

Acknowledgment of Country

IPART acknowledges the Traditional Custodians of the lands where we work and live. We pay respect to Elders both past and present.

We recognise the unique cultural and spiritual relationship and celebrate the contributions of First Nations peoples.

Tribunal Members

The Tribunal members for this review are: Carmel Donnelly PSM, Chair Dr Darryl Biggar Jonathan Coppel Sharon Henrick

Enquiries regarding this document should be directed to: water@ipart.nsw.gov.au

Invitation for submissions

IPART invites comment on this document and encourages all interested parties to provide submissions addressing the matters discussed.

Submissions are due by Tuesday, 6 May 2025

We prefer to receive them electronically via our online submission form.

You can also send comments by mail to:

Hunter Water prices 2025-2030 Independent Pricing and Regulatory Tribunal PO Box K35 Haymarket Post Shop, Sydney NSW 1240

If you require assistance to make a submission (for example, if you would like to make a verbal submission) please contact one of the staff members listed above.

Late submissions may not be accepted at the discretion of the Tribunal. Our normal practice is to make submissions publicly available on our website as soon as possible after the closing date for submissions. If you wish to view copies of submissions but do not have access to the website, you can make alternative arrangements by telephoning one of the staff members listed above.

We may decide not to publish a submission, for example, if we consider it contains offensive or potentially defamatory information. We generally do not publish sensitive information. If your submission contains information that you do not wish to be publicly disclosed, please let us know when you make the submission. However, it could be disclosed under the *Government Information (Public Access) Act 2009* (NSW) or the *Independent Pricing and Regulatory Tribunal Act 1992* (NSW), or where otherwise required by law.

If you would like further information on making a submission, IPART's submission policy is available on our website.

The Independent Pricing and Regulatory Tribunal

IPART's independence is underpinned by an Act of Parliament. Further information on IPART can be obtained from IPART's website.

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Chapter 1

Report Summary



1.1 IPART is reviewing Hunter Water's prices

We are currently reviewing Hunter Water's prices and have made draft decisions on the maximum efficient prices to apply for the 5 years from 1 July 2025 to 30 June 2030. This report outlines these draft decisions and explains how and why we reached them.

Reliable, secure and affordable water services are needed to support the growing Lower Hunter region. Hunter Water owns and operates the water, wastewater and stormwater infrastructure and systems which serve more than 250,000 households and businesses in the region.¹

Water and wastewater services are essential, and it is vital that the services deliver value to customers and are affordable. It is also important that Hunter Water has the capability to maintain and replace its assets, deliver necessary infrastructure to meet the increasing demands of population growth, and can plan and prepare for the challenges of climate change.

IPART's role is to set the maximum prices Hunter Water can charge for these services. In doing so, we set maximum prices that mean customers only pay for expenditure that is efficient. Hunter Water may set prices below the maximum with the approval of the Treasurer, and it also provides a range of hardship assistance for customers struggling to pay their bills.

Hunter Water is, like most other water utilities in the world, a monopoly. This means customers cannot shop around for a provider which offers them better value, lower charges or better services. It also means Hunter Water is not, in the main, competing with any other businesses to attract and keep customers. In a competitive market, businesses are compelled to adapt, innovate and keep prices competitive. If they don't, they won't survive.

IPART seeks to set efficient prices which reflect the maximum that Hunter Water would need to charge to survive in a competitive environment. This means customers don't necessarily pay for what Hunter Water does spend, but what it should spend. It also means that Hunter Water generates the revenue it needs to plan, construct and maintain infrastructure as well as funding its day-to-day operations.

Our draft decisions, and the draft maximum prices, would result in customers only paying what Hunter Water requires to efficiently deliver quality water services.

In addition to our legislative responsibilities and our framework for regulating water businesses, we have also considered the following factors when proposing draft maximum prices as required by the NSW Government:

- the cost-of-living impacts of Hunter Water's prices
- the effectiveness of existing rebates to manage the social impacts of Hunter Water prices
- opportunities to adjust project timelines to minimise price impacts and, if necessary, to reduce the proposed capital programs in line with least cost planning principles
- deliverability of the proposed capital plans based on capability and market conditions.

1.2 Under our draft maximum prices, we propose increases in typical bills on average by 3.6% per year

Typical water and wastewater bills would increase by \$48 per year from 1 July 2025

In discussing typical residential bills, we refer to the combined water and wastewater bill a typical residential house would pay.^a Some Hunter Water customers also pay stormwater drainage charges to Hunter Water, which means their bills are higher.

Our draft maximum prices would see typical household bills for water and wastewater services increase by around \$48 (or 3.6%) each year over 5 years plus yearly inflation. This is lower than the yearly increases under Hunter Water's proposed prices (of \$71 or 5.2% per year).

The typical household bill would increase from \$1241 in 2024-25 to:

- \$1290 in 2025-26 plus inflation
- \$1481 in 2029-30 in the last year of the 2025 determination period, plus inflation.

With inflation, the typical household bill would increase by \$89 (or 7.2%) to \$1330 in 2025-26.

Our draft price increases would apply to usage charges more than service charges

Household water bills include fixed water and wastewater charges, and a variable water usage charge. The water usage charge is important because it sends a signal to customers about how much water not only costs to collect, make safe and distribute – but also how expensive it will be to increase supply if needed. For Hunter Water we estimate this value to be at least \$4.70 per kilolitre. This water scarcity signal is a proxy for the value of water and promotes efficient use.

Our draft decision is to accept Hunter Water's proposal for the water usage charge to rise from \$2.89 to \$4.40 per kilolitre by 2029-30 (plus inflation). This is in line with both costs and the scarcity value of water. Hunter Water customers indicated that any price increases would be better added to the usage charge rather than the service charge, as this would allow them to make usage choices and potentially exert more control over their bills. Our draft decision is for the fixed charges to generate the rest of the revenue we estimate Hunter Water will need to cover its efficient costs.

Households and businesses with low or moderate water usage may benefit from a higher water usage charge (and lower fixed charges). However, we note that higher water users such as some large families and industrial customers may face a higher percentage increase in their bills.

We have balanced customer affordability with the need to protect services

Many households and businesses are grappling with higher cost of living pressures. Affordability was a key theme in the feedback we received on our Issues Paper. Hunter Water also stated in its pricing proposal it was the top priority for its customers.²

^a This is based on consumption of 146 kilolitres a year, which is the average amount of water an individually metered house in Hunter Water's area of operations uses.

b In \$2024-25 terms.

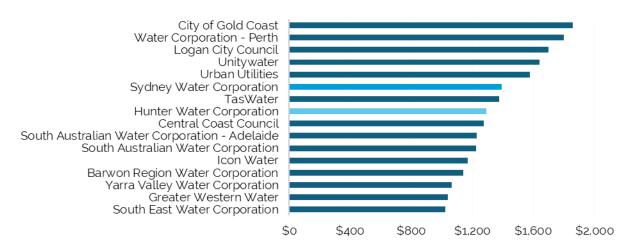
Our draft maximum prices increase more slowly than they might have over the next 5 years, while still aiming to raise the revenue Hunter Water needs to cover its efficient costs. Hunter Water proposed a similar price glide path.

This price path, where bills increase incrementally each year, helps to avoid 'bill shock' which can occur with a sudden jump in prices. We estimate that if we set prices so they only increased in 2025-26 and then didn't change across the following 4 years, the typical residential bill would be around \$146 (or 11.8%) higher in 2025-26 compared to 2024-25 to generate the same revenue as our draft price path.^c

Typical bills would be comparable to other Australian water utilities

As set out below, under our draft decisions Hunter Water's typical bill would be around the average of other similar water utilities around Australia.





Note: Figures shown for Hunter Water reflect our draft decisions on prices as set out in this report. Figures for Sydney Water reflect the bills proposed in its September 2024 price proposal.

Source: IPART analysis using data from Bureau of Meteorology

Typical bills under our draft maximum prices would be moderately higher for most customers. However, one of our draft findings is that most residential customers should be able to afford the increases, albeit with some financial impacts. We note that most pensioners receive a pensioner rebate off their Hunter Water bill from the NSW Government.^d

We have considered the issue of affordability carefully, knowing affordability concerns are different for different customers and different households.

The United Nations suggests that water costs should not exceed 3% of household income.³ While we know that any price increases are unwelcome, our analysis suggests that under our draft prices, the typical customer in almost all customers groups does not breach this benchmark.

c In net present value (NPV) terms.

^d The rebate each pensioner household served by Hunter Water receives is equal to 27.25% of the bill of a household customer who uses 200 kilolitres of water a year.

However, there is a small subset of customers who do exceed the 3% threshold and may need additional financial support. These are:

- recipients of Jobseeker payments
- single households receiving parenting payments
- single households receiving the age pension, disability pension or carer payment.

The current water pensioner rebate in NSW generally assists single and couple pensioner households to remain below the 3% threshold, but as highlighted above, certain households would exceed the threshold and could face financial hardship from the proposed increase in prices.

Hunter Water's proposal aimed to balance keeping bills affordable by offering a range of hardship assistance programs for customers facing difficulties paying their bills, maintaining water quality and services and ensuring equity for future water customers. Our draft maximum prices would result in customers only paying what Hunter Water requires to efficiently deliver quality water services. Hunter Water may charge prices below the maximum with the approval of the Treasurer.

In addition, we are proposing recommendations to the NSW Government on improving the effectiveness of rebates to help moderate the impact on more adversely impacted households. These proposed recommendations include that the NSW Government:

- consider temporarily expanding the eligibility of rebates to households that hold either a
 Health Care Card or Low Income Health Care Card
- consider temporarily increasing the rebate amount from 27.25% of a typical 200 kL/year bill to:
 - 28.4% in 2025-26 and increasing to 30.8% by 2029-30, if the eligibility criteria remain the
 - 30.8% in 2025-26 and increasing to 32.8% by 2029-30, if the eligibility criteria is expanded to include Health Care Card and Low Income Health Care Card holders.

1.3 Proposed increases in bills reflect efficient costs

The proposed bill increases under our draft decisions are lower than the 5.2% (i.e. about \$72 per year) bill increase proposed by Hunter Water.⁴ This is primarily because our draft decisions apply a weighted average cost of capital (WACC) of 3.2%, compared to Hunter Water's proposal which used a slightly higher WACC of 3.6%.⁵ Our WACC calculation differs from Hunter Water's because it applies more up-to-date market data than was available at the time that Hunter Water calculated the WACC for its pricing proposal.

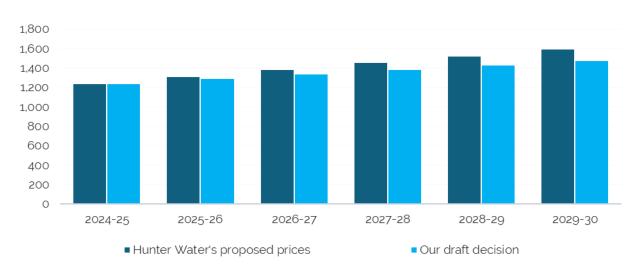


Figure 1.2 Comparing typical household bills under Hunter Water's proposed prices and our draft maximum prices

Note: Typical household bills are based on a customer living in a house and using 146 kL per year. The bills shown above are for a typical household with water and wastewater services only.

Source: IPART analysis

Under our draft prices the typical residential bill would be around:

- \$1,290, which is \$23 or 1.8% lower than the \$1,314 proposed by Hunter Water in 2025-26.
- \$1,481, which is \$116 or 7.3% lower than the \$1,597 proposed by Hunter Water in 2029-30.

1.4 We propose price rises are necessary to support customer outcomes

The increases in draft maximum prices and bills are mainly driven by the efficient costs of new infrastructure, and in particular the proposed Belmont desalination plant.

Water security - Belmont desalination plant

Hunter Water has prioritised water security in this price period, and its proposal included around \$460 million of capital expenditure to build a new desalination plant at Belmont.⁶ This plant would provide a source of rainfall-independent water supply for Hunter Water's customers and is a key feature of the NSW Government's Lower Hunter Water Security Plan (LHWSP).

Hunter Water's pricing proposal indicates that the relatively low storage capacity of its major dams means its customers are exposed to unacceptable risk of severe water shortages in unprecedented droughts. The Belmont desalination plant is designed to address a very low probability drought event. The construction of the plant would change the annual probability of:

- reaching a storage level where stage 3 water restrictions and a total outdoor water ban would be implemented from 1 in 143 years to 1 in 400 years
- reaching a storage level where Hunter Water would risk of running out of water and could have to deliver water in rations from 1 in 1,429 years to 1 in 5,000 years

• reaching a storage level where Hunter Water is no longer confident that water would flow in its network from 1 in 50,000 years to less than 1 in 100,000 years.

We engaged independent experts, Houston Kemp, to advise us on efficient levels of capital expenditure for this price period. Houston Kemp found that while Hunter Water demonstrated a genuine need for water security investment, this need was not immediately critical and investment in the Belmont desalination plant could be deferred – especially given the low probability of drought in the Lower Hunter region and the current cost of living pressures.

We have considered Houston Kemp's advice and agree that the drought risks targeted by the Belmont desalination plant are very low. However, we also recognise that there are other benefits the plant provides outside of drought resilience - for example, it could be relied upon during times of low water quality (such as water quality deterioration after bushfires or floods) to augment drinking water supply and ensure long-term water supply continuity. Our draft decision to include the desalination plant costs in Hunter Water's capital expenditure allowance considers these various benefits, as well as the need to address water security in the Lower Hunter region.

In reaching our draft decision we were conscious that Hunter Water chose to prioritise the Belmont desalination plant to deliver improved water security for its customers, and to do so, it deferred other important capital projects that would also deliver customer value in other areas. However, we expect Hunter Water to regularly review its expenditure program and, if necessary, change its infrastructure priorities to optimise customer value using the revenue envelope our draft prices generate. We want to hear from stakeholders on whether Hunter Water's prioritisation of the desalination plant over other capital projects delivers the right customer outcomes for this period.

Burwood beach wastewater treatment plant upgrade

Hunter Water's proposal allocates \$130 million for major upgrades to its Burwood Beach wastewater treatment plant.8 These proposed upgrades would go towards stopping the release of sludge into the ocean at Burwood beach and would improve secondary wastewater treatment systems at the plant.

Burwood beach is the last remaining treatment plant in Australia disposing sludge into the ocean, and Hunter Water states that recent discussions with the NSW Environment Protection Agency (EPA) indicate that it would be required to stop doing so in the future. Hunter Water estimates that the cost of upgrading the plant to stop the sludge release would be \$60 million over the 2025 determination period, with further capital costs continuing beyond 2030.

We recognise that some customers may consider that keeping prices lower should be a higher priority than pre-empting large capital costs for future environmental compliance – especially during periods of high cost of living. Others may place higher value on environmental sustainability and could be more willing to pay higher costs today to deliver immediate environmental benefits.

We made a draft decision to include the costs of upgrading the Burwood beach wastewater treatment plant in Hunter Water's maximum prices. Although Hunter Water is not currently breaching its licence by discharging ocean sludge, we acknowledge that the EPA has indicated its intention to change this requirement in the future. We consider it is important that the maximum prices we set enable businesses to adapt to changing environmental regulations.

1.5 We have considered all feedback received from stakeholders

We heard from a range of stakeholders over our consultation period including individuals, industry organisations, the Energy and Water Ombudsman NSW and the Justice and Equity Centre. We received 38 submissions to our Issues Paper and held a Public Hearing attended by 45 stakeholders who provided feedback on various aspects of Hunter Water's pricing proposal.

Many stakeholders raised issues relating to:

- affordability and the impacts of price increases on cost-of-living for different customers
- the use of fixed service charges versus variable usage charges, and the impacts of increased water usage charges on water use
- Hunter Water's proposed spending, including spending on the Belmont desalination plant
- the importance of spending on water infrastructure
- the transparency of spending.

We understand that the current cost of living pressures undeniably affects how much customers may be willing to pay for certain outcomes, and the amount customers are willing to pay can vary substantially between customer groups based on affordability and their individual circumstances. Equally, we have heard from many stakeholders on the importance of continuing to invest in assets to maintain high quality water services now and into the future.

We value the feedback that stakeholders have given us to date, and we have taken into account all views in reaching the draft decisions set out in this report. Chapter 3 of this report summarises what we heard from stakeholders so far in our review.

1.6 We assessed Hunter Water's pricing proposal as Advanced

Under the IPART Act we are required to consider a range of matters when setting maximum water prices. Our 3Cs framework was developed to assist us in considering these matters, focusing on '3Cs': **customers, costs, and credibility**. It is underpinned by 12 guiding principles which both IPART and water businesses use to develop and assess pricing proposals. Our Handbook provides further information on our 3Cs framework.

Under this framework, we ask each water businesses to self-assess its pricing proposal as either Standard, Advanced or Leading using our 12 guiding principles. We then conduct our own assessment on this grading using the same criteria. Our grading is an important element in shaping the approach we take in each price review. We will require a business that submits a 'Sub-Standard' proposal to submit a revised proposal that will deliver better customer outcomes.

We assessed Hunter Water's price proposal in view of how it understood and responded to customers' preferences. Our draft decision is to grade Hunter Water's proposal as Advanced, reflecting our findings that:

 Hunter Water has shown a commitment to delivering customer value, understanding customer preferences and integrating these into its decision-making processes.

- The proposal has identified spending levels linked to customer outcomes and that Hunter Water has made an effort to prioritise and defer expenditure where appropriate to address affordability concerns.
- Hunter Water has established clear plans for achieving its proposed outcomes, which are well aligned to outcomes that customers expressed were important to them.

Under our 3Cs framework, an Advanced proposal grading allows us to undertake a more targeted review of a business' expenditure in the areas where there is greatest materiality, risk and uncertainty. This has helped shaped the approach we took in assessing Hunter Water's costs, where we focused on areas, like the Belmont desalination plant, where costs are more material and project outcomes are more uncertain. An Advanced proposal grading also makes Hunter Water eligible to receive a grading allowance, which is 1.25% of annual revenue requirement.9

Our 3C framework was designed to hold water businesses accountable for being efficient and delivering value for money. Where we agree with a business that its proposal is Advanced, we proposed that the business share in the customer value created through an up-front financial allowance of 1.25% of the business' annual revenue requirement. This would provide the business additional incentives to innovate and deliver increase customer value.

However, we are very mindful of affordability concerns and the cost of living pressures currently being faced by consumers. IPART has also been directed by the NSW Government to address these pressures in our pricing reviews. In this context we are proposing to include this grading allowance as a capital cost and spread it across bills over the medium term

1.7 We want to hear your views on our draft decisions

Your input is valuable to us as we undertake this price review. We are now seeking feedback on our draft decisions. To have your say, you can provide a submission to this Draft Report by 6 May 2025.

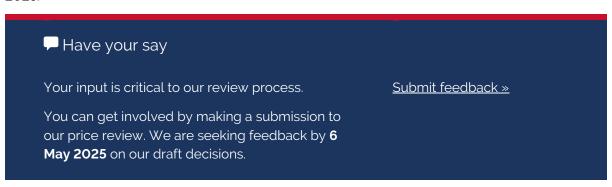


Figure 1.3 shows our review timeline.

We will consider all stakeholder and customer feedback, as well as input from our independent experts and our own analysis, before publishing our Final Report with our final decisions in June 2025.

Figure 1.3 Timeline for our review



1.8 List of draft decisions

1.	To grade Hunter Water's pricing proposal as Advanced.	22
2.	To include \$978.8 million of efficient operating expenditure into Hunter Water's notional revenue requirement for the 2025 determination period, as shown in Table 4.1.	38
3.	To assess Hunter Water's actual capital expenditure since 2019-20 as efficient, as shown in Table 5.1.	45
4.	To include \$1.6 billion of capital expenditure into Hunter Water's notional revenue requirement build-up for the 2025 determination period, as shown in Table 5.2.	46
5.	To set Hunter Water's notional revenue requirement as \$2,406 million over the 2025 determination period.	54
6.	 To set an allowance of \$749.6 million for the return on assets component of the notional revenue requirement, noting that: The opening RAB for the 2025 determination period is \$4,147.9 million, and we added \$868.1 million of capital costs (net of depreciation) for the period We included a capital allowance for Hunter Water's 'Advanced' graded proposal in the corporate RAB, equivalent to 1.25% of the NRR for the 2025 determination period We used a real post-tax WACC of 3.2% as the efficient rate of return. 	57
7.	To set the return of assets (regulatory depreciation allowance) as \$586.8 million.	58
8.	To set the return on working capital as \$11.3 million over the 2025 determination period.	59
9.	To set the tax allowance as \$83.8 million over the 2025 determination.	59
10.	To make the following revenue adjustments to Hunter Water's notional revenue requirement over the 2025 determination period: - \$6.1 million for the Demand Volatility Adjustment Mechanism (DVAM) \$10.1 million for the cost of debt true-up.	61
11.	To accept Hunter Water's proposal to not true-up its efficient costs incurred in the deferral year.	61
12.	To accept Hunter Water's proposal to maintain its existing cost-pass through for drought water usage prices.	62
13.	To maintain the existing price structure of variable and fixed components for water and wastewater pricing.	68
14.	To not accept Hunter Water's proposal to apply a minimum service charge to non-residential multi-premises customers that share a common meter.	68
15.	To set Hunter Water's maximum water usage charges to \$3.19/kL in 2025-26, rising to \$4.40/kL in 2029-30, as shown in Table 8.1.	78
16.	To set Hunter Water's maximum water service charges as shown in Table 8.3 for residential customers and Table 8.4 for non-residential customers.	78

17.	To set Hunter Water's drought uplift water usage price and raw water price as shown in Table 8.2.	78
18.	To set Hunter Water's maximum usage charge for wastewater services at \$0.77/kL.	78
19.	To set Hunter Water's wastewater service charges as shown in Table 8.6 for residential customers and Table 8.7 for non-residential customers.	78
20.	To set Hunter Water's maximum stormwater charges as shown in Table 8.8.	78
21.	To set Hunter Water's trade waste and miscellaneous charges as shown in Appendix D.2 and D.3.	78
22.	To accept Hunter Water's proposed performance outcomes, measures and targets with some modifications.	101
23.	To apply the EBSS, CESS and ODI incentive schemes to Hunter Water as per its proposal over the 2025 determination period.	105
24.	To apply a 1% cap on the revenue adjustment across the ODI, EBSS and CESS over the 2025 determination period.	106

1.9 Tell us what you think

Seek Comment

1.	Do Hunter Water's proposed capital investments, including the Belmont desalination plant, deliver on the most important outcomes for customers in this price period?	52
2.	Do you agree with applying more of the necessary price increases to usage charges to give you more control over your bills?	75
3.	Should price increases be gradually phased in, or should they increase through a larger one-off step?	75
4.	Should there be a minimum service charge for multi-premise non-residential customers who share a common meter?	75
5.	What are your views on the draft increases in trade waste and miscellaneous charges?	83
6.	What are your views on the affordability of our draft maximum water, wastewater and stormwater prices?	94

Chapter 2

Assessment of Hunter Water's pricing proposal



Summary of draft decisions on Hunter Water's pricing proposal grading

Grade Hunter Water's pricing proposal as Advanced

Our draft decision is to grade Hunter Water's pricing proposal as Advanced, consistent with our preliminary grading and with Hunter Water's self-assessment.

We have found that Hunter Water has met the guiding principles of our 3Cs framework for an Advanced pricing proposal. This makes Hunter Water eligible to receive a grading allowance of 1.25% of its annual revenue requirement over the 5-year 2025 determination period.

We regulate maximum prices for water businesses under our '3Cs' framework. The 3Cs are aimed at:

- promoting customer interests
- keeping costs as low as possible
- business credibility.

Each water business is required to self-assess its pricing proposal as either Standard, Advanced or Leading against 12 guiding principles set out in our 3Cs framework. We then determine whether the pricing proposal promotes the long-term interest of customers at a Standard, Advanced, or Leading level, using the same criteria. We will require a business that submits a Sub-Standard proposal to submit a revised proposal that will deliver better customer outcomes.

This is an assessment of each water business' pricing proposal, rather than on the water business itself.

This chapter provides context to the matters we must consider when setting maximum water prices and explains the reasons for our draft grading of Hunter Water's proposal as Advanced.

2.1 Our water pricing review process

Under the IPART Act, when setting water prices, we are required to consider a range of matters (see Appendices A.1, O, A.3 and A.4).

Matters for IPART to consider when setting maximum water prices





Are customers protected from abuses of monopoly power?





What is the effect on general price inflation?



Has efficiency improved?



Do the prices promote environmentally sustainable development?



What is the impact of the prices on the finances of the water business?



What is the impact of the prices on contractors etc. of the water business?



Do the prices promote competition?



What is the impact of the prices on demand management and least cost planning?



What are the social impacts of the prices?



What is the impact of the prices on quality, reliability and safety standards?

Our 3Cs framework was developed to assist us in considering these matters, focusing on customers, costs, and credibility. It is underpinned by 12 guiding principles which both IPART and water businesses use to develop and assess pricing proposals (see Figure 2.1). Our Water Regulation Handbook provides further information on our 3Cs framework.



Figure 2.1 The 3Cs framework and the 12 guiding principles

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

The 3Cs framework is centred around water businesses developing pricing proposals that promote customer value. It strongly encourages water businesses - including Hunter Water - to actively involve and engage with their customers, bringing customers into the decision-making process when they are setting outcomes. Involving customers to set outcomes that matter most to them, and align with their preferences, is essential if water businesses are to identify better ways of delivering their services.

We recognise this is the first time Hunter Water has submitted a pricing proposal under the 3Cs framework. We will work together with all stakeholders to continue to improve the framework. This will help achieve our common goal of delivering customer value.

In addition to our legislative responsibilities and the 3Cs framework, the NSW Government required our review to consider the following matters:

- the cost-of-living impacts of the price determinations
- the effectiveness of existing rebates to manage the social impacts of the price determinations, including if the program will adequately support customers who may be disproportionately impacted by any price increase
- opportunities to adjust project timelines within the price determination period and over the next 10 years to minimise price impacts and, if necessary, to reduce the proposed capital programs in line with least cost planning principles
- deliverability of the proposed capital plans based on capability and market conditions.^a

^a These matters are prescribed in a Letter from the NSW Premier to the Chair of IPART, 20 August 2024, under section 13(1)(c) of the IPART Act.

Chapters 4-10 detail how we assessed each aspect of Hunter Water's pricing proposal. Our assessment was underpinned by 3 key criteria:

O1 Customers get the services they need, and costs are efficient

We review operating and capital costs to ensure what customers pay is fair. We also identify any productivity improvements Hunter Water could make.

O2 Fair and equitable risk sharing

We assess the social impact, affordability, and intergenerational equity of the pricing proposal.

03 What customers must pay is reasonable

We determine the maximum price a water business can charge a customer, considering the reasons for the proposed increases.

2.2 We assessed Hunter Water's proposal as Advanced

Our draft decision is:



1. To grade Hunter Water's pricing proposal as Advanced.

Our reasons for an Advanced grading



Customers

Hunter Water's pricing proposal integrates customer needs and preferences based on thorough and meaningful engagement with its customers. Over a multiple-stage comprehensive engagement program, Hunter Water provided genuine opportunities for customers to influence its proposal in areas that matter to them.



Costs

Hunter Water's proposed costs are robust and well-justified. It has made conscious decisions to lower bills where possible, prioritise spending and balance risks to the benefit of customers. It has also demonstrated a commitment to improving cost efficiency through an efficiency strategy.



Credibility

The credibility of Hunter Water's proposal is supported by a clear path towards meeting customer outcomes and achieving cost efficiency. Hunter Water has shown a credible commitment on areas of improvement that are of value to customers.

2.2.1 We made a preliminary assessment to inform our approach to the review

After a water business submits its pricing proposal, we make a preliminary assessment based on the 3 gradings (see Box 2.1 for the types of gradings possible under our 3Cs framework). The full grading rubric is also available in Appendix B. This preliminary assessment helps us to determine the approach we take to reviewing a business's proposal.

Box 2.1 There are 3 possible grades under the 3Cs framework

The grades are:

- Leading for businesses that are industry leaders in understanding their
 customers, innovating to deliver services customers want and driving costs
 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.

If we determine the proposal to be unacceptable or to not promote the long-term interests of customers, we may grade a proposal to be Sub-Standard. In such cases, the business will be required to submit a new proposal.

Source: IPART, Water Regulation Handbook, July 2023.

Our preliminary grading for Hunter Water was 'Advanced' (see our 2025 Hunter Water price review - Issues Paper). Under our 3Cs framework, an 'Advanced' proposal grading allows us to undertake a more targeted review of a businesses' expenditure in the areas where there is greatest materiality, risk and uncertainty.

To inform our decisions we engaged independent experts, Houston Kemp, to review Hunter Water's proposed operating and capital expenditure. We asked Houston Kemp to specifically examine Hunter Water's:

- strategic planning and risk
- performance over the 2020 determination period
- proposed forecast operating expenditure
- proposed forecast capital expenditure
- proposed water demand.

Our draft decisions on Hunter Water's efficient expenditure are set out in Chapter 4 and Chapter 5 of this report.

2.2.2 Hunter Water self-assessed its proposal as Advanced

Hunter Water self-assessed its proposal as 'Advanced' and focused on 5 focus principles that it considered reflected the most important current priorities for its customers. These focus principles were given greater emphasis in our review of the proposal compared to the other principles. Hunter Water's focus principles included:

- 2 Customer focus principles
 - customer centricity.
 - customer engagement
- 3 Cost focus principles
 - robust costs
 - balancing risk and long-term performance
 - commitment to improve value.

In making its self-assessment, Hunter Water told us it has put 'customers and the community at the heart' of what it does. It said it implemented a robust customer engagement strategy that provided customers with a high degree of influence over topics important to them. It told us it continues to engage with customers and the community to better understand its customer's needs.

On cost principles, Hunter Water told us that its proposed expenditure reflects the efficient costs of delivering its services that is consistent with its customer preferences while maintaining compliance with regulatory requirements. It told us that its investment and asset management decisions balance the risks to customers and the business. It also told us that it would accept more risk to benefit customers and that it is resilient to absorb costs to do so. It has also committed to improving value for its customers through a cost efficiency strategy.

On credibility principles, Hunter Water told us that it is confident in its capability and commitment to deliver the investments and levels of services it has proposed. It has noted that its proposal has been subject to a robust assurance process and has been approved by its Board. Hunter Water has told us it is committed to continual improvement.

Hunter Water self-assessed its proposal against each of the 12 guiding principles. For more information, see attachment to Hunter Water's pricing proposal: Attachment L: Self-assessment against the 3Cs framework.

2.2.3 We agree with Hunter Water's self-assessment that its pricing proposal is Advanced

We took a holistic approach to assessing Hunter Water's proposal. We considered Hunter Water's self-assessment of its proposal against each of the 12 guiding principles. However, we allocated a single grade to the proposal as a whole, rather than allocating a grade to each principle, consistent with our 3Cs framework. This recognises that each proposal's grading may not be a simple weighted average of the grades for each of the 12 principles. It also reflects the importance of businesses developing robust pricing proposals that balance customer, cost and credibility outcomes according to customer preferences.

