and confidential financial counselling services are also provided.

Other measures offered by Essential Water to assist customers and alleviate financial stress are discussed below:

- > A free plumbing site inspection is offered to customers who have experienced higher than usual water usage, to help them understand where their water may have been used and to help them determine if they have a water leak.
- > When there is a genuine leak, Essential Water will provide a credit on the customer's water account if the leak is fixed by a NSW licensed plumber or if there is evidence of water theft.
- > Essential Water will perform a meter test free of charge if the customer has exhausted all other high account investigation avenues but still feels something is wrong with their water account.
- > Essential Water attends all sewer overflows, blockages and water leaks reported by customers, even though sometimes it may be an internal customer issue – this saves the customer the expense of calling out a plumber as the first point of contact. The plumber will charge the customer even if the fault is on Essential Water's side, so Essential Water prefers to attend first and will fix the issue at no cost to the customer if the fault is on the Essential Water side of the system.

²⁴ Company Policy: Essential Water Financial Hardship Support CECP8301

13.4 NSW Government rebates available to customers

13.4.1 Pensioner rebates

Eligible pensioners can avail themselves of NSW Government water and wastewater rebates which are administered by Essential Water. The maximum annual rebate is currently \$87.50 for water and \$87.50 for wastewater.

Eligible pensioners must hold one of the following:

- > Centrelink Pensioner Concession Card; or
- > Department of Veteran Affairs Pensioner Concession Card; or
- > Department of Veteran Affairs Disability Pension at the 'totally and permanently incapacitated' (TPI) rate only.

IPART acknowledged in its 2022 determination that the amount of this subsidy for Essential Water customers had not increased for many years and recommended that the NSW Government review the appropriateness of pensioner concessions for water and wastewater bills across the state.

In 2024, a review was carried out by the NSW Productivity and Equality Commission (the Commission) into funding models for Local Water Utilities; this included a review of pensioner rebates and highlighted that the rebates which were set in 1993, have not been indexed since their inception and have thus declined in real terms by 55%. Essential Energy made a submission to the Issues Paper, which highlighted the need for an increase in the amount of pensioner rebates to better support these customers with the current cost of living pressures. This is of particular importance to Essential Water given that projections from NSW Government show that 25.8% of the population will be 65 and over by 2026. The submission also highlighted that more generous pension rebates were available to customers of Sydney Water and Hunter Water.

In its final report²⁵ the Commission recognised this disparity in rebates and also noted further inconsistencies such as the payment assistance schemes (PAS) offered to Sydney Water and Hunter Water customers – the NSW Government funds \$6 million per annum for those customers under the PAS. The report recommended an evaluation of pensioner rebates on all water services before the 2025-26 Budget. It further recommended that where targeted concessions/rebates and hardship schemes are deemed necessary, they should be funded in full by governments through transparent Community Service Obligation payments.

13.4.2 Exemption from service charges

In addition to the pension rebates, we have a number of customers who are exempt from service charges and who only pay usage charges for water and wastewater services. Properties are exempt if they fall under Section 312 of the NSW Water Management Act²⁶. Examples of such properties are schools, hospitals and churches. Essential Water is recompensed by the NSW Government for this foregone service charge revenue.

We understand that significant work is underway within the NSW Government on reviewing rebates on a comprehensive basis. Given the scale of the review and potential impacts, it is not expected that any change will be made to the rebates available to Essential Water customers prior to 1 July 2026.

13.5 The case for additional NSW Government subsidies

13.5.1 What can our customers afford to pay?

Chapter 2 noted our customers are amongst the most disadvantaged in NSW, and the unique demographics of our community place constraints on our customers' ability to afford essential water and wastewater services.

In its 2025 determination on Hunter Water's prices, IPART assessed affordability by considering water and wastewater bills as a proportion of household income.²⁷ IPART's Draft Report noted that a systematic review of

²⁵ NSW Productivity and Equality Commission, Review of funding models for local water utilities, Final Report, July 2024, p.105

²⁶ <https://legislation.nsw.gov.au/view/html/inforce/current/act-2000-092>

²⁷ IPART, Hunter Water prices 2025-2030, June 2025, p10.

studies analysing water and wastewater affordability used a threshold of between 2% and 5%.²⁸ To analyse the affordability of Hunter Water's water and wastewater prices IPART used a threshold of 3% of water and wastewater bills as a proportion of pre-tax household income, as proposed by the UN.²⁹

We have undertaken analysis of water and wastewater affordability for our customers using the threshold of 3% of water and wastewater bills as a proportion of households' pre-tax income, consistent with IPART's approach. We evaluate affordability for different residential customer classes – by consumption, income level and pension status.

Our analysis demonstrates a further NSW Government subsidy, to support the affordability of essential water and wastewater services for our customers, may be warranted.

13.5.2 The counterfactual – if water and wastewater services were not supplied

Investing in water and wastewater infrastructure yields long-term dividends that vastly outweigh the initial costs, especially when considering benefits beyond the immediate bill paying customers. In remote and arid areas, these services are transformative – turning fragile, underserved places into healthier, more productive, and sustainable communities. The economic boosts (jobs, industry, stable towns), the social improvements (health, education, equity), and the environmental safeguards (clean water, conserved resources) all combine to justify strong public support for such investments.

From a policy perspective, recognizing these broader benefits is crucial for informed decision-making. Ideally the Cost Benefit Analysis (CBA) for water projects should include the avoided healthcare costs, the value of lives improved or saved, the increased economic output, and the environmental value of cleaner, more resilient ecosystems. When these factors are included, water and wastewater projects – even in small remote towns – often show an excellent return on investment for society. A joint report from the United Nations and the World Health Organisation³⁰ estimated that for every \$1 invested in these services, there were economic and environmental gains and more than a \$4 return in lower healthcare costs. In sparsely populated areas, that ratio may be even higher when considering the expensive emergency alternatives, like transporting water during droughts or airlifting sick patients.

The long-term benefits include future-proofing Essential Water communities against climate change and preserving the region's unique heritage. Water scarcity is projected to worsen in many arid regions; those with robust water infrastructure will be able to adapt and endure, whereas those without may face crises or depopulation. Having these services available can attract people to stay or even relocate to remote areas (for jobs in mining, renewable energy, tourism, etc.), creating a more balanced population distribution and relieving pressure on crowded cities. Ensuring essential services in First Nations communities is part of Australia's commitment to "Closing the Gap" – it supports people to live on their traditional lands with dignity, which has incalculable cultural value for the nation. Clean water is critical to Closing the Gap in health outcomes for First Nations people.

Access to secure, reliable and safe drinking water is essential to human health and well-being and is recognised by the United Nations as a human right. Many First Nations communities have inadequate drinking water, sanitation, and hygiene (WASH) accessibility. Providing these services in remote and arid areas reflects a society's values and inclusivity. The broader societal benefits – healthier, empowered citizens contributing to their country – are the reward for doing the right thing.

The provision of water and wastewater services are not merely utility expenditures; they are high-impact social investments. Access leads to healthier, more stable populations, driving economic growth and taking better care of the environment. In Essential Water's footprint, these services are the foundation upon which any other progress in the region is built. The benefits flow to everyone – from reduced public health burdens and enhanced economic resilience to the sustainability of natural resources – extending far beyond those who pay the bills.

The case for additional government support so that Essential Water can continue to provide safe and reliable water and wastewater services to the Broken Hill community and surrounds, is a strategic investment for the NSW Government in a stronger, fairer, and more sustainable future for the State.

²⁸ Fagundes, T, Marques, R, & Malheiros, T, Water affordability analysis: a critical literature review, AQUA – Water Infrastructure, Ecosystems and Society, 31 July 2023, 72 (8) pp. 1431-1445.

²⁹ United Nations, Global Issues Water, accessed 19 March 2025 Analysis of different types of customers and average consumption (kL p.a.).

³⁰ [UN reveals major gaps in water and sanitation – especially in rural areas](#)

13.6 Targeting subsidies

We understand that the application of subsidies can result in differing opinions on who should or should not get them. The current subsidies that Essential Water receives from the NSW Government are blanket subsidies – how they are applied to customers' bills does not reflect whether the customer needs it more or less than other customers, and there is no means testing.

We wanted to test with our customers the topic of blanket subsidy vs something more targeted to specific customer groups – in case the NSW Government does look to provide an additional subsidy to affordability issues in the 2026 determination period (if recommended by IPART and it is agreed to).

We asked our June EWCP, and whilst there were mixed views, at the end of the discussion there was a consensus that any targeting needed to be done appropriately, was complex and that it was difficult to achieve an equitable allocation. Therefore, it concluded that a blanket subsidy was still the most appropriate for Essential Water, provided the ability to receive additional rebates (such as pension rebates) was still available for those customers in need. Please see Chapter 3 and our Customer Engagement Strategy (Attachment 2) for more information on this issue.

Appendix A: 3Cs grading self-assessment

This appendix presents an overview of our self-assessment against each of IPART's 3Cs principles and its grading rubric in its July 2023 Water Regulation Handbook (Handbook).

Below we self-assess against IPART's expectations of a 'Standard' rated proposal. Overall, we consider our Proposal should receive a 'Standard' rating.

Our Proposal is consistent with the key principles of IPART's 3Cs regulatory framework and required content as outlined in IPART's Handbook, although tailored to reflect Essential Water's size and operating environment. We are a small business, servicing a population a fraction of the size of the other water businesses regulated by IPART.

Our Proposal focuses on delivering core water and wastewater services to customers consistent with their expectations of lowest possible cost over the long term. We were able to leverage the support of Essential Energy in the preparation of this Proposal, but its implementation will be delivered by our small number of staff, who work in a challenging physical environment. Therefore, IPART's assessment should be proportionate to our size and delivery capability.

Customer centricity

How well have you integrated customers' needs and preferences into the planning and delivery of services, over the near and long-term?

Standard expectations	How this Proposal meets these expectations?
Develop customer engagement strategy:	
> The business has a published customer engagement strategy which: • sets out how it seeks to understand what matters to customers, and identifies the outcomes that maximise long-term customer benefit at an efficient cost • considers the level of influence customers have in how services are delivered • identifies the role of customer engagement in understanding customer preferences • commits to engage with customers in the pricing proposal and for major investments. > The strategy should be well structured and easy for customers to follow, and articulate clear roles and responsibilities of customers, regulator(s) and business.	> Essential Water has developed a Customer Engagement Strategy (Attachment 2), which sets out how it engaged with its customers to inform this Proposal. It details the customer engagement channels used to reach a broad cross-section of our customers and describes the new Customer Panel set up to meet on a regular basis throughout the development of the proposal. The Customer Panel enabled an in-depth discussion of issues and allowed customers to deliberate on options. > The Customer Engagement Strategy highlights that there are 'must do' investment options which are required for compliance and ensuring service standards can be maintained, as well as discretionary investments where customers can exercise more influence in the decision making process. > Essential Water's Customer Engagement Strategy is well structured, easy for customers and stakeholders to follow, explains roles and responsibilities, and addresses the expectations of IPART's "Standard" grading. > Section 3.3 of this Proposal summarises our customer and stakeholder consultation and how this informed this Proposal.
Customers influence business outcomes:	
> Customer insights and engagement influence customer outcomes, inform business decisions, and short, medium and long-term plans.	> Chapter 3 of this Proposal provides an overview of our customer and stakeholder consultation and how this informed this Proposal, our targeted customer outcomes, business decisions and plans.

Standard expectations	How this Proposal meets these expectations?
	> Table 4 of Chapter 3 details customer priorities and outcomes and sets out how Essential Water has responded to this in our Proposal.

Processes support customer centricity:

> Systems in place to respond to ongoing customer feedback. > Consumer facing businesses propose assistance programs for customers experiencing vulnerability (e.g. hardship programs, payment plans, access to concessions or other).	> Essential Water has systems in place to receive, consider and respond to ongoing customer and stakeholder feedback. For example, the Essential Water website provides an access point for customer feedback as noted in Section 3.2. > Essential Water publishes information on arrangements for customers facing financial hardship which includes payment plans (Section 13.3). > Essential Water has also sought to mitigate price impacts on customers by seeking a grant for the WWTP, smoothing revenues, and advocating for an additional subsidy from the NSW Government to make up a larger portion of its Notional Revenue Requirement.
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Customer engagement

Are you engaging customers on what's most important to them, making it easy for customers to engage by using a range of approaches to add value?