Our draft decision is to agree with Hunter Water's self-assessment of its pricing proposal and maintain our preliminary 'Advanced' grading.

In making this draft decision we considered that:

- Hunter Water has shown a commitment to delivering customer value, understanding
 customer preferences and integrating these into its decision-making processes. Through its
 comprehensive customer engagement program, it has provided opportunities for a broad
 range of customers to influence its pricing proposal on areas that matter to them and has
 incorporated feedback into its pricing proposal.
- The proposal has identified spending levels linked to customer outcomes and shows that Hunter Water has made an effort to prioritise and defer expenditure where appropriate to address affordability concerns. This has demonstrated a high level of accountability to make trade-offs to respond to customer preferences. We consider that its proposed capital and operating costs are largely robust and its key business systems processes, including risk management, asset management and procurement are also robust and mature.
- Hunter Water has established clear plans for achieving its proposed outcomes with designated timeframes and relevant performance targets. We note that some performance targets are yet to be determined and will be reviewed and refined.
- Hunter Water has incorporated a reasonable productivity efficiency factor of 1%. Hunter
 Water has also introduced clear incentive mechanisms to ensure it is accountable for cost
 efficiency outcomes covering capital expenditure and operating expenditure, and an
 outcome delivery incentive for leakage reduction.

The Justice and Equity Centre also expressed its support for Hunter Water's Advanced grading, noting that it considered Hunter Water's engagement had demonstrated genuine commitment and good practice.¹⁰

We considered that Hunter Water proposed few outcome measures which alone may not give customers enough transparency over its performance on customer and community outcomes. We also considered that there was scope to broaden Hunter Water's performance reporting in the interest of increasing customer and community transparency. In Chapter 10 we make recommendations on additional measures that Hunter Water could report on to give customers a more complete picture of its performance against key outcomes.

2.2.4 Hunter Water is eligible to receive a grading allowance of 1.25% of annual revenue requirement

Our 3Cs framework allows businesses to earn financial rewards from submitting Advanced or Leading proposals that deliver customer value and demonstrate step changes in performance.

Each business is considered to start with a Standard grade until its first price review under the new 3Cs framework. Where we agree with the business that its proposal is Advanced or Leading in its first price review under our new framework, the business becomes eligible to receive a grading allowance – calculated as a percentage of the revenue requirement added to the forecast revenue requirement. This provides a financial incentive for water businesses to engage with their customers and prepare well-justified proposals.

Where a business' proposal moves to a higher grading in a subsequent review – e.g. from Advanced to Leading, it would become eligible for another grading allowance. However, it would not be eligible for an additional allowance for maintaining an Advanced proposal grading at its next price review.

We also set financial penalties for a business where we find that its self-assessment is over-confident or where its proposal backslides from a previous grading of Advanced/Leading to Standard.

Since we have agreed with Hunter Water's self-assessment and made a draft grading of Advanced, Hunter Water would be eligible for a grading allowance.

A grading allowance is only available for a water business that submits an Advanced or Leading proposal. This is based on our level of confidence that the business' decisions are efficient and that its proposal promotes the long-term interests of customers.

The grading allowance is intended to drive continued performance in conjunction with other financial incentives of the 3Cs framework (see Chapter 10). It provides an ongoing incentive for Hunter Water to be ambitious in managing its costs, be less risk-averse and strive to deliver customer value.

Our draft decision is to allow Hunter Water a grading allowance of 1.25% of its annual revenue requirement.^b This would amount to, on average, \$6 million per year over the determination period and would add around \$6.50 per year to the typical residential bill over the 5 years.^{cd}

As described, if Hunter Water were to maintain an 'Advanced' proposal grading in the next review, it would not receive an additional grading allowance. If its next proposal were to be graded as 'Standard', it would face a financial penalty. For more information see our Handbook.

Our draft decisions on Hunter Water's maximum prices, which are explained further in this report, include this grading allowance. As we set maximum prices, Hunter Water may decide how best to use its grading allowance to promote customer value.

2.3 We reviewed Hunter Water's customer engagement

Under the 3Cs framework, we assess each water businesses' customer engagement and the extent to which its engagement has informed customer-focused pricing proposals. We do not prescribe a method by which a business should engage with its customers. We do, however, expect that a business demonstrates how it would engage with its customers in a meaningful way to understand its customers' needs and preferences, and that these insights are used to inform its proposal.

In undertaking our assessment, we applied our 3Cs rubric for customer engagement which requires a water business to demonstrate how it:

- engaged on what matters
- chose appropriate engagement methods
- engaged effectively.

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b For more information on financial incentives for Advanced and Leading proposals, see our Handbook, pages 11 and 12.

c In \$2024-25 terms and is based on the typical water and wastewater bill.

We cannot determine what bills would be if Hunter Water submitted a 'Standard' proposal.

We also referred to the IAP2 Public Participation Spectrum^e to understand the levels of influence customers may have in an engagement process. We recognise that different levels of participation are legitimate depending on goals, time frames, resources and levels of understanding and concern in the decision to be made. We also recognise the time and resources needed to prepare and inform participants influences their participation in the engagement and influence on decisions.

2.3.1 Hunter Water undertook a comprehensive multi-stage engagement program

Hunter Water undertook an extensive customer engagement program comprising 5 stages between July 2022 and August 2024. Its engagement on its pricing proposal covered 3 main areas:

- customer outcomes, outcome measures and accountability mechanisms
- what customers are willing to pay for on top of baseline bill increases and how customers want Hunter Water to make decisions on topics of importance
- price structures including how price increases should be applied.

The 5 engagement stages were:

- 1. Validating draft outcomes, understanding topics of interest and customer appetite for participation in decision making.
- 2. Understanding customer priorities on specific topics of interest including a willingness to pay.
- 3. Deliberating key topics with a Community Panel via a deliberative forum seeking their recommendations.
- 4. Confirming customer outcomes, developing outcome measures and identifying accountability mechanisms. During this stage, Hunter Water additionally consulted on price structures in response to customer feedback.
- 5. Closing the loop where Hunter Water explained to the Community Panel how it has incorporated the customer feedback into its proposal.

Hunter Water used a variety of methods and sought input from almost 9,000 stakeholders including customers, community members, internal and external stakeholders, and experts.

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The IAP2 Public Participation Spectrum is designed to assist with the selection of the level of participation that defines the public's role in a community engagement program. The levels of participation are based on the impact the public could have on decision making. From low to high levels of impact the levels include; 'inform', 'consult', 'involve', 'collaborate' and 'empower' (see IAP2 Public Participation Spectrum, 2018).

2.3.2 Hunter Water demonstrated an 'Advanced' level of customer engagement

Our analysis found that through a comprehensive multi-stage engagement program, Hunter Water demonstrated the customer engagement principle at an Advanced level.

Hunter Water involved its customers in setting priorities

Hunter Water's engagement for its pricing proposal builds on previous engagement and interaction with customers, and a strong understanding of customer preferences. Its engagement on key topics for additional investment focused on what it considered customers could have the greatest influence on, priority areas for decision making for the business and where there could be material bill impacts.

In Stages 1 and 2 of Hunter Water's customer engagement, it consulted on these topics through quarterly surveys, focus groups, a bill simulator survey, and a priorities survey. This involved understanding the relative importance of topics compared to customer preferences for keeping bills affordable, preferences on the level of investment per topic and willingness to pay, as well as interest in participating in decision-making. This engagement then informed key topics for Hunter Water to collaborate with the community on. In Stage 3, it held a deliberative forum where a Community Panel discussed these topics (hot spots, carbon reduction and water conservation) and made recommendations to Hunter Water.

Hunter Water chose a range of methods to consult with its customers

Through a mix of quantitative and qualitative engagement methods including surveys, workshops, focus groups, interviews and a deliberative forum, Hunter Water provided genuine opportunities for customers to influence its proposal on areas that mattered to them.

Quarterly surveys allowed Hunter Water to reach of broad range of customers throughout the engagement program and these were tailored to consult on different subjects in line with engagement stages. Focus groups and workshops enabled targeted consultation with different customer groups including difficult-to-reach customers. For example, a bill simulator survey was used to explore willingness to pay across its broad customer base which was then further explored through a focus group.

Where it was difficult to reach a specific group such as young people and renters, Hunter Water took steps to address gaps in representation. To ensure voices of young people were reflected in deliberative discussions Hunter Water told us it targeted a guest youth speaker address its Community Panel. It had members of the panel going to a special youth event to then present insights to the rest of the panel.

Hunter Water engaged effectively

We consider that Hunter Water has demonstrated effective engagement at an Advanced level. Our review of engagement materials finds that overall, the information Hunter Water provided to customers was clear, accessible, and targeted. To address bias, it worked with engagement experts to develop engagement materials and had its engagement experts facilitate direct engagement. Hunter Water also worked with its Customer Engagement Advisory Panel (CEAP) and external stakeholders on the design of its deliberative forum and to ensure engagement materials were accessible. Its engagement process has also been quality assured.

Across engagement stages, Hunter Water provided a clear explanation of options to meet outcomes and bill impacts. This has included providing relevant background, explaining the pricing proposal process, IPART's price setting and the benefits and costs associated with topic areas. We note that it explicitly described the context of 'unavoidable increases' in bills that customers could not influence over engagement. These were associated with investment decisions already made (such as the Belmont desalination plant), essential expenditure required to meet regulatory drivers, the cost of borrowing, and interest rates. It made clear to customers that they were consulting on additional increases in bills.

Hunter Water gave confidence to participants that their feedback influenced outcomes. In Stage 5, Hunter Water held a 'close the loop session', explaining to its Community Panel how its feedback had been incorporated in the pricing proposal.

2.3.3 We consider Hunter Water should consider consulting on costs more broadly in the future

We acknowledge Hunter Water has put substantial effort into its engagement program. Its engagement focused on topics directly related to expenditure and was proportional to interest in select topics, materiality, support for and where customers were interested in participating in decision making. These topics were then deliberated, and the outcomes of engagement led to additional expenditure supported by customers on select topics. We consider Hunter Water's approach was reasonable because it focused on topics that customers could have a high level of influence on.

Hunter Water proposed a range of costs based on customer outcomes. However, it is not clear whether customers understood how Hunter Water's full range of costs would meet outcomes overall, aside from the costs associated with the topics deliberated on. We recommend in the future that Hunter Water engages on costs more broadly so that customers have a more holistic understanding of the total value of their bills. We recognise that by doing so it may not be practical to offer high levels of influence, for example, at the 'collaborate' level where higher levels of understanding, time and resources may be required.

See CEAP attestation that the engagement process has been thorough fair and transparent, and conducted in good faith, resulting in valid customer views being incorporated into its proposal in Hunter Water's Pricing Proposal 2024, p. 52.

Box 2.2 Engagement on the delivery of the Belmont desalination plant

The Belmont desalination plant is a major project that represents around a third of Hunter Water's capital expenditure. Hunter Water did not consult explicitly on the Belmont desalination plant as part of its engagement plan for its pricing proposal. However, there had been other avenues for customers to have their say on the project.

Hunter Water has explained that it had undertaken consultation on the plant as part of engagement on the Lower Hunter Water Security Plan. The Belmont desalination plant had been approved by the NSW Government as part of this plan in 2022. Rather than offer levels of influence at a 'consult' level or above, it has 'informed' customers about the delivery of the plant.

Chapter 3

What we heard from stakeholders



3.1 We consulted with stakeholders to inform our draft decisions

On 1 November 2024, we published Hunter Water's 2025 pricing proposal and an Issues Paper summarising the key aspects of the proposal. This included how Hunter Water has engaged with and understood its customers and community, its proposed costs and service levels, customer outcomes, and the affordability of proposed prices.

We invited stakeholders to have their say on Hunter Water's pricing proposal by sending us written submissions. On 18 November 2024 we also held an online Public Hearing which allowed the community to provide comments and ask questions directly to Hunter Water and to IPART.

We thank all stakeholders for their time and effort spent to provide us with feedback through these avenues. We considered all feedback received to inform the analysis and draft decisions on Hunter Water's prices.



3.2 What stakeholders told us about Hunter Water's proposed prices

We heard from a range of stakeholders over our consultation period, mostly individual stakeholders. We also received submissions from organisations including the Property Council of Australia, Water Services Association Australia, the Energy & Water Ombudsman NSW and the Justice and Equity Centre.

Of the 38 submissions we received, 17 were confidential. While we have considered all submissions in reaching our draft decisions, this report only refers to those submissions that are not confidential.

Submissions to our Issues Paper mainly raised concerns related to:

- affordability and the impacts of price increases on cost-of-living for customers and profitability for businesses
- the use of fixed and variable charges
- Hunter Water's proposed spending including the Belmont desalination plant.

Similarly, participants at our public hearing also raised important issues including:

 the affordability of the proposed price increases for different customers and current cost-ofliving pressures

- the potential for annual assessments of prices to consider CPI changes
- dividends to the State Government
- funding ageing assets and infrastructure
- impacts of increased water usage charges on water use
- the importance of spending on water infrastructure
- the transparency of spending.

3.2.1 Stakeholders raised concerns about Hunter Water's proposed prices

Several individual stakeholders considered the proposed prices unfair, unaffordable and unacceptable, particularly during cost-of-living pressures, and for customers facing bill stress.¹¹ For instance, one stakeholder noted that while they could manage the proposed prices, others would struggle.¹² Some indicated the proposal should be rejected and that allowing Hunter Water to increase prices would be a mistake.¹³

The Justice and Equity Centre considered affordability issues were expanding to impact higher income groups and recommended regulatory reform including a consistent framework of water payment assistance and hardship policies.¹⁴

There was also the view that prices should increase in line with inflation or wages.¹⁵ One stakeholder suggested that IPART recommend a more realistic annual base rate plus CPI increases and assess prices annually.¹⁶

We heard from one stakeholder (a property owner) who raised concerns about the increases in the service charge and the inability to pass these costs on to tenants, calling the increases in the service charge neither fair nor justifiable.¹⁷ We also heard concerns that increases to the usage price would disproportionally impact renters.¹⁸

The Energy & Water Ombudsman NSW made a submission to our Issues Paper stating that it had received 80 complaints against Hunter Water in 2023-24 (a 25% increase from the previous year), and suggested IPART and Hunter Water focus on mitigating the impact of price increases in the following ways:

- IPART should seek additional information from Hunter Water on how pensioner rebates to remain fit-for-purpose, including whether rebates will be increased by Hunter Water.
- IPART should consider actions taken by NSW Government for energy customers when reviewing effectiveness of rebates.
- Hunter Water should provide IPART with more information about how it will expand the Payment Assistance Scheme to better assist customers facing increased water usage pricing and drought pricing.
- Hunter Water should plan a public education campaign before drought price triggers to avoid bill shocks, reduce complaints and build public trust.
- IPART should consider how pensioner concessions could be widened to include other households, such as renters, large households and others experiencing vulnerabilities.¹⁹

We also heard about the broader impacts of the proposed price increases. One stakeholder was concerned about the impact on food production, while one business stakeholder considered the price increases too large and that increased water usage costs would make the company uncompetitive in the international market.²⁰

Water Services Association of Australia supported the proposed price increases to fund investment and considered that the current short-term cost-of-living pressures should not outweigh the long-term opportunities for maintaining strong and effective utilities.²¹ It suggested that Australia should learn from the experience of other countries to ensure utilities charge enough to combat water leaks, sewerage spills and extreme weather incidents. It considered that the government should provide relief to those who struggle to pay their water bill to address affordability concerns.

The Property Council of Australia supported in principle that the indicative price increase for Hunter Water customers is a funding stream for sustainable water service delivery.²²

We also consulted on what stakeholders would do to respond to prices including how they could change their water use. One stakeholder suggested measures could include reducing lawn area, planting more hardy natives and installing a water-efficient irrigation system.²³

Some stakeholders had opposing views about price structures

Individual stakeholders typically supported usage charges to cover increasing costs rather than service charges. The reasons given include:

- It would get people to save more water as currently water is priced too low.²⁴
- Increases in the fixed charge disproportionately impacts landlords, including those that are unable to separately meter water usage and unable to pass costs on to tenants. One stakeholder also noted the limited ability to change rents.²⁵

One stakeholder recommended that the usage charge be based on a tiered pricing structure similar to Western Australia's Water Corporation.²⁶ One stakeholder supported the removal of all services charges for residents and for costs per litre to be increased to cover costs.²⁷

Large water users, namely businesses, however had an opposing view that increased usage charges disproportionately impact high-volume users. One business stakeholder considered the proposed price increases too large, and increased water usage costs would make the company uncompetitive in international markets. It considered that it was unfair to be charged the same as domestic users and argued that Hunter Water should implement a bulk water usage discount.²⁸ We note that Hunter Water has provided large water user discounts (over 50,000 kL), however starting in 2021-22, this has been phased out and is set to finish this year.²⁹

Individual stakeholders raised specific concerns about the fixed household wastewater charge considering that the charge should be based on water usage and how much water customers discharge. One stakeholder considered the fixed wastewater fee is arbitrary and unfair to customers who use less water.³⁰ Another individual stakeholder considered wastewater charges should be dependent on usage and that the fixed charge does not put pressure on people to reduce water use. The stakeholder considered that wastewater charges should be a proportion of the water used but also recognised that not all water from the tap becomes wastewater. They also suggested bonuses for customers who install greywater facilities.³¹ Another stakeholder questioned why the percentage increase in water service charges was much higher than the increase in water usage charges.³²

Others also commented on the stormwater charge. One stakeholder recommended that stormwater prices should be based on the land area of the property and allowances should apply to the stormwater charge where houses have a rainwater tank to catch roof runoff.³³ One stakeholder considered they pay twice for stormwater through charges paid to councils.³⁴

3.2.2 Stakeholders had mixed views on Hunter Water's proposed spending

We consulted with customers on Hunter Water's proposed capital and operating expenditure. Most stakeholders provided general feedback on Hunter Water's proposed spending with a few stakeholders responding directly to Hunter Water's largest capital expenditure for the Belmont desalination plant.

A couple of stakeholders supported construction of the Belmont desalination plant,³⁵ especially considering the importance of maintaining high-quality services to support a growing population and providing resilience against extreme weather conditions. Stakeholders also noted deferring capital investments may result in costly rectification in the long run for short-term lower prices.³⁶

Another stakeholder questioned the need for the desalination plant and considered it is poor value for money. The stakeholder commented that while Hunter Water has put forward the case to act li.e. where the desalination plant is imperative to address water security riskl, they also noted that Hunter Water's proposal shows a downward water demand trend. They argued that the desalination plant may not be necessary, particularly in light of a cost-of-living crisis.³⁷ Another customer raised concerns that the bill impacts presented when consulting on the Lower Hunter Water Security Plan indicated a one-off increase between 6-9%, not an annual increase for 5 years as in its pricing proposal.^{38a} This stakeholder suggested it was the NSW Government's duty to provide infrastructure for a state government-owned monopoly provider of essential services.

Several stakeholders also raised concerns over the funding for capital expenditure including maintenance, asset upgrades and the desalination plant. One stakeholder suggested funding should be set aside over time rather than asking individuals to bear the immediate financial burden.³⁹ Several stakeholders also suggested the desalination plant should be funded by state or federal governments.⁴⁰

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We note that Hunter Water's proposed annual price increases are due to customer preferences for price increases to be applied gradually through smaller increases each year over 5 years than through one large increase in the first year of the determination.

The Justice and Equity Centre commented on Hunter Water's deferral of capital expenditure in recognition of affordability concerns. It recognised the difficulties for customers bearing the full cost of growth infrastructure when it results from government policy, and suggested taking the desalination costs off bills, delaying cost recovery or making other arrangements to cover the costs.⁴¹

3.3 We have considered all stakeholder feedback

Consultation with the community is an important part of our water pricing review process. We have considered all feedback provided on Hunter Water's proposed prices in making our draft decisions on maximum prices to apply from 1 July 2025.

The following chapters explain our draft decisions including our considerations of stakeholder feedback.

Chapter 4

Operating expenditure

Summary of our draft decisions on operating expenditure

Hunter Water's efficient operating expenditure is \$978.8 million over the 2025 determination period

We consider Hunter Water's business processes and systems are mature and it has proposed operating expenditure that is consistent with levels that an efficient business would incur in providing its services that meet customer needs.

We have made a draft decision to include \$978.8 million of efficient operating expenditure into Hunter Water's notional revenue requirement build-up over the 2025 determination period. This is the same operating expenditure proposed by Hunter Water.

This chapter sets out our assessment of the level of operating expenditure Hunter Water requires to operate its business efficiently over the 2025 determination period. Hunter Water's operating costs are the day-to-day expenses involved in running its business and maintaining the infrastructure and equipment it uses to provide services. It includes costs such as staff wages, electricity, contractors, treatment operations and insurance.

We have carefully reviewed Hunter Water's proposed operating costs using a base-trend-step approach, as outlined in our 3Cs handbook.⁴² In reaching our draft decisions, we considered independent expert advice from Houston Kemp, additional supporting documentation provided by Hunter Water and comments from stakeholder consultation. Houston Kemp's report on its assessment of Hunter Water's expenditure forecast is available on our website.⁴³

4.1 Hunter Water's proposed operating expenditure is efficient

Our draft decision is:



2. To include \$978.8 million of efficient operating expenditure into Hunter Water's notional revenue requirement for the 2025 determination period, as shown in Table 4.1.

Table 4.1 Draft decision on Hunter Water's efficient operating expenditure (\$million, \$2024-25)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Water	64.0	64.2	65.4	66.8	66.2	326.6
Wastewater	65.0	65.3	65.9	65.9	65.9	328.0
Stormwater	2.0	2.0	2.0	2.0	2.0	10.0
Corporate	62.0	62.7	63.6	63.1	62.7	314.2
Total	193.0	194.2	197.0	197.8	196.9	978.8

Source: IPART analysis

Our draft decision is that Hunter Water's proposed operating expenditure of \$978.8 million over the 2025 determination period is efficient. This is \$2.7 million (1.4%) higher per year, on average, than the allowance we used to set maximum prices in 2020.

This reflects our estimate of the efficient level of operating costs Hunter Water should incur in providing its services over the regulatory period. However, it is not a budget or an amount that Hunter Water is required to spend over the period. Forecasts, costs and unexpected events can change how much Hunter Water needs to spend, and what the priorities of the business are. Hunter Water should focus on continuing to provide value to customers, regardless of the estimated efficient costs we use to set maximum prices.

Hunter Water has adopted IPART's base-step-trend methodology to forecast its operating expenditure for the 2025 determination period. This included:

- Establishing a base operating expenditure for 2023-24. This was formed by using its actual expenditure from July to March, forecast operating expenditure from April to June, then adjusting for climate variability, non-recurring costs, non-controllable costs and efficiency improvements.
- Applying a growth trend factor of 1.3% per year (corresponding to dwelling growth) and applying a real price input trend to forecast operating cost components including labour, energy, maintenance and treatment operations.
- Adjusting for any step changes in operating expenditure for additional focus on customer service outcomes, reallocating expenditure from capital to operating for digital technologies and operating the Belmont desalination plant.⁴⁴

Hunter Water has also proposed a cost efficiency target of 0.9%^a per annum of its forecast operating expenditure over the 2025-30 pricing period.⁴⁵

4.1.1 Hunter Water's proposed base operating expenditure is efficient

Hunter Water proposed a base operating expenditure of \$175 million in 2023-24.46 To help inform our decision on whether this is an efficient benchmark for future operating expenditure, our expenditure experts reviewed Hunter Water's actual expenditure against the efficient level of operating expenditure to set maximum prices in 2020 and evidence provided to support adjustments made for climate variability, non-recurring and non-controllable costs.

We consider Hunter Water operated efficiently over the 2020 determination period. Over the 2020 determination period, Hunter Water's actual operating expenditure was slightly lower (\$20.6 million or 2.7%) than the estimated efficient costs we used to set maximum prices in 2020. This is set out in Table 4.2.

^a Hunter Water proposed a cost efficiency target of 1.0% per year over the 6 years from 1 July 2025 to 30 June 2030. This equates to 0.9% per year over the 5 years from 1 July 2025 to 30 June 2030.

Table 4.2 Hunter Water's operating expenditure over the 2020 determination period (\$million, \$2024-25)

	2020-21	2021-22	2022-23	2023-24	Total
2020 allowance	196.0	193.1	193.3	189.8	772.1
Hunter Water's actual cost	188.9	182.3	185.0	195.3	751.5
Difference (\$)	-7.1	-10.8	-8.2	5.5	-20.6
Difference (%)	-3.6%	-5.6%	-4.2%	2.9%	-2.7%

Source: IPART analysis

Our independent expenditure experts, Houston Kemp, found that Hunter Water's processes for identifying and removing non-recurring and non-controllable expenditure from the base year was robust. Hunter Water clearly explained the reasons for the differences in spending including reduced spending from COVID-19 impacts in the earlier years and increasing wastewater treatment and maintenance costs from extreme wet weather conditions in later years. Houston Kemp's analysis also noted that Hunter Water performed well against its peers for most categories in benchmarking studies conducted by Water Services Association of Australia (WSAA) and National Performance Reports.⁴⁷

Given the above, we consider Hunter Water's proposed base expenditure to forecast annual operating expenditure is efficient.

Hunter Water proposed some additional costs since its pricing submission

In February 2025, Hunter Water asked us to consider new cost information relating to its treatment operations contract. The new cost information follows the recent completion of Hunter Water's 2-year long procurement process for its retendered treatment operations contract. The cost increase proposed by Hunter Water amounts to \$24.6 million over the 2025 determination period. Hunter Water states the cost increase is material and it cannot reasonably absorb this scale of costs within its proposed expenditure level.

We have reviewed the information provided to us by Hunter Water and consider that its proposed increase in costs for this purpose is likely to be accurate and is derived through a competitive tendering process. However, we consider there is scope for Hunter Water to absorb these costs within its envelope of efficient expenditure. As noted earlier, we have not made any adjustments to Hunter Water's proposed operating expenditure, and consider it is a mature organisation that is well equipped to reprioritise costs and seek efficiencies to absorb this proposed cost increase within its envelope of allowed expenditure.

4.1.2 Step changes in expenditure are efficient and justified

Hunter Water proposed to increase base operating expenditure by \$40.7 million over the 2025 determination period for the following step changes:

- \$10 million to deliver customer outcome commitments based on community panel recommendations
- \$3.5 million for the operation of the Belmont desalination plant

- \$22.4 million for the shift in digital solutions from capital to operating expenditure
- \$4 million to deliver projects to meet regulatory requirements
- \$0.9 million to support vulnerable customers.48

We consider proposed step changes in expenditure for community panel recommendations to address leakage issues, reducing carbon emissions and resolving repeat service problems are reasonable and efficient. It is also appropriate to reallocate expenditure from capital to operating to upgrade digital infrastructure to manage cybersecurity risks, support data protection and managing billing.

We have made a draft decision to accept Hunter Water's proposed step changes in full.

4.1.3 Trend expenditure is reasonable

We asked Houston Kemp to review Hunter Water's proposed growth trend factor and real input price change trend. Houston Kemp found that Hunter Water's growth trend of 1.3% and forecast energy, maintenance and treatment operation costs were reasonable.⁴⁹ However, it noted that Hunter Water's labour costs were likely to be conservative, and it would be open to IPART to adjust these costs upwards.⁵⁰

We consider that there is inherent uncertainty in forecasting trend expenditure and applying a higher allowance for remuneration growth may impact Hunter Water's ability to negotiate future contracts. We consider that Hunter Water has demonstrated robust processes in how it has costed its proposed expenditure and should be able to manage increasing cost pressures within the funding envelope that it has proposed. Therefore, we agree with Hunter Water's proposed trend expenditure and have not made any adjustments to it.

4.1.4 Hunter Water proposed a suitable target for ongoing efficiency

Cost efficiency targets are an important way for businesses to demonstrate a commitment to achieving ongoing efficiency and delivering improved value to customers.

Hunter Water proposed a cost efficiency target of 0.9% per year on its forecast operating and capital expenditure. For operating expenditure, this equates to a cost efficiency of \$36.4 million over the 2025 determination period.^b The efficiency factor is made up of a 'bottom up' component which identifies specific cost savings opportunities, and a 0.8% top-down efficiency factor applied to the remaining operating expenditure to reflect Australia's long-term average annual change in multifactor productivity. It identified a range of opportunities to achieve its efficiency targets including in digital transformation, workforce planning, its management of facilities and vehicles.⁵¹

Hunter Water has set a cost efficiency target of 1.0% per year over the 6 years from 1 July 2024 to 30 June 2030. This equates to 0.9% per year over the 5 years from 1 July 2025-30.

Houston Kemp assessed Hunter Water's targets and stated that they were conservative, particularly given the growing cost pressures on customers and savings opportunities presented by technology. It recommended that a 1.5% efficiency target would be more appropriate in the current landscape and pointed to examples of other utilities in Victoria that are targeting 2% annual efficiency savings.⁵²

We recognise businesses are now facing increasing cost pressures when operating, so we are cautious about setting targets that may adversely impact service levels and customer outcomes. We have considered Hunter Water's proposed efficiency target in context of the overall level of risk it is taking on through its outcome targets, incentive schemes and expenditure prioritisation. With this in mind, we consider that Hunter Water's proposed 0.9% efficiency target is sufficiently challenging while delivering improved customer outcomes. Our draft decision is therefore to not make any adjustments to Hunter Water's proposed efficiency.

4.2 Hunter Water's expenditure for 2024-25 deferral year is efficient

In November 2021, we approved the extension of Hunter Water's current pricing period by one year, to 2024-25. This meant that prices remained constant at 2023-24 levels, and no operating expenditure allowance was set for 2024-25. As part of this review, we have assessed Hunter Water's expenditure in 2024-25 to ensure its costs were efficient and in customers' best interests.

Hunter Water's forecast operating expenditure is \$195.9 million for the 2024-25 deferral year.⁵³ This is slightly higher than its average annual determination allowance of \$193 million.⁵⁴ Hunter Water noted that that many of the cost drivers over 2020-21 to 2023-24 would continue into 2024-25, including non-recurring expenditure on digital transformation projects, increasing digital service costs and non-recurring costs for procuring a new treatment operations contract.

Houston Kemp assessed Hunter Water's expenditure over 2024-25 and found that while it experienced various increasing cost pressures, its forecast 2024-25 costs remain comparable to that of the prior year. Houston Kemp's view is that no adjustments should be made to Hunter Water's 2024-25 operating expenditure. 55

We agree with Houston Kemp's assessment and consider that Hunter Water's forecast 2024-25 expenditure is reasonable in view of actual expenditure from the year prior, and the remaining cost pressures seen through the 2020 determination period. Our draft decision is to accept Hunter Water's proposed forecast operating expenditure for 2024-25 without any adjustments.