Standard expectations	How this Proposal meets these expectations?
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Engage on what matters to customers:

> Select issues for engagement that matter to customers	> We asked our customers what our priorities should be, to set the direction of further engagement to inform the development of the Proposal, this is covered in Section 3.3. > We sought customers and the community's view on our focus areas in interviews, surveys and at the first session of our Customer Panel. In subsequent Customer Panel sessions, we explored in more depth with customers, each of the priorities they wanted us to focus on. > As outlined in Section 3.3, customers told us that they want us to focus on delivering essential services, that is maintaining water quality and security, in an environmentally sustainable and cost-
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Standard expectations	How this Proposal meets these expectations?
	effective manner. Table 4 of Chapter 3 details these priorities, in order of importance to customers: (1) Water Quality (and Reliability), (2) Water Security, (3) Sustainability and Environmental Protection, (4) Cost Efficiency (5) Customer Service (6) Consultation, Communication and Transparency and (7) Encourage Water Efficient Behaviours.
Choose appropriate engagement methods:	
> Suitable consultation methods have been chosen to reach a representative customer base and/or their advocates, such as renters, homeowners, vulnerable groups, and businesses. > Opportunities for 2-way communication with customers exist. > The scope of engagement is proportional to the level of expenditure and the impact of the project.	> As outlined in Section 3.2, we used a range of methods to engage with customers and the community to inform this Proposal, including interviews with local businesses, meetings with local stakeholders, customer-wide survey, customer and community feedback via our website, community pop-ups and an Essential Water Customer Panel. > Our Customer Panel comprised a representative mix of customers in terms of gender, age, ethnicity, business ownership, income and vulnerability – this is detailed on page 4 of Attachment 3.1 – Essential Water Customer Panel 1 Final Report. > The Customer Panel met over four sessions, to identify customer priorities, consider whether Essential Water's proposed initiatives deliver on these priorities, discuss whether customers are willing to pay for Essential Water's proposed initiatives and evaluate whether Essential Water's Proposal delivers customer value. > Further information on the engagement methods we used to inform this Proposal is available in Chapter 3 and Attachment 2.
Engage effectively:	
> Unbiased, clear explanation of context and objectives. > Participants are informed of the impact of their feedback. > Engagement is easy to understand, and customers' understanding is tested and, where relevant,	> To inform this Proposal, we have engaged effectively, providing clear and accurate information to a diverse and representative range of stakeholders and customers. > We employed the services of a third-party facilitator for our Customer Panel meetings to ensure that they were run in an unbiased manner and that feedback from each session was impartially recorded in an independent report. These reports can be found in Attachments 3.1, 3.2, 3.3 and 3.4.

Standard expectations	How this Proposal meets these expectations?
technical literacy/capacity is supported for effective engagement. > Culturally and linguistically diverse groups are supported in their engagement. > Information is accurate, objective, tells the whole story and is correctly targeted to its audience. > Clear explanations of investment options, service levels, and uncertainties.	> Customer Panel members were presented with the bill impacts of the various investment options for both 'must do' and more discretionary items, so that they were fully informed of the impact of their feedback. > Information on how we engaged is provided in Chapter 3 and our Customer Engagement Strategy (Attachment 2).

Customer outcomes

How well does your pricing proposal link customer preferences to proposed outcomes, service levels and projects?

Standard expectations	How this Proposal meets these expectations?
Customers drive outcomes:	
> Propose outcomes, based on customer engagement, that capture what customers want you to deliver. > Link proposed expenditure to these outcomes.	> Chapter 3 summarises our customer and stakeholder consultation and how this informed this Proposal. > Table 4 of Chapter 3 details customer priorities and outcomes, based on what we heard from customers during our engagement process. > Chapter 4 of this Proposal includes key outcomes, linked to customer engagement and our proposed expenditure allowances, which we will publicly report against each year. > Chapters 6 and 7 present the efficient expenditure required to deliver the outcomes our customers want.

Standard expectations	How this Proposal meets these expectations?
Performance measures support outcomes:	
> Propose performance measures for each outcome. > Propose performance targets for each measure, referencing IPART's principles, with: • internally consistent short-, medium- and long-term targets • targets justified based on past performance and other suitable industry benchmarks • targets that, at a minimum, meet customer protection operating licence standards and other regulatory requirements.	> Table 6 of Chapter 4 of this Proposal includes proposed: • performance measures for each outcome • performance targets for each measure, informed by past performance, customer engagement, water industry benchmarks and our legislative responsibilities.
Accountability for customer outcomes:	
> Clear mechanisms ensure the business is accountable for delivering outcomes	> As outlined in Chapter 4 of this Proposal, we will annually report our performance and progress against our targeted outcomes, to ensure we are held accountable to customers and the broader community for delivering these outcomes. > Essential Water is also accountable to the Essential Energy Board and, as a State Owned Corporation, Essential Energy is accountable to its shareholders (NSW Government Ministers) for these outcomes.

Community

Are you engaging with and considering the broader community to understand their objectives, including traditional custodians of the land and water, while ensuring services are cost-reflective and affordable today and in the future?