Chapter 5

Capital expenditure



Summary of our draft decisions on capital expenditure

Include all of Hunter Water's capital costs since 2019-20 in its regulatory asset base

We reviewed Hunter Water's capital costs since 2019-20 to determine whether they met the prudence and efficiency criteria to include them within its RAB roll-forward.

Our view is that all of Hunter Water's capital costs during this period were prudent and efficient. Our draft decision is to include Hunter Water's actual capital costs since 2019-20 to its RAB roll-forward.

Include \$1.6 billion of efficient capital expenditure into Hunter Water's notional revenue requirement build-up over the 2025 determination period

We have made a draft decision to include \$1.6 billion of Hunter Water's capital expenditure into the notional revenue requirement build-up for the 2025 determination period.

In its optimisation of capital expenditure and through its customer consultation, Hunter Water prioritised the construction of the new Belmont desalination plant and excluded or deferred other projects that may also have produced improved outcomes for customers. We are seeking feedback on whether Hunter Water's capital expenditure proposal delivers the right customer outcomes for this price period, or whether customer outcomes could be better optimised by delivering on other capital works.

This chapter sets out our assessment of Hunter Water's capital expenditure required to deliver good quality services and promote customer outcomes. Hunter Water's capital costs are the investments it makes to buy, build and renew the infrastructure and equipment it uses to provide its services (e.g. water mains and pipelines, wastewater treatment plants, IT systems).

We have carefully reviewed Hunter Water's proposed capital costs in light of its long-term investment plan, the impacts of climate change on its assets and planning, growth in the Hunter region and the need to address priority customer outcomes and deliver value for money.

In reaching our draft decisions, we considered independent expert advice from Houston Kemp, additional supporting documentation provided by Hunter Water and comments from stakeholder consultation. Houston Kemp's report on its assessment of Hunter Water's expenditure is available on our website.⁵⁶

5.1 Hunter Water spending over the last 5 years

Our draft decision is:



3. To assess Hunter Water's actual capital expenditure since 2019-20 as efficient, as shown in Table 5.1.

Our decisions on capital expenditure reflect our assessment of the prudent and efficient level of expenditure on capital works that should be included in a businesses' regulatory asset base and be recovered through prices. When we assess historical capital expenditure, we look at spend over the current determination period (2020-25), as well as spend over the final year of last determination period (i.e., 2019-20)^a.

Since 2019-20, Hunter Water's actual capital expenditure was slightly higher (\$15.2 million or 1.4%) than the efficient funding envelope set in the 2020 determination. This is set out in Table 5.1 below.

Table 5.1 Efficient capital expenditure for the 2019-25 period (\$millions, \$2024-25)

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25 ^b	Totalc
Determination allowance	216.9ª	248.2	220.9	198.0	169.1	n/a	1053.1
Hunter Water's actual	218.3	215.9	182.7	213.7	237.7	266.8	1068.3
Difference (\$)	1.4	-32.3	-38.2	15.7	68.6	n/a	15.2
Difference (%)	0.6	-13.0	-17.3	7.9	40.6	n/a	1.4

a. This figure refers to the expenditure we determined as efficient in our 2020 review of Hunter Water's prices b. 2024-25 figure is a forecast.

Based on our initial assessment of Hunter Water's proposal and the minor overspend of its allowed capital expenditure, we did not consider it was necessary to conduct a detailed ex-post review of Hunter Water's historical capital expenditure. Although Houston Kemp didn't specifically review Hunter Water's historical capital expenditure, it found that Hunter Water generally did well at promising its capital spending within the target revenue it expected to receive from customers during the period.

We have made a draft decision to include all of Hunter Water's actual capital expenditure since 2019-20 in the regulatory asset base to be recovered through prices in the upcoming period.

c. In this table, the total determination allowance considers only 5 years between 2019-20 and 2023-24. This is because no explicit allowance was set for 2024-25 period when the price review was deferred.

We look at spend over the final year of last determination period (2019-20) because at the time of setting prices for our current determination period (2020-21 onwards) we would not have had a complete year of actual expenditure data from 2019-20 to assess its efficiency.

5.2 We have accepted Hunter Water's proposed capital expenditure

Our draft decision is:



4. To include \$1.6 billion of capital expenditure into Hunter Water's notional revenue requirement build-up for the 2025 determination period, as shown in Table 5.2.

The capital expenditure allowance we set for Hunter Water represents our view on the overall envelope of capital expenditure that we consider reasonable to maintain or improve Hunter Water's assets and services over the upcoming determination period, and that should be recovered through prices. It doesn't signal the amount they are required to spend on specific capital projects, or discrete allowances for specific works. We expect a business to prioritise its planned prudent and efficient capital works within the envelope of capital expenditure that we consider reasonable to recover through customer prices.

We have made a draft decision to accept Hunter Water's proposed capital expenditure of \$1.6 billion over the 2025 determination period. Table 5.2 below summarises our draft decisions on Hunter Water's efficient level of capital expenditure for the 2025 determination period.

In the following sections we step through our analysis and explain how and we reached this draft decision. We also note specific areas where we are seeking input from stakeholders to inform our final decisions on Hunter Water's capital expenditure.

Table 5.2 Draft decision on Hunter Water's efficient capital expenditure (\$million, \$2024-25)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Water	322.0	264.5	153.8	134.0	79.3	953.8
Wastewater	69.0	76.9	94.1	111.6	120.2	471.9
Stormwater	9.1	6.5	6.4	6.4	6.4	34.8
Corporate	19.9	18.6	18.4	18.4	18.4	93.7
Total	420.1	366.5	272.8	270.5	224.3	1,554.2

Hunter Water proposed \$1.6 billion in capital expenditure over the 2025 determination period

Hunter Water has proposed investing \$1.6 billion capital expenditure across a range of projects.⁵⁷ This includes:

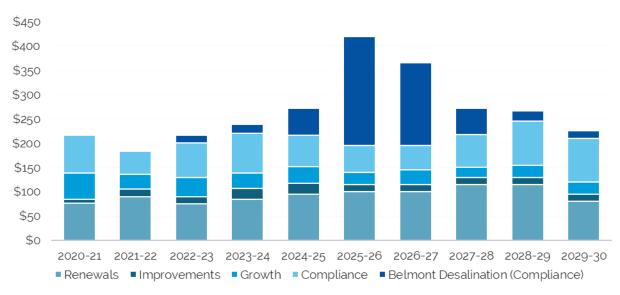
- \$512 million on water security, mainly comprising expenditure on the new Belmont desalination plant as well as some leakage reduction works across its water network.
- \$387 million on environmental sustainability, including upgrades to the Burwood Beach wastewater treatment plant to address ocean sludge discharges and stage 3 treatment works, increasing the operating capacity of the Morpeth wastewater treatment plant as well as numerous other wastewater network renewals to prevent dry weather overflows and replace ageing or vulnerable assets.

- \$298 million to provide reliable water services, targeting replacements and augmentations
 in response to Community Panel recommendations to maintain consistency of water supply,
 ensure adequate water pressure for new and existing customers, and address areas of repeat
 failures.
- \$159 million for community and worker safety through critical dam safety works at Grahamstown and Chichester dams, as well as various network and treatment plant upgrades.
- \$147 million for providing high-quality, clean and safe water, mainly comprising treatment upgrades to the Grahamstown Water Treatment Plant and other water treatment asset renewals.
- \$93 million to deliver on other outcomes spanning business enablement and addressing Community Panel recommendations on 'value for money and affordability'58

It also proposed a \$41 million efficiency target⁵⁹, bringing its total proposed capital costs over the 2025 determination period to \$1.55 billion. It identified various cost efficiency programs to pursue over the upcoming period to deliver these efficiencies, including optimising its procurement by tendering bundled work packages and continuing early contractor involvement to drive construction phase efficiencies.⁶⁰

Overall, Hunter Water's proposed capital expenditure is a reasonable uplift from spending levels in prior years – with a larger a portion of these costs expected to be incurred in the earlier years of the upcoming period. Figure 5.1 below compares Hunter Water's proposed capital expenditure for this period relative to prior years.

Figure 5.1 Comparison of Hunter Water's proposed capital expenditure to prior years (\$million, \$2024-25)



Source: Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 109

Hunter Water prioritised capital expenditure and made trade-offs to keep costs lower for customers

In developing its proposal Hunter Water undertook an investment planning process that initially resulted in a capital expenditure program of over \$2.1 billion over the 2025 determination period. It states that this investment scenario comprised of several well-justified and prudent projects to address compliance obligations and stakeholder expectations, with only modest improvements in other areas such as carbon reduction.⁶¹ Upon progressing its customer engagement Hunter Water states that it chose to prioritise customers' want to keep bills as low as possible in light of the current cost-of-living pressures.⁶² This resulted in a reprioritisation of its capital program that brought its planned expenditure down from \$2.1 billion to \$1.6 billion over the 2025 determination period. Hunter Water's proposal notes that it progressively reduced expenditure by testing what it meant for risks and outcomes, and that it decided to take on risk in areas where it could monitor performance and respond as needed if new risks emerged.⁶³

We consider Hunter Water's key business systems and processes, including risk, asset management and procurement, are robust and mature. It has not been overly risk-averse in how it has forecasted its expenditure. It has demonstrated a high level of accountability taking more risk by reprioritising and making trade-offs in expenditure to manage customer affordability.

We note however that a large portion of Hunter Water's proposed capital expenditure is driven by the Belmont desalination plant. The desalination plant is expected to drive \$460 million of capital expenditure over the 2025 determination period, roughly 30% of its total capital proposal. §4 In its investment planning process Hunter Water chose to prioritise the Belmont desalination plant to deliver improved water security for its customers. In choosing to do so, it deferred other important capital expenditure projects that could also deliver improved value to customers in other areas. §5

We are interested in hearing from stakeholders on whether Hunter Water's prioritisation of the Belmont desalination plant over other capital works delivers the right customer outcomes for this price period, or whether customer outcomes could be better optimised by delivering on other capital works. We discuss the planning and investment in the Belmont desalination plant further below in Section 5.3.

We consider Hunter Water's capital expenditure proposal is prudent and efficient

Houston Kemp reviewed Hunter Water's proposed capital expenditure for the 2025 determination period and proposed:

- A lower bound expenditure allowance of \$1.2 billion, whereby:
 - \$344 million of expenditure on the Belmont desalination plant could be delayed given the low probability of reaching low water storage levels in the 2025 determination period, and
 - \$1.8 million of expenditure on planning for biosolids treatment could be delayed until there is clearer guidance from the NSW Government on regulatory requirements
- An upper bound expenditure allowance of \$1.6 billion, equivalent to Hunter Water's proposal without any adjustments.⁶⁶

Houston Kemp's lower bound of \$1.2 billion is primarily driven by its recommendation to defer a portion of capital expenditure for the Belmont desalination plant. Houston Kemp's analysis showed that there was a very low probability of reaching critical water storage levels in the 2025 price period. Specifically, it calculated that there was only a 1 in 50,000-year probability that storage levels would reach below the point where Hunter Water would have no confidence that water could continue to flow in its network.⁶⁷ Houston Kemp also expressed concern that Hunter Water did not sufficiently engage with its customers on trade-offs between water security risk and costs of deferring investment. Based on this, Houston Kemp concluded that it would be open to IPART to defer some of the investment on the Belmont desalination plant. It proposed that some portion of the expenditure (\$178 million) could be incurred in this price period to reduce the timing risk for Hunter Water if it needed to construct the desalination plant in the future in a shortened timeframe.⁶⁸

Houston Kemp also noted that despite these concerns, Hunter Water did demonstrate a genuine need for water security investment and that its community supported this investment driver inprinciple. Houston Kemp's upper bound recommendation was therefore to include the entirety of the Belmont desalination plant in Hunter Water's capital expenditure allowance.

We have considered Houston Kemp's report, Hunter Water's proposal, stakeholder views and undertook additional analysis on this matter. We consider Hunter Water's proposed expenditure represents a reasonable balance of risk, affordability and delivery of priority customer outcomes. The expenditure included within Hunter Water's proposal is generally well justified and tied to specific service outcomes for customers. Our draft decision is therefore to accept Hunter Water's proposed capital expenditure of \$1.6 billion over the 2025 determination period, equivalent to roughly \$311 million per year. This is \$102 million (or 49%) higher on average per year than the allowance we used to set maximum prices in 2020.

As noted earlier, the major driver for Hunter Water's proposed capital expenditure is the Belmont desalination plant. While we set maximum prices based on an envelope of capital expenditure that promote customer outcomes, rather than an allowance for specific projects, it would be disingenuous not to assess the need for, and costs of this investment. This is because including this expenditure has crowded out other capital expenditure that may also have improved other customer outcomes. We discuss our reasoning for including expenditure for the Belmont desalination plant in the section below.

5.3 We consider it is prudent to include expenditure for the Belmont desalination plant in this period

The case and need for the Belmont desalination plant has been investigated by both Hunter Water and the NSW Government through the Lower Hunter Water Security Plan since 2021. This investment:

- Is intended to provide a rainfall-independent supply and improve the water security for Hunter Water customers.⁷⁰
- Is designed to ultimately deliver up to 25% of Hunter Water's demands in times of drought.71
- Is supported and approved by the NSW Government.⁷²

The upper bound of Houston Kemp's recommendation is to accept Hunter Water's proposal to build the Belmont Desalination plant and the lower bound is to defer some of the construction. Houston Kemp did not recommend any efficiency adjustments to how Hunter Water has costed this investment. We consider the decision on whether to include the full costs of the Belmont desalination plant in Hunter Water's expenditure allowance requires a balancing of financial considerations, water security risks and commitments under the Lower Hunter Water Security Plan.

The Belmont desalination plant addresses a very low probability drought event

We acknowledge there is a genuine need to address water security risk in the Hunter region. However, we also recognise that the probability of a drought severe enough to completely deplete water storage is very low.

When storage levels fall below 40%, Hunter Water typically implements stage 3 water restrictions and total ban on outdoor water use. Houston Kemp's analysis found minimising the chances of reaching this trigger was a major driver for the desalination plant, but that the current chances of the triggers being met were already considerably low.⁷⁴

Houston Kemp found that the construction of the Belmont desalination plant would change the annual probability of:

- reaching a storage level where stage 3 water restrictions and a total outdoor water ban would be implemented from 1 in 143 years to 1 in 400 years
- reaching a storage level where Hunter Water would risk of running out of water could have to deliver water in rations from 1 in 1,429 years to 1 in 5,000 years
- reaching a storage level where Hunter Water is no longer confident that water would flow in its network from 1 in 50,000 years to less than 1 in 100,000 years.⁷⁵

In other words, the construction of the Belmont desalination plant could provide only marginal benefit to customers, given that it is designed to reduce a drought risk that is already considerably low.

Deferring only part of the construction may not be in customers' best interests

Although the drought risks targeted by the desalination plant are already very low, we acknowledge that water security remains an issue that must be addressed in the Lower Hunter region.

In this respect, Houston Kemp explored the option of deferring some of the construction of the Belmont desalination plant. In its lower bound capital expenditure recommendation, it suggested that given the extremely low drought risks in the current price period, Hunter Water could defer a large part of the construction costs and undertake only some necessary early works in the 2025 period. These early works could reduce the timing risk for Hunter Water in the future if it needed to construct the plant within a shortened timeframe.

When we asked Hunter Water about the trade-offs of this staging approach, it noted that staging the plant construction would not materially shorten the lead time to deliver the plant reactively, highlighting that the current program has already been optimised so that long lead-time activities occur in parallel.

Given the above we consider that it is not in customers' best interest to defer only part of the expenditure for construction of the desalination plant. As such we do not agree with Houston Kemp's view that there are merits in undertaking only some capital works for the Belmont desalination plant in this period while deferring others to a future price period.

Customer engagement on the Belmont desalination plant is varied

A key reason for Houston Kemp's lower bound recommendation is that Hunter Water did not sufficiently engage with consumers on the trade-off between water security risk and the costs of deferring investment. Houston Kemp found that customers and the community were informed that the preferred Lower Hunter Water Security Plan (including the building of a desalination plant at Belmont) would cost around \$220 million and was likely to add a one-off increase between \$75 and \$120 (i.e. a 6 to 9% increase) to customer bills in 2021. However, since this time the costs of the desalination plant have risen to \$530 million and indicated bill impacts would be around \$78 on average per year, every year, over the 2025 determination period.77

Hunter Water told us that even though they did not consult specifically on the bill impacts for this price review, they shared potential bill impacts of the desalination plant in a media release when they sought government approval to modify the plant design in January 2024. Hunter Water also noted that feedback from customers did not question the need for and timing of this project but rather questioned whether alternative funding arrangements would be available to alleviate affordability impacts.

The desalination plant addresses the need for water security in line with the Lower Hunter Water Security Plan

We have considered Houston Kemp's report, Hunter Water's proposal and stakeholder feedback on this matter. We also considered the scope of Hunter Water's customer engagement on the Belmont desalination plant since 2021, and how the outcomes of that engagement influenced its pricing proposal.

We agree with Hunter Water that the Belmont desalination plant provides important and necessary water security during periods of severe droughts. The desalination plant provides customers with long-term supply continuity and can be relied upon during times of low water quality (for example, following water quality deterioration after bushfires) to augment drinking water supply. There is a genuine need to address water security in the lower Hunter region. Even though the Belmont desalination plant targets drought risks that are already considerably low, we consider it is prudent and efficient to include the plant costs in Hunter Water's envelope of efficient expenditure for this price period.

While we propose to include these desalination plant costs into the draft expenditure envelope for this period, Hunter Water continues to have discretion on how and when it makes capital expenditure decisions that reflect its customers priorities and are in customers long term interests. In so doing Hunter Water should continue to make prudent investment decisions that deliver outcomes it has communicated with customers for this price period, including for instance, on water security.

We are seeking stakeholder views on whether delivering the Belmont desalination plant in this period optimises outcomes for customers

In reaching our draft decision we were conscious that Hunter Water chose to prioritise the Belmont desalination plant to deliver improved water security for its customers, and to do so, it deferred other important capital projects that would also deliver customer value in other areas. We also note that the drought scenarios driving the desalination plant are already very low probability events, and as such there could be a risk that customers bear a significant increase in bills for only a marginal water security benefit in return.

Hearing stakeholders' views on important pricing decisions, like the Belmont desalination plant, is an important part of our review process. We are interested in your views on whether Hunter Water's prioritisation of the Belmont desalination plant over other capital works delivers the right customer outcomes for this price period, or whether customer outcomes could be better optimised by delivering on other capital works.

Seek Comment



Do Hunter Water's proposed capital investments, including the Belmont desalination plant, deliver on the most important outcomes for customers in this price period?

Chapter 6 🔊

Other costs and notional revenue



Summary of our draft decisions on revenue requirement

Set Hunter Water's notional revenue requirement at \$2,406 million over the 2025 determination period

This is \$108 million or 4.3% lower than Hunter Water's proposal. This change is primarily due to due to a reduction in the return on assets allowance resulting from our use of a 3.2% WACC, rather than Hunter Water's calculated 3.6% WACC.

We continue to use the building block approach to calculate Hunter Water's notional revenue requirement, as is outlined in our 3Cs handbook.⁷⁸

In Chapter 4 we discussed our draft decisions on Hunter Water's efficient operating expenditure. Similarly in Chapter 5 we discussed capital expenditure levels to be included in Hunter Water's regulatory asset base (RAB). This chapter now outlines our draft decisions on the other remaining building blocks and adjustments, which are:

- Return on assets
- Return of assets (also known as the regulatory depreciation allowance)
- Working capital allowance
- Tax allowance
- Revenue adjustments.

6.1 Hunter Water's notional revenue requirement is \$2,406 million

Our draft decision is:



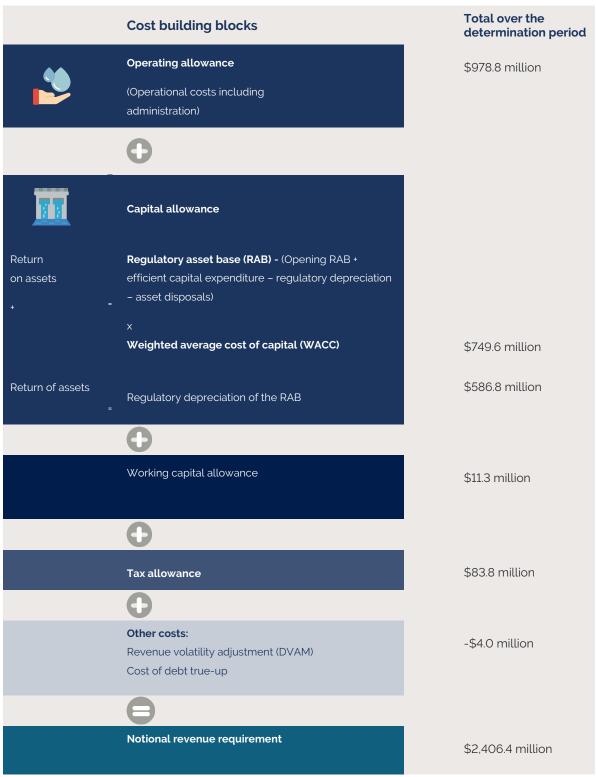
5. To set Hunter Water's notional revenue requirement as \$2,406 million over the 2025 determination period.

Hunter Water's notional revenue requirement is calculated as a build-up of various cost components – such as operating expenditure allowances, capital allowances and allowances for tax. We refer to each of these cost components as 'building blocks'.

We have calculated each of these building block cost allowances and by adding them together, we arrive at a notional revenue requirement for Hunter Water of \$2,406 million over the 2025 determination period. This amount represents our draft assessment of the total revenue Hunter Water must generate to recover the efficient costs of providing its services to customers.

Figure 6.1 summarises the build-up of the notional revenue requirement using our standard building bock approach. The figures shown below are a total over Hunter Water's 5-year determination period.

Figure 6.1 Building block approach



Note: All dollar values shown are in \$2024-25 terms

Our draft decision on Hunter Water's notional revenue requirement is slightly (4.3%) lower than what Hunter Water proposed. This is primarily because our draft decisions apply a WACC of 3.2%, compared to Hunter Water's proposal which used a slightly higher WACC of 3.6%. Our WACC calculation differs from Hunter Water's because it applies more up-to-date market data than was available at the time that Hunter Water calculated the WACC for its pricing proposal.

Table 6.1 below compares our draft decision on Hunter Water's notional revenue requirement with its proposal.

Table 6.1 Draft decision on total notional revenue requirement for the 2025 determination period (\$ millions, \$2024–25)

	Hunter Water's proposed total NRR	IPART's draft decision on total NRR
Operating expenditure	978.8	978.8
Return on assets	839.2	749.6
Return of assets (depreciation)	579.5	586.8
Return on working capital	11.1	11.3
Tax allowance	109.6	83.8
NRR before adjustments	2518.2	2,410.3
DVAM	6.1	6.1
Cost of debt true-up	-10.1	-10.1
NRR after adjustments	2,514.0	2,406.4

Source: Hunter Water price proposal and IPART analysis

The following sections step through our decisions on each of the building block components of Hunter Water's notional revenue requirement – except operating expenditure, which has been explained earlier in Chapter 4.

A full breakdown of our draft decisions on Hunter Water's building blocks is provided in Appendix D.1

6.2 Return on assets

Our draft decisions are:



- 6. To set an allowance of \$749.6 million for the return on assets component of the notional revenue requirement, noting that:
 - The opening RAB for the 2025 determination period is \$4,147.9 million, and we added \$868.1 million of capital costs (net of depreciation) for the period
 - We included a capital allowance for Hunter Water's 'Advanced' graded proposal in the corporate RAB, equivalent to 1.25% of the NRR for the 2025 determination period
 - We used a real post-tax WACC of 3.2% as the efficient rate of return.

We include an allowance for return on assets in the revenue requirement to account for the opportunity cost of capital invested to provide regulated services. This ensures businesses can continue to make efficient capital investments in the future. We calculate the return on assets by multiplying the value of the regulatory asset base (RAB) over the determination period by an efficient rate of return.

We calculated a return on assets allowance of \$749.6 million for Hunter Water over the 2025 determination period.

The value of the regulatory asset base over the 2025 determination period is \$5,016 million

The regulatory asset base (RAB) represents the value of Hunter Water's assets on which it should earn a return on capital and an allowance for depreciation. We calculated the opening RAB for the 2025 determination period by "rolling the RAB forward" from the previous determination period. To do this we:

- Added \$1,197.4 million of historical capital expenditure from 2020 determination period, as discussed in Chapter 5.1.
- Deducted \$462.4 million for regulatory depreciation of assets and asset disposals
- Added \$752.4 million to account for annual indexation of the RAB

To calculate the RAB for each year of the 2025 determination period we then:

- Added \$1,464.2 million of forecast capital expenditure, which is based on the efficient capital
 expenditure allowance set out in Chapter 5, minus cash capital contributions and asset
 disposals. This also includes a corporate capital allowance of \$30 million for Hunter Water's
 'Advanced' proposal grading (this is discussed further in the section below).
- Deducted \$596.1 million for regulatory depreciation of assets

Our calculations result in the RAB increasing from \$4,148 on 1 July 2025 to \$4,946 million by 30 June 2030. Our full RAB roll forward calculations are shown in Appendix D.1.2.

We included a capital allowance for Hunter Water's 'Advanced' grading in the RAB

Our 3Cs framework allows businesses to earn one-off financial rewards from delivering Advanced or Leading proposals that deliver customer value and demonstrate step changes in performance. Where we agree with the business that its proposal is Advanced or Leading, the business becomes eligible to receive a grading allowance – calculated as a percentage of the revenue requirement added to the forecast revenue requirement.

Since we have agreed with Hunter Water's self-assessment and made a draft grading of 'Advanced', Hunter Water would be eligible for a grading allowance of 1.25% of its annual revenue requirement. We have added this grading allowance to Hunter Water's corporate RAB, with a return of capital over 12 years. Capitalising the grading allowance into the corporate RAB has the effect of spreading the impact of this allowance across 17 years^a, rather than just 5 years.

This would amount to, on average, \$6 million per year over the determination period.

As noted earlier, this 'Advanced' grading allowance is only available to a business once – i.e., Hunter Water would not be eligible for an additional allowance for maintaining an 'Advanced' proposal grading at its next price review.

We used a real return on capital (post-tax real WACC) of 3.2%

As in previous reviews, we determined the rate of return using a weighted average cost of capital (WACC). We used our standard WACC approach⁷⁹ to calculate a WACC of 3.2% for Hunter Water's draft prices. This is lower than the 3.6% WACC that Hunter Water used to calculate revenue requirement in its pricing proposal.

A full step-through of our WACC calculation is provided in Appendix C.

6.3 Return of assets (regulatory depreciation)

Our draft decision is:



7. To set the return of assets (regulatory depreciation allowance) as \$586.8 million.

We include an allowance for depreciation in the notional revenue requirement to ensure that the capital invested by Hunter Water in its regulatory assets is returned over the useful life of each asset.

Consistent with our usual approach, we used the straight-line depreciation method to calculate regulatory depreciation. Under this method, the assets in the RAB are depreciated by an equal value in each year of their economic life. We consider this method balances the need for simplicity, consistency and transparency.

We did not make changes to standard asset lives for any asset types. D.1.3 shows our draft decisions on asset lives for the 2025 determination period.

^a With the final reward allowance in 2029-30 being returned over the 12 years to 2041-42 – 17 years after the commencement of the 2025 Determination.

6.4 Return on working capital

Our draft decision is:



8. To set the return on working capital as \$11.3 million over the 2025 determination period.

The working capital allowance component of the notional revenue requirement represents the return the business could earn on the net amount of working capital it requires each year to meet its service obligations. It ensures the business recovers the cost it incurs due to the time delay between providing a service and receiving the money for it (i.e. when the bills are paid).

In 2018, we developed a standard approach to calculate the working capital allowance, which can be found on our website.

The amount we allowed for the 2025 determination period represents the holding cost of net current assets.

6.5 Tax allowance

Our draft decision is:



9. To set the tax allowance as \$83.8 million over the 2025 determination.

When setting maximum prices we include an explicit allowance for tax because we use a post-tax WACC to estimate the allowance for a return on assets in the revenue requirement. This tax allowance reflects the regulated business' forecast tax liabilities. The tax allowance is not intended to recover Hunter Water's actual tax liability over the determination period. Rather, it reflects the liability that a comparable commercial business would be subject to.

We calculated the tax allowance for each year by applying a 30% statutory corporate tax rate adjusted for franking credits to the business's (nominal) taxable income. We applied our standard methodology to set the tax allowance.

We will consider changes to our tax allowance approach in setting Hunter Water's final maximum prices

Regulated businesses can receive contributions from developers towards infrastructure for new development in 2 forms: as cash from developer charges or as assets constructed by the developer and gifted to the regulated business called Assets Free of Charge (AFOC). When calculating a business's tax allowance in our notional revenue requirement, we typically include an allowance for income tax that they would need to pay on these cash and AFOC developer contributions.

We are currently reviewing our usual approach for AFOC tax allowances and are considering whether allowances should be provided to regulated water businesses for tax on AFOC going forward. We are also considering refining our usual approach of calculating tax allowances for cash capital contributions to account for imputation (franking) credits.

Our draft decision on Hunter Water's tax allowance continues our usual approach to setting tax allowances. However, in reaching our final decisions we will consider refining our usual approach to remove tax allowances for AFOC, and to account for imputation credits in cash capital contribution tax allowances going forward. Box 6.1 below summarises these changes and their expected impacts on the notional revenue requirement and on bills. We welcome feedback from any interested stakeholders on this approach.

Box 6.1 Refining our approach on allowances for tax on developer contributions

In a recent ruling in the case of *Victoria Power Networks Pty Ltd v Commissioner of Taxation*⁸⁰, the Full Federal Court of Australia ruled that gifted assets to certain regulated businesses were not assessable as income. Based on this, we are considering discontinuing including allowances for tax on AFOC (and associated depreciation allowances) in the notional revenue requirement for Hunter Water and other regulated water businesses.

We are also considering refining our usual approach of calculating tax allowances for cash capital contributions to account for imputation (franking) credits. Our current approach sets aside 30% of cash capital contributions for income tax. However, we recognise that this does not allow for the value of franking credits. If we were to account for franking credits, we would instead set aside 22.5% of cash contributions for income tax.

Under our draft decisions, Hunter Water's tax allowance for the 2025 determination period is \$83.8 million. This is based on our usual approach, and does not take into account these 2 changes.

Removing tax allowances for AFOC and setting aside 22.5% (instead of 30%) of cash contributions for income tax, Hunter Water's tax allowance for the 2025 determination period would reduce to \$42.5 million – i.e., a reduction of roughly \$41 million (or 50%) from our draft allowance. All else being equal, this would result in typical bills reducing by \$31 per year, on average, compared to typical bills under our draft decisions. We will consider including these changes in making our final decisions on Hunter Water's prices.

a. All figures are in \$2024-25 terms Source: IPART analysis

b Consistent with the parameters we use to set the WACC, where imputation credits are valued at 0.25.