Standard expectations	How this Proposal meets these expectations?
Identify community outcomes:	
> Engage with, and consider the broader community, including Aboriginal and Torres Strait Islander peoples, to identify community outcomes. > Assess the benefits and costs to customers of delivering on broader community values, as they relate to the provision of regulated services. > Consider costs/benefits and bill impacts before proposing expenditures.	> We have engaged with, and considered the views of the broader community, including Aboriginal peoples, to inform the delivery of our services, plans and this Proposal (see Chapter 3 and our Customer Engagement Strategy at Attachment 2). > We have considered costs/benefits and bill impacts before proposing expenditure. Our Proposal reflects the efficient costs of delivering the services our customers want and need, while complying with our regulatory requirements. We plan to phase price increases to minimise bill shocks for customers. > To mitigate price impacts on customers, we have investigated the case for additional financial contributions from the NSW Government (see Chapter 13). This ensures our proposed prices remain affordable to most customers.
Community outcome performance measures:	
> Community outcomes have targets that are measurable, have intermediate steps and milestones built in (as needed).	> We have developed performance measures for outcomes, including for community outcomes, to ensure we are held accountable to customers and the broader community for delivering our targeted outcomes (see Chapter 4 of this Proposal).
Accountability for community outcomes:	
> Clear mechanisms ensure the business is accountable for delivering community outcomes.	> As outlined in Chapter 4 of this Proposal, we will publicly report each year on our performance and progress against our targeted outcomes. > We report on our performance to the EPA on an ongoing basis.

Standard expectations	How this Proposal meets these expectations?
	> Essential Water is also accountable to the Essential Energy Board and, as a State Owned Corporation, Essential Energy is accountable to its shareholders (NSW Government Ministers) for these outcomes.

Environment

Have you identified and met broader environmental objectives, while ensuring services are cost reflective and affordable today and in the future?

Standard expectations	How this Proposal meets these expectations?
Identify environmental outcomes:	
> Meet all regulatory requirements, including environmental requirements, at an efficient cost. > Follow government directions and regulatory obligations. > Set environmental outcomes that relate to the provision of regulated services, consistent with customer preferences, community views and waterway quality guidelines. > Consider long-term environmental costs/benefits and bill impacts before proposing expenditures. > Propose cost-efficient expenditure to manage and adapt to the impacts of climate change.	> Our Proposal includes our estimates of the efficient costs of complying with all environmental regulatory requirements and obligations. This includes the costs of replacing the Wills St WWTP, building a new Emergency Pumping Station at Stephens Creek, safety works to the Stephens Creek Dam Wall, and concrete degradation works at Mica St Water Treatment Plant, to comply with environmental regulatory requirements. > Our long-term planning, including our IWCM Strategy, considers the potential impacts of climate change where relevant. We discuss our approach to climate change considerations in Section 2.7 and Appendix B: Climate change considerations. > Our customers have advised that they value Sustainability and Environmental Protection, which has shaped our Proposal as discussed in Section 3.3.

Environmental outcome performance measures:

- | | |
|---|---|
| > Environmental outcomes have targets that are measurable, have intermediate steps and milestones built in (as needed). | > Our Proposal includes targeted environmental outcomes that have performance measures and targets (see Chapter 4). |
|---|---|

Accountability for environmental outcomes:

- | | |
|--|---|
| > Clear mechanisms ensure the business is accountable for delivering environmental outcomes. | > As outlined in Chapter 4 of this Proposal, we will annually report our performance and progress against our targeted outcomes.
> We report on our performance to the EPA on an ongoing basis.
> We report on our greenhouse gas emissions to the NGER Scheme as part of Essential Energy's reporting.
> We comply with Essential Energy's Sustainability Strategy and emissions reduction target of Scope 1 and 2 emissions reduction of 50% by 2030 from a base year of 2020-21.
> Essential Water is also accountable to the Essential Energy Board and, as a State Owned Corporation, Essential Energy is accountable to its shareholders (NSW Government Ministers) for these outcomes. |
|--|---|

Choice of services

Are you providing opportunities to reflect customers' varied preferences for the tariffs and additional services they are willing to pay for?

Standard expectations**How this Proposal meets these expectations?****Consider differentiated service offerings:**

- | | |
|-------------------|---|
| > No requirements | > We are able to provide customers with treated effluent for irrigation and other purposes. The revenue we generate from selling this water is used to offset our Notional Revenue Requirement. |
|-------------------|---|

Standard expectations	How this Proposal meets these expectations?
	> More generally we are not in the position to offer differentiated services to customers, nor do our customers appear to demand a choice of services.

Robust costs

How well does your proposal provide quantitative evidence that you will deliver the outcomes preferred by customers at the lowest sustainable cost?

Standard expectations	How this Proposal meets these expectations?
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Justify proposed expenditure:

> Proposed operating expenditure (opex) is consistent with past expenditure and clearly explains any step changes or trends. > Proposed capital expenditure (capex): • is clearly explained • identifies baselines for recurrent expenditure and provides justification for any changes it proposes over time • for large capital projects with a clear scope is supported by cost-benefit analysis considering alternative options.	> We have explained variations between our actual opex and our opex allowances over the current determination period. Our proposed opex for the 2026 determination period is broadly consistent with past expenditure and we have clearly explained any step changes or trends (see Chapter 7). As we discuss in Chapter 7 our expenditure is in line with that of other water utilities in Western NSW. > Our proposed capex is clearly explained, we provide justification for changes over time and our large capital projects are supported by cost benefit analysis (CBAs), evaluating alternative options (see Chapter 6, our Cost Efficiency Strategy at Attachment 1, and Business Cases on request).
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Optimise between opex and capex:

> Demonstrates consideration has been given to opex and capex trade-offs.	> Our Water Asset Management Plan considers opex and capex trade-offs to ensure cost effective and commercial asset replacement is compared to ongoing maintenance of aging assets.
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Standard expectations	How this Proposal meets these expectations?
	> For key expenditure items such as large capex projects, we have ensured an optimal balance between opex and capex (through robust business cases, which are available on request).
Accountability for expenditure outcome:	
> Expenditure performance targets have been identified that maintain compliance with licence conditions, other regulatory requirements, and are consistent with customer preferences.	> Our expenditure forecasts have been prepared to deliver the outcomes our customers want and to comply with our legislative responsibilities, regulatory requirements, expectations of reasonable service levels in the water sector and customer preferences. > We have pursued measures to ensure our proposed expenditure allowances will efficiently deliver the outcomes required by our customers and regulators over the long term: • Where possible, we have consulted with customers on our proposed expenditure allowances. We have increased our renewals expenditure reflecting customer preferences. • We consulted with the EPA and DCCEEW on the Wills St WWTP, to ensure our expenditure delivers their required outcomes as efficiently as possible, while appropriately future proofing. > We have prepared a Cost Efficiency Strategy available in Attachment 1, to demonstrate to our customers and stakeholders that we are challenging ourselves to become even more efficient over time; we have a credible plan to achieve the Strategy; and that we will be held accountable for delivering against the Strategy. Internally, managers will be assigned responsibility for delivering elements of this Strategy, with the Executive Leadership Team and Chief Executive Officer ultimately responsible. We will regularly report to our Executives on progress against this Strategy, and the IPART expenditure allowances which will include determined cost efficiency measures. > Essential Water is also accountable to the Essential Energy Board and, as a State Owned Corporation, Essential Energy is accountable to its shareholders (NSW Government Ministers) for these outcomes.

Balance risk and long-term performance

How well do you weigh up the benefits and risks to customers of investment decisions, and how consistent are they with delivering long-term asset and service performance?

Standard expectations	How this Proposal meets these expectations?
Understand long-term performance:	
> Investment and asset management decisions demonstrate a balancing of risks and benefits to customers and the business in terms of long-term asset and service performance.	> We have a robust and risk-based approach to whole of life asset management, as set out in our Water Asset Management Plan, informed by condition assessments, asset quality and performance. Refer to Sections 2.6 and 6.2. > Our renewal program considers opex and capex trade-offs to ensure cost effective and commercial asset replacement is compared to ongoing maintenance of aging assets. > Our significant investment and asset management decisions are informed by long term cost benefit analysis (including options analysis and the consideration of risk), to ensure that proposed expenditure generates benefits that exceed costs and reflects the least cost means of achieving required service outcomes over the long-term. > The IWCM Strategy presents our strategic system wide, long term view, developed in consultation with key stakeholders.
Manage risks and reprioritise:	
> Demonstrates all cost drivers and has mechanisms to monitor cost risks and reprioritise expenditures and asset management strategies as necessary. > Outlines its approach to manage long-term risks, including climate change	> We have a robust and risk based approach to whole of life asset management, as set out in our Water Asset Management Plan, informed by condition assessments, asset quality and performance. This is described further in our Cost Efficiency Strategy in Attachment 1, as well as in Sections 2.7 and 6.2. > We apply a risk-based approach to our operational and expenditure decisions. For example, we have been reducing water levels in tanks to decrease water pressure to mitigate risk of bursts, while balancing the risk this creates for water supply reliability, particularly in drought.

Standard expectations	How this Proposal meets these expectations?
	> Our Proposal has also been informed by, and is consistent with, our IWCM Strategy – which is our long-term strategic water plan. Our IWCM Strategy considers and responds to long-term risks, such as the potential impacts of climate change. Appendix B also covers more detail on our climate change approach and sustainability.

Commitment to improve value

How much ambition do you show in your cost efficiency targets and what steps have you taken to demonstrate commitment to deliver on your promises?

Standard expectations:	How this Proposal meets these expectations?
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Develop cost efficiency strategy:

> The business has a management approved and externally published cost efficiency strategy that includes: • an annual 'efficiency factor' across opex and capex • productivity improvements achieved and proposed, which highlight that the business is adopting innovations • how it has performed against current period targets.	> Essential Water has a management approved and externally published Cost Efficiency Strategy that is proportionate to our size, but nevertheless addresses IPART's expectations for a Standard Proposal, and includes: • a range of planned efficiency measures • a continuing or ongoing annual efficiency factor across opex and capex • efficiency improvements achieved and proposed • performance against current period expenditure allowances.
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Accountability for cost efficiency outcomes:

> Has clear mechanisms to ensure the business is accountable for achieving its proposed cost efficiency outcomes.	> We will report our performance against our proposed cost allowances – to ensure we are held accountable for achieving our proposed cost efficiency outcomes.
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Standard expectations:	How this Proposal meets these expectations?
	> Essential Water is also accountable to the Essential Energy Board and, as a State Owned Corporation, Essential Energy is accountable to its shareholders (NSW Government Ministers). > Essential Energy is required to regularly report to its shareholders on its performance.

Equitable and efficient cost recovery

Are your proposed tariffs efficient and equitable, and do they appropriately share risks between the business and your customers?

Standard expectations	How this Proposal meets these expectations?
Propose cost-reflective prices:	
> Propose cost-reflective maximum prices for customers, with: • modelling to justify tariffs over the next determination period • a balance of fixed and usage charges that takes into account the long run marginal cost (LRMC) of providing services.	> We have used IPART's regulatory model to set cost-reflective tariffs over the next determination period. > We propose to maintain a two-part tariff structure, where the water usage price takes into account the LRMC of providing services (as outlined in Chapter 12). We have done this by holding our usage charge constant while adjusting the fixed charge to recover our Notional Revenue Requirement. This ensures that customers can observe the efficient cost of water, recognising the importance of this for our community, and is consistent with customer feedback.
Justify within-period revenue adjustments:	
> Provides a robust justification for any revenue adjustments, consistent with IPART's revenue hierarchy principles.	> We do not propose any within-period revenue adjustments, and instead would seek to manage (and, if necessary, reprioritise) within our expenditure allowance over the 2026 determination period. For any unforeseen significant change, we will work with IPART to address the issue and rely on the existing adjustment mechanisms within the regulatory framework.

Credibility principles: Delivering

Can you provide assurance that you have the capability and commitment to deliver?