6.6 Revenue adjustments

Our draft decision is:



- 10. To make the following revenue adjustments to Hunter Water's notional revenue requirement over the 2025 determination period:
 - \$6.1 million for the Demand Volatility Adjustment Mechanism (DVAM)
 - -\$10.1 million for the cost of debt true-up.
- 11. To accept Hunter Water's proposal to not true-up its efficient costs incurred in the deferral year.

Demand volatility (DVAM) true-up

Under the price cap approach, we use a demand volatility adjustment mechanism (DVAM), to adjust for any over- or under-recovery of revenue resulting from actual demand being different to forecasts. The DVAM protects businesses from under-recovery due to lower than forecast water sales and protects customers in the case of any over-recovery through bills.

In 2020, we set the DVAM threshold at $\pm 5\%$ for Hunter Water. This means Hunter Water is only able to recover the difference between its actual sales and forecast demand, if the difference is greater than $\pm 5\%$ over the price determination period. This 5% threshold incentivises businesses to accurately forecast and manage water sales. We make DVAM adjustments in the pricing period after the differences have occurred.

Between 2019-20 and 2023-24, Hunter Water's actual demand was lower than its forecast demand. As a result, it under-recovered \$53 million in revenue compared to what it initially forecasted under the demand assumptions applied to the 2020 pricing determination.

We applied our DVAM calculation methodology, including the 5% difference threshold, and calculated a revenue adjustment of \$6.1 million for Hunter Water to account for demand volatility over the previous pricing period. This is consistent with what Hunter Water calculated in its pricing proposal. We have made a draft decision to include this \$6.1 million DVAM revenue adjustment to Hunter Water's notional revenue requirement for the 2025 determination period.

Cost of debt true-up

Our 2018 review of the WACC method introduced a trailing average cost of debt. Under this method the WACC changes every year as new tranches of debt are introduced to the trailing averages and the oldest tranches drop out.⁸² In our 2018 WACC methodology, we decided that at each price review we would consider whether to:

- update prices annually to reflect the updates in the WACC annually, or
- use a regulatory true-up at the next period, which we would pass through to prices at the beginning of the next period⁸³

We have made a draft decision to use a true-up approach for changes to the cost of debt, consistent with our approach in Hunter Water's 2020 price determination. We consider this reduces price fluctuations within price periods for customers while ensuring that businesses are adequately compensated for changes in the cost of debt that occur within each price period.

We have calculated a cost of debt true-up for the 2020 price period of \$-10.1 million. Our draft decision is to include this true-up as an adjustment to Hunter Water's 2025 determination period revenue requirement.

Deferral year true-up

In 2021 we agreed to defer the scheduled 2023-24 water price reviews for Hunter Water by one year. This meant that the 2023-24 prices set out in the 2020 Determination remained constant in nominal terms in 2024-25, and as a result, Hunter Water under-recovered its efficient costs over 2024-25.

Hunter Water did not propose to true-up the efficient costs it incurred in 2024-25. We have made a draft decision to accept Hunter Water's proposal as we consider that it is in the short-term interests of customers by keeping bills lower than they otherwise would be. In our view this position is in line with our assessment of Hunter Water's proposal as 'Advanced', and we consider that Hunter Water is placed to assess and mitigate its revenue risks, including by choosing to not accept a true-up for its revenue under-recovery over 2024-25.

Appendix D.1.7 steps through our calculation of what a deferral year true-up would be, had we made a draft decision to apply it to Hunter Water's notional revenue requirement.

6.6.1 Cost pass-throughs

Our draft decisions are:



12. To accept Hunter Water's proposal to maintain its existing cost-pass through for drought water usage prices.

When there is a known, material cost that the business cannot control, we can include an upfront cost pass-through in the determination. However, a business can only automatically pass the costs through to customers within the determination period if the costs are actually incurred. Further information of our approach to cost pass-throughs is available in section 5.1.1 in the 3Cs handbook.

Drought water usage pricing

We introduced dynamic water usage pricing in our 2020 price review, to reflect that water businesses faced additional costs during drought, and to send a stronger signal to customers to conserve water in periods of scarcity. Under the mechanism, the water usage price increases when water storage levels are low. Box 6.2 explains how the dynamic drought pricing mechanism works.

Hunter Water has proposed maintaining the cost pass-through for drought water usage prices. We agree with Hunter Water that setting a dynamic drought water usage price is an efficient mechanism to signal to customers the higher costs for businesses to manage drought and incentivises customers to manage their water usage during drought conditions, and that the higher costs incurred by businesses during droughts are uncontrollable and should be recovered via a pass-through.

Our draft decision is to maintain the cost pass-through for drought water usage prices.

Box 6.2 Drought pricing mechanism

The dynamic drought pricing mechanism means that the water usage charge varies between a non-drought price and a higher drought price, based on dam storage levels. The mechanism includes a 'rolling' trigger where the drought water usage price will apply from 31 days after dam levels fall below 60% and return to the base price 31 days after dams exceed 70% again.

The rolling trigger has various advantages:

- The 'on' and 'off' triggers are asymmetric so only a significant increase in water storage levels will turn off the drought price. This will minimise price volatility due to small fluctuations in dam levels and ensure that the water business has greater certainty of its funding for drought management projects.
- The drought price only applies for a limited time and is closely related to dam levels to closely reflect the water businesses' costs.
- By lagging the trigger by one month, a water business is able to communicate with customers about price changes, which would provide a better opportunity for customers to adjust their behaviour.

The water usage price is calculated by starting with the non-drought water usage charge, and then:

- Adding the efficient operating costs of responding to drought, including for instance, costs for implementing water conservation programs, costs incurred in enforcement or communications during water restrictions, or drought management overheads.
- Reducing water sales forecasts to reflect the impact of water restrictions.

Source: IPART analysis

Chapter 7

Price setting



Summary of draft decisions on price setting

We accept Hunter Water's forecast of its demand for 2025-30, which is that water demand will increase by 0.2% per year, as shown in Table 7.1.

While Hunter Water expects that population growth will put upward pressure on demand, this will be largely offset by water efficiency improvements and changes in consumer behaviour, as well as declining non-residential demand.

Hunter Water's demand forecasting should be improved for the next price determination period by the inclusion of a price elasticity demand adjustment

Hunter Water's forecasts for this determination period are not adjusted to account for customers' potential demand response to higher water prices. It has not included an adjustment due to the uncertainty of price elasticity and considers this is in the customers' interest as an adjustment would increase prices.

We accept Hunter Water's proposal to maintain the DVAM at the same ±5% threshold

We agree with Hunter Water that its current arrangements to manage revenue volatility are robust, and appropriate to continue. This threshold means that Hunter Water only recovers the difference between actual and forecast demand if it is greater than 5% (above or below forecast).

Price structure

We have accepted Hunter Water's proposals for setting the usage charge of water and wastewater, and we have set the service charge to recover efficient costs.

Non-residential customers with a common meter

We do not accept Hunter Water's proposal to set a minimum service charge for non-residential customers with a common meter, and consider that Hunter Water should undertake further work to understand impacts on customers for the next determination.

This chapter sets out our approach to assessing Hunter Water's proposed:

- price control
- forecast demand
- price structure
- approach to managing revenue volatility for the 2025 determination period
- drought pricing
- discharge factors.

These elements ultimately inform the draft prices that we set, as outlined in Chapter 8.

7.1 Price control

Our draft decision is:



12. To accept Hunter Water's proposal to continue with the price cap approach to regulation.

In line with our 3Cs framework, water businesses can propose a form of price control that is in their customers' interest. Also in our framework is that the regulatory period lasts for 5 years. Hunter Water has proposed to maintain its current form of control, which is a price cap. A price cap approach has some important benefits, such as:

- maintaining consistent revenue streams to support the business's operations
- providing predictable prices to customers.

Further information on price controls and the different forms is available in section 4.7.3 of the Water Regulation Handbook.

We accept Hunter Water's proposal to continue with a price cap approach for the 2025 determination period.

7.2 Water Demand

Understanding past and future demand for water services is important for setting maximum prices. We set prices using forecasts of:

- the number of customers we expect would receive water services in each year of the 2025 determination period (forecast connections)
- the volume of water we expect a water business would provide in each of those years (forecast water sales volumes).

Further information on demand forecasts and how businesses are required to justify their forecasts is available in section 4.7.2 of the Water Regulation Handbook.

There are a lot of factors that impact water demand. The most important factors are:

- the population mix, number of dwellings, and mix of residential property types
- water efficiency schemes influencing adoption of water saving technologies
- changing consumption behaviours, including the influence of water conservation campaigns
- demographics of customers, including age and socioeconomic status
- a changing and more variable climate.

Hunter Water considers these factors in its modelling to forecast demand.

We note that water demand over the 2020 determination period was 5.7% lower than forecast. Hunter Water explain this difference between forecast and actuals by downward pressure on demand by the weather being wetter than average, more conservation behaviours by customers, and impacts of COVID-19 such as on tourism. It also noted that actual population growth was higher than forecast, which placed upward pressure on water sales.⁸⁴

7.2.1 We accept Hunter Water's forecast sales volumes

We consider that Hunter Water's demand forecasting approach is appropriate and it has applied a robust methodology. It is continuing its approach from previous determination periods, and has incorporated appropriate inputs including regional development plans, demographic trends, and historical growth.

While population growth continues, Hunter Water expects demand to be relatively flat. Water efficiency improvements, changes in consumer behaviour, and declining non-residential demand mean that forecast water sales volumes only increase marginally.

Hunter Water has not taken account of price elasticity of demand in developing its demand forecast. In general, we would expect that price increases would reduce demand. Hunter Water has not made an adjustment because it considers price elasticity for water is uncertain, and it notes that it considers the increased price as a result of price elasticity would not be in customers' interest.

We consider that to continue to refine and improve its demand forecasts, Hunter Water should develop an approach to including a price elasticity adjustment to its future forecasts, and we expect this to be included in its forecast for the 2030 determination period.

We accept Hunter Water's proposed demand forecast, as set out in Table 7.1.

Table 7.1 Draft decision on forecast water sales volumes

	2025-26	2026-27	2027-28	2028-29	2029-30
Sales (GL) ^a	60.07	60.24	60.39	60.61	60,62
Demand (GL) b	65.42	64.48	63.91	63.78	63.64

a Water sold to customers, including treated and untreated water

Source: IPART analysis

7.2.2 Demand volatility adjustment mechanism (DVAM)

We use DVAM as a tool to account for uncertainty. DVAM allows for an adjustment to a business' NRR to account for over or under-recovery of revenue due to material differences between forecast and actual water sales over the previous determination period. The DVAM protects businesses from under-recovery due to lower than forecast water sales, and protects customers in the case of over-recovery. In 2020, we set the DVAM threshold at \pm 5% of forecast revenue from water sales, meaning an adjustment is only made if the difference between actual sales and forecast demand is greater than 5%.

b Total demand including sales volumes, unbilled water usage, losses, etc.

We accept Hunter Water's proposal to keep in place the same arrangements, a $\pm 5\%$ threshold for the DVAM as for the 2020 determination.

7.3 Price structure

Our draft decision is:



- 13. To maintain the existing price structure of variable and fixed components for water and wastewater pricing.
- 14. To not accept Hunter Water's proposal to apply a minimum service charge to non-residential multi-premises customers that share a common meter.

7.3.1 Water price structure

For the 2025 determination period, we accept Hunter Water's proposals regarding price structure, which contained few changes to its overall price structure. We agree with Hunter Water that its structure has been refined over successive price determinations periods, and that it is fit for purpose.⁸⁵

Chapter 8 outlines the fixed and variable charges a customer will have to pay for the 2025 determination period. This section discusses why we approved the proposed split between fixed and variable charges put forward by Hunter Water.

Hunter Water has explained that it considers its proposal to increase the variable usage charge by more than the fixed service charge is in the customers' interest. Increasing the usage charge gives customers some ability to minimise the impact of price increases, by using less water. Hunter Water also consider that it is appropriate for the usage charge to increase, as it is consistent with the LRMC to signal that water is a limited precious resource.⁸⁶

Hunter Water engaged with its customers on price structures, reflecting that customers showed a high degree of interest in price structures.

Hunter Water engaged with customers on whether:

- prices should increase with a large one-off increase in year 1, or a gradual phasing,
- increases should be passed on to customers via fixed charges, variable charges, or a mixture of both.

Hunter Water's customer engagement included online surveys and focus groups. As a result of this engagement, Hunter Water proposed to:

increase prices in 5 smaller increments, rather than one big increase, as it reflects customer
preferences to minimise impact on customers who are also experiencing higher cost-ofliving.

put more of the price increase on the usage charge, as customers prefer that to increasing
the service charge. Reasons include because customers feel they have more control over
usage, and because it promotes water conservation. In this engagement, few customers
preferred all the price increase on one of either the service or usage charge, and the majority
of customers preferred a mixture with most of the increase on the usage charge.

Feedback to our Issues Paper showed that generally customers had a preference for usage charges compared to fixed charge, as usage charges would allow customers to control their bill through their usage. We also note that broadly we considered Hunter Water's customer engagement was graded Advanced and that engagement was genuine and influenced the pricing proposals.

7.3.2 Hunter Water's Long Run Marginal Cost (LRMC) estimates

LRMC is an estimation of the additional cost of providing an additional unit of water or wastewater. We use LRMC as a key reference point to set usage prices, as prices that relate to LRMC will promote efficient consumption.

To estimate LRMC, Hunter Water have adopted IPART's algebraic methodology, and validated this against alternative methodologies which were used previously. It estimated the LRMC of water supply based on its water demand forecast and its planned investment. Hunter Water's best estimate of LRMC is \$4.70 per kL, which is above the current water usage price (\$2.89 per kL in 2024-25).⁸⁷

Table 7.2 Hunter Water's estimates of Long Run Marginal Cost

	Estimate over 30 years	35 years	40 years	45 years
IPART algebraic method	\$4.70/kL	\$4.70/kL	\$4.70/kL	\$4.70/kL
AIC method	\$4.61/kL	\$4.73/kL	\$4.55/kL	\$4.29/kL
Turvey method	\$5.53/kL	\$4.97/kL	\$4.65/kL	\$4.31/kL

Source: Hunter Water 2024 Pricing Proposal.

7.3.3 Drought pricing

As set out in Chapter 6, Hunter Water has a dynamic drought water usage price that is added to the standard price when triggers are met (such as storages falling below a certain level). The price increase acts as a signal to customers to encourage water conservation, and to ensure cost recovery during periods of water restrictions when operating costs are higher, and water sales revenue is lower. Our decision on drought water pricing is different from Hunter Water's proposal as we corrected for an error in its assumption about when Level 1 restrictions would apply. This resulted in higher costs, and higher revenue shortfall, and consequentially, the drought usage prices increased to 55 cents per kilolitre.

Table 7.3 Draft decision for drought uplift to water usage prices (\$/kL, \$2024-25)

	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Hunter Water proposal	0.50	0.44	0.44	0.44	0.44	0.44
IPART's decision	0.50	0.55	0.55	0.55	0.55	0.55

Source: Hunter Water 2024 Pricing Proposal, IPART analysis

7.3.4 Wastewater pricing

Similarly to water prices, wastewater prices are split into 2 parts:

- fixed service charge
- a 'usage' charge, based on estimated wastewater discharged.

We accept Hunter Water's proposal to retain the existing price structure and to calculate the service charge as a residual based on water meter size and discharge factors. We also note that Hunter Water has referenced the LRMC and Short Run Marginal Cost (SRMC) in considering an indicative range for its wastewater usage charge.⁸⁸

Hunter Water converts the size of a customer's water meter to a wastewater meter, to which the meter-based service charge applies. It applies the wastewater usage charge to the customer's estimated wastewater discharge volume (discharge factor x volume of water used). The discharge factor reflects the percentage of a customer's water consumption that is discharged to the wastewater network. We use discharge factors because, unlike water consumption, wastewater discharges are often not separately metered.

The wastewater usage charge includes a price per kilolitre of wastewater discharged or deemed to have been discharged into the sewer system. The calculation of this charge depends on customer type:

- Residential customers pay for a deemed volume of wastewater discharge (discharge allowance). Due to the 'fixed' nature of this charge, it is included within the fixed service charge rather than as an explicit usage charge on customer bills. Residential customers are deemed to have a 20 mm meter and discharge 75%.⁸⁹
- Non-residential customers pay a wastewater usage charge.
 - A very small number of the largest customers have a sewer meter connection, and the usage charge may be based on actual metered discharge.
 - Most customers do not have a sewer meter connection, and thus the wastewater usage charge is based on metered water usage and a customer specific sewer discharge factor. The sewer discharge factor is set to reflect the estimated portion of metered water usage discharged into the sewer system.⁹⁰

The wastewater service charge is a fixed charge set at a level to recover the residual capital and operating costs of the wastewater system. Hunter Water considers that most of the costs associated with providing wastewater services are fixed and do not vary with the volume of wastewater discharged, and thus it proposes that its fixed service charge should recover nearly all of the wastewater revenue.⁹¹

Hunter Water engaged with customers on whether for residential wastewater prices, the fixed charge based on deemed usage should continue, or whether a variable component based on estimated discharge should be introduced. The engagement shows mixed support for reintroducing an explicit residential wastewater usage charge. Just over 50% of respondents supported the idea, however Hunter Water did not consider this was a sufficient level of support for change, particularly given the complexities of making such a change. Its engagement found that after explaining the charge further, there was more support for retaining the current structure. It had also observed that some stakeholders who preferred an explicit residential wastewater charge may not have understood that it would negatively impact them. For example, large household customers considered that an explicit residential wastewater usage charge could help them manage bills however it would also mean that their starting bill would be higher based on a higher water usage.⁹²

We accept Hunter Water's proposal to continue with its current approach and use the deemed usage for wastewater charges.

7.3.5 Estimates of marginal cost inform the wastewater usage charge

To promote efficient price signals, it is important that usage charges, where applicable, have reference to the long run marginal cost (LRMC). Hunter Water estimates that its LRMC of wastewater treatment of \$0.62/kL, LRMC of wastewater networks is at least \$0.07/kL. These estimates gives a combined estimate for LRMC wastewater of \$0.69/kL.

We note that Hunter Water estimates its short run marginal cost (SRMC), to be \$0.25/kL. The usage price proposed is \$0.77/kL (nominal) which is higher than both the SRMC and LRMC estimates.

Hunter Water proposes to maintain the current wastewater price of \$0.77 per kL in nominal terms. Hunter Water considered a slight reduction in the usage price, reflecting the range of SRMC and LRMC estimates, but considered that a reduction could incentivise inefficiently high discharge in some catchments that have higher LRMC and SRMC. It proposes that by maintaining the price in nominal terms, the price will gradually reduce with inflation and thus become more cost reflective. Hunter Water also consider maintaining the price will provide consistency across pricing periods.⁹³

7.3.6 Hunter Water proposed lower charges for apartments than houses

Separately to the structure of charges, Hunter Water proposed changes to calculating the residential deemed allowance which would result in different prices depending on whether customers live in houses or in apartments.⁹⁴

In our 2020 determination, IPART put in place arrangements so that over time house- and apartment- owning customers would pay the same for wastewater services. This was envisaged in the 2013 pricing determination. Hunter Water recognises that there is no significant difference in the costs to provide wastewater services to house and apartment customers and has proposed to maintain this transition to align service charges. However, its proposed change to calculating the 'deemed allowance' would mean that apartments and house-owning customers would not pay the same wastewater services.

Residential customers are deemed to be served by a 20 mm meter and have a deemed allowance based on an assumed discharge factor of 75%.

Hunter Water proposed to change the deemed allowance for houses and apartments by using different average water consumption forecasts for houses and apartments, reflecting that apartments tend to discharge less than houses. Currently houses have a deemed discharge volume of 120 kL per year (75% of a 160 kL of typical residential water consumption) while apartments have an assumed deemed discharge volume of 111 kL per year which was set to match that of houses in the next determination. Hunter Water has proposed to change this as it has found that average water consumption for apartments is below this at 102 kL/year. It proposed to use different deemed discharge amounts:

- 126 kL for houses
- 77 kL for apartments.

The assumed 75% discharge factor would stay the same for both property types. The proposed changes to the assumed wastewater discharge volume (discharge allowance) would result in lower wastewater bills for customers that live in apartments.95

Overall, we accept the proposals for deemed discharge for residential customers.

Table 7.4 IPART draft decision – deemed discharge for residential customers

Deemed discharge (kL)	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
House	120	126	126	126	126	126
Apartment	111	77	77	77	77	77

Source: Hunter Water 2024 Pricing Proposal, IPART analysis

Non-residential customers

Non-residential customers are charged according to actual water meter size(s) and a customer-specific sewer discharge factor.

- Properties with a 20 mm water meter are levied the same base charge as residential customers, before the application of a discharge factor. Customers with larger meters pay a proportionately higher base charge to which the discharge factor is then applied.
- Sewer discharge factors depend on the nature of an individual customer's business. Businesses that typically discharge most of their water-use to the sewer, such as hotels, restaurants and petrol stations, have higher discharge factors. Businesses that use most of their water on-site, such as a garden nursery or golf course have lower discharge factors.

7.3.7 Stormwater charge structure

Only about a quarter of connections (~72,000) receive a stormwater service from Hunter Water.97

Hunter Water has calculated stormwater pricing in the same manner as previous price controls and proposed to retain the same price structure. Residential customers are charged for stormwater according to property type, and non-residential customers are charged for stormwater based on land size. Land size is a readily available proxy for the impact that stormwater customers have on the system, though Hunter Water acknowledge it is not a perfect proxy, as other factors such as topography, permeable surfaces, vegetation and property use also impact stormwater.98

Customers can apply to have their property designated as 'low impact' and to receive a lower stormwater drainage charge, if they take significant steps to manage stormwater on their property.

We accept Hunter Water's pricing structure for stormwater charges.

7.3.8 Charges for non-residential customers with a common meter

Hunter Water has proposed applying a minimum service charge to non-residential multipremises customers that share a common meter.⁹⁹

Non-residential customers pay service charges based on their meters. Under the current determination:

- a non-residential customer in a multi-premises served by a common meter pays a share of the fixed charge for the common meter (shared between other non-residential customers also connected to the common meter)
- a non-residential customer with a separate meter (including a sub-meter) pays the fixed charge for the separate meter
- a non-residential customer in a mixed residential multi-premises pays the fixed residential charge (based on a residential property deemed to have a 20 mm meter).

Non-residential service charges are also adjusted based on discharge factors (assumed percentage of water usage that is discharged as wastewater).

A minimum adjusted wastewater service charge applies to non-residential customers. This is set at 75% of the 20 mm meter service charge and is consistent with the service charge paid by residential customers. We made this decision in 2020 to share the fixed costs of wastewater equitably between non-residential and residential customers. Without a minimum charge, non-residential customers with a 20 mm meter and a low discharge factor would pay significantly less than residential customers.

Hunter Water proposed to change the current price structure for non-residential customers

The current price structure means there are differences between what non-residential customers pay in service charges based on their metering arrangements. Non-residential customers in a multi premises that are served by a common meter (businesses in a large building) pay fixed charges that are less than what non-residential customers pay if they are:

- separately metered (e.g. a business in a stand-alone property)
- served by a common meter but are sub-metered where in this case these customers pay the fixed charge associated with the submeter (e.g. a business in a strip mall that has installed its own meter)
- in a mixed-multi premises (e.g. a business at the bottom of a block of residential units).

Hunter Water proposes that non-residential customers in multi-premises are subject to a minimum charge which would lessen the divide between similar non-residential customers that place similar costs on the system. This should apply to water and wastewater service charges.¹⁰¹

Hunter Water considers that this arrangement causes an issue where there is no incentive for these customers to install sub-meters. Hunter Water has told us that non-residential customers have declined a sub-metering arrangement or have requested the removal of sub-meters from existing arrangements. Hunter Water would prefer these customers install sub-meters as this would allow customers greater control over their water usage and support water conservation.¹⁰²

While we recognise there is an inequity under the current structure, we do not consider there is enough evidence to support a change in structure at the present time. Applying a minimum charge would lead to substantial impacts on non-residential customers, particularly in the first year of the next determination. Hunter Water has told us that the proposed changes would impact:

- 2,227 wastewater properties
- 3,085 water properties.

Hunter Water provided analysis on the bill impacts on individual properties:

- Wastewater bill impacts in 2025-26:
 - the largest impact would be \$703 (for 2 customers)
 - the median impact would be \$540
 - 59% of properties would experience an increase in their wastewater bills by \$500 to \$700
- Water bill impacts in 2025-26
 - the largest impact would be \$42
 - the median impact would be \$35
 - 40% of properties would experience an increase in their water bills by \$35 to \$40.

Hunter Water has provided us with a sample of types of customers to help us understand customers that would be affected including customers currently serviced by a common meter. We do not have enough evidence on the types of non-residential customers to suggest that applying the minimum charge would remove the inequity without causing further inequity.

For example, of the types of customers presented that share common meters, there does not necessarily appear to be many customers that would benefit from sub-meters, and or are material water users, for example, retail stores, banks and other professional services. For these customers, it may be reasonable that they share the fixed costs of a common meter particularly if water use is reasonably shared (e.g. through common bathrooms and sinks). Charging a minimum bill that is substantially higher than what they already pay may be inequitable for these customers particularly.

Hunter Water has highlighted how a takeaway food store under a common arrangement would pay less than a stand-alone retail store, when it would impose more costs to the system. We do not have enough evidence to suggest that this issue is widespread across non-residential customers, where there is reason for these customers to submeter.

We consider an appropriate approach is for Hunter Water to identify the non-residential customers in multi-premises that share a common meter where a sub-metering arrangement may be more equitable. It should work with them to encourage sub-metering, rather than applying a minimum charge to all non-residential multi-premises customers.

We note that Hunter Water's proposal would not apply to large shopping centres whose tenants pay rent to the shopping centre and where the shopping centre is treated as one large customer.

We consider revisiting this issue in the next determination would allow time for Hunter Water to gather more information about the impacts on non-residential customers as well as work with customers on sub-metering where this would be the preferred arrangement for them.

Seek Comment



- 2. Do you agree with applying more of the necessary price increases to usage charges to give you more control over your bills?
- 3 Should price increases be gradually phased in, or should they increase through a larger one-off step?
- 4. Should there be a minimum service charge for multi-premise non-residential customers who share a common meter?

Chapter 8 🔊

Draft prices



Summary of draft prices

Maximum water prices would increase over the 2025 determination period

Our draft decision is to set the water usage price at the level that Hunter Water proposed and set the water service charge to recover the remaining efficient costs. The water service charge is about 50% less than Hunter Water's proposal.

The draft maximum water usage price allows an increase of 52% between current prices in 2024-25 and in the last year of the determination in 2029-30. Water service charges are also increasing.

Maximum wastewater prices would increase over the 2025 determination period

Our draft decision is to set the wastewater usage charge to the level proposed by Hunter Water, which has been maintained constant in nominal terms. We propose to set the wastewater service charge to recover the remaining efficient costs, which is about 4.2% lower than Hunter Water's proposal.

Maximum stormwater prices would increase over the 2025 determination period

Stormwater prices are fixed charges, and we propose to set the maximum price to recover efficient costs, which is about 5% lower than proposed by Hunter Water.

Hunter Water currently provides 3 main services to customers:

- water services
- wastewater services
- stormwater services.

Hunter Water's prices for water services has 2 components:

- a variable usage price (expressed as \$ per kilolitre (kL) of metered water supplied)
- a fixed service price (expressed as \$ per year).

There is also a different water usage price if customers don't receive treated water (raw water), and an increased price for drought.

Hunter Water's prices for wastewater services comprise 2 components:

- a fixed usage charge based on deemed usage and a price of \$X/kL. Wastewater discharge volumes are not directly metered.
 - non-residential customers pay wastewater usage charges based on inferred discharge volume, a customer specific discharge factor x metered water consumption

- residential customers pay wastewater usage charges based on a deemed discharge volume, 126 kilolitres per year for houses, and 77 kilolitres a year for apartments
- A fixed service price (expressed as \$ per year).

Hunter Water's price for **stormwater services** is one fixed charge that applies to about a quarter of connections, who receive a stormwater service from Hunter Water. Stormwater charges are based on:

- property type for residential customers
- land size for non-residential customers.

Hunter Water also provides some recycled water and trade waste services to certain customers.

This chapter sets out the maximum prices for Hunter Water's regulated services under our draft decisions.

Our draft decisions are:



- 15. To set Hunter Water's maximum water usage charges to \$3.19/kL in 2025-26, rising to \$4.40/kL in 2029-30, as shown in Table 8.1.
- 16. To set Hunter Water's maximum water service charges as shown in Table 8.3 for residential customers and Table 8.4 for non-residential customers.
- 17. To set Hunter Water's drought uplift water usage price and raw water price as shown in Table 8.2.
- 18. To set Hunter Water's maximum usage charge for wastewater services at \$0.77/kL.
- 19. To set Hunter Water's wastewater service charges as shown in Table 8.6 for residential customers and Table 8.7 for non-residential customers.
- 20. To set Hunter Water's maximum stormwater charges as shown in Table 8.8.
- 21. To set Hunter Water's trade waste and miscellaneous charges as shown in Appendix D.2 and D.3.

8.1 Draft decisions on maximum water, wastewater and stormwater prices

8.1.1 Water charges

The tables below present our draft decisions on maximum fixed and variable prices for water. These prices are in \$2024-25, which means they will be adjusted for inflation from 2025-26 onwards.

Water charges would increase, as we accept Hunter Water's proposal to increase the water usage charge significantly and increase the service charge by a relatively lesser amount.

Hunter Water has proposed only minor changes to its current price structures, and notes that this structure has been refined over successive price controls and following the 3Cs framework. We consider that Hunter Water has set its usage price with reference to its estimates of long run marginal cost (LRMC), and that it has engaged with customers on its price structure.

Table 8.1 Draft water usage charges (\$/kL, \$2024-25)

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Hunter Water proposal	2.89	3.19	3.49	3.80	4.10	4.40
IPART draft decision	2.89	3.19	3.49	3.80	4.10	4.40
Annual change %		10.4%	9.4%	8.9%	7.9%	7.3%

Table 8.2 Draft water usage charges – drought uplift and raw water (\$/kL, \$2024-25)

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Raw water	0.43	0.48	0.54	0.59	0.65	0.7
Hunter Water proposed - drought water usage	0.50	0.44	0.44	0.44	0.44	0.44
IPART draft price - drought water usage	0.50	0.55	0.55	0.55	0.55	0.55

We have set the fixed service charge to meet the remainder of the revenue requirement and thus recover efficient costs.