Expectations for all grades	How this Proposal meets these expectations?
Delivering: > Proposed expenditures and service outcomes can be delivered in the timeframe proposed. > Sets out how progress against key investments and performance targets (both short- and long-term) will be regularly monitored and communicated to its customers. > Plans for foreseeable future challenges, including strategies for how it will reprioritise and adapt as changes arise. > The proposal has been approved by the Board (or equivalent), who endorse that the proposal would best promote the long-term interests of its customers. The proposal has evidence of a robust assurance process to ensure the veracity of information provided to IPART.	> Our proposed service outcomes and the expenditure allowances required to deliver these outcomes and are outlined in Chapters 4, 6 and 7. These are broadly in line with our expenditure and service outcomes over the current determination period, which highlights they are deliverable. > PWA will provide project management expertise to ensure we are able to deliver the significant investment in the Wills St WWTP, while focusing our internal capacity on our ongoing renewal and maintenance programs. > Where possible we consolidate work to minimise disruptions for customers and travel costs for contractors. We will continue to adopt this approach for the 2026 determination period. > We will keep customers and the community informed of our progress in delivering against performance targets, including annually reporting against outcomes. > We will periodically report to the EWCP on our progress in delivering key investments. > We have demonstrated in the past that we can reprioritise expenditure if required in response to changing or unforeseen circumstances. For example, we have focused on refining the Wills St WWTP design in the early part of the 2022 determination period, to ensure a practical and fit-for-purpose design. > We have scrutinised and optimised our capital expenditure profile and delayed expenditure where possible (e.g. property upgrade) to ensure we can meet our capital expenditure forecast. > Chapter 2 provides an overview of our IWCM strategy, our long-term strategic plan that informed this Proposal and which addresses a range of water service challenges, now and into the future. > The leadership of Essential Energy stand behind this Proposal and attest that it is in the long-term interests of customers, has been informed by meaningful customer and stakeholder engagement, would deliver water and wastewater services at lowest sustainable cost over the long-term and has

Expectations for all grades	How this Proposal meets these expectations?
	been subject to a quality assurance check certifying the accuracy and consistency of the information provided in the Proposal (see Board Attestation).

Credibility principles: Continual improvement

Does the proposal identify shortcomings and areas for future improvement?

Expectations for all grades	How this Proposal meets these expectations?
Continual improvement:	
> Justified self-assessment > Performance targets have been monitored and communicated to customers over the previous period, consistent with past regulatory Proposals. You have justified and explained past performance to customers. > Demonstrates how experience and lessons from past determination period/s have been integrated into current and future/long-term strategies, where gaps remain, and how future plans will address these. > Identifies any shortcomings in its proposals including its plans to address any shortfalls.	> We consider our overall self-assessment of 'Standard' is justified (as outlined in this appendix). We have consulted with IPART on an ongoing basis in the preparation of this Proposal to ensure we meet IPART's expectations, while adopting a proportionate response. > We have provided our community with the opportunity to let us know what outcomes and priorities they value most, and influence our plans and this Proposal. There has been a step change in our approach to customer engagement, from the simple survey implemented for our 2022 Proposal to the broad and deep consultation that has informed this Proposal. > Chapter 4 provides a summary of our performance over the current determination period, and Chapter 4 outlines our proposed targeted outcomes and performance measures for the 2026 determination period. > Our proposed expenditure allowances and prices (explained in Chapters 6 to 12) include provision for range of improvement measures, including for example: • Increasing renewals to manage main breaks and enhanced network/service reliability, reflecting customer feedback • Enhanced compliance with environmental regulatory requirements, through the upgrade/replacement of the Wills St WWTP

Expectations for all grades	How this Proposal meets these expectations?
	• Our earlier phasing of the Wills St WWTP may not have reflected the detailed design required to support such a significant investment. We have taken the time to develop and optimise the design in the current determination period, to ensure we are in a position to deliver this to customers • We have expanded our range of performance measures to incorporate the service metrics identified by IPART in its 2022 determination. We report monthly against these standards, and have reflected them in our proposed performance measures and targets • We have engaged with customers and key government agencies to develop an appropriate response to the lead issue facing our community. > We understand there is scope to improve future Essential Water pricing proposals. For example: • Our implementation of trade waste pricing has been slow. We are working to improve this. • Project management support through PWA to ensure the timely delivery of the Wills St WWTP.

Appendix B: Climate change considerations

Essential Water faces a number of physical risks from climate change, as well as a number of transitional risks and opportunities

The region served by Essential Water is the most arid in the state and experiences extreme climatic variations, including more frequent droughts than coastal areas. Physical risks of climate change that are relevant for Essential Water's business include impacts on water supply and quality from a changing climate and increased frequency and severity of heat waves, droughts, and flooding.

There are also climate-related transition risks that could impact Essential Water's business including regulatory compliance with increased climate and sustainability reporting requirements, increased insurance costs, supply chain risks and impacts, leading to delays and higher costs.

Climate-related transition opportunities include transitioning to renewable energy sources, electrifying fleet, resilience and adaptation strategies.

We are responding to climate change with our adaptation and resilience strategies

The risk to water security from drought has significantly reduced for Broken Hill residents, since the commissioning of the Broken Hill Pipeline in 2019, which provides an estimated raw water supply reliability of 98%. The Menindee town water supply is still sourced from the Darling River. If climatic events such as drought or fish kills occur, two alternate water supplies are available if required, including the Menindee Common Bore and the ability to gravity feed Murray River water via the Broken Hill to Menindee pipeline.

The IWCM strategy includes an assessment of the security of the Menindee and Sunset Strip water supply. Additionally, the strategy covers supplementary storages like Stephens Creek and Umberumberka reservoirs.

Essential Water's drought management plan³¹ establishes how water supply will be managed during periods of drought. It outlines minimum water supply requirements, trigger levels, corresponding actions and water restriction levels. Emergency water sources and treatment options are identified.

Our proposed capital expenditure plans (see Chapter 6) will enhance resilience, reduce leakage of water and reduce emissions. Projects include accelerated water mains replacement, a replacement wastewater treatment plant, Mica Street service reservoir replacement and the rollout of smart meters.

We are actively working on reducing our emissions

Essential Water reports greenhouse gas emissions to the NGER Scheme as part of Essential Energy's reporting. Essential Water has also reported its emissions to the NSW DCCEEW Local Water Utility performance monitoring database since 2014.

Essential Energy has a Sustainability Strategy with a key pillar being 'Responding to Climate Change'. The three commitments in this pillar are:

- > facilitating the net zero transition.
- > building climate resilience.
- > decarbonising our operations.

Essential Energy has an emissions reduction target, which includes Essential Water emissions, of Scope 1 and 2 emissions reduction of 50% by 2030 from a base year of 2020-21.

Essential Water's emission reduction activities include:

Energy efficiency and renewable energy

The IWCM strategy includes plans for energy-efficient operations and maintenance of water treatment plants and pumping stations. Currently one Essential Water site has solar panels - the Broken Hill Pumping Station has a 700kW solar system that can typically run completely on solar except in periods of very high water demand. The

³¹ <https://essentialwater.com.au/water-insights/drought-management-plan/>

proposed new Wills St WWTP will include a ~500kW solar system that will be capable of supplying the full load of the plant during daylight hours.

Fleet electrification

As part of Essential Energy's fleet electrification, Essential Water has installed 415V charging stations in Broken Hill and Menindee including 6 AC chargers and 1 DC charger. Essential Water has begun trialling five SUV electric vehicles (Kia eNiro and Hyundai IONIQ) to replace Utes in Broken Hill. Essential Energy (including Essential Water) have targets of 100% passenger vehicles and forklifts, 70% light commercial vehicles and 30% heavy commercial vehicles as electric by 2032.

Broken Hill Wastewater Treatment Plant

The new WWTP at Wills St replaces the existing two wastewater treatment plants (Wills St and South Broken Hill). The existing plants were built between the 1930s and 1960s, are at end-of life, and no longer provide the level of treatment required to meet modern environmental and effluent reuse requirements. An aerobic digester has been selected for sludge handling. This will reduce Scope 1 emissions of wastewater handling to 0 tCO₂e but increase electricity consumption (Scope 2 emissions). This increased energy consumption will be offset by the proposed solar system.

We have an environmental management system that addresses climate change

Essential Water has several documented plans that consider future, short and long term requirements in regard to the reliability of water supply and climate change including:

- > IWCM (30-year plan) - the strategy includes a 30-year Total Asset Management Plan (TAMP) that addresses the impacts of climate change on infrastructure. The strategy accounts for the impact of a 1°C warming scenario on water demand projections for Broken Hill and Menindee.
- > Asset Management Plan (10-year plan) - the plan considers climate change as a driver for asset renewals.
- > Strategic Plan (5-year plan).
- > Drinking Water Management System (annual plan).
- > Drought Management Plan (currently being updated) - the plan has been prepared to provide a strategic mechanism for managing water supply and consumption in the city of Broken Hill and surrounds during times of severe drought.
- > Operational Procedure: Blue Green Algae Management Plan.

Regarding insurance cover for climate related risk, the main insurance policies held by Essential Water, which insure against climate related risks, are the property and motor vehicle policies. In particular, they provide cover for the risk of damage to assets caused by severe weather events such as fires, floods, and storms.

In relation to climate-related reporting, the consolidated financial statements of Essential Energy for 2024-25 will include climate-related financial disclosures for Essential Water. Greenhouse gas emissions for Essential Water are reported to the NSW Government as part of the Local water utility performance reporting process.

Appendix C: Performance outcomes

Table 52: Availability of water supply – planned interruptions

	2022-23	2023-24	2024-25
Number of interruptions (frequency)	271	362	215
Lost customer minutes (duration)	70,435	308,266	873,690
Number of customers impacted	457	1,252	2,360

Table 53: Availability of water supply – unplanned interruptions

	2022-23	2023-24	2024-25
Number of interruptions (frequency)	321	380	356
Lost customer minutes (duration)	122,634	130,445	154,280
Number of customers impacted	789	995	850

Table 54: Broken Hill drinking water quality (calendar years)

CHARACTERISTICS		ADWG TARGET	2022	2023	2024
Health	E. coli	0 orgs /100ml	100%	100%	100%
	Fluoride	0.9 to 1.5 mg/L	100%	58.33%*	0%*
	Free Chlorine	0.2 to 5 mg/L	100%	100%	100%
	Lead	<0.01 mg/L	100%	100%	100%
	Arsenic	<0.01 mg/L	100%	100%	100%
	Manganese	<0.5mg/L	100%	100%	100%
	Cadmium	<0.002 mg/L	100%	100%	100%
	Copper	<2 mg/L	100%	100%	100%
	Mercury	<0.001 mg/L	100%	100%	100%
	Trihalomethanes	<0.25 mg/L	100%	100%	100%
Aesthetics	Turbidity	<5 NTU	98%	100%	100%

CHARACTERISTICS		ADWG TARGET	2022	2023	2024
	True Colour	15 HU	100%	100%	100%
	pH	pH 6.5-8.5	100%	100%	100%
	EC	<1090 µS/cm	100%	100%	100%
	Zinc	<0.3 mg/L	100%	100%	100%
	Iron	<3 mg/L	100%	100%	100%

* Fault with the fluoride dosing equipment at Mica Street Water Treatment Plant, which affected the dose. The fault has now been rectified.

Source: <https://essentialwater.com.au/water-insights/water-quality-reports/>

Table 55: Wastewater service – planned interruptions

	2022-23	2023-24	2024-25
Number of interruptions (frequency)	0	0	0
Lost customer minutes (duration)	0	0	0
Number of customers impacted	0	0	0

Table 56: Wastewater service – unplanned interruptions

	2022-23	2023-24	2024-25
Number of interruptions (frequency)	0	0	0
Lost customer minutes (duration)	0	0	0
Number of customers impacted	0	0	0

Table 57: Customer complaints – number and category

Category	2022-23	2023-24	2024-25
Water Billing	21	7	7
Water Operations Quality	5	0	4
Water Operations General	1	0	3
Sewer Operations	8	1	8
Water Billing Meter Reading	0	5	3
Total	35	13	24

Table 58: Customer complaints – average number of days to resolve

	2022-23	2023-24	2024-25
Average days to resolve	10	21	6

Table 59: Notice periods - percentage of time of time that adequate notice of planned interruptions given to customers

	2022-23	2023-24	2024-25
Adequate notice given			100%*

*Reporting captured from January 2025, noting that manual processes prior to then ensured that adequate notice was given.