Table 8.3 Draft water service charge for residential customers (\$2024-25)

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Hunter Water proposed						
Houses	27.58	42.52	57.47	72.41	87.36	102.3
Apartments	27.58	42.52	57.47	72.41	87.36	102.3
Annual change (%)		54.2%	35.2%	26.0%	20.6%	17.1%
IPART draft price						
Houses	27.58	29.79	32.01	34.22	36.43	38.65

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Apartments	27.58	29.79	32.01	34.22	36.43	38.65
Annual change (%)		8%	7%	7%	6%	6%

Table 8.4 Draft water service charge for non-residential customers (\$2024-25)

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	% change 2024- 25 to 2029-30
Hunter Water proposed							
20 mm	27.58	42.52	57.47	72.41	87.36	102.30	270.9%
25 mm	43.10	66.44	89.80	113.15	136.50	159.85	270.9%
40 mm	110.33	170.10	229.88	289.65	349.43	409.21	270.9%
100 mm	689.59	1,063.11	1,436.72	1,810.33	2,183.94	2,557.55	270.9%
Other sizes	(Meter si	ze in mm) 2 ×	wastewater s			n Meter for th	e applicable Period
				400)		
IPART draft prices							
20 mm	27.58	29.79	32.01	34.22	36.43	38.65	40.1%
25 mm	43.10	46.55	50.02	53.47	56.92	60.39	40.1%
40 mm	110.33	119.16	128.04	136.88	145.72	154.60	40.1%
100 mm	689.59	744.75	800.25	855.50	910.75	966.25	40.1%
Other sizes	(Meter si	ze in mm) ² ×	wastewater s	service charg		n Meter for th	e applicable Period

8.1.2 Wastewater charges

Fixed and variable prices for wastewater are shown below. These prices are in \$2024-25, which means they will be adjusted for inflation from 2025-26 onwards, excluding wastewater usage charges which are to be maintained in nominal terms. Hunter Water has applied IPART's pricing principles and considered customer views in setting wastewater charges.

Wastewater charges are set to increase over the determination period.

Table 8.5 Draft wastewater usage charge – non-residential customers (\$/kL, \$2024-25)

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Hunter Water proposed	0.77	0.77	0.77	0.77	0.77	0.77
IPART draft prices	0.77	0.77	0.77	0.77	0.77	0.77

Note: These prices are to be maintained over the 2025 determination period in nominal terms.

As for water prices, the draft wastewater service charge is set to recover the remaining revenue requirement, and thus recover efficient costs.

Table 8.6 Draft wastewater service charges for residential customers (\$2024-25)

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Residential						
House	789.18	794.73	795.65	796.58	797.51	799.70
Apartment	730.00	757.98	759.88	761.79	763.7	766.38
Annual change %						
House	-	0.7%	0.1%	0.1%	0.1%	0.3%
Apartment	-	3.8%	0.3%	0.3%	0.3%	0.4%

Source: IPART analysis

Table 8.7 Draft unadjusted wastewater service charges for non-residential customers (\$2024-25)

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	% change 2024-25 to 2029-30
Hunter Water proposed							
20mm	929.04	947.65	966.26	984.87	1,003.49	1,022.10	10.0%
25mm	1,451.63	1,480.70	1,509.78	1,538.86	1,567.95	1,597.03	10.0%
40mm	3,716.17	3,790.60	3,865.04	3,939.48	4,013.96	4,088.40	10.0%
100mm	23,226.07	23,691.25	24,156.50	24,621.75	25,087.25	25,552.50	10.0%
IPART draft prices							
20mm	929.04	933.64	938.23	942.83	947.42	952.02	2.5%
25mm	1,451.63	1,458.81	1,465.98	1,473.17	1,480.34	1,487.53	2.5%
40mm	3,716.17	3,734.56	3,752.92	3,771.32	3,789.68	3,808.08	2.5%
100mm	23,226.07	23,341.00	23,455.75	23,570.75	23,685.50	23,800.50	2.5%

8.1.3 Stormwater charges

Charges for stormwater are shown below in Table 8.8. These prices are in \$2024-25, which means they will be adjusted for inflation from 2025-26 onwards. Stormwater charges will increase over the 2025 determination period.

Table 8.8 Draft decision – stormwater charges (\$2024-25)

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029- 30	% change 2024-25 to 2029- 30
Residential							
House	97.04	109.15	121.25	133.36	145.47	157.58	62.4%
Apartment	35.91	40.39	44.87	49.35	53.83	58.31	62.4%
Low impact assessed residential property	35.91	40.39	44.87	49.35	53.83	58.31	62.4%

Non-residential

	Current 2024-25	2025-26	2026-27	2027-28	2028-29	2029- 30	% change 2024-25 to 2029- 30
Small property (up to 1,000m²)	97.04	109.15	121.25	133.36	145.47	157.58	62.4%
Medium property (1,001 - 10,000m²)	316.94	356.48	396.03	435.57	475.11	514.66	62.4%
Large property (10,001 - 45,000m²)	2,015.70	2,267.19	2,518.68	2,770.17	3,021.66	3,273.15	62.4%
Very large property (>45,000m²)	6,404.36	7,203.41	8,002.45	8,801.50	9,600.55	10,399.5 9	62.4%
Non-Residential Property within a Mixed Multi-Premises	35.91	40.39	44.87	49.35	53.83	58.31	62.4%
Low Impact assessed Non-Residential Property	97.04	109.15	121.25	133.36	145.47	157.58	62.4%
Vacant land							
Vacant land	97.04	109.15	121.25	133.36	145.47	157.58	62.4%
Low impact assessed vacant land	35.91	40.39	44.87	49.35	53.83	58.31	62.4%

8.1.4 Recycled water charges

Hunter Water considers recycling when assessing options to deliver water and wastewater services. It has engaged with its customers regarding recycled water, and found there is support to continue investing where the cost of saving water is not higher than the cost of providing the water (or where the project is fully funded by end-users). Customers did not consider it was a priority for the broader community to subsidise additional higher-cost recycled water schemes.¹⁰³

We accept that Hunter Water has applied IPART's methodology for pricing recycled water. In our 2020 Hunter Water price review, we continued to defer setting a maximum price for recycled water delivered by Hunter Water.¹⁰⁴

We have decided to continue to defer setting a maximum price for recycled water schemes, continuing our approach from previous determinations.

8.2 Draft decisions on trade waste and miscellaneous charges

In addition to setting maximum water, wastewater and stormwater prices, we set 2 other types of prices that Hunter Water can charge its customers. These include:

- Trade waste charges for commercial and industrial customers.
- **Miscellaneous and ancillary charges** for other monopoly services that Hunter Water provides, such as damaged mater replacements and conveyancing certificates.

Both trade waste and miscellaneous and ancillary charges account for a minor part of Hunter Water's total revenue. In 2024-25, revenue from these charges is estimated to be \$6.6 million – roughly 1.5% of its notional revenue requirement.

Hunter Water's proposal puts forward various changes to trade waste charges for customers across different catchments. It also proposed a new charge for non-compliance discharge testing and management equivalent to \$3,030.105

Similarly for miscellaneous and ancillary charges, Hunter Water proposed various increases and decreases across service types. It also proposed introducing 2 new charges and removing 5 existing charges.¹⁰⁶

We have considered and reviewed Hunter Water's proposal for these prices and have made draft decisions to largely accept its proposed prices with minor adjustments. In our assessment we have found that Hunter Water's price changes include both increases and decreases that appear reasonable, and consider that Hunter Water has made reasonable effort to ensure these costs continue to be efficient.

The full schedule of trade waste, miscellaneous and ancillary charges are provided in Appendix D.2 and D.3. We welcome feedback from stakeholders on the impacts of these draft charges.

Dishonoured or declined payment fees

IPART also sets the maximum dishonoured or declined payment fee that Hunter Water may charge in its customer contract.

Hunter Water has proposed to significantly reduce this charge, by 80% to \$6.55. This reduction is due to lower third-party costs, and efficiency benefits arising from automation. Hunter Water proposes to apply this fee to all dishonoured or declined payments, including those paid for by debit, credit and cheque. Our draft decision is to accept this proposed charge on the basis of it being reduced and below other businesses' proposals.

Table 8.9 Draft decision - maximum declined or dishonoured payment fees charges (\$2024-25)

Miscellaneous charges	Current charge (\$)	Proposed charge (\$)	Change (\$)	Change (%)
Bank Authority - Payment dishonour	32.36	6.55	-25.81	-79.8%

Seek Comment



What are your views on the draft increases in trade waste and miscellaneous charges?

Chapter 9

Impacts of draft decisions



Summary of decisions on the impact of our draft prices

Typical water and wastewater bills would increase by \$48 on average each year over the next 5 years from 1 July 2025

- Under our draft decisions, typical household water and wastewater bills would increase by \$48 (or 3.6%) each year from 1 July 2025 for 5 years plus inflation. This is lower than the yearly increases under Hunter Water's proposed prices (of \$71 or 5.2% per year), with most of the increase coming from water usage charges. Bills would be 4.7% on average lower each year than under Hunter Water's proposed prices. With inflation, bills would increase by \$89 (or 7.2%) in 2025-26.
- Household customers who live in a house, receive stormwater services and pay stormwater bills to Hunter Water, would also see the stormwater component of their bill increase by \$12 (or 10%) each year from 1 July 2025 for 5 years, plus inflation.
- The pensioner rebate remains effective for keeping most eligible households out of water stress, but other low-income households may still face issues with affordability.

Non-residential customer bills will increase on average between 2.2% and 8.8%

• These increases will be driven mainly by the increases in the water usage charge.

9.1 Our draft decisions allow necessary increases to bills

9.1.1 Household customers

In discussing typical household bills, we refer to the combined water and wastewater bills a household of 3 to 4 people living in a house would pay.^a Some Hunter Water customers (approximately a quarter of customers) also pay stormwater drainage charges to Hunter Water, which means their bills are higher.

Under our draft maximum prices, typical household bills for water and wastewater services would increase by around \$48 (or 3.6%) on average each year over 5 years plus yearly inflation. This is lower than the yearly increases under Hunter Water's proposed prices (\$71 or 5.2%).

The typical household bill would increase from \$1,241 in 2024-25 to:

- \$1,290 in 2025-26 plus inflation
- \$1,481 in 2029-30 in the last year of the 2025 determination period, plus inflation.

With inflation, the typical household bill would increase by \$89 (or 7.2%) to \$1,330 in 2025-26.

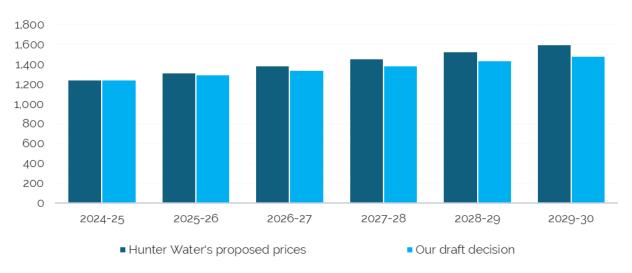
^a This is based on consumption of 146 kilolitres a year, which is the average amount of water an individually metered house in Hunter Water's area of operations uses.

b In \$2024-25 terms.

Figure 9.1 compares the current typical household bill and typical household bills under Hunter Water's proposed prices and our draft decisions. Our draft decision is to accept Hunter Water's proposal to:

- gradually phase in the increase to prices each year as opposed to increasing prices in one step
- apply more of the increase in prices to usage charge, that is the variable component of the hill

Figure 9.1 Typical household water and wastewater bills under our draft maximum prices compared to Hunter Water's proposal (\$2024-25)



Note: Typical household water and wastewater bills are based on a customer living in a house and using 146 kL per year. Bills in 2024-25 reflect current bills.

Source: IPART analysis

Figure 9.2 shows the typical household water and wastewater bill would increase under our draft prices. It shows that the average yearly increase over the 5 years from 2024-25 to 2029-30 would be \$46 (or 9%) for water bills and \$2 (or 0.3%) for wastewater bills, plus inflation.

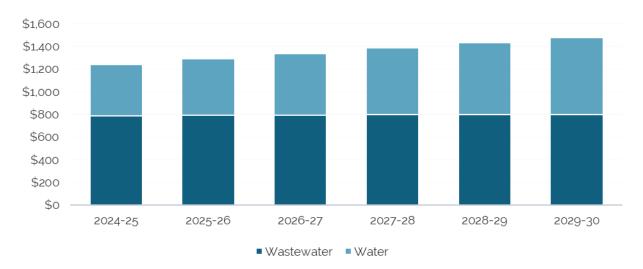


Figure 9.2 Typical bill increases under our draft prices (\$2024-25)

Notes: Typical household bills are based on a customer living in a house and using 146kL per year. Source: IPART analysis.

The bills customers pay to Hunter Water depend on property ownership and metering. If the customer owns a property, they will pay water usage charges as well as wastewater charges. If a customer is a landlord and owns a rental property that is separately metered, the landlord may pay the wastewater and service charges while the renter pays the water usage charge.

Table 9.1 presents bill impacts under our draft prices for a range of households. These bills exclude stormwater charges.

Table 9.1 Draft bill impacts for residential customer types for water and wastewater (\$2024-25)

Customer	Water usage (kL/year)	2024- 25 Current	2025- 26	2026-27	2027- 28	2028- 29	2029- 30	Average change (%)
Owner- occupiers ^a								
Small household - apartment ^b	87	1,011	1,065	1,096	1,127	1,157	1,188	3.3%
Typical household - house	146	1,241	1,290	1,337	1,386	1,433	1,481	3.6%
Large household - house	290	1,657	1,750	1,840	1,933	2,023	2,114	5.0%
Pensioner – house (receives a pensioner rebate)	100	727	745	761	777	793	810	2.2%
Pensioner – house (without pension rebate)	100	1,108	1,144	1,177	1,211	1,244	1,278	2.9%
Renters °								
Renter - small household or apartment with a separate meter	87	251	278	304	331	357	383	8.8%

Customer	Water usage (kL/year)	2024- 25 Current	2025- 26	2026-27	2027- 28	2028- 29	2029- 30	Average change (%)
Renter - typical household with a separate meter	146	422	466	510	555	599	642	8.8%
Renter - large household with a separate meter	290	838	925	1,012	1,102	1,189	1,276	8.8%
Renter - typical pensioner household with a separate meter (no pensioner rebate)	100	289	319	349	380	410	440	8.8%
Property-owner – non-occupiers								
Landlord that leases a separately metered property ^d	n/a							
House		819	825	828	831	834	838	0.5%
Apartment		760	788	792	796	800	805	1.2%

a. As modelled by Hunter Water for its 2024 Pricing Proposal, a small household consists of 1 or 2 people living in their own separately metered apartment, a typical household consists of 3 or 4 people living in their own house, a large household consists of 5 or more people living in their own house with a big garden and/or pool, and a pensioner household consists of 1 or 2 people who own their own home and are eligible for the pensioner rebate.

Source: IPART analysis.

9.2 Household water and wastewater bill increases under our draft maximum prices would vary due to water usage charges

9.2.1 Household bill increases for owner-occupiers would increase on average by 3.6% each year for 5 years from 1 July 2025

Typical household water and wastewater bills under our draft prices would increase by \$48 (or 3.6%) on average each year for 5 years, plus inflation. This is an increase of \$50 from current bills to 2025-26 and an increase of \$240 by the last year of the 2025 determination period (2029-30).

For other households, water and wastewater bills would increase each year over the next 5 years, plus inflation for:

- small households living in an apartment by \$35 (or 3.3%)
- large households living in a house by \$92 (or 5.0%)

b. If the property is not separately metered (i.e. served by a common meter), these households would pay a usage component based on their unit entitlement (this is a percentage apportionment of total water usage of the building).

c. If the property is separately metered, renters can be charged the water usage charge. If the property is not separately metered, the property owner would also pay a usage component based on their property's unit entitlement (this is a percentage apportionment of total water usage of the building).

d. Based on a landlord that leases a separately metered property and can pass on the usage component of the property's bill to the tenant. The landlord pays the service charges. If the property is served by a common meter, the landlord would pay for a usage component based on the property's unit entitlement (this is a percentage apportionment of total water usage of the building).

pensioner households without a rebate, by \$34 (or 2.9%), and with a rebate, by \$17 (or 2.2%).

These average yearly increases over the next 5 years are between 1.1% to 1.9% per year less than that proposed by Hunter Water. Typical bills under our draft prices are on average \$70 (or 4.7%) lower than bills under Hunter Water's proposed prices. By the end of the determination period in 2029-30, typical household bills would increase by 19.4% from 1 July 2025 under our draft prices, as opposed to 28.7% under Hunter Water's proposed prices.

With inflation, water and wastewater bills would increase in the first year of the 2025 determination period from 1 July 2025 for:

- small households living in an apartment by \$87 (or 8.6%)
- large households living in a house by \$147 (or 8.9%)
- pensioner households without a rebate, by \$71 (or 6.4%), and with a rebate, by \$56 (or 8.6%).

9.2.2 High water usage charges will increase bills for renters

Renters who are separately metered would experience higher impacts in their bills, largely due to increases in the water usage charge.

Household water bills for renters would increase by 8.8% on average each year over the next 5 years, plus inflation, or by:

- \$44 for renters of typical houses using 146 kL
- \$88 for renters of large houses using 290 kL
- \$26 for renters of apartments using 87 kL
- \$30 for pensioners households using 100 kL

Under our draft maximum prices, water usage bills for a typical household would increase by 52.2% from 2024-25 to 2029-30, which is the same increase for water usage per kL as under Hunter Water's proposed prices (see Appendix D.4).

With inflation, water bills would increase by 13.8% in the first year of the 2025 determination period from 1 July 2025, or by:

- \$58 for renters of typical houses using 146 kL per year
- \$116 for renters of large houses using 290 kL per year
- \$35 for renters of apartments using 87 kL per year
- \$40 for pensioners households using 100 kL per year

The household bills paid by landlords include the water service charge, wastewater service change and a deemed wastewater usage charge. Bills paid by separately metered landlords would remain relatively flat on average each year over the next 5 years, plus inflation for:

- houses by \$4 (or 0.5%)
- apartments by \$9 (or 1.2%)

This represents an increase of 2.4% for houses and 6.0% for apartments from current prices to the end of the determination period in 2029-30, compared to 16.6% for houses and 21.3% for apartments under Hunter Water's proposed prices (see Appendix D.4).

With inflation, wastewater bills would increase in the first year of the 2025 determination period from 1 July 2025:

- landlords of houses by \$31 (or 3.8%)
- landlords of separately metered apartments by \$52 (or 6.9%).

9.3 Affordability is a concern for customers

Affordability and high inflation were key concerns among stakeholders for this review. We recognise that prices increasing for inflation could have substantial impacts on some customers, including pensioners.

9.3.1 Bills as a proportion of income will worsen for low-income groups

We have calculated affordability ratios for bills as a proportion of a household's pre-tax income. A systematic review of studies analysing water and wastewater affordability used a threshold between 2 and 5%.¹⁰⁷ We have used a threshold of 3%, as proposed by the UN.¹⁰⁸

Our analysis shows that affordability ratios would remain well within the 3% threshold for most households over the period. However, bill increases under our draft maximum prices would predominantly impact low-income households.

Appendix D.4 shows affordability ratios under our draft maximum prices for households earning a median income of \$104,809 would increase between current levels to the end of the determination period in 2029-30 from:

- 1.2% to 1.4% for a typical household
- 1.0% to 1.1% for a median apartment
- 1.6% to 2.0% for a large household (5 or more people who own their own home, live in a house with a big garden and/or pool and have relatively high water use).

For low-income households (earning below \$50,771° per year) using 134 kL per year, the affordability ratio increases from 2.4% to 2.8%, and from 3.3% to 4.2% for a low-income family with a large household (using high water usage).

By comparison, high-income groups earning above \$179,648 and using 215 kL per year, the affordability ratio increases from 0.8% to 1.0%, and from 0.9% to 1.2% for a large household with a high income.

Income quartile median incomes based on ABS 2021 Census data reported in profileid NSW Weekly income data and adjusted for wage growth and income quartile usage based on IPART, Residential water usage in Sydney, Hunter and Gosford, 2016, p. 43.

Approximately 27% of households in the Hunter Water service area earn incomes within the lowest income quartile. This is around 62,700 households.¹⁰⁹

9.3.2 Renter households who are separately metered remain below the 3% threshold

While most bill increases are in the water usage charges, we found that despite these large yearly increases, renters who are separately metered and pay the water usage charges will remain below the 3% water stress threshold.

As shown in Appendix D.4, under our draft maximum prices separately metered households earning median incomes will see affordability ratios increase from:

- 0.2% to 0.4% for apartments,
- 0.4% to 0.6% for typical households
- 0.8% to 1.2% for large households by 2029-30.

Typical pensioner households will see bills increase from to 1.0% to 1.5% of their income for single pensioners and from 0.6% to 1.0% for coupled households.

Low-income renter households that are separately metered will see their bills increase from 0.8% of their income currently to 1.3% by 2029-30 with low water usage (134 kL per year) and from 1.7% to 2.5% by 2029-30 for low-income renter households with high water usage (290 kL per year).

9.3.3 There may be impacts to affordable housing

We note that our focus on water usage increases on separately metered renter customers does not take into account the long run impact on rental prices for tenants who live in apartments that are not separately metered.

In the long run, it is likely that bill increases will be passed from landlords with properties that are not separately metered on to their tenants, which may increase cost-of-living pressures for low-income renter households.

9.3.4 Pensioner rebates provide some financial assistance

We are conscious the proportion of a 200 kL/year bill received as a pensioner rebate to eligible customers has not increased for many years.

The pensioner rebate is available to Pension Concession Card holders and Department of Veteran Affairs Gold Card holders. Eligibility includes customers receiving the aged pension, disability support pension, the carer payment, the parenting payment and JobSeeker recipients who are single with one dependant and looking for work.¹¹⁰

d Commonly metered properties do not pay for their water usage.

Our analysis of pensioner rebates shows that the rebate is currently successful in reducing pensioner bills below the 3% water stress threshold for both single and couple households receiving the aged pension, disability support pension and carer payment. However, by the end of the determination period, single households receiving these pensions (and the pension rebate) will be close to the threshold with bills reaching 2.7% (see Appendix D.4).

We note that the pensioner rebate is ineffective in reducing bills to below 3% for owner-occupier single parents with one dependent on JobSeeker payments.

We also find that other low-income groups that are not eligible for the pensioner rebate may see their bills increase beyond the 3% water stress threshold (see Appendix D.4.

The rebate available to Hunter Water customers is a capped proportion of a bill based on a yearly usage of 200 kL and is significantly lower than the rebate available to pensioners served by Sydney Water. Therefore, we recommend that the NSW Government review pensioner concessions for water and wastewater bills across NSW.

9.3.5 Hunter Water provides other forms of financial assistance

Hunter Water told us it has mechanisms in place to assist customers in financial difficulty and provides payment plans and other assistance schemes. Examples of such measures are:

- extension of financial assistance for residential customers facing financial difficulty via the Payment Assistance Scheme (PAS)
- Easy Pay: making bills more manageable with smaller regular payments (weekly, fortnightly or monthly)
- CentrePay: voluntary regular direct deductions from Centrelink payments.¹¹¹

9.3.6 Improving the effectiveness of rebates

Our analysis on the affordability of bills for different customer groups highlights that some changes could be made to improve how existing rebates deliver bill relief to customers experiencing vulnerability in NSW. Our draft recommendations to the NSW Government to improve the effectiveness of rebates are summarised below.

Draft Recommendations



- 1. To improve the effectiveness of rebates, the NSW Government should:
 - a. note that water rebates should be targeted to assist those most in need
 - b. consider temporarily expanding the eligibility of rebates to households that hold either a Health Care Card or Low Income Health Care Card to the end of the 2025-30 Determination Period
 - c. consider temporarily increasing the rebate amount from 27.25% of a typical 200 kL/year bill to:

- 28.4% in 2025-26 and increasing to 30.8% by 2029-30, if the eligibility criteria remain the same
- 30.8% in 2025-26 and increasing to 32.8% by 2029-30, if the eligibility criteria is expanded to include Health Care Card and Low Income Health Care Card holders.
- d. Explore the merits of a utilities rebate.

9.4 Non-residential customers

Non-residential customers' bills depend on several factors, including their water and wastewater usage, which can vary significantly depending on the size and nature of the customer. Bills also depend on meter configuration and trade waste discharge factors, as well as the catchment the customer is served by.

We explored the indicative bill impacts on a number of non-residential business types. We found that on average from 1 July 2025 to 30 June 2030:

- Increases would range between 2.2% to 8.8% per year plus inflation for non-residential customers, with higher water usage charges leading to higher average yearly changes for non-residential customers with greater water usage.
- Trade waste charges do not have a phased increase and have varied impact (positive or negative) on the overall bill changes due to changes in trade waste charges (See Chapter 8.2)
- Small businesses using 50 kL per year would see bill increases of 2.2% per year plus inflation, increasing from \$1,694 currently in 2024-25 to \$1892 in 2029-30 (in \$2024-25).
- Medium licensed hotels using 1200 kL per year would see bill increases of 5.3% per year plus inflation, increasing from \$6,808 currently in 2024-25 to \$8,820 in 2029-30 (in \$2024-25).
- Regional shopping centres and medium sized industrial businesses using approximately 73,000 kL per year would see increases of 6.5% and 7.1% plus inflation respectively, with shopping centres bills increasing from \$293,576 to \$402,662 and medium industrial businesses increasing from \$264,634 to \$372,361 (in \$2024-25).
- Large industrial businesses with no sewer and using 190,000 kL per year would see average yearly increases of 8.8% plus inflation, while large industrial businesses with sewers and using 243,300 kL per year would see average increases of 7.5% per year, plus inflation.

Appendix D.4 presents the draft bill impacts for various non-residential customers.

This includes impacts of water, wastewater and stormwater prices and where applicable, trade waste prices.

9.5 Impacts on Hunter Water's financial sustainability

When setting maximum prices, we consider the financial sustainability of the business resulting from our pricing decisions. To do this, we undertake a financeability test to assess how our price decisions are likely to affect the business's financial sustainability and ability to raise funds to manage its activities, over the upcoming regulatory period.

We assessed Hunter Water's financeability over the 2025 Determination by analysing its forecast financial performance, financial position, and cash flows for both the benchmark and actual business. We then forecast financial ratios for both tests and assessed Hunter Water's financial ratios compared to our target ratios (see Appendix D.4).

We did not identify a financeability concern for Hunter Water that needs to be addressed in this review. It is our view that it can remain financially sustainable and continue to provide sustainable services over the 2025 determination period. Hunter Water considered it should be able to manage higher risk.

9.5.1 Implication for general inflation

Under section 15 of the IPART Act, we are required to consider the effect of our determinations on general price inflation. The Australian Bureau of Statistics (ABS) does not collect data on Hunter Water's water and wastewater prices. The national consumer price index (CPI) is based only on capital city prices, hence the change in Hunter Water's prices are unlikely to have a measurable effect on the national CPI.

We have assumed in previous determinations that within its area of operations, changes in Hunter Water's prices have a similar effect on inflation as that of changes to Sydney Water's prices in Sydney. Currently, water and wastewater prices contribute 0.59% towards Sydney's CPI (All groups, Sydney)¹¹². This does not include Sydney Water's prices for the 2025 determination period.

Based on this impact, we estimate that the average annual increase of about 3.6% for the typical household bill would not have a material impact on inflation in the Lower Hunter Region.^f

Seek Comment



What are your views on the affordability of our draft maximum water, wastewater and stormwater prices?

f The average annual increase in bills of 3.6% for the typical household would contribute 0.021 percentage points (0.59% x 3.6% = 2.1%) to inflation.

Chapter 10 🔊

Performance and accountability

Summary of our draft decisions on performance and accountability

Accept Hunter Water's proposed performance outcomes, measures and targets with some modifications

Our draft decision is to accept the performance outcomes and measures proposed by Hunter Water, and to add some additional measures to its customer report card to improve transparency across some priority outcomes.

We have also asked Hunter Water to set more clearly defined targets for some of its proposed performance measures, as well as the additional measures included in our draft decisions.

Apply the Efficiency Benefits Sharing Scheme, the Capital Efficiency Sharing Scheme and one leakage Outcome Delivery Incentive to Hunter Water

We have made a draft decision to accept Hunter Water's proposed application of the Efficiency Benefits Sharing Scheme and the Capital Efficiency Sharing Scheme with no expenditure carve-outs. We have also accepted Hunter Water's proposed leakage reduction Outcome Delivery Incentive, including its baseline and target figures, noting the strong support from the Community Panel to address leakage outcomes.

Apply a 1% cap on revenue adjustments across the 3 incentive schemes

Our draft decision is to accept the proposed 1% cap on the revenue adjustment across the Efficiency Benefits Sharing Scheme, the Capital Efficiency Sharing Scheme and the Outcome Delivery Incentive over the upcoming determination period. We consider that the 1% cap on revenue adjustments provides a reasonable balance of risk and incentives across the 3 incentive schemes.

10.1 Outcomes and performance measures

Under our 3Cs framework, we expect businesses to develop performance outcomes related to customer, community and the environment. There is no set limit on how many outcomes a business must develop. For each outcome, we expect businesses to develop suitable performance measures and demonstrate a clear link between these outcomes and performance measures. This would include how the business' activities and expenditure are linked to outcomes.

Hunter Water proposed 6 customer outcomes and 10 performance measures¹¹³, as shown in Table 10.1 below.

Hunter Water also consulted with its customers on their preferred communication channels for performance reporting. Based on this, it proposed reporting on its performance on a "customer report card" which would be made available via:

Hunter Water's website

- e-newsletters
- social media
- annually along with water bills.

Table 10.1 Hunter Water's proposed performance outcomes and measures

Performance outcome	Performance measure	Performance target		
High quality water services	% compliance with Australian Drinking Water Guidelines	Target: from 99.95% to ≥99.75% by 2030 Trend: No change		
	% of service delivery issues raised by customers addressed within target timeframes	Target: ≥88% Trend: No change		
	Number of customers removed from repeat service issue register (low pressure, odour and wastewater overflow issues)	Target: from 40/yr to ≥1000/yr by 2030 Trend: Improvement		
Value for money, affordable	% of survey respondents that agree Hunter Water delivers value for money (via survey)	Target: from 51% to ≥50% by 2030 Trend: No change		
	% of customers who are accessing, or have accessed, support programs that agree the program is effective (via survey)	Target: TBC – Hunter Water has not yet proposed a target		
Water security	Average daily volume of leakage and overflow from supply mains and service reservoirs	Target: from 83 L/connection/day to ≤ 40 L/connection/day by 2030 Trend: Improvement		
Environmentally sustainable	% of Beachwatch sites graded as good, or grading unaffected by Hunter Water's activities	Target: Maintain 100% Trend: No change		
	% reduction in carbon dioxide equivalent emissions compared to a 2020-21 baseline	Target: from 30% to ≥80% by 2030 Trend: Improvement		
Great customer service	% of customers satisfied with their most recent interaction with Hunter Water (via survey)	Target: TBC – Hunter Water has not yet proposed a target		
Community- focused	% of survey respondents that agree they trust Hunter Water (via survey)	Target: TBC – Hunter Water has not yet proposed a target		

Source: Hunter Water 2024 Pricing Proposal, p. 72.