Table 60: Notifiable environmental impacts - number and category

Category	2022-23	2023-24	2024-25
N/A	0	0	0

Appendix D: Miscellaneous charges

Table 61: Charges for ancillary and miscellaneous customer services (\$2026-27)

	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
Conveyancing Certificate						
Statement of outstanding charges						
a) Full certificate with meter read	94.95	94.95	94.95	94.95	94.95	94.95
b) Updated meter read request (special meter read)	71.16	71.16	71.16	71.16	71.16	71.16
c) Full certificate with history search - Note 1	167.14	n/a	n/a	n/a	n/a	n/a
d) Urgent full certificate with meter read (within 48 hours)	164.55	164.55	164.55	164.55	164.55	164.55
Meter Test						
Refunded if meter is $\pm 3\%$	98.68	98.68	98.68	98.68	98.68	98.68
Drainage Diagram	27.83	27.83	27.83	27.83	27.83	27.83
Plumbing Inspection	46.04	46.04	46.04	46.04	46.04	46.04
Plumber's application	49.18	49.18	49.18	49.18	49.18	49.18
Site inspection for water and wastewater	158.13	158.13	158.13	158.13	158.13	158.13
Statement of available water pressure - Note 2	228.83	498.41	498.41	498.41	498.41	498.41
Building plan approval - extension	44.42	44.42	44.42	44.42	44.42	44.42
Building plan approval - new connection	67.12	67.12	67.12	67.12	67.12	67.12
Fire Service application	117.38	117.38	117.38	117.38	117.38	117.38
Relocation/increase in size of water service (tapping fee)	113.65	113.65	113.65	113.65	113.65	113.65
Backflow prevention device testing and certification (per hour plus materials) - Note 2	95.13	138.26	138.26	138.26	138.26	138.26
Install Water Service						
a) 20mm Service up to 3 metres	974.48	974.48	974.48	974.48	974.48	974.48
b) 20mm Service over 3 metres and less than 30 metres	2,514.64	2,514.64	2,514.64	2,514.64	2,514.64	2,514.64
c) All others	By quote	By quote	By quote	By quote	By quote	By quote
Alter existing water service						
a) Actual Cost	By quote	By quote	By quote	By quote	By quote	By quote
b) Relocate existing service	By quote	By quote	By quote	By quote	By quote	By quote
Downgrade Meter Size						
a) 25mm to 20mm - Note 2	125.29	138.26	138.26	138.26	138.26	138.26
b) All others	By quote	By quote	By quote	By quote	By quote	By quote
Repair damaged water service						
a) First repair within 5 year period	Nil	Nil	Nil	Nil	Nil	Nil
b) Second and subsequent repairs (per hour plus materials) - Note 2	125.29	138.26	138.26	138.26	138.26	138.26
Rectification of Illegal Service	304.69	304.69	304.69	304.69	304.69	304.69
Replace Damaged Water Meter						
(a) First replacement in a 5 year period	Nil	Nil	Nil	Nil	Nil	Nil
(b) 20mm	146.55	146.55	146.55	146.55	146.55	146.55
(c) 25mm	289.26	289.26	289.26	289.26	289.26	289.26

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	2025-26	2026-27	2027-28	2028-29	2029-30	2030-31
(d) 32mm	420.39	420.39	420.39	420.39	420.39	420.39
(e) 40mm	1,013.04	1,013.04	1,013.04	1,013.04	1,013.04	1,013.04
(f) 50mm	1,263.75	1,263.75	1,263.75	1,263.75	1,263.75	1,263.75
(g) 80mm	1,388.45	1,388.45	1,388.45	1,388.45	1,388.45	1,388.45
(h) 100mm or greater	By quote	By quote	By quote	By quote	By quote	By quote
Water Service Disconnection						
a) First disconnect within 1 year period	Nil	Nil	Nil	Nil	Nil	Nil
b) Capping	122.20	122.20	122.20	122.20	122.20	122.20
c) 20mm to 25mm	204.42	204.42	204.42	204.42	204.42	204.42
d) Greater than 25mm	By quote	By quote	By quote	By quote	By quote	By quote
e) Bitumen Repairs (\$ per metre) (minimum 1 metre) - Note 2	23.79	102.90	102.90	102.90	102.90	102.90
Water Service Reconnection						
a) First reconnect within 1 year period	Nil	Nil	Nil	Nil	Nil	Nil
b) Un-capping	131.14	131.14	131.14	131.14	131.14	131.14
c) 20mm to 25mm	219.85	219.85	219.85	219.85	219.85	219.85
d) Greater than 25mm	By quote	By quote	By quote	By quote	By quote	By quote
e) Bitumen Repairs (\$ per metre) (minimum 1 metre) - Note 2	23.79	102.90	102.90	102.90	102.90	102.90
Asset Location						
a) Major or Critical Infrastructure (per hour) - Note 2	125.29	138.26	138.26	138.26	138.26	138.26
b) Minor or non-critical Initial Location	Nil	Nil	Nil	Nil	Nil	Nil
c) Reinspect asset location (per hour) - Note 2	125.29	138.26	138.26	138.26	138.26	138.26
Relocate existing stop valve or hydrant	By quote	By quote	By quote	By quote	By quote	By quote
Replace water main before customer installations	By quote	By quote	By quote	By quote	By quote	By quote
Standpipe Hire						
a) Monthly (Minimum Charge)	40.49	40.49	40.49	40.49	40.49	40.49
b) Annually	485.96	485.96	485.96	485.96	485.96	485.96
c) Water usage charges (\$ per kL)						
i. Treated	2.32	2.32	2.32	2.32	2.32	2.32
ii. Untreated	2.06	2.06	2.06	2.06	2.06	2.06
d) Connection fee (to cover account set up, key and swipe card) - Note 3		40.49	40.49	40.49	40.49	40.49
Personal Service of Final Warning Notice	27.70	27.70	27.70	27.70	27.70	27.70
Water Reconnections - after restrictions						
a) during business hours - Note 2	119.56	138.26	138.26	138.26	138.26	138.26
b) outside business hours	165.83	198.24	198.24	198.24	198.24	198.24
Reprint of statement and send by mail - Note 3		36.35	36.35	36.35	36.35	36.35

Note 1: As this category has never been used, and the other conveyancing certificate miscellaneous charges cover all potential requirements, we are proposing to not publish a price for this from 2026-27.

Note 2: These charges have been updated to reflect latest cost information

Note 3: These are new charges to cover the cost of services which are currently being provided but which are not being recovered