10.1.1 Hunter Water's proposed outcomes and measures are driven by customer engagement

It is important that a business' performance outcomes and measures are developed through robust customer consultation to ensure that customer values and priorities are reflected in proposed indicators. Involving customers to set the priorities and outcomes that matter most is essential if water businesses are to identify better ways of delivering services.

We have found that Hunter Water's performance outcomes and measures were developed through strong community consultation and an understanding of key customer priorities. Hunter Water consulted on customer expectations to develop its performance outcomes, and sought feedback on the measures that would help customers understand what they pay for.

In some areas where customers indicated a strong preference for improved outcomes, Hunter Water set more ambitious targets to improve customer value – including for instance via its targets to reduce leakages and to address repeat service issues in hotspot areas.

Overall, we consider that Hunter Water's engagement on performance outcomes and measures was genuine and enabled customer influence on key priorities.

Box 10.1 Hunter Water's services

Hunter Water provides services to residential and non-residential customers in the Lower Hunter region, including Newcastle.



Hunter Water provides water, wastewater and stormwater services:

- Its water services include to source, treat, and store water, and deliver water to customers. Hunter Water has around 285,000 water customers.
- Its wastewater services include to collect wastewater from customers, treat it, reuse or discharge treated wastewater, and dispose of biosolids. Hunter Water also accepts liquid trade waste from commercial customers. It has around 260,000 wastewater customers.
- Its stormwater services include maintaining stormwater channels, which is part of the larger stormwater system managed by local councils. Hunter Water has around 70,000 stormwater customers.

Note: Capital assets: 1. Belmont desalination plant, 2. Grahamstown water treatment plant upgrade, 3. Burwood Beach wastewater treatment plant upgrade, 4. Chichester Trunk Gravity Main Replacement.

10.1.2 The scope of Hunter Water's performance reporting could be widened to improve performance transparency

We assessed Hunter Water's proposed performance outcomes and measures using the criteria set out in our Water Regulation Handbook. We found that some of Hunter Water's proposed performance targets were highly ambitious and directly driven by customer priorities – for example, those that address repeat service delivery issues and reduce carbon dioxide equivalent emissions.

However, in some areas there were insufficient measures to give customers a holistic picture of Hunter Water's performance. In these cases, we consider there is merit in Hunter Water broadening the scope of its outcome reporting to provide customers more visibility of how it is delivering customer value.

The following sections step though our assessment of Hunter Water's proposed performance outcomes, measures and targets.

High quality water services

One of the measures proposed by Hunter Water for the 'high quality drinking water outcome' relates to compliance with the Australian Drinking Water Guidelines. Since Hunter Water is already required to meet these guidelines under its Operating Licence¹¹⁴, we don't consider this measure to be delivering any *additional* benefit to customers. We recognise though that there is merit in reporting Australian Drinking Water Guidelines compliance to provide transparency to customers in any event of future non-compliances. Hunter Water proposed a target of >99.75% compliance by 2030, compared to its current performance of 99.95%. In its response to our Draft Report, we ask that Hunter Water clarify the basis of measurement of this target, including any averaging across test results for different compliance metrics.

Hunter Water also set targets to address repeat service issues, which was one of the key issues raised by customers in its consultation. The targets selected for this measure represent a significant continuous improvement in customer outcomes.

While Hunter Water's proposed measures for quality of water service are each independently useful, together they do not provide enough transparency into if or how Hunter Water is delivering improved services to its customers. We consider Hunter Water should expand its reporting on this outcome by including the following measures in its customer report card - the number of properties that experience:

- an Unplanned Water Interruption that lasts for more than 5 continuous hours
- three or more Unplanned Water Interruptions that each last for more than one hour
- a Water Pressure Failure
- an Uncontrolled Wastewater Overflow in dry weather
- three or more Uncontrolled Wastewater Overflows in dry weather.

These measures are the same as the IPART performance indicators Hunter Water is required to report on under its Operating Licence.¹¹⁵ In our view, these performance measures, together with those proposed by Hunter Water, provide a more balanced picture of water service outcomes. In its response to our Draft Report we ask that Hunter Water set targets against these measures so that they can be considered in our Final Report.

Value for money, affordable

One of the measures proposed by Hunter Water for this outcome is the 'percentage of survey respondents that agree [it] delivers value for money', for which its proposed target is ≥50% by 2030. This target of ≥50% is considerably broad and does not demonstrate a sufficient step change improvement to customer value. In its response to our Draft Report, we ask that Hunter Water propose a more specific target for this measure.

We also note that Hunter Water has not yet developed a target for the percentage of customers who are accessing, or have accessed, support programs that agree the program is effective. We ask that Hunter Water also propose a relevant target for this measure in its response to our Draft Report.

Overall, we consider that the 2 measures proposed by Hunter Water for this outcome do not provide sufficient insight into the affordability of services to customers. We recommend adding additional measures to derive more useful insights into affordability and improve comparability with other businesses. We recommend the following additional measures that Hunter Water should report on in its customer report card:

- % of customers on hardship programs
- average time spent by customers on hardship programs
- value of customer bills in arrears.

These measures reflect some of The Justice and Equity Centre's suggestions in its submission to our Issues Paper.¹¹⁶ We do not consider that setting explicit targets for these measures is required. However, Hunter Water should consider how its actions to address the needs of customers experiencing vulnerability can be best captured through these measures.

Water security

Hunter Water proposed one measure for water security: leakage reduction. We have found that its proposed targets for leakage reduction are ambitious, directly tied to its proposed expenditure, and supported by customers through its consultation. It also proposed an Outcome Delivery Incentive (ODI) for its leakage reduction program to hold it accountable for performance against its targets.

Noting that water security is a significant driver of Hunter Water's proposed capital expenditure, measuring water security outcomes is important for improving performance transparency and ensuring Hunter Water is accountable for delivering on this outcome. On its own, we consider that leakage is not a sufficient measure of water security. Equally, we acknowledge that water security is not an easily measurable outcome. We considered several other potential measures (including number of days of water restrictions, or percentage of demand met by rainfall independent sources). However, many of these measures could be driven by exogenous factors (like climate change or drought) or could encourage inefficient expenditure.

We are seeking feedback from customers, community and industry on potential measures of water security that Hunter Water could transparently report against on in its customer report card.

Environmental sustainability

Hunter Water proposed measuring environmental sustainability via its reduction in carbon dioxide equivalent emissions^a. We consider this is a suitable and concise measure of sustainability and is supported by an ambitious target of an 80% reduction by 2030.

It also proposed measuring sustainability though the percentage of Beachwatch sites that are graded as good, or where the grading is unaffected by Hunter Water's activities. We consider this is a useful metric for reporting on environmental outcomes, and is a demonstrable measure of Hunter Water's impact on the water quality of swim sites across the Hunter region. However, to ensure this metric is closely tied in with Hunter Water's actual impact on Beachwatch ratings, this metric should be calculated as a percentage of Beachwatch sites that *could* be affected by Hunter Water's operations, rather than as a percentage of *all* Beachwatch sites.

NSW Environment Protection Authority (EPA) non-compliances are another important measure of environmental performance and could provide customers a more holistic picture of environmental value delivered through Hunter Water's expenditure. Equally, we acknowledge that there are a wide range of non-compliance measures and reporting against all of these may make the customer report card inaccessible or overly detailed.

We are seeking feedback from all interested parties on which EPA compliance (or other sustainability) measures are most relevant to customers for inclusion in Hunter Water's customer report card.

Great customer service

Hunter Water proposed one measure for this outcome: percentage of customers who are satisfied with their most recent interaction with Hunter Water. Its proposal did not include a corresponding target for this measure.

In its response to our Draft Report, we ask that Hunter Water develop these targets for consideration in our Final Report.

Community-focused

Hunter Water proposed one measure for this outcome: percentage of survey respondents that agree they trust Hunter Water. Its proposal did not include a corresponding target for this measure.

In its response to our Draft Report, we ask that Hunter Water develop these targets for consideration in our Final Report.

Our draft decision is:



22. To accept Hunter Water's proposed performance outcomes, measures and targets with some modifications.

^a Compared to a 2020-21 baseline

10.2 Financial incentive schemes

Our 3Cs framework includes 3 financial incentive schemes to reward businesses for improvements on their past performance: the Outcome Delivery Incentives (ODIs) Scheme, the Expenditure Benefits Sharing Scheme (EBSS), and the Capital Expenditure Sharing Scheme (CESS).

Incentive schemes reward businesses that outperform their forecasts for operating expenditure, capital expenditure, and/or service delivery, encouraging businesses to continuously improve customer value over the medium to long term.

More information about the ODI scheme, EBSS and CESS are available in our Water Regulation Handbook. 117

10.2.1 Hunter Water proposed one ODI for leakage

The ODI scheme ties financial rewards and penalties to the delivery of key outcomes that promote customer value. Each business will propose customer outcomes, and specific measures for each outcome that will promote customer value. For a particular outcome measure, if the business can establish the customer value for an increase (or decrease) in performance, we will allow the business to retain 20% of the value it has delivered to customers from a change in performance.

Hunter Water set a baseline leakage that reduces from 16.4 ML/day to 10.6 ML/day over the 2025 determination period. It states this has been set consistent with the forecast expenditure contained in its pricing proposal to meet that baseline.

To calculate the customer value from leakage performance, Hunter Water proposes:

- the value of leaked water is the usage price (based on the Long Run Marginal Cost of water supply), and
- the financing benefit or cost will be calculated using the prevailing Short Run Marginal Cost of water.¹¹⁸

Table 10.2 below summarises Hunter Water's proposed leakage ODI baseline and targets.

Table 10.2 Hunter Water's proposed leakage reduction ODI

Performance measure	Units	Current performance	2025-26	2026-27	2027-28	2028-29	2029-30
Leakage outcome target	Litres per connection per day	83	≤65	≤55	≤45	≤45	≤40
Leakage performance baseline	ML/day	22.8	16.4	13.5	11.7	10.9	10.6

Note: The leakage targets shown above are different to those presented in Hunter Water's pricing proposal. These figures have been updated by Hunter Water to account for a previous calculation error.

This leakage baseline is shown relative to Hunter Water's historical leakage performance in Figure 10.1 below.

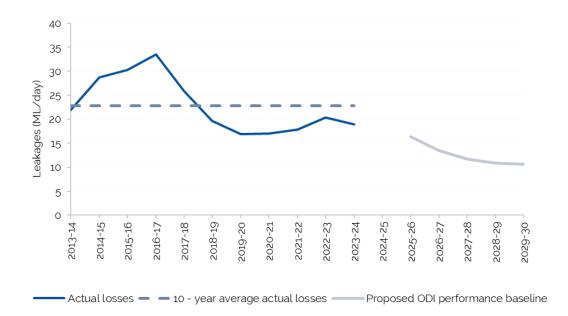


Figure 10.1 Hunter Water's historical and forecast leakages performance

Source: IPART analysis using data from Hunter Water.

Hunter Water's leakage targets require investment beyond the Economic Level of Water Conservation

One of the key recommendations made by Hunter Water's customers on the Lower Hunter Water Security Plan was to conserve more water by fixing leakages on properties and across the network. Based on this, Hunter Water developed ambitious leakage targets that required investment beyond the Economic Level of Water Conservation (see Box 10.2 below for further information).

In preparing its proposal, Hunter Water retested these targets with customers, to which the Community Panel supported some additional expenditure on leakage reduction beyond the Economic Level of Water Conservation. The Community Panel was made aware of the cost/benefit trade-offs of investing above the Economic Level of Water Conservation. However, the Community Panel explained its comfort in exceeding this level was to 'secure resources for future generations'.¹¹⁹

Based on this engagement Hunter Water proposed \$20 million in capital expenditure to reduce leakages¹²⁰, of which approximately \$10.8 million represents 'improvement' expenditure beyond the Economic Level of Water Conservation.

Box 10.2 Economic Level of Water Conservation method

Hunter Water has an obligation to apply an 'Economic Level of Water Conservation' method to assess leakage projects (and other water conservation strategies) under its operating licence regulated by IPART.

Under the Economic Level of Water Conservation methodology, all water conservation measures with a levelised cost less than or equal to the value of water are considered economically viable. The volume of water that could be saved if Hunter Water implemented all these measures is the Economic Level of Water Conservation.

Source: IPART analysis.

Hunter Water's leakage ODI meets the criteria set out in our Water Regulation Handbook

Our Water Regulation Handbook sets out principles that businesses should apply when developing their ODIs. We have assessed Hunter Water's ODI against these principles and found that:

- The leakage outcome is measurable, influenced by expenditure and creates customer value:
 - While there are some inherent uncertainties in leakage calculations (noting that leakage is fundamentally a water balance calculation), overall, it is readily measurable and is a suitable outcome for an ODI.
 - The proposed targets are supported by a step change in expenditure, which has strong support from Hunter Water's Community Panel.
 - This expenditure delivers improved customer value. While the targets require investment beyond the Economic Level of Water Conservation, this investment is supported by customer willingness to pay.
- The baseline level for the outcome is well-justified. It is calculated using an established leakage calculation methodology under the urban water utilities National Performance Reporting framework, and is based on the leakage reduction expenditure included in Hunter Water's proposal.
- The method to estimate customer value is reasonable. Customer value is based on the usage price of drinking water as a proxy for the economic value of water.
- The ODI is succinct and does not overlap. Since Hunter Water has proposed only one ODI, there are no overlaps with other performance-based incentives.

Based on our assessment above we consider that Hunter Water's leakage ODI proposal meets the criteria set out in our Water Regulation Handbook and is well supported by customer priorities and willingness to pay. Our draft decision is to accept Hunter Water's proposed leakage ODI, baseline and targets.

10.2.2 Hunter Water proposed participating in the EBSS and CESS

The Operating Efficiency Benefit Sharing Scheme (EBSS) and the Capital Efficiency Sharing Scheme (CESS) provide financial incentives to businesses to achieve cost savings over the medium to long term and establish a mechanism for these savings to be shared with customers.

Hunter Water has proposed participating in both the EBSS and CESS. It stated that in the spirit of a working trial, it is not proposing any up-front exclusions or carve-outs additional to those considered through IPART's financial incentive schemes working group.¹²¹ It noted some reservations about the schemes, and queried whether deviations in actual expenditure from a pre-determined level necessarily reflect efficiency gains or losses for the purpose of the CESS.¹²²

We consider that the proposed CESS and EBSS application is reasonable

We consider that Hunter Water's proposal to apply the CESS and EBSS is reflective of a reasonable balance of risk between customers and an Advanced water business. Our draft decision is to apply the CESS and EBSS to Hunter Water, as per its proposal with no explicit exclusions. Under our draft decision, the EBSS and CESS would apply to the total operating and capital expenditures from Chapters 4 and 5.

Our draft decision is:



23. To apply the EBSS, CESS and ODI incentive schemes to Hunter Water as per its proposal over the 2025 determination period.

10.2.3 Hunter Water proposed a 1% cap on the revenue adjustment across ODI, EBSS and CESS

Our 3Cs framework asks businesses to propose a revenue adjustment cap to apply across the 3 incentive schemes. We noted that the default limit for the combined incentive adjustments would be 1% of the revenue requirement over the determination period, but allowed businesses to propose different cap levels to this. In determining the cap, we noted that we would take into account specific circumstances of the businesses and the anticipated risks involved with implementation of the incentive schemes. 123

Hunter Water proposed the default revenue adjustment cap of 1%^b apply across the ODI, EBSS and CESS¹²⁴.

Noting that Hunter Water has not proposed any explicit expenditure carve-outs for the EBSS and CESS, and has set ambitious leakage reduction targets for its ODI, we consider that the 1% cap on revenue adjustments provides a reasonable balance of risk and incentives across the 3 incentive schemes.

Our draft decision is to accept the proposed 1% cap on the revenue adjustment across the ODI, EBSS and CESS over the upcoming determination period.

^b Of revenue requirement over the determination period.

Our draft decision is:



24. To apply a 1% cap on the revenue adjustment across the ODI, EBSS and CESS over the 2025 determination period.

10.3 Monitoring and credibility

After setting revenues, performance targets and incentives, we monitor ongoing performance through a range of tools to make sure businesses deliver on their commitments to customers. Specifically, we track business performance in terms of customer outcomes and expenditure. We also collaborate with other NSW regulators so that businesses promote customers' long-term interests by responding to all regulatory requirements efficiently.

10.3.1 Monitoring compliance with pricing determinations

IPART has an ongoing role in monitoring the performance of certain specified businesses for the purposes of establishing and reporting to the Minister on the level of compliance by the business with an IPART pricing determination.¹²⁵ This ongoing role provides another layer of monitoring and accountability for Hunter Water to comply with its pricing determination.

10.3.2 Monitoring outcome performance

Hunter Water is expected to notify customers of its progress

As part of our 3Cs framework, we expect businesses to publish annual updates on their progress against outcome commitments. The aim of annual progress updates is to maximise accessibility and visibility for customers.

Hunter Water proposed reporting its performance on a "customer report card" which would be made available via:

- Hunter Water's website
- e-newsletters
- social media
- annually along with water bills.¹²⁶

It also proposed establishing an ongoing Community Committee, of which one function would be to recommend performance ratings for each outcome on the Hunter Water report card.¹²⁷

Performance results in an online dashboard

IPART also monitors performance to ensure businesses maintain a customer focus, improve their services and deliver on outcome commitments included in their proposals. Publishing progress on these commitments increases public visibility and leverages reputational incentives for businesses to deliver on their promises.

We will publish a user-friendly online performance dashboard that tracks businesses' progress against their outcome commitment. Public access to this information promotes greater accountability and allows businesses and customers to compare performance outcomes across different water businesses.

The online dashboard will be designed to be easily accessible to all interested stakeholders. It will contain current and past information for all price-regulated businesses on:

- the grades that businesses received for current and past pricing proposals
- customer-informed outcome commitment targets and progress against achieving those targets in the current and past determination period, with 'traffic lights' to signal progress
- trends for operating and capital expenditure, including deeper level information on several standardised cost categories.

The dashboard will be accessible via our website once it has been established. We expect the dashboard to be available in July 2025.

10.3.3 Annual licence audits

IPART has a role in auditing Hunter Water's compliance with the requirements of its operating licence. As part of this auditing function, we collect annual performance information provided by the businesses on measures relating to water quality, system continuity and reliability, environmental performance and customer service.

Our annual operating licence audit reports are provided to the Minister for Water and are published on our website for public access.

The information collected through these audits may be published on our online dashboard to ensure transparency and improve public confidence. This provides additional incentives for businesses to perform to its expectations and continually identify areas for improvement.

Appendices

Appendix A 🕻

Matters considered by IPART



This appendix explains how we considered certain matters we are required to consider under the *Independent Pricing and Regulatory Tribunal Act 1992* (the IPART Act).

A.1 Matters under section 13(1) of the IPART Act

For this review, the NSW Premier required us to consider:

- a. the cost-of-living impacts of the price determinations
- b. the effectiveness of existing rebates to manage the social impacts of the price determinations, including if the program will adequately support customers who may be disproportionately impacted by any price increase
- opportunities to adjust project timelines within the price determination period and over the next ten years to minimise price impacts and, if necessary, to reduce the proposed capital programs in line with least cost planning principles, and
- d. deliverability of the proposed capital plans based on capability and market conditions.

Table A.1 Consideration of section 13(1) matters by IPART

Se	ection 13(1)	Report reference
a.	the cost-of-living impacts of the price determinations	Chapter 9 sets out the potential impact of our pricing decision on Hunter Water and its customers.
b.	the effectiveness of existing rebates to manage the social impacts of the price determinations, including if the program will adequately support customers who may be disproportionately impacted by any price increase	Chapter 9 sets out the potential impacts of our pricing decision on Hunter Water's customers, and also considers at a high level the current arrangements for existing rebates.
C.	opportunities to adjust project timelines within the price determination period and over the next ten years to minimise price impacts and, if necessary, to reduce the proposed capital programs in line with least cost planning principles, and	Chapter 5 sets out the efficient capital expenditure for Hunter Water, including our considerations of capital phasing.
d.	deliverability of the proposed capital plans based on capability and market conditions.	Chapter 5 sets out our assessment of Hunter Water's capital plans.

The Letter from the NSW Premier to the Chair of IPART is provided below.

OFFICIAL

The Hon Chris Minns MP

Premier of New South Wales



Ref: A6131815

Ms Carmel Donnelly PSM Chair Independent Pricing and Regulatory Tribunal PO Box K35 Haymarket Post Shop 1240

Re: Section 13 requirements for Sydney Water and Hunter Water and price determinations

Dear Ms Donnelly,

I write regarding the upcoming price determinations for Sydney Water Corporation and Hunter Water Corporation that will commence in September 2024.

The Government understands that Sydney Water and Hunter Water will lodge their submissions shortly, which may propose increases to their customers' bills. NSW households are currently experiencing increasing cost of living pressures, including rising housing and utility expenses. These cumulative price increases may disproportionately impact vulnerable communities.

To help address these pressures, pursuant to section 13(1)(c) of the Independent Pricing and Regulatory Tribunal Act 1992 (IPART Act), I require IPART to consider the following matters:

- the cost-of-living impacts of the price determinations
- the effectiveness of existing rebates to manage the social impacts of the price determinations, including if the program will adequately support customers who may be disproportionately impacted by any price increase
- opportunities to adjust project timelines within the price determination period and over the next ten years to minimise price impacts and, if necessary, to reduce the proposed capital programs in line with least cost planning principles, and
- deliverability of the proposed capital plans based on capability and market conditions.

These directions will maintain IPART's independence, while ensuring that the NSW Government is afforded the information required to consider the impacts of IPART's draft determination.

Sincerely

Chris Minns MP

Premier of New South Wales

52 Martin Place Sydney NSW 2000 GPO Box 5341 Sydney NSW 2001

Review of Hunter Water's water prices

02 7225 6000 nsw.gov.au/premier

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A.2 Matters under section 14A(2) of the IPART Act

Where the Tribunal uses a methodology to fix prices, section 14A of the IPART Act requires us to report on what regard we have had to the matters listed in section 14A(2). These matters are:

- a. the government agency's economic cost of production,
- b. past, current or future expenditures in relation to the government monopoly service,
- c. charges for other monopoly services provided by the government agency,
- d. economic parameters, such as—
 - · discount rates, or
 - movements in a general price index (such as the Consumer Price Index), whether past or forecast.
- e. a rate of return on the assets of the government agency,
- f. a valuation of the assets of the government agency,
- g. the need to maintain ecologically sustainable development (within the meaning of section 6 of the *Protection of the Environment Administration Act 1991*) by appropriate pricing policies that take account of all the feasible options available to protect the environment,
- h. the need to promote competition in the supply of the service concerned,
- i. considerations of demand management (including levels of demand) and least cost planning.

Table A.2 Consideration of section 14A(2) matters by IPART

Section 13(1)		Report reference
a.	the government agency's economic cost of production,	Chapters 4, 5 and 6 set out Hunter Water's total efficient costs to deliver its regulated services over the determination period
b.	past, current or future expenditures in relation to the government monopoly service,	Chapters 4 and 5 set out our decisions on Hunter Water's efficient expenditure
C.	charges for other monopoly services provided by the government agency,	Appendix D sets out our decisions on Hunter Water's prices for other monopoly services
d.	economic parameters, such as— discount rates, or movements in a general price index (such as the Consumer Price Index), whether past or forecast,	Chapter 6 sets out how we have indexed Hunter Water's regulatory asset base to account for inflation, and chapters 7 and 8 set out how we have set prices to raise revenue that recovers efficient costs over the determination period in net present value terms.
e.	a rate of return on the assets of the government agency,	Chapter 6 and appendix C set outline that we have allowed a market-based rate of return on debt and equity which would enable a benchmark business to return an efficient level of dividends.
f.	a valuation of the assets of the government agency,	Chapter 6 sets out the value of Hunter Water's assets on which we consider it should earn a return on capital and an allowance for regulatory depreciation.
g.	the need to maintain ecologically sustainable development (within the meaning of section 6 of the Protection of the <i>Environment Administration Act 1991</i>) by appropriate pricing policies that take account of all the feasible options available to protect the environment,	Chapters 4 and 5 set out Hunter Water's efficient expenditure that allows it to meet all of its regulatory requirements, including its environmental obligations.
h.	the need to promote competition in the supply of the service concerned,	In determining efficient costs, we have been mindful of relevant principles such as competitive neutrality (e.g.

Sec	ction 13(1)	Report reference
		we have included a tax allowance for regulatory depreciation)
	considerations of demand management (including levels of demand) and least cost planning.	Chapters 4 and 5 outline how we have assessed Hunter Water's efficient expenditure required to deliver its regulated services at least cost.

A.3 Matters under section 15 of the IPART Act

IPART is required under section 15(1) of the IPART Act to have regard to the following matters in making determinations and recommendations:

- a. the cost of providing the services concerned
- b. the protection of consumers from abuses of monopoly power in terms of prices, pricing policies and standard of services
- c. the appropriate rate of return on public sector assets, including appropriate payment of dividends to the Government for the benefit of the people of New South Wales
- d. the effect on general price inflation over the medium term
- e. the need for greater efficiency in the supply of services so as to reduce costs for the benefit of consumers and taxpayers
- f. the need to maintain ecologically sustainable development (within the meaning of section 6 of the Protection of the *Environmental Administration Act 1991*) by appropriate pricing policies that take account of all the feasible options available to protect the environment
- g. the impact on pricing policies of borrowing, capital and dividend requirements of the government agency concerned and, in particular, the impact of any need to renew or increase relevant assets
- h. the impact on pricing policies of any arrangements that the government agency concerned has entered into for the exercise of its functions by some other person or body
- i. the need to promote competition in the supply of services concerned
- j. considerations of demand management (including levels of demand) and least cost planning
- k. the social impact of the determinations and recommendations
- l. standards of quality, reliability and safety of the services concerned (whether those standards are specified by legislation, agreement or otherwise).

Table A.3 Consideration of section 15(1) matters by IPART

Section 15(1)	Report reference
a) Cost of providing the services	Chapter 4, 5 and 6 set out Hunter Water's total efficient costs to deliver its regulated services over the determination period

Section 15(1)		Report reference
b) Protection of consumers f power in terms of prices, services	from abuses of monopoly pricing policies and standard of	We consider our decisions will protect consumers from abuses of monopoly power, as they reflect the efficient costs Hunter Water requires to deliver its regulated services. This is addressed throughout the report, particularly in Chapters 4 and 5 (where we establish the efficient expenditure) and Chapters 7, 8 and 9 (where we set out our pricing decisions and impacts).
 c) Appropriate rate of return including appropriate pay Government for the benef Wales 		Chapter 6 outlines that we have allowed a market- based rate of return on debt and equity that would enable a benchmark business to return an efficient level of dividends.
d) Effect on general price inf	flation over the medium term	Chapter 9 outlines that we estimate the impact of our prices on general inflation is negligible.
 e) need for greater efficiency to reduce costs for the be taxpayers 	y in the supply of services so as enefit of consumers and	Chapter 4 and 5 set out our decisions on Hunter Water's efficient expenditure. These decisions promote greater efficiency in the supply of Hunter Water's regulated services.
by appropriate pricing pol		Chapters 4 and 5 set out Hunter Water's efficient expenditure that allows it to meet all of its regulatory requirements, including its environmental obligations.
dividend requirements of	lar, the impact of any need to	Chapters 6 sets out how we have provided Hunter Water with an allowance for a return on and of capital and Chapter 9 sets out our assessment of its financeability
the government agency c	cies of any arrangements that concerned has entered into for ns by some other person or	Chapters 4 and 5 sets out the efficient expenditure including operational contracts that Hunter Water has entered into and costs associated with these over the next period.
i) the need to promote com services concerned	petition in the supply of the	In determining efficient costs, we have been mindful of relevant principles such as competitive neutrality (e.g. we have included a tax allowance for regulatory depreciation)
j) Considerations of demand of demand) and least cost	d management (including levels t planning	Chapters 4 and 5 outline how we have assessed Hunter Water's efficient expenditure required to deliver its regulated services at least cost.
k) The social impact of the d recommendations	leterminations and	Chapter 9 sets out the potential impact of our pricing decision on Hunter Water and its customers.
	bility and safety of the services e standards are specified by otherwise)	Chapters 4 and 5 set out our consideration of Hunter Water's efficient expenditure so it can meet the required standards of quality, reliability and safety in delivering its services, and Chapter 10 sets out incentives, performance and outcomes.

A.4 Considerations under section 16 of the IPART Act

Under section 16 of the IPART Act, we must report on the likely impact on the Consolidated Fund if prices are not increased to the maximum levels permitted. If this is the case, then the level of tax equivalent and dividends paid to the Consolidated Fund would fall. The extent of this fall would depend on Treasury's application of its financial distribution policy and how the change affects after-tax profit.

Our financial modelling is based on a tax rate of 30% for pre-tax profit and dividend payments at 70% of after-tax profit. A \$1 decrease in pre-tax profit would result in a loss of revenue to the Consolidated Fund of 49 cents in total, which is 70% of the decrease in after-tax profit of 70 cents.

Appendix B 🕻

3Cs framework grading rubric



Table B.1 Guidance for customer principles

1. 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 Advanced Leading Expectations Additional expectations to Standard Additional expectations to Advanced **Develop customer engagement** strategy The business has a published • The strategy demonstrates that The strategy empowers customers have a high level of customers to co-develop the customer engagement strategy which: influence in how services are most material aspects of its delivered, and commits to gain pricing proposal that impact price sets out how it seeks to insights from customers through a and service. understand what matters to variety of methods. 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. **Customers influence business** outcomes Customer insights and Customer insights are linked to engagement influence customer customer outcomes, which inform outcomes, inform business ongoing improvements in the way

long-term plans. Processes support customer centricity

decisions, and short, medium and

- 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)
- Learns from and keeps up with peers and industry best practice engagement methods.

services are delivered to

customers.

- Consumer facing businesses propose tools or processes to support early identification and interventions for customers experiencing a range of vulnerability circumstances.
- Clear evidence of continual improvement in customer value across the business where it reflects on, and incorporates, learnings from its engagement processes.
- Consumer facing businesses propose simplifications to assist customers, including those experiencing vulnerability, improve accessibility and understanding (e.g. customer contracts, bills and accounts and water literacy).

2. 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	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced
Engage on what matters to customers		
Select issues for engagement that matter to customers.	Customers involved in setting priorities that matter most for deeper engagement.	 Collaborates with and empowers customers (and/or customer representatives) to develop solutions in customers' long-term interests.
Choose appropriate engagement methods		
 Suitable consultation method/s have been chosen to reach a representative customer base and/or their advocates, such as renters, home-owners, vulnerable groups, and businesses. Opportunities for 2-way communication with customers exist. Scope of engagement proportional to the level of expenditure and the impact of the project. 	Chooses effective methods to provide all customers – including more difficult-to-reach customers – with a high level of influence in how services are delivered. Responses are then triangulated and tested against other information.	Continuously seeks to improve methods of engagement and explore innovative methods.
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, 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. 	Engagement includes clear explanation of options (including price differences and any potential trade-offs), and participants are confident their feedback will influence outcomes.	

3. Customer outcomes

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

Standard Expectations	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced
Customers drive outcomes		
 Propose outcomes, based on customer engagement, that capture what customers want you to deliver. Link proposed expenditure to these outcomes. 	Outcomes are concise, specific, measurable and written from customer's perspective. They are clearly aligned to customer preferences and proposed expenditure.	 Outcomes and supporting output measures and targets are co- designed with customers, and proposals are supported by customers.
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.	Targets show a step change improvement to customer value and include adequate protections for individual customers.	Where supported by customer willingness to pay, service targets exceed past performance and other suitable industry benchmarks by an ambitious but realistic margin.
Accountability for customer outcomes		
Clear mechanisms ensure the business is accountable for delivering outcomes.	All outcomes include steps the business will take if not meeting targets, and where appropriate, are supported by outcome delivery incentive (ODI) payments/penalties.	 All important customer outcomes with high customer value would typically be supported by ODI payment/penalty rates and targets.

4. 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	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced
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 the customer of delivering on broader community values, as they relate to the provision of regulated services. Consider costs/benefits and bill impacts before proposing expenditures. 	Outcomes have demonstrated customer value and support, with awareness of bill impacts.	Demonstrate step change improvements in community outcomes, which prioritise customer preferences revealed through engagement.
Community outcome performance measures		

Accountability for community outcomes

 Clear mechanisms ensure the business is accountable for delivering community outcomes.

Community outcomes have

built in (as needed).

targets that are measurable, have

intermediate steps and milestones

 Mechanisms include steps the business will take if not meeting targets.

Work and partner with local

services.

groups and other stakeholders to

propose and deliver community

outcomes within the scope of its

 Demonstrate innovative approaches to promote customer and community value.

5. Environment

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

Standard Expectations	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced
Identify environmental outcomes		
 Meet all regulatory requirements, including environmental requirements, at an efficient cost. Follow government directions²⁵ 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. 	 Actively engage with other regulators, evaluate prospective government directions and obligations from the perspective of promoting the customer's long-term interests. Incorporate climate change into forecasting models and undertake climate change adaptation and mitigation actions. 	Demonstrate step change improvements in environmental outcomes, revealed through engagement, which prioritise delivery of environmental outcomes that customers and the community value most.
Environmental outcome performance measures		
Environmental outcomes have targets that are measurable, have intermediate steps and milestones built in (as needed).	Work and partner with community groups, other businesses, stakeholders and government, to propose and deliver outcomes that meet regulatory requirements, promote customer value and provide environmental benefits.	Demonstrate innovative approaches which promote customer value and maximise environmental benefits.
Accountability for environmental outcomes		
Clear mechanisms ensure the business is accountable for delivering environmental outcomes.	Mechanisms include steps the business will take if not meeting targets.	

Government directions are typically made by Ministerial order through the State Owned Corporations Act 1989 (the SOC Act) or other power under legislation

6. 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	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced
Consider differentiated service offerings		
No requirements at Standard.	 Engage with customers on opportunities for differentiated service offerings, including standard add-on mass market tariff options (e.g. carbon offsets), where it is cost efficient to do so. Work with government and developers in growth planning to offer additional services and supply options to new developments. 	Offer customers innovative tariffs and products above licence obligations, consistent with customers' preferences if there is evidence of customer demand.

Table B.2 Cost principles

7. Robust costs

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

processor, constructed at the construction of			
Standard Expectations	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced	
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. 	Changes in expenditure are supported by quantitative evidence which demonstrates how it promotes customer value (e.g., in proposing step changes for opex, and justification in business cases for large capital projects).	Proposes opex and capex that maximises customer value, supported by modelling which shows it is below industry benchmarks.	
Optimise between opex and capex			
 Demonstrates consideration has been given to opex and capex trade-offs. 	 Uses quantitative evidence to show that proposed opex and capex minimises net life-cycle costs. 	 Takes into account the potential and likelihood for cost saving innovations when proposing a balance of opex and capex. 	
Accountability for expenditure outcomes			
Expenditure performance targets have been identified that maintain compliance with licence conditions, other regulatory requirements, and are consistent with customer preferences.	Demonstrates how performance targets have been developed through customer engagement and deliver customer value.	 Has adopted and implemented robust processes to ensure that forecasts are justified, evidence-based and deliverable. 	

8. 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	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced
Understand long-term performance		
 Investment and asset management decisions demonstrate a balancing of the risks and benefits to the customer and business in terms of long- term asset and service performance. 		 Provides additional evidence optimising this balance of risks, using best practice, probabilistic investment decision and asset management systems.
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 	 Proposal commits to accept more risk where it has benefits for customers. Demonstrates it has organisational resilience to absorb cost impacts arising from changes in the operating environment. 	 Proposal includes capability and strategies to optimise and manage the value of risk factored into its forecasts and proposals.

9. 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	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced
Develop cost efficiency strategy		
 The business has a management²⁶ 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. 	Proposal is informed by cost efficiency strategy, justifies an ambitious annual expenditure 'efficiency factor' and explains reasons for its current performance.	Proposes efficiency targets which would lead to a significant step change in cost efficiencies below historical costs and industry cost benchmarks.
Accountability for cost efficiency outcomes		
Has clear mechanisms to ensure the business is accountable for achieving its proposed cost efficiency outcomes.		

²⁶ Depending on the organisation structure this approval may be Board, Council or executive leadership approval.

10. 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 Propose cost-reflective prices	Advanced Additional expectations to Standard	Leading Additional expectations to Advanced
 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. 	Provides modelling to show that proposed prices: are sustainable over time, and would avoid large future bill impacts have been informed by LRMC model estimates consider the impact of climate change on the level and structure of prices addressed Justifies the appropriate form of price control that promotes the long-term interests of customers.	Provides comprehensive modelling to support its proposed recovery of costs, including: catchment level LRMC estimates where appropriate (to justify demand and supply side responses to delay augmentations or prioritise investments) longer-term pricing paths supported by long-term cost estimates.
Justify within-period revenue adjustments		
 Provides a robust justification for any revenue adjustments, consistent with IPART's revenue hierarchy principles. 		

Table B.3 Credibility principles

Table b.3 Credibility principles						
Credibility Requirements (all levels)						
11. Delivering Can you provide assurance that you have the capability and commitment to deliver?	 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. 					
12. Continual improvement Does the proposal identify shortcomings and areas for future 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. 					

Appendix C 🕻

Weighted average cost of capital



To calculate an allowance for the return on assets in the revenue requirement, we multiply the value of the regulatory asset base (RAB) in each year of the determination period by an appropriate rate of return. To do this, we determine the rate of return using a weighted average cost of capital (WACC).

This appendix shows the parameters we used to calculate the WACC and explains our decision about how to treat annual changes in the WACC over the determination period

C.1 We use our standard approach to calculate the WACC

We used our standard 2018 WACC methodology to calculate the WACC. Under this approach we estimate one WACC based on current market data and one based on long-term average data. When our uncertainty index, which indicates the level of volatility in capital markets, is within one standard deviation of its mean value, we select the mid-point of the current and long-term WACC values. The uncertainty index was within this range at the time we calculated the WACC.

Table C.1 sets out the parameters we used to derive Hunter Water's 3.2% post tax real WACC.

Table C.1 WACC calculation using IPART's standard approach

		arket data et data
	Current	Long term
Nominal risk-free rate	3.2%	2.7%
Inflation	2.7%	2.7%
Implied debt margin	2.1%	2.3%
Market risk premium	6.2%	6.0%
Debt funding	60%	60%
Equity funding	40%	40%
Total funding (debt + equity)	100%	100%
Gamma	0.25	0.25
Corporate tax rate	30%	30%
Effective tax rate for equity	30%	30%
Effective tax rate for debt	30%	30%
Equity beta	0.70	0.70
Cost of equity (nominal post-tax)	7.5%	6.9%
Cost of equity (real- post tax)	4.7%	4.1%
Cost of debt (nominal pre-tax)	5.3%	5.0%
Cost of debt (real pre- tax)	2.5%	2.2%
tax)		
Nominal vanilla (post-	6.2%	5.8%
tax nominal) WACC		
Post-tax real WACC	3.4%	3.0%
Pre-tax nominal WACC	7.1%	6.6%
Pre-tax real WACC point estimate	4.3%	3.8%
point ostimate		

Source: IPART analysis

C.2 Our methodology to calculate WACC parameters

This section sets out some of the key methodologies we use to derive the component parameters used to calculate the WACC under our standard approach.

a. This is the WACC we use for our proposed prices in this draft report.

C.2.1 Gearing and beta

In selecting proxy industries, we consider the type of business the firm is in. If we can't directly identify proxy firms that are in the same business, then we would consider which other industries exhibit returns that are comparably sensitive to market returns.

We adopted the standard values of 60% gearing and an equity beta of 0.7. We undertook preliminary proxy company analysis on several different types of industries with risk profiles that appear similar to water businesses. Our analysis supported continuing to use an equity beta of 0.7 when 60% gearing is used.

C.2.2 Sampling dates for market observations

For the Draft Report, we applied a sampling period up to the end of December 2024 for the market observations. This sampling period will apply only for the purpose of the WACC calculated in this Draft Report. When we release our Final Report on Hunter Water's prices, we will use a sampling period that is closer to our Final Report release date and consistent with our 2018 WACC method.

For earlier years in the trailing average calculation of the historic cost of debt, we sampled to the end of March in each year.

C.2.3 Tax rate

We assumed the Benchmark Equivalent Entity is a large public water utility. The scale economies that are important to firms of this type suggest that the Benchmark Equivalent Entity would be likely to be well above the turnover threshold at which a firm becomes ineligible for a reduced corporate income tax rate. Therefore, we used a tax rate of 30%.

C.2.4 Regulatory period

We applied the WACC estimate for the duration of the determination period.

C.2.5 Application of trailing average method

Our 2018 review of the WACC method introduced a decision to estimate both the long-term and current cost of debt using a trailing average approach, which updates the cost of debt annually over the regulatory period.

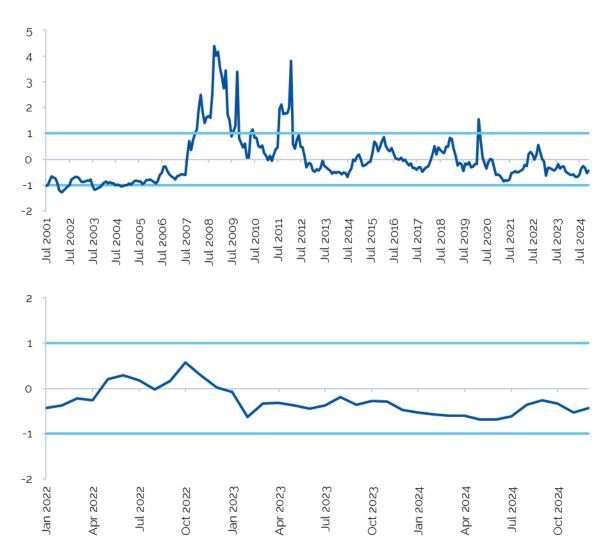
We have not applied a transition to the trailing average in our WACC calculation for this Draft Report. The transition to the trailing average was applied in Hunter Water's 2020 Determination, so we consider that the businesses is now fully transitioned to the trailing average approach.

C.2.6 Uncertainty index

Under current IPART's WACC method, we estimate one WACC using current market data and one using long-term average data. When our uncertainty index — which indicates the level of volatility in capital markets — is within one standard deviation of its mean value, we select the mid-point of the current and long-term WACC values.

As Figure C.1 shows, the uncertainty index for market observations to the end of December 2024 is within one standard deviation of its mean value. Therefore, we have set our Draft Report WACC based on the mid-point of the current and long-term WACC values.

Figure C.1 IPART's uncertainty index



Appendix D 🕻

Detailed financial tables



D.1 Building blocks and notional revenue requirement

D.1.1 Total notional revenue requirement

Table D.1 Draft decision on total notional revenue requirement for the 2025 determination period (\$ millions, \$2024–25)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Total NRR proposed by Hunter Water	465.1	490.5	508.1	520.5	529.8	2,514.0
IPART decision (Building Block components)						
Operating allowance	193.0	194.2	197.0	197.8	196.9	978.8
Return on assets	137.2	145.9	151.7	155.9	159.0	749.6
Regulatory depreciation	102.4	111.0	118.2	124.6	130.7	586.8
Working capital allowance	1.4	1.9	2.5	2.6	2.9	11.3
Tax allowance	14.3	15.7	16.9	18.0	19.0	83.8
Other costs	-4.0	0.0	0.0	0.0	0.0	(4.0)
Hunter Water total NRR (IPART decision)	444.2	468.6	486.2	498.8	508.5	2,406.4
Difference between the proposed and IPART draft decision total NRR	-20.9	-21.9	-21.9	-21.7	-21.3	-107.6
Difference between the proposed and IPART draft decision total NRR (%)	-4.5%	-4.5%	-4.3%	-4.2%	-4.0%	-4.3%

Note: Totals may not add due to rounding. In this table, the regulatory depreciation is a mid-year figure (i.e. the RAB roll-forward depreciation figure is discounted by half a year of WACC). Source: IPART analysis.

D.1.2 Return on assets

Table D.2 Draft decision on return on assets for the 2025 determination period (\$ millions, \$2020–21)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Hunter Water proposal	153.9	163.4	169.9	174.3	177.7	839.2
IPART decision	137.2	145.9	151.7	155.9	159.0	749.6
Difference	-16.7	-17.5	-18.2	-18.4	-18.7	-89.6
Difference (%)	-10.9%	-10.7%	-10.7%	-10.6%	-10.5%	-10.7%

Note: Totals may not add due to rounding. Source: IPART analysis.

Table D.3 Draft decision on regulatory asset base roll-forward for the 2020 determination period (\$ millions, \$nominal)

	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Opening RAB for Hunter Water	2,660.5	2,779.7	3,005.2	3,278.3	3,592.6	3,863.9
Plus: Efficient capital expenditure	168.8	179.0	160.6	199.9	229.3	259.8
Less: Asset disposals	0.0	0.1	0.0	0.0	0.0	0.0
Less: Regulatory depreciation	41.3	62.4	75.6	88.3	98.9	95.6
Plus: Indexation	-8.2	109.0	188.2	202.7	140.9	119.8
Closing RAB	2,779.7	3,005.2	3,278.3	3,592.6	3,863.9	4,147.9
Hunter Water proposal	2,779.2	3,004.7	3,277.8	3,592.0	3,863.2	4,147.2
Difference	0.5	0.5	0.5	0.6	0.7	0.7
Difference (%)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Note: Totals may not add due to rounding. Source: IPART analysis.

Table D.4 Draft decision on regulatory asset base roll-forward for the 2025 determination period (\$ millions, \$2024-25)

	2025-26	2026-27	2027-28	2028-29	2029-30
Opening RAB for Hunter Water	4,147.9	4,456.9	4,690.7	4,823.0	4,946.0
Plus: Efficient capital expenditure	413.0	346.5	252.4	249.5	202.8
Less: Asset disposals	0.0	0.0	0.0	0.0	0.0
Less: Regulatory depreciation	104.0	112.7	120.0	126.6	132.8
Plus: Indexation	0.0	0.0	0.0	0.0	0.0
Closing RAB	4,456.9	4,690.7	4,823.0	4,946.0	5,016.0
Hunter Water proposal	4,450.9	4,679.5	4,807.0	4,925.5	4,991.4
Difference	6.0	11.2	16.0	20.5	24.6
Difference (%)	0.1%	0.2%	0.3%	0.4%	0.5%

Note: Totals may not add due to rounding.

Source: IPART analysis

D.1.3 Return of assets (regulatory depreciation allowance)

Table D.5 Draft decision on allowance for return of assets for the 2025 determination period (\$ millions, \$2024-25)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Hunter Water proposal	101.9	110.0	116.7	122.7	128.2	579.5
IPART decision	102.4	111.0	118.2	124.6	130.7	586.8
Difference	0.5	1.0	1.5	1.9	2.5	7.3
Difference (%)	0.5%	0.9%	1.2%	1.6%	2.0%	1.3%

Note: Totals may not add due to rounding. Source: IPART analysis

Table D.6 Draft decision on remaining asset lives for existing assets (years)

	Remaining RAB lives of depreciable assets existing on 1 July 2025
Corporate	8
Water	44
Wastewater	49
Stormwater	46

Table D.7 Draft decision on expected lives of new assets (years)

	2025-26	2026-27	2027-28	2028-29	2029-30
Corporate	12	12	12	12	12
Water	56	56	56	56	56
Wastewater	42	42	42	42	42
Stormwater	87	87	87	87	87

D.1.4 Working capital allowance

Table D.8 Draft decision for the return on working capital allowance for the 2025 determination period (\$millions, \$2024-25)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Hunter Water proposal	1.3	1.8	2.5	2.6	2.9	11.1
IPART decision	1.4	1.9	2.5	2.6	2.9	11.3
Difference	0.1	0.1	0.0	0.0	0.0	0.2
Difference (%)	5.1%	4.2%	-0.3%	1.3%	1.4%	1.9%

Note: Totals may not add due to rounding. Source: IPART analysis

D.1.5 Tax allowance

Table D.9 Draft decision on the tax allowance for the 2025 determination period (\$millions, \$2024-25)

	2025-26	2026-27	2027-28	2028-29	2029-30	Total
Hunter Water proposal	19.4	21.0	22.1	23.1	24.0	109.6
IPART decision	14.3	15.7	16.9	18.0	19.0	83.8
Difference	-5.1	-5.3	-5.2	-5.1	-5.0	-25.8
Difference (%)	-26.2%	-25.1%	-23.7%	-22.3%	-20.9%	-23.5%

Note: Totals may not add due to rounding. Source: IPART analysis

D.1.6 Revenue adjustment for DVAM

Table D.10 DVAM true-up for Hunter Water (\$million, \$2024-25)

	2019-20 to 2023-24
Forecast revenue over true-up period	937.9
Actual revenue over true up period	884.9
Variance (%) over the period	-5.7%
True up with 5% threshold	6.1

Source: IPART analysis

Note: True-up calculation includes the holding costs

D.1.7 Calculation of the deferral year revenue

In 2021 we agreed to defer the scheduled 2023-24 water price reviews for Hunter Water by one year. This meant that the 2023-24 prices set out in the 2020 Determination remained constant in nominal terms in 2024-25, and as a result, Hunter Water under-recovered its efficient costs over 2024-25.

Hunter Water proposed to not true-up the efficient costs it incurred in 2024-25, as it considers that a true-up would increase prices and negatively impact customer affordability. We have made a draft decision to accept Hunter Water's proposal.

Below we step through our calculation of what a deferral year true-up would be, had we made a draft decision to apply it to Hunter Water's notional revenue requirement.

How we calculated what a deferral year true-up would be

At the beginning of each new determination period, we typically add efficient historical capital expenditure, including from any price review deferral years to the Regulatory Asset Base. We calculate the efficient costs incurred by Hunter Water in 2024-25 by calculating the notional revenue requirement for one year, based on 2024-25 parameters. The true-up amount would be the difference between our calculation of the NRR for 2024-25, and the revenue the business expects to receive in 2024-25, based on actual prices and forecast volumes under the prevailing determination. In this way, we can calculate the true-up amount as if we had set prices in our usual way for 2024-25.

Given that we have updated the WACC for 2024-25 there is no cost of debt true-up required for the deferral year. We have also not included the DVAM in the deferral year true-up. Normally, we do not include the final year of a determination period in our calculation, as complete actual data is not yet available. The DVAM true-up for 2024-25 will therefore be recovered in the 2030-35 price determination.

Applying this calculation method we arrive at a potential revenue adjustment true-up for the deferral year of \$18.5 million.

Table D.11 NRR for Hunter Water over the 2020 determination period, 2024-25, and over its 2025-30 price proposal (\$m, \$2024-25)

	Hunter Water annual average 2020-24 determination	Hunter Water 2024-25	Hunter Water annual average 2025-30 proposal
Operating expenditure	193.0	195.9	195.8
Depreciation	88.9	92.7	115.9
Return on RAB	128.3	123.7	167.8
Return on working capital	1.7	1.8	2.2
Tax allowance	15.6	12.7	21.9
Revenue adjustment	(3.1)	0.0	-0.9
NRR	424.4	426.9	502.8

Source: Hunter Water Pricing Proposal and IPART analysis.

D.2 Trade waste charges

Our draft decisions on trade waste charges over the 2025 determination period are set out in the following tables:

Table D.12 Draft high-strength charges for sewered customers (\$2024-25)

Wastewater catchment	BOD charge (\$/kg) 2024-2025	Draft BOD charge (\$/kg) 2025-26 to 2029-30	Change (%)	TSS charge (\$/kg) 2024-2025	Draft TSS charge (\$/kg) 2025-26 to 2029-30	Change (%)
Belmont	1.50	1.32	-12%	0.41	0.33	-20%
Boulder Bay	1.55	1.28	-17%	0.43	0.41	-5%
Branxton	3.49	3.86	11%	2.50	2.91	16%
Burwood Beach	0.72	0.79	10%	0.24	0.18	-25%
Cessnock	1.89	1.71	-10%	0.31	0.10	-68%
Clarence Town	5.67	6.13	8%	4.73	5.11	8%
Dora Creek	2.25	2.29	2%	0.20	0.22	10%
Dungog	2.44	2.44 (to apply from 2025-26 to 2026-27) 7.32 (to apply from 2027-28)	200%	1.64	1.64 (to apply from 2025-26 to 2026-27) 4.92 (to apply from 2027-28)	200%
Edgeworth	1.22	1.19	-2%	0.42	0.26	-38%
Farley	1.69	1.06	-37%	0.42	0.69	64%
Karuah	8.36	8.36	0%	1.44	1.43	-1%
Kearsley	2.30	0.62	-73%	0.98	0.24	-76%
Kurri Kurri	3.59	2.98	-17%	0.83	0.77	-7%
Morpeth	1.75	1.70	-3%	0.51	0.51	0%
Paxton	4.67	4.15	-11%	3.27	3.36	3%
Raymond Terrace	2.54	2.85	12%	0.78	0.76	-3%
Shortland	4.02	2.49	-38%	0.77	0.45	-42%
Tanilba Bay	2.83	4.83	71%	0.78	0.55	-29%
Toronto	1.90	2.34	23%	0.30	0.35	17%
Incentive charge for sewered customers	3 times base high-strength BOD charge	3 times base high-strength BOD charge		3 times base high-strength TSS charge	3 times base high-strength TSS charge	

Table D.13 Draft administration charges for sewered customers (\$2024-25)

	2024-25	Draft charge 2025-26 to 2029-30	Change (%)
Minor Agreement			
Establishment	201.37	227.10	13%
Renewal	169.21	169.88	0%
Annual	140.10	161.10	15%
Moderate Agreement			
Establishment	520.50	433.39	-17%

	2024-25	Draft charge 2025-26 to 2029-30	Change (%)
Renewal	319.20	344.73	8%
Annual	805.16	984.89	22%
Agreement Variation	172.71	131.51	-24%
Major Agreement			
Establishment	818.26	932.42	14%
Renewal	525.26	600.59	14%
Annual	2,754.94	3,125.07	13%
Inspection	269.18	282.49	5%
Variation	172.71	149.14	-14%
Non-compliant customers (all risk classifications)			
Non-compliant discharge testing and management fee (to apply	N/A	3,029.59	N/A

Table D.14 Draft administration charges for tankered customers (\$2024-25)

	2024-25	Draft charge 2025-26 to 2029-30	Change (%)
Tankered waste agreement			
Establishment	659.39	571.24	-13%
Renewal	274.48	235.22	-14%
Annual	871.86	763.98	-12%
Variations	174.34	134.41	-23%
After-hours access fee (up to 4 hours)	524.07	539.79	3%
After-hours access (hourly rate beyond 4 hours)	98.86	101.83	3%

Table D.15 Draft volumetric charges for tankered customers (\$2024-25)

		Draft charge 2025-26 to	
	2024-25	2029-30	Change (%)
Tankered waste (\$ per kL)			
Administrative volumetric price	-	0.95	
Load based volumetric price	6.91	6.07	-12.2%
Total Volumetric Price	6.91	7.02	1.6%
Tankered customer incentive charge			
Hunter Water proposed		21.06	
IPART draft decision		18.21	

D.3 Miscellaneous and ancillary charges

Our draft decisions on miscellaneous and ancillary charges over the 2025 determination period are set out in the following table.

Table D.16 Draft miscellaneous and ancillary charges (\$2024-25)

Service no.	Function	2024-25	Draft charge from 2025-26 to 2029-30
1.	Conveyancing certificate		
a)	Over the counter	17.15	Removed
b)	Electronic	12.20	11.80
2.	Property sewerage diagram	15.55	Removed
3.	Service location diagram		
a)	Service location plan (both water and sewer)	12.50	13.90
b)	Sewer location diagram (Section 47 and sewer location diagram sewer conveyancing)	10.10	11.15
4.	Building over or adjacent to sewer advice	72.80	75.85
5.	Water reconnection - after restriction		
a)	Restriction	64.10	72.25
b)	Reconnection during business hours (8am to 3pm)	71.40	81.20
C)	Reconnection outside business hours (3pm to 8am)	114.00	129.00
6.	Workshop flow rate test of meter		
a)	20-25 mm	295.00	301.00
b)	32 mm	345.00	334.00
C)	40 mm	346.00	345.00
d)	50 mm light (being a meter weighing less than 10kg)	430.00	345.00
e)	50 mm heavy (being a meter weighing 10kh or more)	466.00	449.00
f)	65 mm	471.00	453.00
g)	80 mm	702.00	659.00
h)	100 mm	1,053.00	962.00
i)	150 mm	1,294.00	1,175.00
7.	Application for water and recycled water disconnection		
a)	Application for water disconnection (all sizes)	31.20	35.55
b)	Application for recycled water disconnection	46.80	53.00
8.	Application for water service connection	39.00	44.25
9.	Application to assess a water main adjustment	339.00	Removed
10.	Metered standpipe hire - security bond		
	20 mm metered standpipe	333.00	317.00
	32 mm high flow metered standpipe	983.00	876.00
	50 mm metered standpipe	983.00	876.00
	Metered standpipe hire - annual fees		
11.	20 mm metered standpipe	126.00	86.85
	32 mm high flow metered standpipe	256.00	199.00

Service			Draft charge from 2025-26 to
no.	Function	2024-25	2029-30
	50 mm metered standpipe	256.00	199.00
12.	Statement of available pressure	111.00	120.00
13.	Application to connect or disconnect sewer services or for a special internal inspection permit	50.00	47.75
14.	Application to connect or disconnect water & sewer services (combined application)	62.35	53.00
15.	Request for separate metering of units (per plan)	54.55	61.25
16.	Building plan stamping	23.35	26.70
17.	Determining requirements for building over/adjacent to sewer or easement	170.00	174.00
18.	Hiring of a metered standpipe		
a)	application to hire a metered standpipe	64.15	65.40
b)	Breach of standpipe hire conditions:		
	Breach 1	9.20	10.50
	Breach 2	9.20	10.50
	Breach 3 - step 1	9.20	10.50
	Breach 3 - step 2 (customer fails to return standpipe)	33.75	38.50
19.	Metered affixtures/handling fee		
	20 mm (delivery and installation by Hunter Water)	54.35	49.65
	25 mm (delivery and installation by Hunter Water)	53.90	49.35
	32 mm (delivery and installation by Hunter Water)	67.30	61.10
	40 mm (delivery and installation by Hunter Water)	67.30	61.10
	50 mm (delivery and installation by Hunter Water)	126.00	112.00
	50 mm (delivered by Hunter Water)	252.00	223.00
	50 mm (collected by customer)	18.50	18.15
20.	Inspection of non-compliant meters	61.35	46.45
21.	Connect to or building over/adjacent to stormwater channel for a single residence	106.00	109.00
22.	Stormwater channel connection	282.00	287.00
23.	Hydraulic design assessment		
	Less than 80 mm	222.00	219.00
	80 mm or larger	330.00	334.00
24.	Complex works design review		
	Water-point asset (water pump stations, pressure reduction valves)	5,106.00	5,571.00
	Sewer-point asset (water pump stations, pressure reduction valves)	5,830.00	6,409.00
	Linear water and sewer asset		
	Tier 1 (0-99 mm) Linear water and sewer asset (including pressure sewer)	869.00	939.00
	Tier 2 (99-1000 mm) Linear water and sewer asset (including pressure sewer)	3,658.00	3,943.00
	Tier 3 (Greater than 1000 mm) Linear water and sewer asset (including pressure sewer)	5,324.00	5,720.00

Service no.	Function	2024-25	Draft charge from 2025-26 to 2029-30
25.	Application to asset sewer main adjustment	378.00	Removed
26.	Revision of development assessment	353.00	388.00
27.	Bond application	2,803.00	2,713.00
28.	Development assessment application	376.00	379.00
29.	Application for water and sewer main extensions and/or adjustments	378.00	393.00
30.	Application to connect to/disconnect from water supply system	205.00	199.00
31.	Shutdown and charge-up for water connection/disconnection	479.00	719.00
32.	Application for additional sewer connection point	378.00	Removed
33.	Complex works inspection fee		
	Water-point asset (water pump stations, pressure reduction valves)	7,468.00	9,224.00
	Sewer-point asset (water pump stations, pressure reduction valves)	6,794.00	8,404.00
	Linear water and sewer asset (including pressure sewer)		
	Tier 1 (0-99 m)	806.00	1,046.00
	Tier 2 (99-1000 m)	1,132.00	1,412.00
	Tier 3 (Greater than 1000 m)	1,544.00	1,918.00
34.	Technical services hourly rate	141.00	170.12
35.	Remote from services application fee	102.00	80.99
36.	Preliminary servicing advice	575.00	615.00
37.	Servicing strategy review	1,731.00	1,928.00
38.	Environmental assessment report review	1,062.00	1,122.00
39.	Water cart tanker inspection	52.80	57.80
40.	Damaged meter replacement		
	Meter Exchange (Customer Request) 20 mm	101.00	107.00
	Meter Exchange (Customer Request) 25 mm	171.00	170.00
	Meter Exchange (Customer Request) 32 mm	234.00	267.00
	Meter Exchange (Customer Request) 40 mm	321.00	339.00
	Meter Exchange (Customer Request) Light 50 mm	333.00	1,176.00
	Meter Exchange (Customer Request) Heavy 50 mm	370.00	1,176.00
	Meter Exchange (Customer Request) 65 mm	683.00	Discontinued
	Meter Exchange (Customer Request) 80 mm	595.00	1,288.00
	Meter Exchange (Customer Request) 100 mm	989.00	1,702.00
	Meter Exchange (Customer Request) 150 mm	2,893.00	2,802.00
	Meter Exchange (Customer Request) 250 mm	5,746.00	5,218.00
	Meter Exchange (Customer Request) 300 mm	7,118.00	6,465.00
41.	Affix a separate meter to a unit	38.15	48.90
42.	Recycled water meter affix fee	69.60	63.20
43.	Application for recycled water service connection - domestic		
	Pre-laid Service	24.65	27.55
	Redevelopment - recycled water main size drillings		

Service no.	Function	2024-25	Draft charge from 2025-26 to 2029-30
(i)	80 mm	229.00	246.00
(ii)	100 mm	221.00	241.00
(iii	150 mm	229.00	263.00
(iv)	200 mm	321.00	397.00
(v)	250 mm	368.00	336.00
(vi)	300 mm	447.00	343.00
(vii)	375 mm	754.00	438.00
44.	Accredited supplier assessment fee	New Charge	954.00
45.	Billing record search statement		
a)	Over the phone - up to 2017	New Charge	31.25
b)	Electronic - beyond 2017 - via case logged (triage team)	New Charge	48.65
c)	For multiple properties (per hour)	New Charge	104.00

D.4 Bill impacts

D.4.1 Bills impacts and affordability assessments

Table D.17 Bill impacts for Hunter Water's proposed prices and our draft prices for water and wastewater (\$2024-25)

	Water usage kL/ year	2024- 25 Current	2025- 2026	2026- 2027	2027- 2028	2028- 2029	2029- 2030	Total change ^a	Average yearly change ^a
Hunter Water proposed									
Small household - apartment	87	1,011	1,089	1,142	1,196	1,250	1,304	293	59
Percentage change			7.7%	4.9%	4.8%	4.5%	4.3%	29.0%	5.2%
Typical household - house	146	1,241	1,314	1,384	1,455	1,526	1,597	356	71
Percentage change			5.9%	5.3%	5.2%	4.8%	4.7%	28.7%	5.2%
Large household - house	290	1,657	1,773	1,886	2,003	2,116	2,231	574	115
Percentage change			7.0%	6.4%	6.2%	5.7%	5.4%	34.6%	6.1%
Pensioner – house (receives a pensioner rebate)	100	727	762	795	828	861	895	168	27
Percentage change			4.8%	4.3%	4.2%	4.0%	3.9%	23.0%	4.1%
Pensioner – house (without pension rebate)	100	1,108	1,167	1,223	1,281	1,337	1,395	287	46
Percentage change			5.3%	4.8%	4.7%	4.4%	4.3%	25.9%	4.6%
Draft decisions									
Small household – apartment	87	1,011	1065	1096	1127	1157	1188	177	35
Percentage change			5.4%	2.8%	2.8%	2.7%	2.7%	17.5%	3.3%
Typical household – house	146	1,241	1,290	1,337	1,386	1,433	1,481	240	48
Percentage change			4.0%	3.6%	3.6%	3.4%	3.4%	19.4%	3.6%
Large household - house	290	1,657	1,750	1,840	1,933	2,023	2,114	458	92
Percentage change			5.6%	5.2%	5.1%	4.7%	4.5%	27.6%	5.0%
Pensioner – house (receives a pensioner rebate)	100	727	745	761	777	793	810	83	17
Percentage change			2.5%	2.1%	2.2%	2.0%	2.1%	11.4%	2.2%
Pensioner – house (without pension rebate)	100	1,108	1,144	1,177	1,211	1,244	1,278	171	34
Percentage change			3.2%	2.9%	2.9%	2.7%	2.8%	15.4%	2.9%

a. Changes are between 2024-25 and 2029-30 and do not include inflation.

Table D.18 Bill impacts of Hunter Water's proposed prices and draft prices on water usage charges for renters (\$2024-25)

	Water usage kL/year	2024- 25 Current	2025- 2026	2026- 2027	2027- 2028	2028- 2029	2029- 2030	Total change ^a	Average yearly change ^a
Hunter Water proposed									
Renter - small household or apartment with a separate meter	87	251	278	304	331	357	383	131	26
Percentage change			10.4%	9.4%	8.9%	7.9%	7.3%	52.2%	8.8%
Renter - typical household with a separate meter	146	422	466	510	555	599	642	220	44
Percentage change			10.4%	9.4%	8.9%	7.9%	7.3%	52.2%	8.8%
Renter - large household with a separate meter	290	838	925	1,012	1,102	1,189	1,276	438	88
Percentage change			10.4%	9.4%	8.9%	7.9%	7.3%	52.2%	8.8%
Renter - typical pensioner household with a separate meter (no pensioner rebate)	100	289	319	349	380	410	440	151	30
Percentage change			10.4%	9.4%	8.9%	7.9%	7.3%	52.2%	8.8%
Draft decisions									
Renter - small household or apartment with a separate meter	87	251	278	304	331	357	383	131	26
Percentage change			10.4%	9.4%	8.9%	7.9%	7.3%	52.2%	8.8%
Renter - typical household with a separate meter	146	422	466	510	555	599	642	220	44
Percentage change			10.4%	9.4%	8.9%	7.9%	7.3%	52.2%	8.8%
Renter - large household with a separate meter	290	838	925	1,012	1,102	1,189	1,276	438	88
Percentage change			10.4%	9.4%	8.9%	7.9%	7.3%	52.2%	8.8%
Renter - typical pensioner household with a separate meter (no pensioner rebate)	100	289	319	349	380	410	440	151	30
Percentage change			10.4%	9.4%	8.9%	7.9%	7.3%	52.2%	8.8%

a. Changes are between 2024-25 and 2029-30 and do not include inflation.

Table D.19 Bill impacts of Hunter Water's proposed prices and draft prices for wastewater charges on landlords (\$2024-25)

	Water usage kL/year	2024- 25 Current	2025- 2026	2026- 2027	2027- 2028	2028- 2029	2029- 2030	Total change ^a	Average yearly change ^a
Hunter Water Proposed									
Landlord that leases a separately metered property ⁱ	n/a								
House		819	848	874	901	927	955	136	27
Percentage change			3.6%	3.1%	3.0%	2.9%	3.0%	16.6%	3.1%
Apartment		760	811	838	866	893	921	162	32
Percentage change			6.8%	3.4%	3.3%	3.2%	3.1%	21.3%	3.9%
Draft decisions									
Landlord that leases a separately metered property ^j	n/a								
House		819	825	828	831	834	838	20	4
Percentage change			0.7%	0.4%	0.4%	0.4%	0.5%	2.4%	0.5%
Apartment		760	788	792	796	800	805	46	9
Percentage change			3.7%	0.5%	0.5%	0.5%	0.6%	6.0%	1.2%

a. Changes are between 2024-25 and 2029-30 and do not include inflation.

Table D.20 Affordability ratios for owner-occupier households of different socio-economic groups

Customer type	Water usage kL/year	Yearly income	2024- 25	2025- 26	2026- 27	2027- 28	2028- 29	2029- 30
Median apartment	87	\$104,809	1.0%	1.0%	1.0%	1.1%	1.1%	1.1%
Typical household	146	\$104,809	1.2%	1.2%	1.3%	1.3%	1.4%	1.4%
Large household	290	\$104,809	1.6%	1.7%	1.8%	1.8%	1.9%	2.0%
Income Quartiles								
Low income	134	\$50,771	2.4%	2.5%	2.6%	2.6%	2.7%	2.8%
Lower-middle income	158	\$77,676	1.6%	1.7%	1.8%	1.8%	1.9%	2.0%
Higher-middle income	199	\$142,085	1.0%	1.0%	1.1%	1.1%	1.2%	1.2%
High income	215	\$179,648	0.8%	0.8%	0.9%	0.9%	1.0%	1.0%
Low Income - large household	290	\$50,771	3.3%	3.4%	3.6%	3.8%	4.0%	4.2%
High income - large household	290	\$179,648	0.9%	1.0%	1.0%	1.1%	1.1%	1.2%
Pensioner rebate eligible households								
Age pensioner, disability pension or carer payment - single	Without rebate	\$29,754	3.7%	3.9%	4.0%	4.1%	4.2%	4.3%
	With rebate	\$29,754	2.4%	2.5%	2.6%	2.6%	2.7%	2.7%
Age pensioner, disability pension or carer payment – couple	Without rebate	\$44,855	2.5%	2.5%	2.6%	2.7%	2.8%	2.8%
	With rebate	\$44,855	1.6%	1.7%	1.7%	1.7%	1.8%	1.8%
JobSeeker – single with dependent and looking for work	Without rebate	\$21,663	4.7%	4.9%	5.1%	5.2%	5.3%	5.5%
	With rebate	\$21,663	2.9%	3.1%	3.1%	3.2%	3.3%	3.3%
Parenting payment – single	Without rebate	\$26,195	3.9%	4.1%	4.2%	4.3%	4.4%	4.5%
	With rebate	\$26,195	2.4%	2.5%	2.6%	2.6%	2.7%	2.7%
Parenting payment – couple	Without rebate	\$37,040	3.3%	3.5%	3.6%	3.7%	3.9%	4.0%
	With rebate	\$37,040	2.3%	2.4%	2.5%	2.6%	2.7%	2.7%
	Low Water S	Stress 3% Wate	er Stress Thre	eshold	High Water S	itress		

Table D.21 Affordability ratios for renter households of different socio-economic groups

Household	Usage kL/year	Yearly Income	2024- 25	2025- 26	2026- 27	2027- 28	2028- 29	2029- 30
Small household (apartment)	87	\$104,809	0.2%	0.3%	0.3%	0.3%	0.3%	0.4%
Typical household	146	\$104,809	0.4%	0.4%	0.5%	0.5%	0.6%	0.6%
Large household	290	\$104,809	0.8%	0.9%	1.0%	1.1%	1.1%	1.2%
Low Income	134	\$50,771	0.8%	0.9%	1.0%	1.1%	1.2%	1.3%
Lower-middle income	158	\$77,676	0.6%	0.7%	0.8%	0.8%	0.9%	1.0%
Higher-middle income	199	\$142,085	0.4%	0.5%	0.5%	0.6%	0.6%	0.7%
High income	215	\$179,648	0.4%	0.4%	0.4%	0.5%	0.5%	0.6%
Low income – large household	290	\$50,771	1.7%	1.8%	2.0%	2.2%	2.3%	2.5%
High income – large household	290	\$179,648	0.5%	0.5%	0.6%	0.6%	0.7%	0.7%
Pensioner - couple without rebate	100	\$44,885	0.6%	0.7%	0.8%	0.8%	0.9%	1.0%
Pensioner – single without rebate	100	\$29,754	1.0%	1.1%	1.2%	1.3%	1.4%	1.5%
Low Water Stress 3% Water Stress Threshold High Water Stress								

Table D.22 below presents the impact on affordability ratios for low-income households that receive full water and wastewater bills (owner-occupiers) that are not eligible for the Pensioner Concession Card and therefore pensioner rebates, but are eligible for the Health Care Card. It shows the impact on affordability ratios *if* the current pensioner rebate were expanded to include these households eligible for the Health Care Card.

Table D.22 Affordability ratios for other owner-occupier households that may experience vulnerability and are not eligible for rebates

Household	Rebate	Usage kL/year	2024- 25	2025- 26	2026- 27	2027- 28	2028- 29	2029- 30
Single, no children	Without	87	4.9%	5.2%	5.3%	5.5%	5.6%	5.8%
Single, no children	<i>If</i> rebate	87	3.1%	3.3%	3.3%	3.4%	3.4%	3.5%
Couple	Without	87	2.7%	2.9%	3.0%	3.0%	3.1%	3.2%
Couple	<i>If</i> rebate	87	1.7%	1.8%	1.8%	1.9%	1.9%	1.9%
Partnered, 2 children	Without	146	3.3%	3.5%	3.6%	3.7%	3.9%	4.0%
Partnered, 2 children	<i>If</i> rebate	146	2.3%	2.4%	2.5%	2.6%	2.7%	2.7%
Family Tax Benefit Part A	Without	146	1.9%	2.0%	2.1%	2.1%	2.2%	2.3%
Family Tax Benefit Part A	<i>If</i> rebate	146	1.3%	1.4%	1.4%	1.5%	1.5%	1.6%
Low Water Stress 3% Water Stress Threshold High Water Stress								

Table D.23 Draft bill impacts for typical non-residential customers (\$2024-25)

Customer	Water usage (kL/year)	2024- 25 Current	2025- 26	2026- 27	2027- 28	2028- 29	2029- 30	Average change (%)
Service station	70	1,304	1,362	1,400	1,438	1,476	1,515	3.0%
Small shop	150	1,351	1,398	1,446	1,496	1,545	1,595	3.4%
Small/medium shop	165	1,962	2,027	2,096	2,166	2,234	2,304	3.3%
Large licensed club	8,450	49,675	52,816	55,361	57,991	60,537	63,150	4.9%
Medium licensed hotel	1,200	6,808	7,218	7,613	8,020	8,415	8,820	5.3%
Regional shopping centre – with high strength trade waste	73,100	293,576	313,707	335,652	358,330	380,276	402,662	6.5%
Large office – Newcastle	3,600	17,815	18,880	19,936	21,027	22,083	23,169	5.4%
Regional office – Maitland	230	3,732	3,812	3,898	3,988	4,074	4,163	2.2%
Small industrial business	50	1,694	1,748	1,784	1,820	1,856	1,892	2.2%
Medium industrial business	73,300	264,634	286,198	307,446	329,426	350,673	372,361	7.1%
Large industrial business – no sewer	190,000	550,878	607,895	665,029	724,062	781,195	838,329	8.8%
Large industrial business – with sewer	243,300	818,617	889,936	961,009	1,034,514	1,105,586	1,177,753	7.5%
Plant nursery	5,500	16,948	18,611	20,261	21,966	23,615	25,271	8.3%
Fast food outlet	1,450	8,407	9,094	9,513	9,948	10,368	10,800	5.1%
Shopping centre – with high-strength trade waste	7,800	44,912	43,905	46,163	48,499	50,756	53,081	3.4%
Large industrial business – with high strength trade waste	42,000	152,728	168,625	180,940	193,675	205,989	218,472	7.4%
Regional shopping centre - with high strength trade waste Large office - Newcastle Regional office - Maitland Small industrial business Medium industrial business Large industrial business - no sewer Large industrial business - with sewer Plant nursery Fast food outlet Shopping centre - with high-strength trade waste Large industrial business - with high strength	3,600 230 50 73,300 190,000 243,300 5,500 1,450 7,800	17,815 3,732 1,694 264,634 550,878 818,617 16,948 8,407 44,912	18,880 3,812 1,748 286,198 607,895 889,936 18,611 9,094 43,905	19,936 3,898 1,784 307,446 665,029 961,009 20,261 9,513 46,163	21,027 3,988 1,820 329,426 724,062 1,034,514 21,966 9,948 48,499	22,083 4,074 1,856 350,673 781,195 1,105,586 23,615 10,368 50,756		23,169 4,163 1,892 372,361 838,329 1,177,753 25,271 10,800 53,081

a. Changes are between 2024-25 and 2029-30 and do not include inflation.

Note: Bill impacts for non-residential archetype customers who are trade waste customers, do not include any potential incentive charges on excessive BOD and TSS levels. Agreement renewals are also not included.

Source: IPART analysis.

D.4.2 Financeability assessment

We calculated Hunter Water's financeability indicators based on the NRR and prices under our draft decisions. The following tables step through our benchmark and actual tests of financial sustainability for Hunter Water under our draft decisions.

Table D.24 Benchmark financeability test results based on our draft decisions

	Target ratio	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Real interest cover	(higher is better)						
Benchmark test	>2.2x	3.4	3.5	3.6	3.8	4.0	4.2
Does it meet the target?		yes	yes	yes	yes	yes	yes
Real FFO over debt	(higher is better)						
Benchmark test	>7.0%	5.5%	6.0%	6.2%	6.6%	7.1%	7.7%
Does it meet the target?		No	no	no	no	yes	yes
Real gearing							
Benchmark test	<70%	60%	60%	60%	60%	60%	60%
Does it meet the target?	(lower is better)	yes	yes	yes	yes	yes	yes

Table D.25 Financeability results – actual test based on draft decisions

	Target ratio	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30
Real interest cover	(higher is better)						
Actual test	>1.8	2.7	2.5	2.4	2.3	2.3	2.4
Does it meet the target?		yes	yes	yes	yes	yes	yes
Real FFO over debt	(higher is better)						
Actual test	>6.0%	5.6%	5.4%	5.3%	5.4%	5.8%	6.3%
Does it meet the target?		no	no	no	no	no	yes
Real gearing	(lower is better)						
Actual test	<70%	52%	54%	55%	55%	55%	54%
Does it meet the target?		yes	yes	yes	yes	yes	yes

Hunter Water's benchmark ratios for the FFO over debt ratio are slightly below the target for the first 4 years of the period. However, we did not consider that this reflects a financeability concern for the 2025 determination period because:

- The trend in the benchmark FFO over debt ratio improves over the determination period and reaches the target ratio in the final year. Previously, we have been clear that if trends in the financial ratio show an improvement, then we would assess that the business may not have a financeability concern
- The interest cover ratios indicate that Hunter Water will have cash flows that cover its annual interest payments.

Appendix E 🔉

Glossary

Term	Definition
3Cs	The 3 pillars of our framework: Customer, Cost, and Credibility. The 12 principles we
	use to grade businesses' proposals are grouped under these pillars.
Assessment tool	Guidance material to assist businesses preparing pricing proposals. It sets out, for each of the 12 principles in the framework, the key considerations IPART is going to make when assigning a grade to a proposal.
AFOC	Assets free of charge refers to assets transferred by developers to utilities for 'no consideration', the value of which is regarded as assessable income, resulting in a tax benefit for developers and a tax liability for utilities, which is then added to the tax asset base.
BTS approach	Base-Trend-Step approach: the approach IPART will use when setting operating expenditure allowances. 'Base' refers to the efficient recurring expenditure required each year, calculated from recent past data. 'Trend' refers to predictable changes in expenditure over time due to known factors such as demand growth or inflation. 'Step' refers to changes in expenditure caused by new requirements or new processes.
Building block model	IPART's standard method for calculating a business's required revenue. Costs are broken down into 5 components to establish the amount of revenue needed to recover them.
Cap-and-collar	Cap on the maximum amount of benefits to be paid out through financial incentive schemes.
CESS	Capital Efficiency Sharing Scheme: an incentive scheme to provide water businesses with a fixed share of any efficiency gains (or losses) associated with capital expenditure during a determination period.
Carve-out	Mechanism to allow businesses to exclude some uncontrollable costs from the calculation of capital expenditure incentive schemes.
Cost pass-through	Tool to allow businesses to pass some costs directly to customers within the determination period, under limited circumstances.
CPI	CPI refers to the All groups consumer price index weighted average of 8 capital cities. This is published by the Australian Bureau of Statistics; or, if the Australian Bureau of Statistics does not, has not yet, or ceases to publish the index, then CPI will mean an index determined by IPART
Customer	In the context of this report, 'customer' refers to direct bill payers as well as end users who might not be in a direct paying relationship with a water business (for example, an occupant or tenant of a serviced property).
Determination period	The period of time over which a determination of maximum prices applies.
Discount factor	The factor used to modify an annual amount to convert it to net present value terms.
DPE	Department of Planning and Environment in New South Wales.
DVAM	Demand volatility adjustment mechanism is a way to manage the revenue risk resulting from actual water demand over the determination period being materially higher or lower than the forecasts used to set prices.
Early engagement	Opportunity for businesses to engage with IPART1 to 2 years before submitting their proposals.
EBSS	Efficiency Benefit Sharing Scheme: an incentive scheme to provide water businesses with a fixed share of any efficiency gains (or losses) associated with opex during a determination period.
Efficiency factor	Factor applied to a business's forecast expenditure, when appropriate, to adjust it for ongoing productivity improvements.
EPA	Environment Protection Authority, the primary environmental regulator for New South Wales.
ESC	Essential Services Commission, the independent regulator of essential services in Victoria.
Expenditure review	IPART's method for reviewing a business's expenditure to ensure customers are only paying efficient costs.

Financial incentives	Mechanisms to adjust a business's revenue requirement based on its performance, for examples by rewarding the quality of a proposal (ex-ante incentives) or realised improvements in efficiency (ex-post incentives).
Incentive payments	The amount calculated through the application of an incentive scheme that is used to modify the revenue requirement in a subsequent determination period.
IPART Act	The <i>Independent Pricing and Regulatory Tribunal Act 1992</i> , which establishes IPART's regulatory role and functions in New South Wales.
kL	Kilolitre (one thousand litres)
LIS	Line in the sand. The LIS value is equal to the present value of future free cashflow and is used to establish the value of a business's initial Regulatory Asset Base.
LRMC	Long Run Marginal Cost
ML	Megalitre (one million litres)
NPV	Net Present Value: the discounted value of a stream of benefits (or costs) taking into account the time value of money.
NRR	Notional Revenue Requirement, the revenue needed by a business to recover the cost of providing their services.
Operating licence	A regulatory instrument that authorises a water business to undertake its functions. Issued under the requirements of an Act by a Minister or the Governor, it contains terms and conditions governing a water business' operations. Not all water businesses are subject to a licence.
ODI	Outcome Delivery Incentive: An incentive scheme to provide financial benefits or penalties for achieving or not achieving customer agreed outcomes respectively.
Price controls	Methodologies used by water businesses and the regulator to set prices charged to customers. Main examples are price caps, and revenue caps.
RAP	Regulators Advisory Panel
RAB	Regulatory Asset Base: calculated as the economic value of all assets the business owns. The RAB is used as basis to calculate the revenue we provide to businesses in our determinations.
Re-opener	Option to reopen a determination and replace it partially or entirely. This is a last resort solution in case unforeseen cost changes materially impact a business's capacity to carry out its services.
Revenue requirement	Amount of revenue a business should recover from customers to cover its costs, as calculated by IPART during a price determination.
Revenue risk	The risk of businesses not collecting enough revenue from customers because of unforeseen increases in expenditure that aren't reflected in the revenue allowance.
Sharing ratio	The fixed ratio of sharing of gains (or losses) between customers and a water business.
Stakeholder submission	Submission prepared by stakeholders in the sector (such as water businesses, advocacy groups, and other regulators) in response to our Draft Report or Discussion Papers
True-up	Mechanism to allow businesses to pass some unexpected costs to consumers in the following determination period. This is reserved for limited circumstances.
Underspend	Actual expenditure savings in any year of a determination period compared to forecast expenditure. A negative underspend is an overspend.
WACC	Weighted average cost of capital: The post-tax real cost of capital as determined by IPART as part of a regulatory review.

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- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p 197.
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p 78.
- United Nations, Global Issues Water, accessed 19 March 2025
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p 26.
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p 18.
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p 107.
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, pp. 29-30.
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p 112.
- IPART, Water Regulation Handbook, September 2024, p 12.
- The Justice and Equity Centre submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, pp. 3-5.
- Name suppressed (W24/2261) submission to IPART 2025 Hunter Water price review Issues Paper, October 2024; Watson-Will, B, submission to IPART 2025 Hunter Water price review – Issues Paper, November 2024; Name suppressed (W24/2774) submission to IPART 2025 Hunter Water price review - Issues Paper, November 2024; and Name suppressed (W24/2988) submission to IPART 2025 Hunter Water price review – Issues Paper, December 2024.
- Name suppressed (W24/2279), submission to IPART 2025 Hunter Water price review Issues Paper, November 2024.
- 13 Watson-Will, B, submission to IPART 2025 Hunter Water price review – Issues Paper, November 2024; and Banks, R, submission to IPART 2025 Hunter Water price review - Issues Paper, November 2024.
- The Justice and Equity Centre submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, pp. 11, 13.
- Banks, R, submission to IPART 2025 Hunter Water price review Issues Paper, November 2024; and Watson-Will, B, submission to IPART 2025 Hunter Water price review - Issues Paper, November 2024.
- Watson-Will, B, submission to IPART 2025 Hunter Water price review Issues Paper, November 2024.
- Atkinson, J, submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, p. 1; and IPART, 2025 Hunter Water price review – Public hearing transcript, November 2024, p. 17.
- The Justice and Equity Centre submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, p. 15.
- Energy & Water Ombudsman NSW submission to IPART 2025 Hunter Water price review Issues Paper, December 2024. pp 3-4.
- Name suppressed (W24/2630) submission to IPART 2025 Hunter Water price review Issues Paper, November 2024; and Infrabuild Wire Pty Ltd submission to IPART 2025 Hunter Water price review - Issues Paper, December 2024, p. 3.
- Water Services Association of Australia submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, pp. 3 & 10.
- Property Council of Australia submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, p.
- Name suppressed (W24/2279) submission to IPART 2025 Hunter Water price review Issues Paper, November 2024.
- Endicott, D, submission to IPART 2025 Hunter Water price review Issues Paper, November 2024.
- Atkinson, J. submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, p. 6.
- Name suppressed (W24/2988) submission to IPART 2025 Hunter Water price review Issues Paper, December 2024,
- 27 Endicott, D, submission to IPART 2025 Hunter Water price review - Issues Paper, November 2024.
- Infrabuild Wire Pty Ltd submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, p. 3.
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p 215.
- Lobley, A, submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, p. 1.
- 31 Name suppressed (W24/3064) submission to IPART 2025 Hunter Water price review - Issues Paper, December 2024.
- 32 Name suppressed (W24/2988) submission to IPART 2025 Hunter Water price review - Issues Paper, December 2024, p 2.
- 33 Name suppressed (W24/2988) submission to IPART 2025 Hunter Water price review - Issues Paper, December 2024.
- Atkinson, J. submission to IPART 2025 Hunter Water price review Issues Paper, December 2024.
- Name supressed (W24/2279) submission to IPART 2025 Hunter Water price review Issues Paper, November 2024; and Watson-Will, B, submission to IPART 2025 Hunter Water price review - Issues Paper, November 2024.
- Water Services Association of Australia submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, p. 2.
- 37 Alterator, J, submission to IPART 2025 Hunter Water price review - Issues Paper, November 2024.
- Name suppressed (W24/2988) submission to IPART 2025 Hunter Water price review Issues Paper, December 2024.
- Name suppressed (W24/2261) submission to IPART 2025 Hunter Water price review Issues Paper, October 2024.
- Lobley, A, submission to IPART 2025 Hunter Water price review Issues Paper, December 2024, December 2024; and Name suppressed (W24/2988) submission to IPART 2025 Hunter Water price review - Issues Paper, December 2024.
- The Justice and Equity Centre submission to IPART 2025 Hunter Water price review Issues Paper, December 2024,
- IPART, Water Regulation Handbook, September 2024, pp. 42-43.
- 43 Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, pp. 134-136. Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 150.
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 147.

- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, p. 72.
- ⁴⁸ Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 156.
- 49 Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, p. 75.
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, p. 79
- 51 Hunter Water, 2024 Pricing Proposal to IPART, September 2024, pp. 104-105
- Houston Kemp, Review of Hunter Water Corporations proposed expenditure for the 2025-30 regulatory period, March 2025, pp. 91-92
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 135
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 140
- Houston Kemp, Review of Hunter Water Corporations proposed expenditure for the 2025-30 regulatory period, March 2025, pp. 67-68.
- Houston Kemp, Review of Hunter Water Corporations proposed expenditure for the 2025-30 regulatory period, March 2025
- ⁵⁷ Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 108.
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, pp. 24-57
- ⁵⁹ Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 122.
- 60 Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 122.
- ⁶¹ Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 94.
- ⁶² Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 95.
- ⁶³ Hunter Water, 2024 Pricing Proposal to IPART, September 2024, pp. 95-96.
- ⁶⁴ Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 107
- ⁶⁵ Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 107.
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, pp. ii-vii
- 67 Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, p. 29
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, p. 34
- ⁶⁹ Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, p. 34
- NSW Department of Planning and Environment, Lower Hunter Water Security Plan, April 2022, p 76
- 71 NSW Department of Planning and Environment, Lower Hunter Water Security Plan, April 2022, p 30.
- NSW Government, Bolstering water security for the Lower Hunter region | NSW Government Water, September 2024
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, pp. ii-vii
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, p. 29
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, pp. 29-30
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, pp. 34-35
- Houston Kemp, Review of Hunter Water Corporation's proposed expenditure for the 2025-30 regulatory period, March 2025, pp. 31-33
- ⁷⁸ IPART, Water Regulation Handbook, September 2024, pp 39-40; pp. 94-99.
- ⁷⁹ IPART, Review of our WACC method, February 2018.
- ⁸⁰ Victoria Power Networks Pty Ltd v Commissioner of Taxation [2020] FCAFC 169
- ⁸¹ IPART, Final Report Review of prices for Hunter Water from 1 July 2020, June 2020, pp. 30-31
- 82 IPART, Final Report Review of our WACC method, February 2018, p. 29
- 83 IPART, Final Report Review of our WACC method, February 2018, p. 39
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 205
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 214
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 219-222
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 222-223
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 239
 Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 233
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 233
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 233
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 236
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 239
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 237
 Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 237
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 240
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 243
- Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 243

```
Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 245

    Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 245-7
    Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 247

<sup>102</sup> Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 246-7
<sup>103</sup> Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 248.
<sup>104</sup> IPART, 2020 Hunter Water price review - Final Report, 16 June 2020, p 139.
<sup>105</sup> Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 256.
    Hunter Water, 2024 Pricing Proposal to IPART, September 2024, pp. 261-262.
   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.
    United Nations, Global Issues Water, accessed 19 March 2025
Digital Atlas of Australia, ABS Census G33 Total household income (weekly) by household composition b2 2021 LGA, 8
    December 2023.
    Services Australia, Who can get a card, 22 November 2023.
   Hunter Water, 2024 Pricing Proposal to IPART, September 2024, pp. 299
    Australian Bureau of Statistics, Annual weight update of the CPI and Living Cost Indexes 2025, Appendix 2: Housing
    Capital Group Weights, 26 February 2025
   Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 72
   Hunter Water Operating Licence 2022-2027, p. 8
    Hunter Water Operating Licence 2022-2027, pp. 9-11
   The Justice and Equity Centre, Submission to IPART 2020 Hunter Water price review – Issues Paper, pp. 14-15
117
   IPART, Water Regulation Handbook, September 2024, pp 44-45; pp 64-88.
    Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 323
<sup>119</sup> Insync, Hunter Water Community Panel - Deliberative Forum Report, March 2024, pp. 39 and 43.
   Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 111
   Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 323
Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 322
<sup>123</sup> IPART, Water Regulation Handbook, September 2024, p. 69
Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 322
125 IPART Act s 24AA
<sup>126</sup> Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 74
<sup>127</sup> Hunter Water, 2024 Pricing Proposal to IPART, September 2024, p. 74
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